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, 2023

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 001-38662

SUTRO BIOPHARMA, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**47-0926186**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
111 Oyster Point Blvd. South San Francisco, California	**94080**
(Address of principal executive offices)	**(Zip Code)**

(650) 881-6500

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common stock, $0.001 par value	STRO	The Nasdaq Stock Market LLC (Nasdaq Global 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. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant on June 30, 2023 (the last business day of the Registrant's second fiscal quarter), based upon the closing price of $4.65 of the Registrant's common stock as reported on The Nasdaq Global Market, was approximately $278.3 million.

The number of shares of the registrant's common stock outstanding as of March 20, 2024, was 62,441,963.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be filed for its 2024 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.

Sutro Biopharma, Inc.

ANNUAL REPORT ON FORM 10-K

TABLE OF CONTENTS

		Page
PART I		6
ITEM 1.	Business	6
ITEM 1A.	Risk Factors	43
ITEM 1B.	Unresolved Staff Comments	98
ITEM 1C.	Cybersecurity	98
ITEM 2.	Properties	100
ITEM 3.	Legal Proceedings	100
ITEM 4.	Mine Safety Disclosures	100
PART II		101
ITEM 5.	Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities	101
ITEM 6.	[Reserved]	103
ITEM 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	104
ITEM 7A.	Quantitative and Qualitative Disclosures About Market Risk	121
ITEM 8.	Financial Statements and Supplementary Data	122
ITEM 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	160
ITEM 9A.	Controls and Procedures	160
ITEM 9B.	Other Information	161
ITEM 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	161
PART III		162
ITEM 10.	Directors, Executive Officers of the Registrant and Corporate Governance	162
ITEM 11.	Executive Compensation	162
ITEM 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	162
ITEM 13.	Certain Relationships and Related Transactions, and Director Independence	162
ITEM 14.	Principal Accounting Fees and Services	162
PART IV		163
ITEM 15.	Exhibits and Financial Statement Schedules	163
ITEM 16.	Form 10-K Summary	167
	Signatures	168

Forward-Looking Statements

This Annual Report on Form 10-K, or Annual Report, contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and section 27A of the Securities Act of 1933, as amended, or the Securities Act. All statements contained in this Annual Report other than statements of historical fact, including statements regarding our future results of operations and financial position, the use and adequacy of our existing cash to achieve our business goals, business strategy, market size for our product candidates, potential future milestone and royalty payments, the value of our holdings of Vaxcyte common stock, potential growth opportunities, nonclinical and clinical development activities, efficacy and safety profile of our product candidates, our ability to maintain and recognize the benefits of certain designations received by product candidates, our ability to successfully leverage Fast Track designation, the timing and results of nonclinical studies and clinical trials, collaboration with third parties, the impact of health pandemics, regional geopolitical conflicts, changes in interest rates, inflation, potential uncertainty with respect to the debt ceiling and potential government shutdown related thereto, on our operations, and the receipt and timing of potential regulatory designations, approvals and commercialization of product candidates, are forward-looking statements. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “predict,” “target,” “intend,” “could,” “would,” “should,” “project,” “plan,” “expect,” and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Item 1A, “Risk Factors” and elsewhere in this Annual Report. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the forward-looking events and circumstances discussed in this Annual Report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this report to conform these statements to actual results or to changes in our expectations, except as required by law. You should read this Annual Report with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

Except where the context otherwise requires, in this Annual Report on Form 10-K, “we,” “us,” “our” and the “Company” refer to Sutro Biopharma, 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. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

Summary of Risk Factors

Our business is subject to a number of risks and uncertainties, including those highlighted in the section titled "Risk Factors". Some of these risks include:

- We have a history of significant losses and may never achieve or maintain profitability.
- We will need substantial additional funds to advance development of our product candidates and failure to obtain sufficient funding may force us to delay, limit or terminate our product development programs, commercialization efforts or other operations. We may have difficulties accessing the required additional capital on reasonable, or even any, terms to continue our product and platform development or other operations, and may have to make difficult prioritization decisions regarding development and potential partnering of our clinical and preclinical product candidates.
- Our product candidates are in development and may fail, be impacted by competitive products or suffer delays that materially and adversely affect their commercial viability.
- Our business is dependent on the success of our product candidates, including Iuvelta, which is generated from our proprietary XpressCF® and XpressCF+® platforms.
- If we do not achieve our development goals in the timeframes we anticipate and project, the commercialization of our products may be delayed and, as a result, our stock price may decline.
- 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 depend on our information technology systems, and any failure of these systems, or those of our CROs, third-party vendors, or other contractors or consultants we may utilize, could harm our business. Security breaches, cyber-attacks, loss of data, and other disruptions could compromise sensitive information related to our business or other personal information or prevent us from accessing critical information and expose us to liability, which could adversely affect our business, reputation, results of operations, financial condition and prospects.
- Our information technology systems could face serious disruptions that could adversely affect our business.
- Our failure to comply with privacy and data protection laws or to adequately secure the personal information we hold could result in significant liability or reputational harm and, in turn, a material adverse effect on our client base, member base and revenue.
- If our collaborations with third parties to develop and commercialize certain product candidates are not successful, we may not be able to capitalize on the market potential of our XpressCF® and XpressCF+® platforms and the product candidates.
- Our inability to manufacture sufficient quantities of our product candidates or such materials, or the loss of our third-party suppliers, or our or their failure to comply with applicable regulatory requirements or to supply sufficient quantities at acceptable quality levels or prices, or at all, would materially and adversely affect our business.
- We 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.
- 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 collaborators may fail to abide by the terms of the agreements with us, which would require us to seek to enforce our agreements in accordance with the dispute resolution procedures set forth therein. These procedures may require us to engage in litigation or arbitration to enforce our rights, which can be expensive, time-consuming, and distracting to our management and Board of Directors and that may ultimately end up being unsuccessful.

- If we are unable to develop, obtain regulatory approval for or commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed. Changes in regulatory policy may render our strategies for obtaining regulatory approval less effective or completely ineffective, preventing us from obtaining regulatory approval for our product candidates on time or at all.

PART I

Item 1. *Business*

Overview

We are a clinical-stage oncology company developing site-specific and novel-format antibody drug conjugates, or ADCs, enabled by our proprietary integrated cell-free protein synthesis platform, XpressCF®, and our site-specific conjugation platform, XpressCF+®. We aim to design and develop therapeutics using the most relevant and potent modalities, including ADCs, bispecific ADCs, immunostimulatory ADCs, or iADCs, dual conjugate ADCs, or ADC²s, and cytokine derivatives. Our molecules are directed primarily against clinically validated targets where the current standard of care is suboptimal. We believe that our platform allows us to accelerate the discovery and development of potential first-in-class and/or best-in-class molecules by enabling the rapid and systematic evaluation of protein structure-activity relationships to create optimized homogeneous product candidates. Our mission is to transform the lives of patients by creating medicines with improved therapeutic profiles for areas of unmet need.

Our most advanced product candidate is STRO-002, or luveltamab tazevibulin, or luvelta, an ADC directed against folate receptor-alpha, or FolRα, for patients with FolRα-expressing cancers, including ovarian cancer. In 2019, we began enrolling patients in a Phase 1 trial of luvelta that focused on ovarian and endometrial cancers. The Phase 1 trial assessing safety, tolerability and preliminary efficacy of luvelta to treat platinum resistant ovarian cancer has been completed. In January 2024, we reported near-final results from this Phase 1 trial, in which luvelta exhibited a manageable safety profile together with promising preliminary efficacy data in the tested patient population, as discussed in detail below. We also presented data from Phase 1b trials assessing safety, tolerability and preliminary efficacy for the treatment of ovarian cancer with luvelta in combination with bevacizumab and for treatment of endometrial cancer. In August 2021, luvelta was granted Fast Track designation by the U.S. Food and Drug Administration, or FDA, for the treatment of patients with platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer who have received one to three prior lines of systemic therapy. We began enrolling patients in a Phase 2/3 trial of luvelta for the treatment of platinum-resistant ovarian cancer, the REFRαME-O1 study, in June 2023.

In addition, we have been offering compassionate use of luvelta to treat pediatric patients with relapsed/refractory CBFA2T3-GLIS2, or CBF/GLIS, acute myeloid leukemia, or AML, commonly known as RAM phenotype AML. Updated compassionate use data continued to show anti-leukemic activity of luvelta in pediatric patients with relapsed/refractory CBF/GLIS AML and was presented at the 65th American Society of Hematology Annual Meeting and Exposition (ASH 2023) in December 2023. The data showed that luvelta was well tolerated as a monotherapy agent and in combination with standard cancer therapies. Luvelta was granted Orphan Drug Designation by the FDA in December 2022 in this pediatric patient population. We expect to begin enrollment of a registration-directed trial of luvelta for treatment of pediatric RAM phenotype AML in the second half of 2024.

We also have two preclinical product candidates, STRO-003 and STRO-004. These product candidates are single homogeneous ADCs directed against an anti-receptor tyrosine kinase-like orphan receptor 1, or ROR1, and tissue factor, or TF, respectively, each of which we intend to develop for the treatment of solid tumors. We anticipate being ready to file an IND for each of STRO-003 and STRO-004 in 2024 and 2025, respectively.

Enabled through our proprietary XpressCF® and XpressCF+® platforms, we have entered into multi-target, product-focused collaborations with leading pharmaceutical and biotechnology companies in the field of oncology, including an immunostimulatory antibody-drug conjugates collaboration with Astellas Pharma Inc., or Astellas, a cytokine derivatives collaboration with Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, or Merck; a B Cell Maturation Antigen, or BCMA, ADC collaboration with Celgene Corporation, or Celgene, a wholly owned subsidiary of Bristol Myers Squibb Company, New York, NY, or BMS; a MUC1-EGFR ADC collaboration with Merck KGaA, Darmstadt Germany (operating in the United States and Canada under the name “EMD Serono”), or EMD Serono. Our XpressCF® and XpressCF+® platforms have also supported Vaxcyte, Inc., or Vaxcyte, focused on discovery and development of vaccines for the treatment and prophylaxis of infectious disease. In the fourth quarter of 2023, Vaxcyte exercised its option to access expanded rights to develop and manufacture cell-free extract for use in development and manufacture of its vaccine products, among certain other rights.

We believe our XpressCF® platform is the first and only current Good Manufacturing Practices, or cGMP, compliant and scalable cell-free protein synthesis technology that has resulted in multiple product candidates in

clinical development. We believe key advantages of our cell-free protein synthesis platform over conventional biologic drug discovery and development include:

- ability to rapidly produce a wide variety of protein structures in-house;
- ability to incorporate multiple, different non-natural amino acids in a single protein;
- faster cycle time;
- efficient drug discovery and early pharmacology and safety assessment; and
- rapid and predictable scalability.

We plan to leverage these capabilities to accelerate the discovery and development of potential first-in-class and best-in-class molecules.

The benefits of our XpressCF® and XpressCF+® platforms have resulted in collaborations with leaders in the field of oncology, including Astellas, Merck, BMS and EMD Serono. In 2022, we entered into a License and Collaboration Agreement with Astellas, for the development of immunostimulatory antibody-drug conjugates for up to three biological targets, which remains ongoing. Our collaboration with Merck resulted in MK-1484, a selective IL-2 agonist that Merck is developing as a monotherapy and in combination with pembrolizumab for the treatment of solid tumors. We announced the dosing of the first patient with MK-1484 in a Phase I study in the third quarter of 2022. Our BMS collaboration yielded CC-99712, a novel ADC therapeutic directed against BCMA. BMS elected to terminate development of CC-99712 in June 2023, whereupon rights to the product candidate reverted to us. Finally, our collaboration with EMD Serono yielded a novel bispecific ADC product candidate targeting EGFR and MUC1, known as M1231, for which an IND submission was filed in 2020. EMD Serono decided to terminate development of M1231 in the first quarter of 2023. Through December 31, 2023, we have received an aggregate of approximately $854 million in payments from all of our collaborations, which includes approximately $54 million in investments in our stock. We intend to selectively enter into additional collaborations with partners who are seeking efficient and effective drug discovery, preclinical development and manufacturing capabilities for the creation of novel therapeutics.

We are developing luvelta for the treatment of ovarian and endometrial cancers. In addition to the development discussed above, an expansion cohort assessing the effects of administration of prophylactic pegfilgrastim in combination with luvelta opened for enrollment in the second quarter of 2022; interim results from this cohort were most recently presented in January 2024.

Other studies for luvelta include a trial assessing the combination of luvelta with bevacizumab for treatment of ovarian cancer and an expansion cohort for FolRα-selected endometrial cancer that opened for enrollment in the fourth quarter of 2021. We intend to continue development of luvelta for the treatment of these indications in the future as resources permit. Additionally, luvelta was provided to pediatric patients with CBF/GLIS AML on a compassionate use basis. Translational work is also ongoing to support an investigational new drug, or IND, application for the initiation of a non-small cell lung cancer study, for which submission is planned in the first half of 2024.

In December 2021, we entered into the Tasly License Agreement, as amended in April 2022, to develop and commercialize luvelta in the Greater China territory. We believe that our collaboration with Tasly extends the opportunity to realize the potential value of luvelta through clinical development and commercialization in Greater China.

We previously were developing STRO-001, which is an ADC directed against CD74, an antigen that is highly expressed in many B cell malignancies. We completed enrollment for STRO-001 dose escalation in a Phase 1 trial for multiple myeloma and NHL and the maximum tolerated dose of STRO-001 was identified.

In October 2021, we entered into the BioNova Option Agreement, under which BioNova was granted the right to develop and commercialize STRO-001 in Greater China. In March 2024, BioNova notified us that it had decided to terminate both the BioNova Option Agreement and clinical development of STRO-001 in Greater China. Following receipt of this notice, we decided to suspend development of STRO-001.

Our most advanced assets in preclinical development are STRO-003 and STRO-004. We believe STRO-003 has the potential to be a first-in-class and best-in-class ADC targeting ROR1 and that STRO-004 has the potential to be a best-in-class ADC targeting TF. Preclinical data suggest that both STRO-003 and STRO-004 have potent antitumor activity and potential for a differentiated safety profile.

Beyond these programs and collaborations, we are developing a broader pipeline of next-generation protein therapeutics using our XpressCF® and XpressCF+® platforms. Our protein engineering and chemistry efforts are focused on maximizing therapeutic indices, and our technology allows us to rapidly test our therapeutic hypothesis in significantly more product candidates than conventional protein synthesis allows in order to identify the best molecule to advance to the clinic. We are also actively pursuing the discovery and development of other novel ADCs and next-generation ADC modalities, including iADCs, bispecific ADCs, and ADC^{2}s.

Our Strategy

Our goal is to use our proprietary XpressCF® platform to create product candidates primarily against clinically validated targets. Key elements of our strategy are to:

- **Advance luvelta through clinical development.** We are currently enrolling patients in a Phase 2/3 trial of luvelta for the treatment of platinum-resistant ovarian cancer, the REFRαME-O1 study. We also expect to enroll patients in a registration-directed trial of luvelta for the treatment of pediatric RAM phenotype AML in the second half of 2024. Given that FolRα is a clinically validated target for ovarian cancer, along with luvelta's homogeneous design, we believe it has the potential to be a best-in-class FolRα-targeted ADC and provide benefit to a broader patient population, as well as potentially greater activity, stability and/or safety as compared to other investigational agents in development.

- **Opportunistically maintain worldwide rights or pursue strategic partnerships to maximize the potential value of our pipeline.** We have assembled a management team with extensive experience in the biopharmaceutical industry, including drug discovery and development through commercialization, and our plan is to independently pursue the development and commercialization of our product candidates, to the extent possible. As we continue to advance our products, we may opportunistically pursue additional strategic partnerships that maximize the value of our pipeline, including relationships, when possible, to potentially co-develop and co-commercialize one or more of our product candidates.

- **Develop a diverse pipeline of novel product candidates with optimized therapeutic profiles.** We intend to continue to build a broad pipeline of optimally designed, next-generation protein therapeutics, initially for cancer, using our XpressCF® platform. Our cell-free-based protein synthesis system enables the rapid and systematic evaluation of protein structure-activity relationships, which we believe will accelerate the discovery and development of molecules. We aim to take advantage of the most potent modalities, focusing primarily on ADCs, iADCs, bispecific ADCs and ADC^{2}s, to create drugs that are directed primarily against clinically validated targets where the current standard of care is suboptimal.

- **Strategically pursue additional collaborations to broaden the reach of our XpressCF® platform.** To maximize the value of our XpressCF® platform technology, we have entered into multi-target, product-focused collaborations with leaders in the field of oncology, including an iADC collaboration with Astellas, a cytokine derivatives collaboration with Merck, a BCMA ADC collaboration with BMS and a MUC1-EGFR ADC collaboration with EMD Serono. We intend to selectively enter into additional collaborations with partners who are seeking efficient and effective drug discovery and manufacturing capabilities for the development of novel therapeutics. We intend to retain, to the extent possible, certain development and commercial rights to maximize the future potential value of product candidates discovered and developed using our XpressCF® platform.

Cancers Remains a Major Unmet Medical Need

Cancers are the second leading cause of mortality in the United States and the leading cause of death for those under 65 years of age. The American Cancer Society estimated that there would be greater than 2 million new cases of cancer diagnosed and approximately 612,000 people would die of cancer in the United States in 2024.

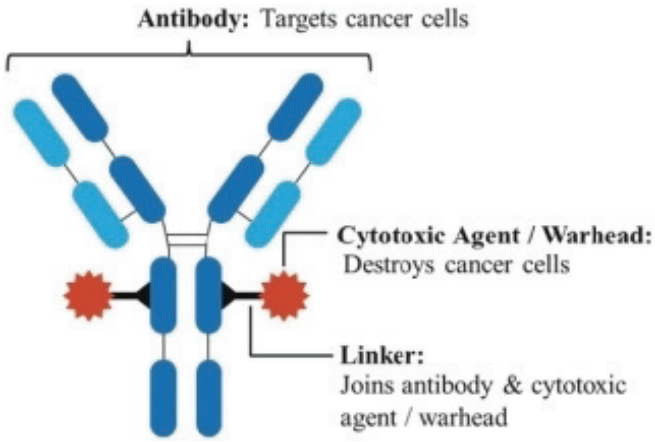
Traditional Cancer Therapeutics

Cancer treatment has traditionally included chemotherapy, radiation, surgery, or a combination of these approaches. Chemotherapy agents and other small molecule targeted therapies can be effective in certain types of cancer, but they can also cause toxicities that may lead to life-threatening consequences, lower quality of life or early termination of treatment. Furthermore, these agents offer limited efficacy in many types of cancer.

Over the last twenty years, new paradigms of cancer research and treatment have emerged to address the limitations of existing treatments. Some of the most promising new approaches involve biologic therapies, including Antibody Drug Conjugates, or ADCs. ADCs have shown promise over the last decade with twelve marketed products in the United States and over 200 ADC candidates investigated in the clinic. ADCs use the foundation of monoclonal antibodies and small molecule drugs by targeting the delivery of chemotherapeutics to the tumor. They have shown clinical benefit in hematological and solid tumors, and often have a better safety profile than systemically delivered chemotherapeutics. We believe our XpressCF® platform will provide enhanced therapeutic approaches for treating cancer to address these unmet needs and are exploring next generation biologics, including ADCs, iADCs, and ADC^{2}s. The expectation is that multiple therapeutic modalities will be used in novel combinations to treat patients and provide the most potent anti-cancer effect.

Antibody-Drug Conjugates (ADCs)

ADCs are a highly potent improvement to monoclonal antibody oncology therapies. The key components of ADCs include an antibody, a stable linker, and a cytotoxic agent (warhead). The antibody is used to target and deliver cytotoxic agents to tumor cells. ADCs can be mono, bispecific, or multi-specific. The intended result of this powerful and targeted approach is greater tumor cell death and less systemic tolerability issues as compared to traditional chemotherapy. The following diagram shows the component parts of an ADC.

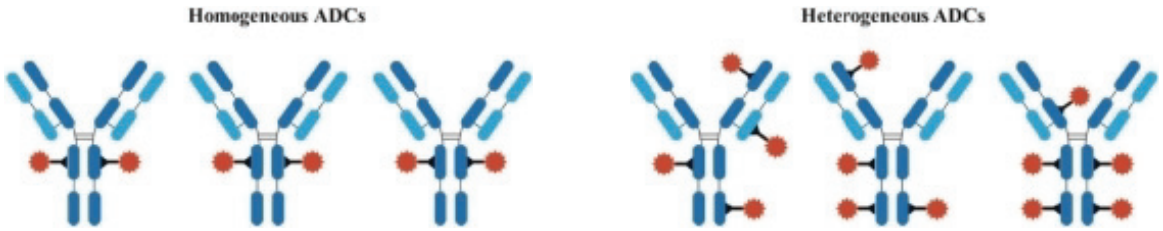


Currently, there are more than 200 ADCs being investigated in clinical development. Kadcyla and Adcetris were the first of the new generation of ADCs to be approved for the treatment of specific subsets of breast cancer and lymphoma, respectively. Several more ADCs are currently on the market in the U.S.: Besponsa, Mylotarg, Polivy, Zynlonta, and Zevalin were approved for the treatment of specific subsets of leukemia and lymphoma; Padcev was approved for the treatment of bladder and urinary tract cancers; Enhertu and Trodelvy were approved for the treatment of breast cancer as well as gastric and urinary tract cancers respectively; Tivdak was approved for the treatment of cervical cancer; and mirvetuximab soravtansine (Elahere®) was approved for the treatment of ovarian cancer. These approved therapies demonstrate that ADCs have an emerging role in the armamentarium of cancer therapeutics.

Limitations to Current ADC Approaches

Despite the approvals of these ADCs, there have been challenges in achieving the full clinical potential of this modality. We believe these challenges are directly related to the following:

- *Heterogeneity as a Result of Imprecise and Variable Conjugation.* Many ADCs, both those approved and those in development, use imprecise technologies that opportunistically attach the cytotoxic payload to naturally occurring amino acids within the antibody and result in a heterogeneous mixture. In these mixtures, the number and site location of the linker-warhead can vary significantly from antibody to antibody within the single ADC product. These many different forms in the final product are likely to perform differently, with some forms carrying insufficient cytotoxin to kill the tumor, and some forms carrying too high a load resulting in unintended toxicities. The overall performance of the heterogeneous ADC is therefore the average activity of the different species within the ADC mixture, which may limit both efficacy and tolerability. For these reasons, we believe this current class of ADCs, which are heterogeneous mixtures, are suboptimal for effective cancer treatment. The figure below compares homogeneous and heterogeneous ADCs.



- *Suboptimal Linker-Warhead Positioning.* Conventional ADC technologies use conjugation chemistry to attach linker-warheads to naturally occurring amino acids within an antibody; therefore, the position is dictated by the pre-existing amino acid sequence. Published research studies have demonstrated that linker-warhead positioning along an antibody can have significant effect on the ability of an ADC to kill tumor cells, with some positions resulting in suboptimal killing. This position effect also contributes to the challenge of a heterogeneous ADC mixture. We believe that superior ADCs can be developed using technologies that allow linker-warhead positioning to be fine-tuned to empirically determined sites for maximal therapeutic benefit.

- *Lack of Tumor Specificity Due to Linker Design*. One of the major challenges in ADC technology has been to develop linking chemistries that ensure that warheads are only released from the antibody within the tumor microenvironment, and not released within the blood or healthy tissue as the ADC is delivered systemically and travels through the body. We believe that safer ADCs can be developed by utilizing non-natural amino acids that enable state-of-the-art chemistries to ensure that the warhead is not prematurely released. In addition, linker chemistries that rely on proteinases preferentially expressed in the tumor such as cathepsin and B-Glucuronidase, can provide more tumor specific release of the active catabolites and a resulting better safety profile.

- *Mechanism of Action of Cytotoxin Payloads.* Beyond potent cytotoxic activity of ADC payloads, there are additional attributes that lead to better efficacy and more durable responses. Payloads that induce bystander activity, which is dependent on the ADC target engagement, but also kills surrounding cells within the tumor, are thought to result in broader activity. Additionally, some payloads can induce immunogenic cell death pathways. These pathways not only cause potent tumor cell killing but also produce an immunological phenotype in the cancer cells, known as immunogenic cell death, or ICD. Different payload types induce variable levels of ICD, which can induce an immune response against endogenous tumor antigens, contributing to tumor elimination and improved outcomes. Importantly, there is an emerging trend in the clinic that ADCs that induce higher levels of ICD combine better with checkpoint inhibitors, including PD-1/L1 antibodies.

- *Limitations of Topo1 inhibitor payloads*. When compared to first generation, tubulin inhibitor-based ADCs such as T-DM1, exatecan-delivering ADCs, such as Enhertu or raludotatug deruxtecan, or R-DXd, display significant improvements in safety and efficacy measures observed in preclinical and clinical studies. Despite the progress made, serious adverse events and efficacy challenges remain. For example, upon prolonged treatment with DXd-based ADCs, a small but significant fraction of patients develop ILD. This adverse event is observed independent of the tumor antigen targeted by the ADC. ILD is difficult to treat and can be fatal if not detected in a timely manner. One potential cause of ILD is Fc gamma-mediated uptake of ADCs by alveolar macrophages in the lung, causing internalization followed by payload release, ultimately leading to ILD.

- *Low potency of exatecan-delivering ADCs*: Exatecans are, in general, less potent inducers of tumor cell death compared to tubulin inhibitors. Therefore, low copy number tumor antigens and/or antigens with low internalization rates may be poor targets for extecan-based ADCs due to low potency.

Dual conjugations to enable iADC and ADC^2 modalities to address current limitations of extecan-based ADCs and to optimize the therapeutic index, or TI

XpressCF® enables the incorporation of non-natural amino acids into antibody sequences and results in site specific conjugation of drug payloads. More recently, we have developed technology to enable incorporation of two different non-natural amino acids that allows for the site-specific conjugation of two different payloads, providing the opportunity to combine pharmacology into a single molecule. We believe this is the first use of dual conjugation combining a conventional cytotoxin with an immune stimulatory payload to drive not only direct killing of the tumor cells but an immune response against the tumor. These iADC molecules utilize immune agonists such as TLR 7, TLR 8 and STING to induce activation of innate immune cells within the tumor microenvironment and resulted in more complete responses and protective anti-tumor immune responses in preclinical tumor models. This dual conjugation approach is the basis for our research collaboration with Astellas that is focused on the discovery of iADC molecules for solid tumors. In addition to immune modulators, additional payloads can be incorporated into our dual conjugation approach. These ADC^2 payloads are focused on targets that are upregulated tumors that do not respond well to existing therapies. Our goal is to provide more durable responses in hard-to-treat tumors by combining two payloads that may offset resistance mechanisms.

Cytokine-Based Immuno-Oncology Therapeutics

Cytokines are small biologically active proteins that play an essential role in immune cell function. Cytokines are important for cell-to-cell communication and are responsible for controlling immune cell growth and differentiation. Recombinant human cytokines were among the first biotechnology products engineered for therapeutic use and, in the field of oncology, cytokines that stimulate the immune system to attack cancer cells have been viewed as a potential new approach.

Certain cytokines play a central role in T cell function, contributing to the careful balance between helpful and harmful immune responses. These can be powerful activators of the immune system but can also suppress immune responses through certain specialized T cells that have suppressive functions. A previously approved cytokine therapeutic Proleukin® had shown therapeutic benefit in a small number of cancer patients, but its therapeutic use was limited due to toxicity. Scientists at other companies have focused research on finding ways to modify cytokines so as to reduce toxicity while maintaining therapeutic benefit. The observed efficacy of a modified cytokine, in combination with an immune checkpoint inhibitor, indicates the potential of this new approach. In light of these data and our prior research into cytokines, we commenced a cytokine-based research

program using our XpressCF® and XpressCF+® platform technologies to engineer cytokines aimed at better exposure and tolerability profiles. Our collaboration with Merck focused on developing cytokine derivatives yielded an IL-2 derivative that entered Phase 1 in 2022. We believe that recent advances in immuno-oncology combined with new protein engineering technologies create opportunities to identify novel cytokine-based therapeutics with superior therapeutic indexes.

Our Proprietary XpressCF® Platform

While ADCs, iADCs, ADC^{2}s and engineered cytokines hold significant promise, drug developers working with these complex biologics face significant design and development challenges. Optimizing these complex biological structures is a challenging, trial and error process that requires the refinement of several properties in tandem. This iterative process is cumbersome and fraught with significant limitations. As a result, the drug candidate nominated for development is often plagued by inefficient design properties, which then translates to a suboptimal therapeutic index when investigated in the clinic.

Our XpressCF® platform seeks to address these significant shortcomings. We believe our cell-free-based protein synthesis technology allows for efficient and proper design exploration to be conducted prior to nominating a lead drug candidate. In addition, we believe we can optimally design these types of complex biologics in a manner that is ideal for subsequent production at relevant scale and manufacture. We believe we are the only company with products in clinical development that has the capability to produce cell-free-based protein synthesis at scale. We believe we have a significant advantage over other development approaches in this space.

Overview of Our XpressCF® Platform

Our XpressCF® platform is fundamentally different from the conventional cell-based protein synthesis approach in that we separate the production of the cell mass from the production of the protein.

We first generate a cellular mass from our proprietary cell line from which we harvest the inner cellular machinery for making proteins. The cellular mass is generated from our highly engineered variant of Escherichia coli, or E.coli bacteria, and has been optimized to make an extract that produces complex mammalian proteins. These cells are grown over the course of several days, harvested, broken apart, clarified, and stored as a cell mass for future production of our protein therapeutics. We refer to this proprietary cell mass as extract, or XtractCF®. The extract includes necessary components for energy production, transcription and translation, and can be used to support cell-free protein synthesis. This extract can then be used agnostically to manufacture a wide variety of therapeutic proteins and protein fragments without the need to generate further cell lines.

As a result, protein synthesis then becomes a predictable and reproducible biochemical reaction, independent of the constraints of a cell. A specific DNA sequence is added to the extract, which results in the coding and expression of the desired protein in less than 24 hours. Using this process, we express hundreds or thousands of DNA sequences simultaneously within the same cell-free extract system and therefore can make and purify hundreds or thousands of unique proteins at the same time. This allows us to perform rapid expression, testing and characterization of many variants early in discovery to elucidate structure-activity relationships. Structure-activity relationship refers to how changes to the structure of a protein can lead to improvements in a molecule's properties, such as binding, internalization, functional activity and stability, which are properties that are key to the therapeutic protein's efficacy and tolerability in the patient. We are thereby able to optimize many properties with high specificity, including: binding efficiency to each antigen target, spatial orientation, linker design, target killing efficiency, immunological activity, protein expression, and folding efficiency and stability.

Advantages of Our XpressCF® Platform

We believe the advantages of our cell-free-based protein synthesis technology platform include:

- *Ability to Rapidly Produce and Evaluate a Wide Variety of Protein Structures In-house*. By decoupling the production of the cell-free extract from the production of the protein, we are able to stockpile large quantities of cell-free extract from which we are able to manufacture a wide variety of proteins without the need to generate individual cell lines, including cytokine-based immuno-oncology therapeutics, ADCs, iADCs and bispecific antibodies. Additionally, our dual conjugation ADC^2 technology could enable "mixed

payload" ADCs that combine two distinct small molecules with different pharmacologies onto a single antibody.

- *Ability to Incorporate Non-Natural Amino Acids.* Our technology allows for efficient incorporation of a non-natural amino acid in any location in an antibody or protein with high precision and fidelity, which we believe allows for the design of optimized protein conjugates. Further, our non-natural amino acid conjugation technology permits complete and rapid stable linkage between our linker components and the non-natural amino acid, resulting in a single species without loss of efficiency as the conjugates become increasingly complex.

- *Absence of Fc-gamma Receptor Binding.* Antibodies produced using the XpressCF® platform have not been shown to bind the Fc-gamma receptor, and therefore are not subject to Fc-gamma mediated uptake by alveolar macrophages, which we believe results in reduced nonspecific payload release in the lung, reducing the potential for ILD.

- *Faster Cycle Time.* Our ability to produce thousands of protein variants in parallel overnight allows us to rapidly express, test and characterize many variants early in discovery to elucidate structure-activity relationships and identify opportunities for superior therapeutic profiles, as well as new intellectual property. We are therefore able to efficiently optimize many properties with high specificity in parallel.

- *Efficient Drug Discovery and Early Pharmacology and Safety Assessment.* Our cell-free technology creates the opportunity for accelerated pharmacology and safety assessments during the design and discovery phase of product development. This approach allows us to generate optimized proteins early in our discovery process, which can be transitioned seamlessly to clinical scale production using the same cell-free process.

- *Rapid and Predictable Scalability*. Our cell-free extract does not need to be modified in any manner as we scale from research to preclinical to clinical to commercial production. This enables us to move more rapidly to the clinic by eliminating master cell banking activities and significantly de-risks scale-up to manufacturing.

Our XpressCF® Solution for ADCs, iADCs, Bispecific ADCs, and ADC² Therapeutics

We believe our technology enables new approaches to ADCs, iADCs, bispecific ADCs, and ADC^2 drug discovery, development and manufacturing. Key attributes are:

- *Homogeneous Design.* Our XpressCF+® platform enables precise and specific placement of non-natural amino acids in defined numbers and positions within our engineered proteins. These non-natural amino acids then serve as highly stable attachment sites, also known as conjugation sites, for chemical functional groups. For example, we attach linker-warheads to non-natural amino acids within our antibodies to create single-species, tumor-killing ADCs. Similarly, we can attach polyethylene glycol polymers onto non-natural amino acids within our cytokine-based therapeutics to create single-species immunotherapies designed for extended pharmacokinetics and safety.

- *Experimentally Defined Structure-Activity Relationships*. Our cell-free technology enables rational design of protein therapeutics through a rapid, reiterative process that experimentally defines structure-activity relationship for cytokine-based therapeutics, ADCs, iADCs, bispecific ADCs and ADC^{2}s. This approach allows us to explore a wide variety of structural features and formats in parallel as we optimize therapeutic candidates. For example, the precise location of chemical conjugation sites directly affects the activity of both ADCs and cytokine-based therapeutics. Our proprietary technology is key to our ability to define the best number and positions of non-natural amino acids for conjugation based on: conjugation efficiency; functional activity/pharmacological properties; and pharmacokinetics and safety. This design flexibility is also an important aspect of our discovery approach to other protein therapeutics. For example, we are able to make and directly compare a variety of pairings and structural formats for our ADC molecules to ensure that we have optimized sites of conjugation, the number of payloads on each antibody (drug-antibody ratio, or DAR) and linker chemistry. We have examples where changing just one of these parameters can significantly impact the safety, efficacy and stability of the ADC. Further, we have

demonstrated the ability to introduce more than eight non-natural amino acids into a single antibody structure, without impacting the expression levels of engineered antibodies, permitting ADCs with a DAR of greater than eight. Most conventional conjugation methods are limited by a DAR of eight, due to the availability of only eight interchain cysteines, which are used for conjugation with conventional methods. In addition, our XpressCF+® platform enables integration of two different types of non-natural amino acid, which can be used to precisely conjugate two different payloads to the same antibody, and allows us to engineer additional pharmacological properties, including iADCs and ADC^2 therapeutics.

- *Efficient Transition from Research Scale to Development Scale Protein Production.* Protein therapeutics can encounter obstacles, or even fail, during the transition from research cell lines to cGMP cell lines appropriate for clinical development and commercialization. Our XpressCF® platform can rapidly produce different protein types from a single proprietary extract, which can be scaled for discovery, development and ultimately, we believe, commercialization of cytokine-based immuno-oncology therapeutics, ADCs, iADCs, bispecific ADCs and ADC^{2}s.

- *Manufacturable Dual Conjugations.* Our XpressCF+® platform allows us to manufacture antibodies that contain two different non-natural amino acids that are substrates for mutually orthogonal site-specific conjugation reactions. This advantage permits dual conjugation, resulting in homogenous iADC or ADC^2 dual conjugate molecules with two different precisely placed payloads.

Accordingly, we use our XpressCF® platform to discover and develop cancer therapeutics by empirically determining the optimum structure-activity relationships for cytokine-based immuno-oncology therapeutics, ADCs, iADCs, bispecific ADCs and ADC^{2}s and transitioning those products to cGMP compliant manufacturing.

Our Collaborations Validate Our Technology

Our XpressCF® platform has garnered the attention of leading pharmaceutical and biopharmaceutical companies and resulted in collaborations to discover and develop novel therapeutics. We have leveraged these strategic partnerships to extend our own capabilities and broaden the scope of our XpressCF® platform. Through December 31, 2023, all of our collaborations have provided us with an aggregate of approximately $854 million in payments, which includes approximately $54 million in investments in our stock. Our currently active collaborations include:

- ***Merck Program.*** We have granted Merck the right to develop MK-1484, a selective IL-2 agonist in clinical studies as a monotherapy and in combination with pembrolizumab for the treatment of solid tumors.

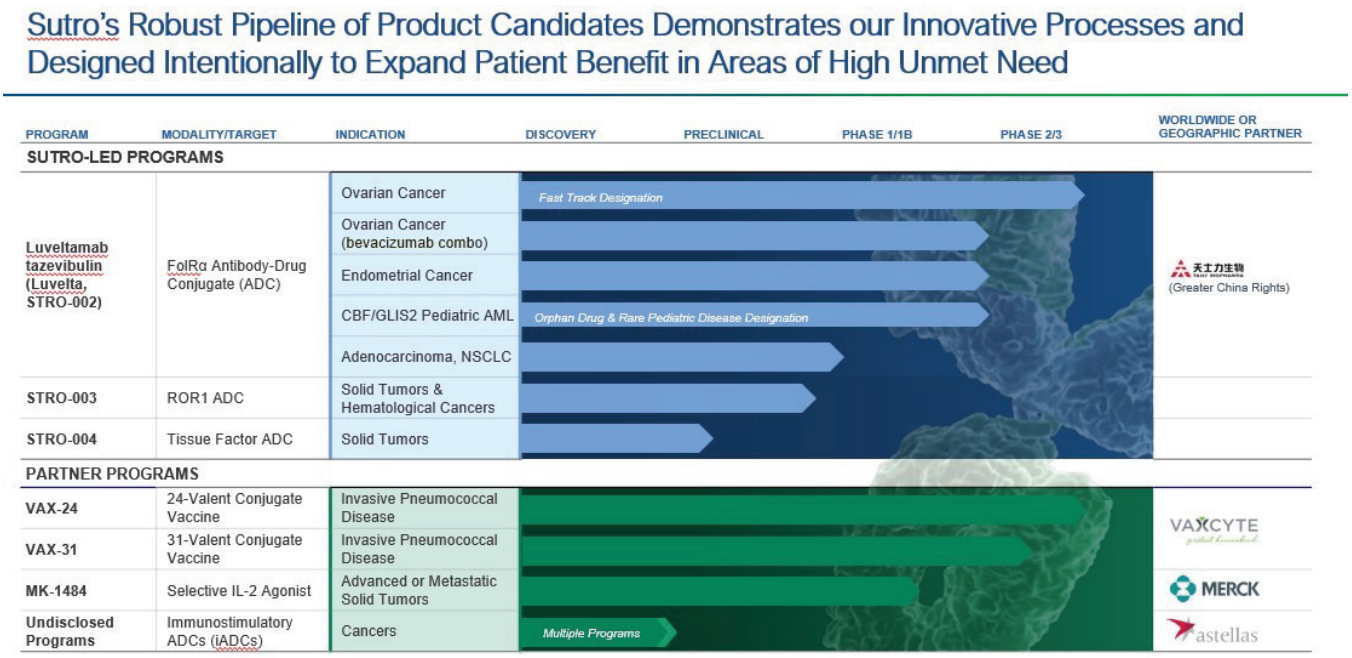
- ***Astellas Collaboration.*** The collaboration and license agreement with Astellas covers the discovery and development of immunostimulatory antibody-drug conjugates for up to three biological targets.

- ***Vaxcyte Relationship.*** We have granted Vaxcyte the right to discover and develop vaccines for the prophylaxis and treatment of infectious diseases. Vaxcyte's most advanced product candidates are VAX-31 and VAX-24, 31-valent and 24-valent, respectively, pneumococcal conjugate vaccine candidates under investigation for the prevention of invasive pneumococcal disease in adults and adults and infants, respectively. Further, in the fourth quarter of 2023, Vaxcyte exercised an option to obtain development and manufacturing rights for XtractCF® providing Vaxcyte the right to make and source our cell-free extract for research, development, and manufacture of vaccines for the prophylaxis and treatment of infectious disease.

- ***Tasly Relationship.*** We have granted Tasly an exclusive license to the right to develop and commercialize STRO-002 in Greater China.

- **Our Pipeline of Product Candidates and Discovery/Preclinical Programs**

Our current product candidates and Discovery and Preclinical stage programs, all based on our proprietary XpressCF® platform, are summarized in the chart below:



Our Product Candidates

Luveltamab tazevibulin (luvelta), an ADC Directed Against the Target Folate Receptor-Alpha (FolRα)

Overview

We are developing luveltamab tazevibulin, or luvelta, an optimally designed ADC directed against the cancer target FolRα, initially focused on ovarian and endometrial cancers. Luvelta was designed and optimized for an improved therapeutic index by placing a precise number of linker-warheads at four specific locations within the antibody using our proprietary XpressCF+® platform. We initiated a Phase 2/3 trial to assess the efficacy of luvelta for the treatment of platinum resistant ovarian cancer, the REFRAME-O1 study, in June 2023.

Phase 1 trial enrollment, focused on ovarian and endometrial cancers, began in March 2019. We reported a near-final dataset in January 2024. Based on such reported data, luvelta exhibited a manageable safety profile and promising preliminary efficacy data. Both the dose-escalation and the dose-expansion portions of the Phase 1 trial were fully enrolled for assessment of the efficacy, safety, and tolerability of luvelta at dose levels of 4.3 and 5.2 mg/kg. Additionally, a combination cohort in ovarian cancer, assessing the combination of luvelta with bevacizumab, opened for enrollment in December 2021, and an expansion cohort for FolRa-selected endometrial cancer opened and began enrolling patients in the fourth quarter of 2021. Interim results from the endometrial cohort demonstrated encouraging preliminary anti-tumor activity in FolRα-selected patients, defined by a tumor proportion score, or TPS, of >25% FolRα expression, with a safety profile that was consistent with prior data in patients with platinum-resistant ovarian cancer, and were presented at the 2023 European Society for Medical Oncology, or ESMO, Congress in October 2023. An expansion cohort assessing the effects of administration of prophylactic pegfilgrastim in combination with luvelta opened for enrollment in the second quarter of 2022; interim results from this cohort were also presented in January 2023. Interim results from the combination study of luvelta with bevacizumab for treatment of ovarian cancer and updated results from the cohort assessing the combination of luvelta with pegfilgrastim were presented in January 2024. In August 2021, we were granted Fast Track designation for luvelta by the FDA for the treatment of patients with platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer, who have received one to three prior lines of systemic therapy. In December 2021, we entered into a collaboration and exclusive license agreement with Tasly to develop and commercialize luvelta in Greater China.

Luvelta has been provided through compassionate use to pediatric patients with relapsed/refractory CBF/GLIS AML, which data were presented at ASH 2022 and ASH 2023. The data showed that luvelta was well tolerated as a monotherapy agent and in combination with standard cancer therapies. In December 2022, luvelta was granted Orphan Drug Designation by the FDA for this pediatric indication.

Ovarian Cancer Overview

Ovarian cancer is the most common cause of cancer death from gynecologic tumors in the United States, and the fifth most common cause of cancer death in women. In the United States alone, the American Cancer Society estimates that 19,680 new cases of ovarian cancer would be diagnosed in 2024, and approximately 12,740 women would die of this disease. Given that early stages of the disease cause minimal, nonspecific symptoms or are asymptomatic, approximately 75% of patients with ovarian cancer are diagnosed as stage III and IV, for which the prognosis is poor. Standard pre- or post-operative chemotherapy for ovarian cancer is combination therapy with a platinum compound and a taxane, for example, carboplatin and paclitaxel, with or without bevacizumab which achieves a complete or partial response in between 70% to 80% of patients. Increasingly, PARP inhibitors are being used in the maintenance setting. Patients who are refractory or resistant to platinum-based treatments are then treated with a host of additional palliative chemotherapeutic agents, each showing only marginal benefit with response rates to single agent chemotherapy of 10-12% and progression free survival of 3-4 months. This represents a significant unmet need.

Endometrial Cancer Overview

There is also a significant unmet need in the treatment of recurrent or metastatic endometrial cancer. In the United States alone, the American Cancer Society estimated 67,800 new cases of endometrial cancer, which is cancer of the uterus, in 2024, and that approximately 13,250 women would die of this disease. First-line treatment for stage III/IV disease is commonly paclitaxel/carboplatin. Recently, the combination of lenvatinib and pembrolizumab was approved for the treatment of patients with advanced, metastatic endometrial cancer who have disease progression following prior systemic therapy with a platinum doublet. With the lack of available therapies for patients who progress after standard of care therapies, long-term survival prospects are poor and novel treatments offering even a modest improvement in progression-free survival or overall survival, or OS, may be considered for expedited regulatory approval.

Pediatric AML CBFA2T3-GLIS2 (CBF/GLIS) Phenotype Overview

There remains a significant unmet need in the treatment of CBF/GLIS AML in pediatric patients. The CBF/GLIS subtype of AML is a rare, aggressive form of AML that typically affects pediatric patients with a median age of 1.5 years. The prevalence of CBF/GLIS AML is 1%-3% in childhood AML, and in recent studies the incidence was determined to be 1.3%-1.8% of pediatric AML patients. The prognosis for this disease is grim, with a 5-year OS of 15-30%. The first-line treatment for this disease is chemotherapy with a goal of reducing disease burden to the point that the patient can receive a bone marrow transplant. While a bone marrow transplant is intended to be curative, most patients eventually relapse with poor treatment outcomes. Patients who are refractory to primary chemotherapy or who relapse following bone marrow transplant have no additional treatment options and also have poor treatment outcomes. Given the lack of treatment options for these patients, a novel treatment that offers an opportunity for these patients to become eligible for bone marrow transplantation may be considered for expedited regulatory review.

Our Solution, luveltamab tazevibulin (luvelta)

Luvelta targets FolRα, a surface protein with limited expression on normal tissue and overexpressed in multiple cancers, including ovarian cancer, which makes FolRα a promising ADC approach.

Luvelta employs a cleavable linker that releases a cytotoxic drug inside tumor cells, while being stable and resistant to cleavage in general circulation. The cytotoxic drug used in luvelta is our proprietary hemiasterlin moiety. From a safety perspective, we designed luvelta to have what we believe to be the optimal potency-to-safety ratio. We therefore rationally selected a homogenous ADC with an optimized DAR of four.

Based on preclinical findings, we believe our efficient homogeneous design of luvelta could provide anti-tumor activity, stability, and safety with the potential to minimize off-target damage and improve clinical benefit. We believe an improved therapeutic index could differentiate luvelta from conventional technology for the treatment of ovarian cancer and endometrial cancer. To test this, we have created a benchmark FolRα-targeting surrogate molecule based on conventional technology that has a heterogeneous ADC, with a similar DAR, utilizing a DM4 linker-warhead. We have tested this benchmark molecule against luvelta in multiple preclinical models. However, additional preclinical and clinical testing will be needed to determine the safety and efficacy of luvelta and to obtain regulatory approval, if ever obtained.

Clinical Development Plan

Our first Phase 1 trial for luvelta was an open-label study evaluating luvelta as a monotherapy for patients with ovarian and endometrial cancers. This trial was being conducted in two-parts, dose escalation and dose expansion. We began enrolling ovarian cancer patients in March 2019, with updated data for the completed dose escalation cohort reported in December 2020 and May 2021. The primary objectives of the clinical trial are to determine the safety and tolerability profile, to define the recommended Phase 2 dose level and interval, and to evaluate preliminary anti-tumor activity. Our secondary objectives are to characterize human pharmacokinetics and additional safety, tolerability, and efficacy measures.

We initially enrolled adult patients with advanced and/or refractory ovarian cancer, for whom no suitable treatment exists. These patients are considered to have incurable disease and need repeated courses of life-prolonging and palliative treatment. The initial Phase 1 trial enrolled ovarian cancer patients regardless of their FolRα expression levels. These ovarian cancer patients were enrolled in a dose escalation cohort, with luvelta administered on day one of a 21-day cycle. Since anti-tumor activity was observed during the fully enrolled dose escalation portion of the Phase 1 trial, we initiated enrollment of patients in the dose expansion portion of this clinical study in January 2021 and are treating less heavily pre-treated ovarian cancer patients. The dose expansion portion of this Phase 1 study of luvelta has been completed.

In May 2021, we announced data from the dose-escalation portion of our ongoing Phase 1 clinical trial of STRO-002 in patients with ovarian cancer. The dose-escalation portion of the trial was fully enrolled with 39 patients in August 2020. Patients were heavily pre-treated and had a median of six prior lines of therapy, including standard of care platinum-based regimens, bevacizumab, PARP inhibitors, and checkpoint inhibitors.

The dose-escalation portion of the Phase 1 trial included 34 patients treated with clinically active dose levels, 2.9 mg/kg or higher, of which 31 patients had post-baseline scans and were evaluable for RECIST response. At the data cutoff of April 23, 2021, results out of 31 evaluable patients included:

- 10 patients (32%) met RECIST criteria for response, of which, one patient achieved a complete response, or CR, and nine patients achieved a partial response (four confirmed partial responses and five unconfirmed partial responses).

- For the five confirmed responders (1 CR and 4 confirmed partial responses), the median duration of response, or DOR, was 5.8 months (95% CI: 2.0, not evaluable).

- Median study follow-up was 8.4 months and median progression-free survival (PFS) was 7.2 months (95% CI: 4.5, 10.8).

- 86% of treatment-emergent adverse events, or TEAEs, were Grade 1 or 2. The most common Grade 3 and 4 AEs were neutropenia (64%), arthralgia (13%), fatigue (10%), neuropathy (8%), and abdominal pain (8%), all of which were managed with standard medical treatment, dose reductions, or dose delays.

- Dose limiting toxicities, or DLTs, were observed at higher dose levels in two patients – at 6.0 mg/kg (Grade 2 neuropathy/Grade 3 arthralgia) and at 6.4 mg/kg (Grade 3 bone pain).

Based on the above results, we identified dose levels of 4.3 and 5.2 mg/kg to study in the dose-expansion portion of the Phase 1 trial. For the dose-expansion portion, we dosed the first patient in January 2021 and treated less heavily pre-treated ovarian cancer patients. We reported near-final data in January 2024. We also initiated an exploratory dose expansion cohort of 15 patients to assess the safety of treatment with luvelta at 5.2 mg/kg in combination with prophylactic pegfilgrastim, and interim results from this cohort were also presented in January 2023 and January 2024.

The dose-expansion cohort for ovarian cancer fully enrolled 44 patients, who had experienced up to three prior lines of therapy and were randomized into dose levels starting at 4.3 mg/kg (N=23) and 5.2 mg/kg (n=21). 81% of the patients were platinum-resistant, and 66% and 82% of the patients had been treated previously with bevacizumab and PARP inhibitors, respectively.

The patients were also assessed for FolRα expression levels, which were calculated using TPS correlated with higher response rates. We have identified TPS as a potentially appropriate scoring algorithm for luvelta with respect to the biomarker enrichment strategy. Of the 44 patients in this cohort, 9 had a TPS score of less than or equal to 25%, while 35 had a TPS score of greater than 25%. Of these 35 patients, as of the data cutoff date of November 8, 2022, 32 had at least one post-baseline scan, and therefore were evaluable for RECIST v1.1 responses.

The results demonstrated that luvelta provided substantial clinical benefit in FolRα-selected patients, defined by TPS of >25%, with a 37.5% overall response rate (ORR), median DOR of 5.5 months, and median PFS of 6.1 months, regardless of starting dose. Results also demonstrated the higher starting dose of 5.2 mg/kg provided greater patient benefit compared to the lower starting dose of 4.3mg/kg. FolRα-selected patients account for approximately 80% of the patient population in advanced ovarian cancer, as represented in the patient stratification in the Phase 1 study.

In particular:

- Patients who were FolRα-selected, defined by TPS >25%, regardless of starting dose, demonstrated an ORR of 37.5% (n=32) with a median DOR of 5.5 months (n=12) and a median PFS of 6.1 months (n=35).

- Estimated targeted luvelta patient population is approximately 80% of advanced ovarian cancer patients based on pooled Phase 1 biomarker data.

- Luvelta demonstrated a FolRα-dependent response, with patients who were unselected for FolRα (TPS ≤25%) demonstrating an 11.1% ORR (n=9) with a median DOR of 2.9 months (n=1) and a median PFS of 3.8 months (n=9).

- FolRα-selected patients given the 4.3 mg/kg dose of luvelta demonstrated an ORR of 31.3% (n=16), a median DOR of 13 months (n=5) and a median PFS of 6.1 months (n=19).

- Luvelta, when given to FolRα-selected patients at a starting dose of 5.2 mg/kg, provided greater patient benefit than a starting dose of 4.3 mg/kg, with the 5.2 mg/kg dose of luvelta demonstrating an ORR of 43.8% (n=16), a median DOR of 5.4 months (n=7) and a median PFS of 6.6 months (n=16).

Safety signals from the 44 patients at the 5.2 mg/kg and 4.3 mg/kg starting dose levels, were consistent with data from the dose-escalation cohort, including:

- No qualitatively new safety signals were observed in the dose-expansion cohort, including the absence of meaningful ocular or lung toxicity signals or complications.
- Neutropenia was the leading TEAE that resulted in a treatment delay or a dose reduction. The majority of the cases of neutropenia were generally asymptomatic and resolved with a one-week dose delay or, in other cases, with standard medical treatment, including the use of G-CSF.
- Arthralgia was the second most common Grade 3 or higher, or Grade 3+, TEAE and second most common TEAE leading to dose reduction.
- There were limited observed cases of febrile neutropenia, including one Grade 5 event at the 5.2 mg/kg starting dose level and one Grade 3 event at the 4.3 mg/kg starting dose level. The trial protocol was subsequently updated to require dose reduction for Grade 4 neutropenia.

In 2022 we initiated an exploratory cohort, or cohort C, of 15 patients to assess the safety of treatment with luvelta at 5.2 mg/kg in combination with prophylactic pegfilgrastim and presented preliminary data from 10 patients from this cohort in January 2023. In January 2024, we announced updated data from this cohort based on 16 patients. In particular:

- Grade 3+ neutropenia was reduced from 66.7% to 6.3%, resulting in a 90.6% decrease in Grade 3+ neutropenia rates at the first cycle of luvelta (p=0.0002); Grade 3 neutropenia was reduced from 71.4% to 18.8%, resulting in a 73.7% decrease in Grade 3+ neutropenia rates at the first and second cycle (p=0015)

- Overall Grade 3+ neutropenia was reduced from 76.2% to 37.5%.

In January 2024, we presented an aggregated data set from of our Phase I trials of luvelta. This data set included data from all ovarian cancer patients treated with luvelta as a monotherapy in Phase 1 studies, regardless of FolRα expression levels, dose level of luvelta, or platinum sensitivity or resistance, corresponding to a total of 99 patients, of which 92 were RECIST-evaluable, with 21% platinum sensitive patients and 78% platinum refractory patients. Patients received a median of three prior lines of therapy. There were 72% of the patients that had experienced prior bevacizumab therapy and 70% had been treated with a PARP inhibitor. These patients were not selected for FolRα expression levels and were treated at starting dose levels ≤2.9 mg/kg, 4.3 mg/kg, 5.2 mg/kg or ≥5.6 mg/kg.

The safety profile of luvelta from these aggregated data was shown to be manageable, with a low rate of discontinuation of treatment resulting from neutropenia. The predominant TEAE, was neutropenia, encompassing neutropenia, febrile neutropenia, and decreased neutrophil count, with 69.7% patients reporting any grade neutropenia and 64.6% patients reporting Grade 3 or higher neutropenia. Neuropathy and arthralgia were the other most commonly reported significant TEAEs, with 57.6% and 16% of patients reporting any grade and Grade 3 or higher arthralgia, respectively, and 44% and 7% patients reporting any grade and Grade 3 or higher neuropathy, respectively. The observed neutropenia was primarily uncomplicated, with less than 5% incidence of febrile neutropenia. Neutropenia and arthralgia each led to discontinuation of treatment in 1.5% of patients. Neuropathy led to discontinuation of treatment in 2.9% of patients. There were six patients that experienced grade 5 safety events on study, with one such event assessed as probably luvelta related and the remainder assessed as unrelated to luvelta.

We also presented a subset of the aggregated data from our Phase 1 trials of luvelta for which 43 patients with platinum resistant ovarian cancer selected for FolRα TPS ≥25%, or tumors with ≥25% of the tumor cells expressing FolRα at any level of staining intensity, were treated with 4.3 mg/kg or 5.2 mg/kg doses of luvelta, corresponding to all patients treated in phase 1 studies that would be eligible for enrollment in the REFRαME-O1 registrational study. The ORR observed for this subset population was 28%, with a DOR of 5.7 months and PFS of 5.8 months.

Based on the data from our Phase 1 program, we selected FolRα expression TPS ≥25% as the target eligibility cutoff or threshold for further study in clinical development of luvelta. We estimate that approximately 80% of the platinum resistant ovarian cancer patients would be eligible for luvelta treatment based on this TPS ≥25% threshold for FolRα expression.

Additionally, we opened for enrollment a Phase 1 trial to assess the combination of STRO-002 and bevacizumab for treatment of ovarian cancer in December 2021 and presented initial preliminary results of this study in January 2024. Safety signals from this study were generally consistent with those previously reported and the combination treatment with luvelta and bevacizumab demonstrated clinical activity in treated patients regardless of their FolRα expression status.

We also began enrolling patients in an expansion cohort for FolRα-selected endometrial cancer in the fourth quarter of 2021 and presented initial preliminary results from the study at the 2023 ESMO Congress in October 2023. In this trial, luvelta showed encouraging preliminary anti-tumor activity in FolRα-selected patients, defined by a TPS of >25% FolRα expression, and the safety profile was consistent with prior data in patients with platinum-resistant ovarian cancer. We expect to present updated results from the bevacizumab combination study in 2024. Further, we plan to submit an IND for the treatment of NSCLC with luvelta in the first half of 2024.

In addition to the Phase 1 studies discussed above, we initiated a Phase 2/3 study, the REFRαME-O1 study, of luvelta for the treatment of platinum-resistant ovarian cancer in June 2023. This study comprises two parts; in Part 1, we anticipate enrolling 50 patients randomized 1:1 to two different doses of luvelta, either 4.3 mg/kg or 5.2 mg/kg plus prophylactic pegfilgrastim for two cycles, followed by a reduction to 4.3 mg/kg. After proceeding to Part 2 of the study, the non-optimized dose of luvelta will be dropped and approximately 516 patients will be randomized 1:1 to the selected luvelta dose or investigators' choice of chemotherapy. The protocol will include an optional interim analysis for ORR and DOR to support a potential application for accelerated approval, and the endpoints that will be assessed for a potential full approval are PFS and OS. The REFRαME-O1 study patient population includes those with platinum-resistant ovarian cancer, one to three lines of prior treatment and tumors that express FolRα at TPS ≥25%, and excludes primary platinum refractory patients and those with Eastern Cooperative Oncology Group Performance Status, or ECOG PS, of 0-1. We announced the initiation of Part 1 of the REFRαME-O1 study in June 2023 and the study is ongoing. We anticipate that Part 1 will be fully enrolled in the first half of 2024.

We are also seeking to develop luvelta for the treatment of CBF/GLIS AML in pediatric patients. Initial access to luvelta in this indication has been provided through compassionate use. Initial data on the anti-leukemic activity of luvelta in 17 pediatric patients with relapsed/refractory CBF/GLIS AML was presented at ASH 2022 and updated at ASH 2023, including data from eight additional patients.

The ASH 2023 presentation included results from 25 pediatric patients with relapsed/refractory CBF/GLIS subtype AML treated with luvelta at doses up to 4.3 or 5.2mg/kg every two to four weeks for a DOR of 15.9 weeks (3-73.1), with 68% of patients receiving at least five doses. Luvelta was well-tolerated as a monotherapy agent and in combination with standard of care therapies. Of the 25 treated patients, 19 had ≥5% blasts, consideredmorphologic disease, or MD, and 8 had <5% blasts, considered sub-morphologic disease, or SMD. Collective results show that treatment with luvelta produced clinically meaningful and durable responses across a broad range of patients in various settings, including in patients with or without prior stem cell transplant and in monotherapy or in combination with cytotoxic therapy. A complete remission, or CR, or complete remission with partial hematologic recovery, or CRh, was observed in 8 out of 19 (42%) patients with ≥5% blasts treated with luvelta, with 5 out of 8 CR/CRh patients reaching a minimal residual disease, or MRD,-negative CR (63%). Six out of eight patients with <5% blasts experienced an MRD-negative CR (75%).

In the next phase of luvelta development for the treatment of CBF/GLIS AML in pediatric patients, we expect to initiate enrollment in a registration-enabling trial, REFRαME-P1, in the second half of 2024. In the first part of the study, patients will be randomized between two doses of luvelta, 3.5 mg/kg and 4.3 mg/kg, to identify an optimized dose. Following selection of the optimized dose, we plan to test the optimized dose in approximately 18 patients with relapsed/refractory CBFA2T3::GLIS2 AML having ≥5% bone marrow involvement with leukemic blasts. Key endpoints are planned to be CR rate, MRD-negative response rate, event-free survival, or EFS, release-free survival, or RFS, OS, safety, and pharmacokinetics.

STRO-003, An ADC Directed Against ROR-1

In 2022, we nominated STRO-003 for further development. STRO-003 is a ROR1-targeting ADC for the treatment of ROR1-expressing solid tumors, including triple negative breast cancer, or TNBC, NSCLC, and ovarian cancer. STRO-003 is an anti-ROR1 human IgG1 antibody conjugated using our XpressCF+® platform technology to a cleavable DBCO-PEGylated β-glucuronidase-exatecan linker-payload, at a DAR of approximately eight. Currently, there are no therapeutics approved that specifically target ROR1, although there is one ROR1-targeting ADC, zilovertamab vedotin, or ZV, also known as MK-2140, or VLS-101, in Phase 2 testing targeting DLBCL, mantle cell lymphoma, or MCL, NSCLC, and breast cancer. Based on preclinical *in vitro* and *in vivo* data, we believe that STRO-003 has the potential for an improved therapeutic index compared to ZV. We believe these features present a unique opportunity for clinical development of STRO-003 to address unmet medical needs in hematological malignancies, ovarian cancer, TNBC and NSCLC.

We believe STRO-003 has been precisely designed and optimized to provide the potential for a best-in-class ADC targeting ROR-1. Our proprietary non-natural amino acid, which provides the substrate for conjugation to our proprietary β-glucuronidase cleavable exatecan linker warhead, have been placed at what we believe are the optimal sites in the amino acid sequence of our high affinity anti-ROR1 antibody, resulting in enhanced performance and stability in preclinical *in vitro* and *in vivo* models. These models also suggest that our β-glucuronidase cleavable linkers may provide greater tumor specificity and enhanced tolerability relative to a

protease-cleavable linker delivering an exatecan payload. In particular, in a non-human primate safety study, we did not observe neutropenia, ocular toxicity signals or lung toxicity signals even in the highest dose cohort for STRO-003. Finally, our preclinical testing has shown that the exatecan payload delivered by STRO-003 elicits potent tumor cell killing, bystander activity and immunogenic cell death, which we believe may provide meaningful clinical benefit to patients.

STRO-003 Business Opportunity

We believe ROR1 is a favorable target for an ADC due to its limited normal tissue expression, as well as its prevalence in solid tumors and B cell malignancies, including CLL, DLBCL, MCL, TNBC, NSCLC, and ovarian cancer. Its expression is correlated with poor prognosis in different cancers. Currently, there are no approved therapeutics that specifically target ROR1, but it is a target of increasing interest with several clinical-stage ADCs in development, including ZV (Phase 2), NBE-002 (Phase 1), and CS5001 (Phase 1).

STRO-004, An ADC Directed Against Tissue Factor

We have recently nominated STRO-004 for further development. STRO-004 is a TF-targeting ADC for the treatment of TF-expressing solid tumors, potentially including cervical, lung and breast cancer. STRO-004 is an anti-TF human IgG1 antibody conjugated using our XpressCF+® platform technology to a cleavable DBCO-PEGylated β-glucuronidase-exatecan linker-payload, at a DAR of approximately four. There is an approved ADC targeting TF, TIVDAK®, developed by Seattle Genetics and GenMab A/S, which is approved for the treatment of recurrent or metastatic cervical cancer. In preclinical *in vitro* and *in vivo* studies benchmarking STRO-004 against a TIVDAK® surrogate molecule, we observed comparable antitumor activity but achieved 5- to 10-fold higher dose levels in nonhuman primate safety studies for STRO-004.Therefore, we believe that STRO-004 has the potential for an improved clinical therapeutic index over existing standard of care. We believe these features present a unique opportunity for clinical development of STRO-004 to address unmet medical needs in cervical, lung and breast cancer patients.

We believe STRO-004 has been precisely designed and optimized to provide the potential for a best-in-class ADC targeting TF. Our proprietary non-natural amino acid, which provides the substrate for conjugation to our proprietary β-glucuronidase cleavable exatecan linker warhead, have been placed at what we believe are the optimal sites in the amino acid sequence of our high affinity anti-TF antibody, resulting in enhanced performance and stability in preclinical *in vitro* and *in vivo* models. These models also suggest that our β-glucuronidase cleavable linkers may provide greater tumor specificity and enhanced tolerability relative to a protease-cleavable linker delivering an exatecan payload. In particular, in a non-human primate safety study, we did not observe neutropenia, ocular toxicity signals or lung toxicity, or ILD, signals, even in the highest dose cohort for STRO-004. Finally, our preclinical testing has shown that the exatecan payload delivered by STRO-004 elicits potent tumor cell killing, bystander activity and immunogenic cell death, which we believe may provide meaningful clinical benefit to patients.

STRO-004 Business Opportunity

We believe TF is a favorable target for an ADC due to its limited normal tissue expression, as well as its prevalence in solid tumors, including cervical cancer. Its expression is correlated with poor prognosis in different cancers.

Additional Discovery Efforts

We are also actively researching to identify new ADCs to add to our pipeline. We have multiple ADC discovery programs ongoing using our XpressCF+® platform. Our protein engineering and chemistry efforts are focused on maximizing therapeutic indices, and our technology allows us to rapidly test our therapeutic hypotheses in significantly more product candidates than conventional protein synthesis allows in order to identify the best molecule to advance to the clinic. We have also expanded our ADC technology platform to include iADCs. Our XpressCF+® platform has enabled a groundbreaking technology to engineer homogeneous, dually conjugated immunostimulant and cytotoxic warheads on a single ADC molecule. Our novel iADC design is intended to deliver two different drugs directly to the tumor, to not only kill tumor cells but also locally prime an immune response to the patient's particular tumor cells. We believe that our iADC approach creates a new therapeutic opportunity by combining the best features of an ADC with the biology of a personalized vaccine.

In addition, development of our XpressCF+® platform to enable homogenous, dually-conjugated iADCs also enables us to discover, develop and manufacture ADC^2 molecules. In these ADC^2 molecules, two different linker-warheads are precisely conjugated at specific positions to deliver two different small molecule payloads to a single cancer cell. We are actively investigating different combinations of payloads to identify synergistic pairings with differentiated toxicity profiles. We believe such ADC^2 molecules have the potential to provide the next generation of highly potent cancer therapeutics with acceptable safety and tolerability.

Our bispecific antibody drug discovery programs are focused on bispecific ADCs. We believe such compounds can provide improved specificity for tumors and could potentially spare healthy tissues expressing one, but not both, of the antigens targeted by the bispecific ADC.

Our technology allows us to rapidly incorporate non-natural amino acids in varying numbers and positions, to identify the best cytokine modification for pharmacological activity, pharmacokinetics, and safety. Furthermore, our technology enables rapid preclinical development and transition to cGMP manufacturing, ensuring speed to clinic in a promising field. Our drug discovery teams are exploring novel immuno-oncology therapies, including cytokine-based therapies.

Collaboration and License Agreements

Merck Collaboration

In July 2018, we entered into an Exclusive Patent License and Research Collaboration Agreement (the "2018 Merck Agreement") with Merck to jointly develop up to three research programs focusing on cytokine derivatives for cancer and autoimmune disorders.

Under the 2018 Merck Agreement, we received from Merck a non-refundable, non-creditable, upfront payment of $60.0 million in August 2018 for access to our technology and the identification and preclinical research and development of two target programs, with an option for Merck to engage us to continue these activities for a third program upon the payment of an additional amount. The option to expand activities to a third program expired in January 2021. In December 2021, Merck did not extend the research term for the second research program of the collaboration and that research program reverted to us. The first program of the collaboration is focused on MK-1484, a distinct cytokine derivative molecule for the treatment of cancer. In July 2022, the first patient was dosed with MK-1484 in a Phase 1 study.

We are eligible to receive aggregate contingent payments of up to approximately $500 million for the target program selected by Merck, assuming the development and sale of the related therapeutic candidate and all possible indications identified under the collaboration. If one or more products from the target program is developed for non-oncology or a single indication, we will be eligible for reduced aggregate milestone payments. In addition, we are eligible to receive tiered royalties ranging from mid-single digit to low teen percentages on the worldwide sales of any commercial products that may result from the collaboration.

Merck may terminate the 2018 Merck Agreement at any time with 60 days' prior written notice. Either we or Merck has the right to terminate the 2018 Merck Agreement based on the other party's uncured material breach or bankruptcy.

Astellas Agreement

In June 2022, we entered into a license and collaboration agreement with Astellas, or the Astellas Agreement, for the development of immunostimulatory antibody-drug conjugates for up to three biological targets, to be identified by Astellas. We will conduct research and pre-clinical development of any compound (as designated by Astellas) in each of the three programs in accordance with the terms of a research plan between us and Astellas. Astellas will have an exclusive worldwide license to develop and commercialize any such designated compound, subject to our rights to participate in cost and profit sharing in the United States, as described below.

Pursuant to the Astellas Agreement, we received from Astellas a one-time, nonrefundable, non-creditable, upfront payment of $90.0 million during the year ended December 31, 2022.

We are also eligible to receive up to $422.5 million in development, regulatory and commercial milestones for each product candidate, and tiered royalties ranging from low double-digit to mid-teen percentages on worldwide sales of any commercial products that may result from the collaboration, subject to customary deductions under certain circumstances. We can also elect to convert any product candidate into a cost and profit-sharing arrangement, for the United States only. In the event we make such election, we will share commercialization costs and profits relating to such product candidate equally with Astellas in the United States, and no royalties will be due from Astellas for net sales of such product candidates in the United States.

The Astellas Agreement contains customary provisions for termination, including by Astellas for convenience upon 30 days' written notice and by either party for cause, including for material breach (subject to cure). We have certain reversion rights as to product candidates in connection with certain termination events.

Vaxcyte (formerly known as SutroVax) Relationship

In 2013, we and Johnson & Johnson Innovation, through the Johnson & Johnson Development Corporation, provided initial co-funding for Vaxcyte, Inc., or Vaxcyte, with which we have a license agreement, a supply agreement, an option agreement and a manufacturing rights agreement related to certain development and manufacturing rights. Under the license agreement, Vaxcyte has the right to use the XpressCF® and XpressCF+®platforms to discover and develop vaccine candidates for the treatment or prophylaxis of infectious diseases. The lead programs for Vaxcyte are VAX-31 and VAX-24, its 31-valent and 24-valent, respectively, pneumococcal conjugate vaccine candidates. Vaxcyte is responsible for performing all research and development activities, and we provide technical support and supply XtractCF® and other materials to Vaxcyte.

In May 2018, we entered into a Supply Agreement with Vaxcyte, wherein Vaxcyte engaged us to supply extracts and custom reagents, as requested by Vaxcyte. The pricing is based on an agreed upon cost plus arrangement.

In December 2022, we entered into a letter agreement, or the Vaxcyte Agreement, with Vaxcyte and granted Vaxcyte an option, or the Option, to obtain development and manufacturing rights for XtractCF® that, when exercised, would grant Vaxcyte the right to make and source our cell-free extract for research, development, and manufacture of vaccines for the prophylaxis and treatment of infectious disease.

Pursuant to the Vaxcyte Agreement, we received a one-time, nonrefundable, non-creditable, upfront payment of $10.0 million in cash, and 167,780 shares of Vaxcyte common stock with a fair value of $7.5 million in December 2022.

Additionally, pursuant to the Vaxcyte Agreement, we and Vaxcyte agreed to negotiate the terms and conditions of a form definitive agreement to be entered into in the event Vaxcyte exercises the Option, or the Form Definitive Agreement. In September 2023, we and Vaxcyte mutually agreed upon the Form Definitive Agreement, and in October 2023, we received a $5.0 million payment from Vaxcyte.

Effective immediately upon agreement to the Form Definitive Agreement, we and Vaxcyte entered into Amendment No 3., or Amendment 3, to that certain license agreement between us and Vaxcyte, dated August 1, 2014, and amended and restated on October 12, 2015, and amended again on May 9, 2018 and May 29, 2018, or the License Agreement. Amendment 3 amended certain terms of the License Agreement including with respect to (i) royalty reduction provisions applicable in the event of expiration of relevant patent claims, which would result

in lower royalties payable by Vaxcyte under certain circumstances, (ii) the ownership, prosecution, maintenance and enforcement of certain intellectual property rights licensed or arising under the License Agreement, and (iii) the timing and form for financial reporting of royalty payment calculations.

In November 2023, or the Exercise Date, Vaxcyte exercised the Option by submitting written notice thereof to us and concurrently paid us $50.0 million in cash as the first of two installment payments for the Option exercise price. Under the Vaxcyte Agreement, Vaxcyte is obligated to pay us an additional $25.0 million in cash within six months of the Exercise Date as the second of two installment payments for the Option exercise price. Upon the occurrence of certain regulatory milestones, Vaxcyte would be obligated to pay us certain additional milestone payments totaling up to $60.0 million in cash. In the event that Vaxcyte undergoes a change of control, certain rights and payments may be accelerated.

We hold 0.7 million shares of common stock of Vaxcyte and are eligible for four percent royalties on worldwide net sales of any vaccine candidates for human health use under the license agreement, except for royalties on sales of vaccines for prophylaxis of invasive pneumococcal disease, such as VAX-24 or VAX-31, which are owned by Blackstone, as discussed below. Also, we retain the right to discover and develop vaccines for the treatment or prophylaxis of any disease that is not caused by an infectious pathogen, including cancer.

Vaxcyte has the right to terminate the Vaxcyte license agreement for convenience upon prior written notice. Either party may terminate for the other party's material uncured breach under certain circumstances.

Tasly Relationship

In December 2021, we entered into the Tasly License Agreement with Tasly to grant an exclusive license to develop and commercialize STRO-002 in Greater China. Tasly will pursue the clinical development, regulatory approval, and commercialization of STRO-002 in multiple indications, including ovarian cancer, non-small cell lung cancer, triple-negative breast cancer, and other indications in Greater China. We retained development and commercial rights of STRO-002 globally outside of Greater China, including the United States.

Under the Tasly License Agreement, Tasly was obligated to make an initial payment to us of $40.0 million, with additional potential payments totaling up to $345.0 million related to development, regulatory and commercialization contingent payments and milestones. We will provide STRO-002 to Tasly under appropriate clinical and commercial supply service agreements. Upon commercialization, we will receive tiered royalties, ranging from low- to mid-teen percentages based on annual net sales of STRO-002 in Greater China for at least ten years following the first commercial sale of STRO-002 in Greater China. In February 2022, Tasly indicated that it would like to discuss and renegotiate the terms of the Tasly License Agreement.

In April 2022, we entered amendment No. 1, or the Tasly Amendment, to the Tasly License Agreement. Pursuant to the Tasly Amendment, the initial nonrefundable upfront payment due by Tasly was amended to $25.0 million, and a $15.0 million payment will become payable to us upon the achievement of certain regulatory milestones. The Tasly Amendment also added an additional regulatory milestone payment to the Tasly License Agreement, providing additional potential payments totaling up to $350.0 million related to development, regulatory and commercialization milestones, beyond the payments described above, and made certain other ministerial edits.

In June 2023, we entered into a Master Development and Clinical Supply Agreement, or the 2023 Tasly Supply Agreement, with Tasly, wherein Tasly requested us to provide development, manufacturing and supply chain management services, including clinical product supply.

In September 2023, we received a $5.0 million contingent payment from Tasly, net of withholding tax of $0.5 million, related to the first patient dosed in the REFRaME-O1 trial for luvelta. The REFRaME-O1 study consists of two parts, Part I being the dose-finding portion and Part II being the portion of the study that will focus on the selected dose from Part I, and is intended to generate data to enable the potential registration of luvelta. Although we currently intend to conduct the REFRaME-O1 study to completion, we have the sole discretion to terminate the REFRaME-O1 study at any time. As such, we have agreed with Tasly that, in the event we terminate the REFRaME-O1 study prior to dosing the first patient in Part II, we will refund Tasly the contingent payment received by us within 30 days of such study termination.

In October 2023, we received a $5.0 million contingent payment from Tasly, net of withholding tax of $0.5 million, after Tasly received its first IND clearance by National Medical Products Administration, or NMPA, in Greater China.

Tasly has the right to terminate the Tasly License Agreement for convenience or other reasons specified in the Tasly License Agreement, upon prior written notice.

Blackstone Relationship

In June 2023, we entered into a purchase and sale agreement with Blackstone, or the Blackstone Agreement, to sell to Blackstone a revenue interest in our 4% royalty on potential future sales of Vaxcyte's products, including Vaxcyte's pneumococcal conjugate vaccine, or PCV, products such as VAX-24 and its second-generation PCV product, VAX-31.

Under the Blackstone Agreement, Blackstone paid us an initial upfront payment of $140.0 million in June 2023, with potential payments totaling up to $250.0 million triggered at various return thresholds to Blackstone under the Blackstone Agreement. In addition, under the Blackstone Agreement, we agreed to certain covenants with respect to the exercise of its rights under the Vaxcyte License Agreement, including with respect to the right to amend, assign and terminate the Vaxcyte License Agreement. The Blackstone Agreement contains other customary terms and conditions, including representations and warranties, covenants and indemnification obligations in favor of each party.

Following agreement with Vaxcyte on the Form Definitive Agreement and upon effectiveness of the Amendment, the revenue interest in the 4% royalty on potential future sales of Vaxcyte products other than Vaxcyte's PCV products reverted to us. As such, we retain the revenue interest in royalties from Vaxcyte on sales of all products other than a PCV product, such as VAX-24 or VAX-31.

BMS Collaboration

In September 2014, we signed a Collaboration and License Agreement with BMS to discover and develop bispecific antibodies and/or ADCs, focused primarily on the field of immuno-oncology, using our proprietary integrated cell-free protein synthesis platform, XpressCF®. In August 2017, we entered into an amended and restated collaboration and license agreement with BMS to refocus the collaboration on four programs that were advancing through preclinical development, including an ADC program targeting B cell maturation antigen, or the BCMA ADC, CC-99712.

In May 2019, the U.S. Food and Drug Administration cleared the IND application for the BCMA ADC, which was discovered and manufactured by us and is the first collaboration program IND.

In June 2023, we received a notice of termination from BMS indicating that it was terminating the BMS Agreement and stopping development of CC-99712 due to a portfolio prioritization decision. The termination of the BMS Agreement was effective as of October 7, 2023, or the Termination Date. Following the Termination Date, we have sole worldwide rights to CC-99712.

EMD Serono Collaboration

We signed a Collaboration Agreement and a License Agreement with EMD Serono in May 2014 and September 2014, respectively, which were entered into in contemplation of each other. The Collaboration Agreement was subsumed into the License Agreement, or the MDA Agreement, which agreement is to develop ADCs for multiple cancer targets. Our collaboration with EMD Serono has yielded a novel bispecific ADC product candidate targeting EGFR and MUC1, known as M1231, for which an IND submission was filed in the second half of 2020. In March 2023, EMD Serono disclosed its decision to close the Phase 1a trial of M1231 in patients with solid tumors and not initiate a previously planned expansion study. EMD Serono stated that the decision was based on strategic portfolio considerations.

BioNova Relationship

In October 2021, we entered into the BioNova Option Agreement to confer BioNova the right to obtain exclusive rights to develop and commercialize STRO-001 in Greater China and amended the BioNova Option Agreement with BioNova in the first quarter of 2023. In March 2024, BioNova notified us that it had decided to terminate both the BioNova Option Agreement and clinical development of STRO-001 in Greater China. Following receipt of this notice, we decided to suspend development of STRO-001.

Stanford License

In October 2007, we entered into an Amended and Restated Exclusive Agreement, or the Stanford License, with the Board of Trustees of the Leland Stanford Junior University (Stanford), that grants us an exclusive license, with the right to sublicense, under the patent rights owned by Stanford covering certain technology rights related to our XpressCF® expression system.

We were required to make milestone payments to Stanford of approximately $930,000 on the accomplishment of certain development and regulatory milestones, which total amount has been paid as of December 31, 2021. No additional milestone payments are due under the Stanford License. Additionally, we owe Stanford annual license maintenance fees of $75,000, which may be creditable against earned royalties in such year and are required to reimburse Stanford for ongoing patent-related costs. We are also required to pay to Stanford low single digit royalties on net sales and to share any sublicensing income received related to the licensed technology. We may terminate the agreement at any time upon 30 days' written notice.

Manufacturing

We have significant expertise in the production of therapeutic biologics. Our proprietary XpressCF® platform is a cell-free protein synthesis technology that enables rapid and systematic process development, streamlined scale-up and GMP manufacturing.

Extract and Reagents

We manufacture our cell-free extract and related reagents in our GMP manufacturing facility in San Carlos, California for our clinical trials and supply commitments. We have identified a contract manufacturing organization, or CMO, to serve as our strategic partner for the production of cell-free extract and have initiated technology transfer to this CMO. Similarly, we have identified a CMO to produce custom reagents used in our cell-free production and have initiated this technology transfer as well. The technology transfer for production of custom reagents was substantially completed in 2023 and we expect the technology transfer for production of cell-free extract to be substantially completed in the first half of 2024.

Drug Substance and Drug Product

Our process development and manufacturing strategies are tailored to rapidly advance our product candidates, including the use of a supply chain of established CMOs to ensure successful execution. The production of antibodies will be done by either us or CMOs, depending on our internal cGMP production capacity. We have identified a CMO to produce the antibody component of our products at scale and technology transfer of the manufacturing process is underway. The production of all other necessary elements for the manufacture of our ADC product candidates, and the final manufacture of the ADC drug product, will be handled entirely by CMOs. Our XpressCF+® platform has been successfully used for manufacturing several antibodies containing non-natural amino acids and requires minimal process optimization to support early clinical phase manufacturing. We utilize industry established production steps for the purification of our antibodies. The CMOs we have selected have strong track records in cGMP manufacturing with expertise in clinical or commercial drug manufacturing for cytotoxic agents, large scale manufacture of antibodies, conjugation and fill-finish of therapeutic biologics. All activities from cell-free extract production to formulated drug product are performed to maintain aggressive timelines and minimize delays.

Competition

The biotechnology and biopharmaceutical industries, and the immuno-oncology subsector, 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 XpressCF® 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 products in immuno-oncology. Our competitors include larger and better funded biopharmaceutical, biotechnological and therapeutics companies, as well as numerous small companies. Moreover, we also compete with current and future therapeutics developed at universities and other research institutions.

If our most advanced product candidates are approved, they will compete with a range of therapeutic treatments that are either in development or currently marketed. Currently marketed oncology therapeutics include a range of biologic modalities with the top selling products by class spanning tumor targeting monoclonal antibodies, to ADCs, to immune checkpoint inhibitors, to T cell-engager immunotherapies, to CAR-T cell therapies. In addition, numerous compounds are in clinical development for cancer treatment. The clinical development pipeline for cancer includes small molecules, antibodies, vaccines, cell therapies and immunotherapies from a variety of companies and institutions.

We also face substantial competition from biotechnology and biopharmaceutical companies developing products with FolRα-targeted therapies, including naked antibodies, small molecule drug conjugates, ADCs, and T cell retargeting molecules. The most advanced clinically active agent targeting FolRα to date has been ELAHERE® (mirvetuximab soravtansine IMGN853), an ADC composed of a FolRα-binding antibody linked to the tubulin-disrupting maytansinoid, DM4, via a cleavable linker. Other large pharmaceutical companies are developing a FolRα-targeted ADC for the treatment of cancers, including ovarian cancers.

Many of our competitors, either alone or with strategic partners, have substantially greater financial, technical, manufacturing, marketing, sales, supply and human resources or experience than we have. 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 trial sites and patient registration for clinical trials, 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 the entry of our products. 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 XpressCF® platform, XpressCF+® 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 on the 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 XpressCF® platform, XpressCF+® platform, and product candidates. Our patent portfolio as of December 31, 2023, contained 29 U.S. issued patents and 263 patents issued in ex-U.S. jurisdictions, including Europe, China, Japan, Australia and Singapore, and 43 U.S. pending applications, as well as 105 patent applications pending in ex-U.S. jurisdictions, including Europe, China, Japan, Australia and Singapore owned solely by us. These patents and patent applications include claims relating to:

- bacterial strains, and extracts prepared therefrom, comprising an engineered Release Factor 1 protein, which facilitates incorporation of non-natural amino acids into proteins;
- bacterial strains, and extracts prepared therefrom, comprising combinations of chaperone proteins, which facilitate expression of complex eukaryotic proteins in bacterial extracts;
- bacterial strains having an oxidative cytoplasm;
- Release Factor 1-deficient *E. coli* cells, and methods of expressing proteins therewith;
- cells encoding T7 RNA polymerase, and methods of producing thereof;
- spray-dried extracts for cell-free protein synthesis and methods of producing thereof;
- large scale production of antibody using pre-fabricated light chain;
- non-natural amino acid tRNA synthetases;
- antibodies with engineered CH2 domains;
- antibodies with site-specific glutamine tags;
- antibodies and antibody fragments containing one or more non-natural amino acids at defined positions in their amino acid sequences;
- antibodies targeting receptors of interest, including FolRα, BCMA, ROR1, Tissue Factor, CD3 and EpCAM, and methods of treating therewith;
- ADCs targeting receptors of interest, including FolRα, ROR1, Tissue Factor and BCMA, and methods of treating therewith;

- combination therapies with anti-Folα ADCs, and methods of treating therewith;
- iADCs, and TLR7, TLR7/8, and STING agonists, and methods of treating therewith;
- ADC^2, and methods of treating therewith;
- an exatecan linker-warhead that is used in our STRO-003 and STRO-004 product candidates;
- hemiasterlin, both as a cytotoxin and as a linker-warhead, which is used in our STRO-002 product candidate; and
- para-azidomethylphenylalanine, or pAMF, and proteins comprising pAMF, our workhorse non-natural amino acid which is primarily used when we conjugate molecules to proteins produced with our XpressCF+® platform.

Our issued patents, and any patents that may issue from our pending patent applications, in our solely owned patent portfolio are expected to expire between January 2030 and October 2044, absent any patent term adjustments or extensions.

In addition, we have exclusively licensed the following patent portfolio from Stanford: 9 U.S. issued patents and 31 patents issued in ex-U.S. jurisdictions, including Europe, China, Canada, India, Australia, South Korea, Eurasia and Singapore. This patent portfolio includes claims relating to methods related to *in vitro* protein synthesis that we use in our XpressCF® platform and XpressCF+® platform when discovering, developing and manufacturing our product candidates.

Remaining patents in our patent portfolio licensed from Stanford are expected to expire between July 2024 and January 2028, absent any patent term adjustments or extensions.

As for the XpressCF® platform, XpressCF+® 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.

The following table describes the potentially material patents and patent applications owned or licensed by us.

Patent Relevance	Ownership	Type of Patent Protection	Expiration or Anticipated Expiration (Absent patent term extension or adjustment)	Pending Jurisdictions	Issued Jurisdictions
XpressCF® platform	Owned by Sutro	Utility	2033	None	US, AU, CA, CN, EP, IL, IN, JP, KR, SG
XpressCF® platform	Owned by Sutro	Utility	2034	US, SG	US, AU, CA, CN, EP, HK, IL, IN, JP, KR
XpressCF® platform	Owned by Sutro	Utility	2034	None	US, EP
XpressCF® platform	Owned by Sutro	Utility	2035	None	US, EP
XpressCF® platform	Owned by Sutro	Utility	2041	US, AU, BR, CA, CN, EP, IL, IN, JP, KR, SG, TW	None
XpressCF® platform	Owned by Sutro	Utility	2043	US, TW, PCT	None
XpressCF® platform	Owned by Sutro	Provisional	2044	US	None

ADC platform	Owned by Sutro	Utility	2033	US, BR, CA,	US, AU, CN, EP, HK, IL, IN, JP, KR, SG
ADC platform	Owned by Sutro	Utility	2033	US, EP	US, AU, BR, CA, CN, EP, HK, IL, IN, JP, KR, SG
STRO-002	Owned by Sutro	Utility	2037	US, EP	None
STRO-002	Owned by Sutro	Utility	2038	US, AU, BR, CA, CN, EP, HK, IL, IN, JP, KR, MX, NZ, SG, ZA	US
STRO-002	Owned by Sutro	Utility	2036	US, CA, EP, HK, KR	US, AU, BR, CN, EP, IL, IN, JP, SG
STRO-002	Owned by Sutro	Utility	2039	US, EP, HK, JP	None
STRO-002	Owned by Sutro	Utility	2042	US, EP, TW	None
STRO-002	Owned by Sutro	Utility	2042	PCT	None
STRO-002	Co-owned by Sutro	Utility	2043	US	None
STRO-003	Owned by Sutro	Utility	2043	US, TW, PCT	None
STRO-004	Owned by Sutro	Provisional	2044	US	None
STRO-003 and STRO-004	Owned by Sutro	Utility	2043	US, PCT	None

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, including but not limited to any or all of Australia, Brazil, Canada, China, Hong Kong, India, Israel, Japan, Mexico, New Zealand, Singapore, South Africa, South Korea, and Taiwan.

The term of individual patents depends upon the laws of the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing of a non-provisional patent application. However, the term of United States patents may be extended for delays incurred due to compliance with the FDA requirements or by delays encountered during prosecution that are caused by the United States Patent and Trademark Office, or the USPTO. For example, the Hatch-Waxman Act permits a patent term extension for FDA-approved drugs of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our biopharmaceutical product candidates receive FDA approval, we expect to apply for patent term extensions on patents covering those product candidates. We intend to seek patent term extensions to any of our issued patents in any jurisdiction where these are available; however, there is no guarantee that the applicable authorities, including the USPTO and FDA, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions. Our currently issued patents will likely expire on dates ranging from 2033 to 2040, unless we receive patent term extension or patent term adjustment, or both. If patents are issued on our pending patent applications, the resulting patents are projected to expire on dates ranging from 2034 to 2044, unless we receive patent term extension or patent term adjustment, or both. 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.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. No consistent policy regarding the scope of claims allowable in patents in the field of immunotherapy has emerged in the United States. The patent situation outside of the United States is even more uncertain.

Changes in the patent laws and rules, either by legislation, judicial decisions, or regulatory interpretation in the United States and other countries may diminish our ability to protect our inventions and enforce our intellectual property rights, and more generally could affect the value of our intellectual property. In particular, our ability to stop third parties from making, using, selling, offering to sell, or importing any of our patented inventions, either directly or indirectly, will depend in part on our success in obtaining, defending, and enforcing patent claims that cover our technology, inventions, and improvements. With respect to both licensed and company-owned intellectual property, we cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any of our existing patents or any patents that may be granted to us in the future will be commercially useful in protecting our platforms and product candidates and the methods used to manufacture those platforms and product candidates. Moreover, even our issued patents do not guarantee us the right to practice our technology in relation to the commercialization of our platform's product candidates. However, the area of patent and other intellectual property rights in biotechnology is an evolving one with many risks and uncertainties, and third parties may have blocking patents that could be used to prevent us from commercializing our patented XpressCF® platform, XpressCF+® platform, and product candidates and practicing our proprietary technology. Our issued patents and those that may issue in the future may be challenged, invalidated, or circumvented, which could limit our ability to stop competitors from marketing related platforms or product candidates or limit the length of the term of patent protection that we may have for our XpressCF® platform, XpressCF+® platform, and product candidates. In addition, the rights granted under any issued patents may not provide us with protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies. For these reasons, we may have competition for our XpressCF® platform, XpressCF+® platform, and product candidates. Moreover, because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any particular product candidate can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent. For this and more comprehensive 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 intend to file applications for trademark registrations in connection with our product candidates in various jurisdictions, including the United States. We have filed for trademark protection of the Sutro Biopharma marks, the XpressCF® mark and the XpressCF+® mark with the USPTO. Additionally, we filed for trademark protection of the XpressPDF® mark, XpressRNAP® mark, XpressRS® mark, XpresstRNA® mark and XtractCF® mark with the USPTO. We also filed for trademark protection of the clinical trial marks. XpressCF® refers to our cell-free protein synthesis technology as a whole, and XpressCF+® refers specifically to cell-free protein synthesis incorporating one or more non-natural amino acids. The Sutro Biopharma marks were registered by the USPTO in 2014 and 2018, the XpressCF® mark was registered by the USPTO in 2017, and XpressCF+® mark was registered by the USPTO in 2017. The XpressRNAP® mark, the XpressRS® mark, and the XpresstRNA® mark were registered in the USPTO in 2021. The XpressPDF® mark and the XtractCF® mark were registered in the USPTO in 2022.

We also rely on trade secret protection for our confidential and proprietary information. Although we take steps to protect our confidential and proprietary information as trade secrets, including through contractual means with our employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. Thus, we may not be able to meaningfully protect our trade secrets. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. 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.

Information Security

We seek to preserve the integrity and confidentiality of our proprietary technology and processes by maintaining physical security of our premises and physical and electronic security of our information technology systems. Our Infosec Governance Committee, comprising senior executives and facilities and information technology employees, and under the supervision of our Audit Committee of our Board of Directors, is responsible for designing, implementing, monitoring and improving the security of our confidential and/or proprietary information. We conduct regular audits of our information security systems, including our on-site and cloud-based information systems and strive to continuously improve the robustness of our security and information recovery systems in the event of, for example, a cyberattack or natural disaster that compromises our data integrity. In addition, we conduct regular training and testing of our employees to identify, and report cyberattacks, including phishing and other forms of social engineering. We also maintain a limited insurance policy against cyberattacks that may provide a measure of compensation in the event that we are harmed by an information security attack. Although we have confidence in these individuals, organizations, and systems, our security measures have been breached in the past and may again be breached in the future, and we may not have adequate remedies for any breach. To the extent that our employees, contractors, consultants, collaborators, and advisors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Government Regulation

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

FDA Approval Process

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act, or the FDC Act, and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. Biological products used for the prevention, treatment, or cure of a disease or condition of a human being are subject to regulation under the FDC Act, except the section of the FDC Act which governs the approval of new drug applications, or NDAs. Biological products are approved for marketing under provisions of the Public Health Service Act, or PHS Act, via a Biologics License Application, or BLA. However, the application process and requirements for approval of BLAs are very similar to those for NDAs, and biologics are associated with similar approval risks and costs as drugs. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as clinical hold, FDA refusal to approve pending BLAs, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties, and criminal prosecution.

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

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

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

Clinical trials to support BLAs for marketing approval are typically conducted in three sequential phases, but the phases may overlap. In Phase 1, the initial introduction of the biologic into healthy human subjects or patients, the product is tested to assess metabolism, pharmacokinetics, pharmacological actions, side effects associated with increasing doses, and, if possible, early evidence on effectiveness. In oncology clinical trials, efficacy endpoints are also often explored in Phase 1. Phase 2 usually involves trials in a limited patient population to determine the effectiveness of the drug or biologic for a particular indication, dosage tolerance, and optimum dosage, and to identify common adverse effects and safety risks. If a compound demonstrates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 trials are undertaken to obtain the additional information about clinical efficacy and safety in a larger number of patients, typically at geographically dispersed clinical trial sites, to permit the FDA to evaluate the overall benefit-risk relationship of the drug or biologic and to provide adequate information for the labeling of the product. In some instances, trial phases may be truncated or combined into one or more combined-phase or adaptive design trials. In most cases, the FDA requires two adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the biologic. A single Phase 3 trial with other confirmatory evidence may be sufficient in certain oncological conditions where the trial is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of a clinically meaningful effect on mortality, irreversible morbidity or prevention of a disease with a potentially serious outcome and confirmation of the result in a second trial would be practically or ethically impossible.

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

After completion of the required clinical testing, a BLA is prepared and submitted to the FDA. FDA approval of the BLA is required before marketing of the product may begin in the United States. The BLA must include the results of all preclinical, clinical, and other testing and a compilation of data relating to the product's pharmacology, chemistry, manufacture, and controls. The cost of preparing and submitting a BLA is substantial. The submission of most BLAs is additionally subject to a substantial application user fee, currently exceeding $4,048,000 for Fiscal Year 2024. The applicant under an approved BLA is also subject to an annual program fee, currently exceeding $416,000 per prescription drug product for Fiscal Year 2024. These fees are typically increased annually. The FDA has 60 days from its receipt of a BLA to determine whether the application will be filed based on the agency's threshold determination that it is sufficiently complete to permit substantive review. Once the submission is filed, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of BLAs. Most such applications for standard review biologic products are reviewed within 10 months of the date the FDA files the BLA; most applications for priority review biologics are reviewed within six months of the date the FDA files the BLA. Priority review can be applied to a biologic that the FDA determines has the potential to treat a serious or life-threatening condition and, if approved, would be a significant improvement in safety or effectiveness compared to available therapies. The review process for both standard and priority review may be extended by the FDA for three additional months to consider certain late-submitted information, or information intended to clarify information already provided in the submission.

The FDA may also refer applications for novel biologic products, or biologic 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. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. Before approving a BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. Additionally, the FDA will inspect the facility or the facilities at which the biologic product is manufactured. The FDA will not approve the product unless compliance with current Good Manufacturing Practices, or cGMPs, is satisfactory and the BLA contains data that provide substantial evidence that the biologic is safe, pure, potent and effective in the indication studied.

After the FDA evaluates the BLA and the manufacturing facilities, it issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing, or information, in order for the FDA to reconsider the application. If, or when, those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the BLA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. An approval letter authorizes commercial marketing of the biologic with specific prescribing information for specific indications. As a condition of BLA approval, the FDA may require a risk evaluation and mitigation strategy, or REMS, to help ensure that the benefits of the biologic outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the product. Moreover, product approval may require substantial post-approval testing and surveillance to monitor the product's safety or efficacy.

Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained, or problems are identified following initial marketing. Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new BLA or BLA supplement before the change can be implemented. A BLA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing BLA supplements as it does in reviewing BLAs.

Fast Track Designation and Accelerated Approval

The FDA is required to facilitate the development, and expedite the review, of biologics that are intended for the treatment of a serious or life-threatening disease or condition for which there is no effective treatment and which demonstrate the potential to address unmet medical needs for the condition. Under the fast track program, the sponsor of a new biologic candidate may request that the FDA designate the candidate for a specific indication as a fast track biologic concurrent with, or after, the submission of the IND for the candidate. The FDA must determine if the biologic candidate qualifies for fast track designation within 60 days of receipt of the sponsor's request. In addition to other benefits, such as the ability to engage in more frequent interactions with the FDA, the FDA may initiate review of sections of a fast track product's BLA before the application is complete. This rolling review is available if the applicant provides, and the FDA approves, a schedule for the submission of the remaining information and the applicant pays applicable user fees. However, the FDA's time period goal for reviewing an application does not begin until the last section of the BLA is submitted. Additionally, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Under the FDA's accelerated approval regulations, the FDA may approve a biologic for a serious or life-threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon 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.

In clinical trials, a surrogate endpoint is a measurement of laboratory or clinical signs of a disease or condition that substitutes for a direct measurement of how a patient feels, functions, or survives. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. A biologic candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval trials, or confirm a clinical benefit during post-marketing trials, will allow the FDA to withdraw the biologic from the market on an expedited basis. All promotional materials for biologic candidates approved under accelerated

regulations are subject to prior review by the FDA. The Food and Drug Omnibus Reform Act, or FDORA, was recently enacted, which included provisions related to the accelerated approval pathway. Pursuant to FDORA, the FDA is authorized to require a post-approval study to be underway prior to approval or within a specified time period following approval. FDORA also requires the FDA to specify conditions of any required post-approval study, which may include milestones such as a target date of study completion and requires sponsors to submit progress reports for required post-approval studies and any conditions required by the FDA not later than 180 days following approval and not less frequently than every 180 days thereafter until completion or termination of the study. FDORA enables the FDA to initiate enforcement action for the failure to conduct with due diligence a required post-approval study, including a failure to meet any required conditions specified by the FDA or to submit timely reports.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to biological products intended to treat a rare disease or condition—generally a disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and making a product available in the United States for such disease or condition will be recovered from sales of the product.

Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the biological product and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. The first BLA applicant to receive FDA approval for a product with particular principal molecular structural features to treat a particular disease with FDA orphan drug designation is entitled to a seven-year exclusive marketing period in the United States for that product for that indication. During the seven-year exclusivity period, the FDA may not approve any other applications to market the same drug for the same disease, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. A product is clinically superior if it is safer, more effective or makes a major contribution to patient care. In the case of a biological product, the same drug is a drug that contains the same principal molecular features. Orphan drug exclusivity does not prevent the FDA from approving a different drug or biological product for the same disease or condition, or the same biological product 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 BLA user fee.

Disclosure of Clinical Trial Information

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

Pediatric Information

Under the Pediatric Research Equity Act, or PREA, BLAs or supplements to BLAs must contain data to assess the safety and effectiveness of the biological product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the biological product is safe and effective. The FDA may grant full or partial waivers, or deferrals, for submission of data. Unless otherwise required by regulation, PREA does not apply to any biological product for an indication for which orphan designation has been granted, except a product with a new active ingredient that is molecularly targeted cancer product intended for the treatment of an adult cancer and directed at a molecular target determined by FDA to be substantially relevant to the growth or progression of a pediatric cancer.

The Best Pharmaceuticals for Children Act, or BPCA, provides a six-month extension of any non-patent exclusivity for a biologic if certain conditions are met. Conditions for exclusivity include the FDA’s determination that information relating to the use of a new biologic in the pediatric population may produce health benefits in that population, FDA making a written request for pediatric studies, and the applicant agreeing to perform, and

reporting on, the requested studies within the statutory timeframe. Applications under the BPCA are treated as priority applications, with all of the benefits that designation confers.

Additional Controls for Biologics

To help reduce the increased risk of the introduction of adventitious agents, the PHS Act emphasizes the importance of manufacturing controls for products whose attributes cannot be precisely defined. The PHS Act also provides authority to the FDA to immediately suspend licenses in situations where there exists a danger to public health, to prepare or procure products in the event of shortages and critical public health needs, and to authorize the creation and enforcement of regulations to prevent the introduction or spread of communicable diseases in the United States and between states.

After a BLA is approved, the product may also be subject to official lot release as a condition of approval. As part of the manufacturing process, the manufacturer is required to perform certain tests on each lot of the product before it is released for distribution. If the product is subject to official release by the FDA, the manufacturer submits samples of each lot of products to the FDA together with a release protocol showing a summary of the history of manufacture of the lot and the results of all of the manufacturer's tests performed on the lot. The FDA may also perform certain confirmatory tests on lots of some products, such as viral vaccines, before releasing the lots for distribution by the manufacturer. In addition, the FDA conducts laboratory research related to the regulatory standards on the safety, purity, potency, and effectiveness of biological products. As with drugs, after approval of biologics, manufacturers must address any safety issues that arise, are subject to recalls or a halt in manufacturing, and are subject to periodic inspection after approval.

Post-Approval Requirements

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

Adverse event reporting and submission of periodic reports is required following FDA approval of a BLA. The FDA also may require post-marketing testing, known as Phase 4 testing, REMS, and surveillance to monitor the effects of an approved product, or the FDA may place conditions on an approval that could restrict the distribution or use of the product. In addition, quality control, biological product manufacture, packaging, and labeling procedures must continue to conform to cGMPs after approval. Biologic manufacturers and certain of their subcontractors are required to register their establishments with the FDA and certain state agencies. Registration with the FDA subjects' entities to periodic unannounced inspections by the FDA, during which the agency inspects manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money, and effort in the areas of production and quality-control to maintain compliance with cGMPs. Regulatory authorities may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

FDA Regulation of Companion Diagnostics

A biologic product may rely upon an *in vitro* companion diagnostic for use in selecting the patients that will respond to a therapy. If an *in vitro* diagnostic is essential to the safe and effective use of the therapeutic product, then the FDA generally will require approval or clearance of the diagnostic at the same time that FDA approves the therapeutic product.

Pursuing FDA approval of an *in vitro* companion diagnostic usually would require a pre-market approval, or PMA, for that diagnostic. Based on a final FDA guidance document, and the FDA's past treatment of companion diagnostics, the FDA will likely require PMA approval of an *in vitro* companion diagnostics to identify patient populations suitable for a cancer therapy. The review of these *in vitro* companion diagnostics involves coordination of review by the FDA's Center for Biologics Evaluation and Research and by the FDA's Center for Devices and Radiological Health. Approval of a companion diagnostic is generally required at the time of new drug approval.

The PMA process, including the gathering of clinical and nonclinical data and the submission to and review by the FDA, can take several years or longer. The applicant must prepare and provide the FDA with reasonable assurance of the device's safety and effectiveness, including information about the device and its components regarding, among other things, device design, manufacturing and labeling. PMA applications are subject to an application fee, which exceeds $483,000 for most PMAs for Fiscal Year 2024. In addition, PMAs for devices must generally include the results from extensive preclinical and adequate and well-controlled clinical trials to establish the safety and effectiveness of the device for each indication for which FDA approval is sought. In particular, for a diagnostic, the applicant must demonstrate that the diagnostic produces reproducible results between multiple users at multiple laboratories. As part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with the Quality System Regulation, or QSR, which imposes elaborate testing, control, documentation and other quality assurance requirements.

PMA approval is not guaranteed, and the FDA may ultimately respond to a PMA submission with a not approvable determination based on deficiencies in the application and require additional clinical trial or other data that may be expensive and time consuming to generate and that can substantially delay or prevent approval. 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.

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 register with FDA and list their devices. A medical device manufacturer's manufacturing processes 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 inspections by the FDA.

Failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include any of the following sanctions: warning or untitled letters, fines, injunctions, civil or criminal penalties, recall or seizure of current or future products, operating restrictions, partial suspension or total shutdown of production, denial of submissions for new products, or withdrawal of PMA approvals.

Other Healthcare Laws

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

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

Federal civil and criminal false claims laws, including the federal civil False Claims Act, prohibit any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to have a false claim paid. This includes claims made to programs where the federal government reimburses, such as Medicaid, as well as programs where the federal government is a direct purchaser, such as when it purchases off the Federal Supply Schedule. Several

pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws. Additionally, the ACA amended the federal Anti-Kickback Statute such that a violation of that statute can serve as a basis for liability under the federal False Claims Act. The majority of states also have statutes or regulations similar to the federal Anti-Kickback Statute and False Claims Act, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

Other federal statutes pertaining to healthcare fraud and abuse include the civil monetary penalties statute, which prohibits, among other things, the offer or payment of remuneration to a Medicaid or Medicare beneficiary that the offeror or payor knows or should know is likely to influence the beneficiary to order a receive a reimbursable item or service from a particular supplier, and the additional federal criminal statutes created by the Health Insurance Portability and Accountability Act of 1996, or HIPAA, which prohibits, among other things, knowingly and willfully executing or attempting to execute a scheme to defraud any healthcare benefit program or obtain by means of false or fraudulent pretenses, representations or promises, any money or property owned by or under the control of any healthcare benefit program in connection with the delivery of or payment for healthcare benefits, items or services.

In addition, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, imposes obligations on certain healthcare providers, health plans, and healthcare clearinghouses, known as covered entities, as well as their business associates that perform certain services involving the storage, use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security, and transmission of individually identifiable health information, and require notification to affected individuals and regulatory authorities of certain breaches of security of individually identifiable health information. In addition, many state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, and often are not preempted by HIPAA. For example, the California Consumer Privacy Act (“CCPA”), which went into effect on January 1, 2020, creates new data privacy obligations for covered companies and provides new privacy rights to California residents. On January 1, 2023, the California Privacy Rights Act (“CPRA”), which substantially amends the CCPA, went into effect. The CCPA and CPRA provide for unlimited civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Virginia’s Consumer Data Protection Act, which took effect on January 1, 2023, requires businesses subject to the legislation to conduct data protection assessments in certain circumstances and requires opt-in consent from consumers to acquire and process their sensitive personal information, which includes information revealing a consumer’s physical and mental health diagnosis and genetic and biometric information that can identify a consumer. Colorado enacted the Colorado Privacy Act, and Connecticut enacted the Connecticut Data Privacy Act, each of which took effect on July 1, 2023, and Utah enacted the Consumer Privacy Act, which became effective on December 31, 2023, and each of these laws may increase the complexity, variation in requirements, restrictions, and potential legal risks, and could require increased compliance costs and changes in business practices and policies. Other states have also enacted, proposed, or are considering proposing, data privacy laws, which could further complicate compliance efforts, increase our potential liability and adversely affect our business.

Further, pursuant to the ACA, the Centers for Medicare & Medicaid Services, or CMS, has issued a final rule that requires manufacturers of prescription drugs to collect and report information on certain payments or transfers of value to physicians, physician assistants, certain types of advanced practice nurses and teaching hospitals, as well as investment interests held by physicians and their immediate family members. The reports must be submitted on an annual basis and the reported data are posted in searchable form on a public website on an annual basis. Failure to submit required information may result in civil monetary penalties.

In addition, several states now require prescription drug companies to report certain expenses relating to the marketing and promotion of drug products and to report gifts and payments to individual healthcare practitioners in these states. Other states prohibit various marketing-related activities, such as the provision of certain kinds of gifts or meals. Still other states require the posting of information relating to clinical studies and their outcomes. A growing number of states require the reporting of certain pricing information, including information pertaining to and justifying price increases and introductory prices for new drugs. In addition, certain states require pharmaceutical companies to implement compliance programs and/or marketing codes. Additional states and local jurisdictions, such as Nevada, Connecticut, the City of Chicago and the District of Columbia, require pharmaceutical sales representatives to be registered, licensed and/or meet continuing education requirements. Certain states and local jurisdictions also require the registration of pharmaceutical sales representatives. Compliance with these laws is difficult and time consuming, and companies that do not comply with these state laws face civil penalties.

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

Coverage, Pricing and Reimbursement

The regulations that govern coverage, pricing and reimbursement for new pharmaceutical products vary widely from country to country. Some countries require approval of the sale price of a pharmaceutical product before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, a pharmaceutical company can obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of that product.

A pharmaceutical company's ability to commercialize any products successfully will also depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government authorities, private health insurers and other organizations. The process for determining whether a third-party payor will provide coverage for a product may be separate from the process for setting the price of a product or for establishing the reimbursement rate that such a payor will pay for the product. Even if one or more products are successfully brought to the market, these products may not be considered cost-effective, and the amount reimbursed for such products may be insufficient to allow them to be sold on a competitive basis. Increasingly, third-party payors who reimburse patients or healthcare providers, such as government and private insurance plans, are requiring that pharmaceutical companies provide them with predetermined discounts from list prices and are seeking to reduce the prices charged or the amounts reimbursed for biopharmaceutical products.

Moreover, one payor's determination to provide coverage for a product does not assure that an adequate reimbursement rate will be approved, or that other payors will also provide coverage for the product. Further, no uniform policy for coverage and reimbursement exists in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement rates, but also have their own methods and approval processes apart from Medicare determinations. Therefore, coverage and reimbursement can differ significantly from payor to payor.

Significant delays can occur in obtaining reimbursement for newly approved pharmaceutical products, and coverage may be more limited than the purposes for which product is approved by the FDA or similar foreign regulatory authorities. Interim reimbursement levels, if applicable, may also be insufficient to cover a pharmaceutical company's costs and may not be made permanent. Moreover, eligibility for reimbursement does not imply that any pharmaceutical product will be reimbursed in all cases or at a rate that covers a pharmaceutical

company's costs, including research, development, manufacture, sale and distribution. In addition, coverage policies and third-party reimbursement rates may change at any time.

Healthcare Reform

Healthcare reforms that have been adopted, and that may be adopted in the future, could result in further reductions in coverage and levels of reimbursement for pharmaceutical products, increases in rebates payable under U.S. government rebate programs and additional downward pressure on pharmaceutical product prices. Several healthcare reform proposals recently culminated in the enactment of Inflation Reduction Act, or IRA, which among other things, allows the Department of Health and Human Services, or HHS, to directly negotiate the selling price of a statutorily specified number of drugs and biologics each year that CMS reimburses under Medicare Part B and Part D. Only high-expenditure single-source biologics that have been approved for at least 11 years (7 years for drugs) can be selected by CMS for negotiation, with the negotiated price taking effect two years after the selection year. Negotiations for Medicare Part D products take place in 2024 with the negotiated price taking effect in 2026, and negotiations for Medicare Part B products will begin in 2026 with the negotiated price taking effect in 2028. In August 2023, HHS announced the ten Medicare Part D drugs and biologics that it selected for negotiations. HHS will announce the negotiated maximum fair prices by September 1, 2024, and this price cap, which cannot exceed a statutory ceiling price, will go into effect on January 1, 2026. A drug or biological product that has an orphan drug designation for only one rare disease or condition will be excluded from the IRA's price negotiation requirements, but will lose that exclusion if it receives designations for more than one rare disease or condition, or if is approved for an indication that is not within that single designated rare disease or condition, unless such additional designation or such disqualifying approvals are withdrawn by the time CMS evaluates the drug for selection for negotiation. The IRA also impose rebates on Medicare Part D and Part B drugs whose prices have increased at a rate greater than the rate of inflation. The IRA also extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025.. The IRA permits the Secretary of HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. Manufacturers that fail to comply with the IRA may be subject to various penalties, including civil monetary penalties. These provisions have been and may continue to be subject to legal challenges. For example, the provisions related to the negotiation of selling prices of high-expenditure single-source drugs and biologics have been challenged in multiple lawsuits brought by pharmaceutical manufacturers. Thus, while it is unclear how the IRA will be implemented, it will likely have a significant impact on the biopharmaceutical industry and the pricing of prescription drug products. We expect additional statutory, regulatory, and administrative healthcare reform initiatives to be enacted and implemented in the future.

Human Capital Resources

As of December 31, 2023, we had 302 full-time employees and 22 full-time contract employees. Of these employees, 79 have an M.D. or a Ph.D. None of our employees are represented by a labor union or covered by collective bargaining agreements, and we believe our relationship with our employees is good.

We recognize that attracting, motivating, and retaining talent at all levels is vital to continuing our success. We invest in our employees in many ways, including through high-quality benefits and various health and wellness initiatives and offer competitive compensation packages (base salary and incentive plans), ensuring fairness in internal compensation practices. The principal purposes of our incentive plans (bonus and equity) are to provide retention incentives that align with the long-term interests of our stakeholders and stockholders.

To further engage and incentivize our workforce, we also offer a range of opportunities to support professional development and growth. We support ongoing education by providing an appropriate level of reimbursement for courses which are related to an individual's current or future position, we support our scientific team through encouraging their in-person and/or virtual attendance at conferences and symposia which further their development and we have a robust internal transfer practice to engage our current talent in growth opportunities within and outside of their functional areas. We embarked upon a Company-wide leadership development program which offered the opportunity for every employee to continue to build upon their learning. For our talent pipeline assessment and development, we work closely with individual scientific and business functional leaders to identify our high-performing and high-potential employees, by conducting a company-wide talent assessment

and calibration. This assessment is completed annually to ensure we tie together our incentives, development, and recognition to retain and attract the people we need to drive our success.

We provide our team with ongoing resources aimed at both mental and physical health. We work closely with our Employee Assistance Plan which provides important mental health services and resources. We have a health and wellness initiative which encourages healthy behaviors aimed at creating positive life-long habits. We have a culture of collaboration and collaborative principles which we are intentional about fostering. Our initiatives on Diversity, Equity, Inclusion and Belonging aim to learn, listen and act in support of these principles. We are actively involved in our community through, among other things, mentoring underserved communities and supporting the philanthropic interests of our employees and patients.

We also recognize that maintaining continuity of management in the event of the departure of one or more of our senior executives is critical to the continued success of the organization. To this end, we have prepared a formal written succession plan for our senior executives and to provide guidance for the next generation of our leaders to ensure an orderly and smooth transition in the event of an executive departure. While senior management is primarily responsible for developing our succession plan, our Nominating and Corporate Governance Committee of our Board of Directors (with respect to the CEO) and Compensation Committee of our Board of Directors (with respect to other executives) oversee and guide our process and thinking.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 2003 under the name Fundamental Applied Biology, Inc. We subsequently changed our name to Sutro Biopharma, Inc. Our principal executive offices are located at 111 Oyster Point Boulevard, South San Francisco, California 94080, and our telephone number is (650) 881- 6500. Our website address is www.sutrobio.com. The information contained on, or that can be accessed through, our website is not part of, and is not incorporated by reference into, this report.

Available Information

We file annual, quarterly and current reports, proxy statements and other documents with the Securities and Exchange Commission, or SEC, under the Securities Exchange Act of 1934, as amended, or Exchange Act. The SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers, including us, that file electronically with the SEC. The public can obtain any documents that we file with the SEC at www.sec.gov. Copies of each of our filings with the SEC can also be viewed and downloaded free of charge at our website, ir.sutrobio.com, after the reports and amendments are electronically filed with or furnished to the SEC.

Item 1A. ***Risk Factors***

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making your decision to invest in shares of our common stock, you should carefully consider the risks described below, together with the other information contained in this 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." The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect us. We cannot assure you that any of the events discussed below will not occur. These events could have a material and adverse impact on our business, financial condition, results of operations and prospects. If that were to happen, the trading price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Our Business

We are a clinical stage biopharmaceutical company with no products approved for commercial sale. We have a history of significant 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. Biotechnology product development is a highly speculative undertaking and involves a substantial degree of risk.

To date, we have no products approved for commercial sale, have not generated any revenue from commercial product sales and, as of December 31, 2023, had an accumulated deficit of $559.4 million. For the years ended December 31, 2023 and December 31, 2022, our net loss was $106.8 million and $119.2 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. In addition, our expenses could increase beyond expectations if we are required by the FDA, or foreign regulatory agencies, to perform studies or clinical trials in addition to those studies and clinical trials that we currently anticipate conducting for our product candidates, or if there are any delays in our or our partners completing clinical trials or the development of any of our product candidates. Our technologies and product candidates are in varying stages of development, and we are subject to the risks of failure inherent in the development of product candidates based on novel technologies. In addition, we have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biotechnology industry. Furthermore, we do not expect to generate any revenue from commercial 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 and manufacturing clinical and early commercial supply of our product candidates. We expect our net losses to increase substantially as we progress further into clinical development of our lead programs and create additional infrastructure to support operations as a public company. However, the amount of our future losses is uncertain. We may never generate revenues from the commercial sale of our or our collaborators' products. Our ability to achieve profitability, if ever, will depend on, among other things, our, or our existing or future collaborators', successful development of product candidates, evaluating the related commercial opportunities, 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 existing or future 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. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

We will need substantial additional funds to advance development of our product candidates and failure to obtain sufficient funding may force us to delay, limit or terminate our product development programs, commercialization efforts or other operations. We may have difficulty accessing additional capital on reasonable, or even any, terms to continue our product and platform development or other operations and may have to make difficult prioritization decisions regarding development and potential partnering of our clinical and preclinical product candidates.

The development of biopharmaceutical product candidates is capital-intensive. As our product candidates advance through preclinical studies and clinical trials, we will need substantial additional funds to expand our development, regulatory, manufacturing, marketing and sales capabilities. We have used substantial funds to develop our technology and product candidates and will require significant funds to conduct further research and development and preclinical testing and clinical trials of our product candidates, to seek regulatory approvals for our product candidates, to manufacture extract and products, if any, which may be approved for commercial sale, to establish marketing and sales capabilities to commercialize our product candidates, and to provide support to our collaborators in the development of their products. In addition, we expect to continue to incur additional costs associated with operating as a public company.

Since our inception, we have invested a significant portion of our efforts and financial resources in research and development activities for our clinical-stage product candidates and the development of our technology platform, including our in-house manufacturing capabilities. Clinical trials for our product candidates have required substantial funds to date and will continue to require substantial funds to complete. As of December 31, 2023, we had $333.7 million in cash, cash equivalents and marketable securities. We expect to incur substantial expenditures in the foreseeable future as we seek to advance multiple product candidates through clinical development, manufacturing, the regulatory approval process and, if approved, commercial launch activities, as well as in connection with the continued development of our technology platform and manufacturing capabilities. Based on our current operating plan, we believe that our available cash, cash equivalents and marketable securities will be sufficient to fund our operations through at least the next 12 months. However, 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, and we may need to seek additional funds sooner than planned. Our monthly spending levels vary based on new and ongoing research and development and other corporate activities. Because the length of time and activities associated with successful research and development of our product candidates is highly uncertain, we are unable to estimate the actual funds we will require for development and any marketing and commercialization activities for approved products. For example, the timing and amount of our operating expenditures will depend largely on:

- the timing, progress and results of preclinical and worldwide clinical development activities;
- the costs associated with the development of our internal manufacturing and research and development facilities and processes;
- the number and scope of preclinical and clinical programs we decide to pursue;
- the progress of the development efforts of parties with whom we have entered or may in the future enter into collaborations and research and development agreements;
- the timing and amount of milestone and other payments we may receive under our collaboration and/or research and development agreements;
- our ability to establish and maintain collaborations, strategic partnerships or marketing, distribution, licensing or other strategic arrangements with third parties on favorable terms, if at all;
- our ability to achieve sufficient market acceptance, adequate coverage and reimbursement from third-party payors and adequate market share and revenue for any approved product candidates;
- the costs involved in prosecuting, defending and enforcing patent and other intellectual property claims;

- the costs of manufacturing our product candidates and those of our collaborators using our proprietary XpressCF® and XpressCF+® platforms;

- the cost and timing of regulatory approvals;

- the cost of commercialization activities if our product candidates or any future product candidates are approved for sale, including marketing, sales and distribution costs;

- our efforts to enhance operational systems and hire and retain key personnel, including personnel to support development of our product candidates and satisfy our obligations as a public company; and

- general economic, industry and market conditions, including market volatility, high levels of inflation, changes in interest rates, uncertainty with respect to the federal debt ceiling and budget and potential government shutdowns related thereto.

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 cannot provide assurance that anticipated collaborator payments will, in fact, be received. We do not expect to realize revenue from sales of commercial products or royalties from licensed products in the foreseeable future, if at all, and, in no event, before our product candidates are clinically tested, approved for commercialization and successfully marketed. To date, we have primarily financed our operations through payments received under our collaboration and other associated agreements, the sale of equity securities, debt financing and a royalty monetization agreement. We will be required to seek additional funding in the future and currently intend to do so through additional collaborations and/or licensing agreements, public or private equity offerings or debt financings, credit or loan facilities, royalty monetization or a combination of one or more of these funding sources. 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. If we raise additional funds through licensing or collaboration arrangements with third parties, we may have to relinquish valuable rights to our product candidates, or grant licenses on terms that are not favorable to us. 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. Any future debt financings, if available, are likely to involve, restrictive covenants limiting our flexibility in conducting future business activities, and, in the event of insolvency, debt holders would be repaid before holders of our equity securities receive any distribution of our corporate assets. Failure to obtain capital when needed on acceptable terms may force us to delay, limit or terminate our product development and commercialization of our current or future product candidates, which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our product candidates are in varying development stages and may fail in development or be impacted by competitive products or suffer delays that materially and adversely affect their commercial viability. If we or our collaborators are unable to complete development of or commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

We have no products on the market and all of our product candidates for cancer therapy are in clinical development. Our most advanced product candidate, luvelta, is being evaluated in REFRαME-O1, a Phase 2/3 pivotal trial for treatment of women with platinum resistant ovarian cancer, as well as in additional clinical studies underway, including for treatment of women with endometrial cancer and children with pediatric AML. Additionally, we have programs that are being evaluated by partners in clinical trials and by us in earlier stages of discovery and preclinical development and may never advance to clinical-stage development. 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, and we cannot guarantee you that we will ever obtain regulatory approval for any of our product candidates. We have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA. Before obtaining regulatory approval for the commercial distribution of our product candidates, we or an existing or future collaborator must

conduct extensive preclinical tests and clinical trials to demonstrate the safety and efficacy in humans of our product candidates.

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 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 patients in our clinical trials or by individuals using drugs or therapeutic biologics similar to our product candidates;
- difficulty achieving successful continued development, or transfer to third-parties, of our internal manufacturing processes, including process development and scale-up activities to supply products for preclinical studies, clinical trials and commercial sale;
- delays in submitting INDs or comparable foreign applications or delays or failures 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 patients or high drop-out rates in our clinical trials;
- inadequate supply or quality of product candidate components or materials or other supplies necessary for the conduct of our clinical trials;
- inability to obtain alternative sources of supply for which we have a single source for product candidate components or materials;
- occurrence of epidemics, pandemics or contagious diseases and potential effects on our business, clinical trial sites, highly complex supply chain and manufacturing facilities;
- greater than anticipated costs of our clinical programs;
- harmful side effects or inability of our product candidates to meet efficacy endpoints during clinical trials, which can be unpredictable even in light of earlier non-clinical and clinical data;
- failure to demonstrate in our clinical trials a sufficient response rate or duration of response;
- failure to demonstrate a benefit-risk profile acceptable to the FDA or other regulatory agencies;
- unfavorable FDA or other regulatory agency inspection and review of one or more of our clinical trial sites or manufacturing facilities;
- 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; and
- varying interpretations of our data by the FDA and similar foreign regulatory agencies.

We or our collaborators' inability to complete development of or commercialize our product candidates or significant delays in doing so due to one or more of these factors, could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our business is dependent on the success of our product candidates, including luvelta, which is generated from our proprietary XpressCF® and XpressCF+® platforms. Existing and future preclinical studies and clinical trials of our product candidates may not be successful. If we are unable to commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

We have invested a significant portion of our efforts and financial resources in the development of our proprietary XpressCF® and XpressCF+® platforms and our proprietary product candidates, luvelta, STRO-003 and STRO-004. Our ability to generate commercial product revenues, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates. We have not previously submitted a new drug application, or NDA, or a biologics license application, or BLA, to the FDA, or similar regulatory approval filings to comparable foreign authorities, for any product candidate, and we cannot be certain that our product candidates will be successful in clinical trials or receive regulatory approval. In addition, although we believe that our REFRαME-O1 Phase 2/3 pivotal trial of luvelta for the treatment of women with platinum resistant ovarian cancer will provide a sufficient dataset to support submission of a BLA to the FDA or equivalent to regulatory agencies, we cannot assure you that the FDA will agree with our conclusions or require data prior to approval. Further, our product candidates may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approvals to market our product candidates, our revenues will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval and have commercial rights. If the markets for patient subsets that we are targeting are not as significant as we estimate, we may not generate significant revenues from sales of such products, if approved.

We plan to seek regulatory approval to commercialize our product candidates both in the United States and in selected foreign countries. While the scope of regulatory approvals generally is similar in other countries, in order to obtain separate regulatory approvals in other countries, we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy. Other countries also have their own regulations governing, among other things, clinical trials and commercial sales, as well as pricing and distribution of our product candidates, and we may be required to expend significant resources to obtain regulatory approval and to comply with ongoing regulations in these jurisdictions.

The success of luvelta, STRO-003 and STRO-004 and our other future product candidates will depend on many factors, including the following:

- successful enrollment of patients in, and the completion of, our clinical trials;
- receiving required regulatory approvals for the development and commercialization of our product candidates;
- establishing our commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- establishing successful technology transfers and collaborations to develop our product candidates with licensees, including our licensees with rights to luvelta in Greater China;
- obtaining and maintaining patent, trademark and trade secret protection and non-patent exclusivity for our product candidates and their components;
- enforcing and defending our intellectual property rights and claims and avoiding or defending against intellectual property rights and claims from third parties;
- achieving desirable therapeutic properties for our product candidates' intended indications;

- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with third parties;

- acceptance of our product candidates, if and when approved, by patients, the medical community and third-party payors;

- effectively competing with other therapies, including those that have not yet entered the market;

- maintaining an acceptable safety profile of our product candidates through clinical trials and following regulatory approval; and

- achieving commercially relevant success in the market post approval.

Many of these factors are out of our control and if we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would materially harm our business, financial condition, results of operations and prospects.

Patient enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new drugs or therapeutic biologics that may be approved for the indications being investigated by us. Furthermore, we expect to rely on our collaborators, CROs and clinical trial sites to ensure the 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.

We could encounter delays 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.

Additionally, we have in the past and may in the future create benchmark molecules for comparative purposes. For example, we have created a benchmark FolRα targeting antibody-drug conjugate, or ADC, using conventional technology that results in a heterogeneous ADC mixture. We have compared luvelta to this benchmark molecule in multiple preclinical models. We believe the results of these tests help us understand how the therapeutic index of luvelta compares to competitors' product candidates. However, we cannot be certain that any benchmark molecule that we create is the same as the molecule we are attempting to recreate, and the results of the tests comparing any such benchmark molecule to any other potential or current product candidate may be different than the actual results of a head-to-head test of any such other potential or current product candidate against a competitor molecule. Additional preclinical and clinical testing will be needed to evaluate the therapeutic index of our potential or current product candidates, and to understand their therapeutic potential relative to other product candidates in development. While we believe our ADCs may be superior to other investigative agents in development, without head-to-head comparative data, we will not be able to make claims of superiority to other products in our promotional materials, if our product candidates are approved.

If we do not achieve our projected development goals in the time frames we anticipate and project, the commercialization of our products may be delayed and our stock price may decline.

From time to time, we estimate the timing of the anticipated accomplishment of various scientific, clinical, regulatory, commercial and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of scientific studies and clinical trials and the submission of regulatory filings. From time to time, we may publicly announce the expected timing of some of these milestones. All of these milestones are and will be based on numerous assumptions. The actual timing of these milestones can vary dramatically compared to our estimates, in some cases for reasons beyond our control, such as health epidemics and pandemics, global instability and geopolitical conflicts within regions where our clinical trials are conducted. For example, we intend to open a clinical trial site in Israel, which may face enrollment, operational or other difficulties due to conflicts within the region, including, for example, difficulties importing clinical study drug through Israeli customs, difficulties with patient enrollment, or difficulties with patients

or medical personnel accessing appropriate medical facilities. In addition, we rely on third party vendors, contractors and consultants to provide services in connection with our clinical trials. If these third parties do not perform their services in a timely or workmanlike manner, our clinical studies may be delayed. If we do not meet these milestones as publicly announced, or at all, the commercialization of our products may be delayed or never achieved and, as a result, our stock price may decline.

Our approach to the discovery and development of our therapeutic treatments is based on novel technologies, including unprecedented Immunostimulatory Antibody Drug Conjugate, or iADC, and dual Antibody Drug Conjugates, or ADC² technology, that are unproven and may not result in marketable products.

We are developing a pipeline of product candidates using our proprietary XpressCF® and XpressCF+® platforms. We believe that product candidates identified with our product discovery platform may offer an improved therapeutic approach by taking advantage of precision design and rapid empirical optimization, thereby reducing the dose-limiting toxic effects associated with existing products. However, the scientific research that forms the basis of our efforts to develop product candidates based on our XpressCF® and XpressCF+® platforms is ongoing. Further, the scientific evidence to support the feasibility of developing therapeutic treatments based on our XpressCF® and XpressCF+® platforms is both preliminary and limited.

To date, our clinical stage product candidates have been tested in a limited number of clinical trial patients. We may ultimately discover that our XpressCF® and XpressCF+® platforms and any product candidates resulting therefrom do not possess certain properties required for therapeutic effectiveness. XpressCF® product candidates may also be unable to remain stable in the human body for the period of time required for the drug to reach the target tissue or they may trigger immune responses that inhibit the ability of the product candidate to reach the target tissue or that cause adverse side effects in humans. We currently have only limited data, and no conclusive evidence, to suggest that we can introduce these necessary properties into these product candidates derived from our XpressCF® and XpressCF+® platforms. We may spend substantial funds attempting to introduce these properties and may never succeed in doing so. In addition, product candidates based on our XpressCF® and XpressCF+® platforms may demonstrate different chemical and pharmacological properties in patients than they do in laboratory studies. Although our XpressCF® and XpressCF+® platforms and certain product candidates have produced 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. Further, in our oncology clinical trials to date, we have used achievement of stable disease as evidence for disease control (stable disease, partial response or complete response) by our product candidates; however, the FDA does not view stable disease as an objective response for the purposes of FDA approval.

Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Undesirable side effects could result in the delay, suspension or termination of clinical trials by us or regulatory authorities for a number of reasons. In our clinical trials to date, our product candidates have been generally well tolerated, and the most common treatment-emergent adverse events, or TEAEs, that resulted in a treatment delay or dose reduction was reversible neutropenia. We have also observed arthralgia as a TEAE. It is possible that, as we test our product candidates in larger, longer and more extensive clinical trials or as the use of our product candidates becomes more widespread following any regulatory approval, illnesses, injuries, discomforts and other adverse events that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by patients. If such side effects become known later in development or upon approval, if any, such findings may harm our business, financial condition, results of operations and prospects significantly.

If product candidates based on our XpressCF® and XpressCF+® platforms are unable to demonstrate sufficient safety and efficacy data to obtain marketing approval, we may never succeed in developing a marketable product, we may not become profitable and the value of our common stock will decline. The regulatory approval process for novel product candidates such as ours can be more expensive and take longer than for other, better known or extensively studied product candidates. We are not aware of any company currently developing a therapeutic using our approach to ADC, iADC or ADC² development and no regulatory authority has granted approval for such a therapeutic. We believe the FDA has limited experience with therapeutics in oncology or other disease areas developed in cell-free-based synthesis systems, which may increase the complexity, uncertainty and length of the regulatory approval process for our product candidates. For example, our XpressCF® ADC product candidates contain cleavable or non-cleavable linker-warhead

combinations or novel warheads that may result in unforeseen events when administered in a human. We and our existing or future collaborators may never receive approval to market and commercialize any product candidate. Even if we or an existing or future collaborator obtains regulatory approval, the approval may be for targets, disease indications or patient populations that are not as broad as we intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. We or an existing or future collaborator 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 the products resulting from our XpressCF® platform prove to be ineffective, unsafe or commercially unviable, our entire platform and pipeline would have little, if any, value, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

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

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

In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial patients. In addition, results from compassionate use of our product candidates, such as luvelta to treat pediatric CFB/GLIS AML, may not be confirmed in Company-sponsored trials and/or may negatively impact the prospects for marketing approval for our product candidates. If we fail to receive positive results in clinical trials of our product candidates, the development timeline and regulatory approval and commercialization prospects for our most advanced product candidates, and, correspondingly, our business and financial prospects would be negatively impacted.

Interim, top-line, or preliminary data from our clinical trials that we announce 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 have publicly disclosed, and in the future will disclose, preliminary or top-line data from our preclinical studies and clinical trials, which are based on preliminary analyses of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations, and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. Therefore, final results from the studies may differ from the top-line results initially reported, and the final results may indicate different conclusions once additional data have been evaluated. As such, top-line data should be viewed with caution until the final data are available. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive data, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure. If the final results differ from the interim, top-line, or preliminary data, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and to commercialize, our product candidates may be harmed, which may negatively affect our business, financial condition, results of operations, and prospects.

Moreover, from time to time, we have publicly disclosed, and in the future may 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 outcomes may materially change as patient enrollment continues and more data become available. Adverse differences between top-line, preliminary, or interim data, on the one hand, and final data, on the other, could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock.

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 negatively affect the approvability or commercialization of the particular product candidate.

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, competition in the therapeutic area(s) we have received or may receive approval for, and whether it will otherwise be accepted in the market. Historically, there have been concerns regarding the safety and efficacy of ADCs, and an ADC drug was voluntarily withdrawn from the market for an extended period of time. These historical concerns may negatively impact the perception market participants have on ADCs, including our product candidates. Additionally, the product candidates that we are developing are based on our proprietary XpressCF® and XpressCF+® platforms, which are new technologies. Market participants with significant influence over acceptance of new treatments, such as physicians and third-party payors, may not adopt an ADC product, or a product or treatment based on our novel cell-free production technologies, and we may not be able to convince the medical community and third-party payors to accept and use, or to provide favorable reimbursement for, any product candidates developed by us or our existing or future collaborators. Market acceptance of our product candidates will depend on the following, among other factors:

- the timing of our receipt of any marketing and commercialization approvals;
- the terms of any approvals and the countries in which approvals are obtained;
- the safety and efficacy of our product candidates;
- the prevalence and severity of any adverse side effects associated with our product candidates;
- limitations or warnings contained in any labeling approved by the FDA or other regulatory authority;
- 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.

Because our product candidates are based on new technology, we expect that they will require extensive research and development and have substantial manufacturing and processing costs. In addition, our estimates regarding potential market size for any indication may be materially different from what we discover to exist at the time we commence commercialization, if any, for a product, which could result in significant changes in our business plan and have a material adverse effect on our business, financial condition, results of operations and

prospects. Moreover, 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.

iADC and ADC^2 are novel technologies, which makes it difficult to predict the time, risks and cost of development and of subsequently obtaining regulatory approval of these potential product candidates.

Certain of our preclinical product candidates are based on our proprietary iADC and ADC^2 technology. Some of our future success depends on the successful development of this technology and products based on it. To our knowledge, no regulatory authority has granted approval to any person or entity, including us, to market and commercialize therapeutics using our novel and unprecedented iADC or ADC^2 technology. We may never receive approval to market and commercialize any potential iADC or ADC^2 product candidate.

If we uncover any previously unknown risks related to our iADC and ADC^2 technology, or if we experience unanticipated or unsolvable problems or delays in developing our iADC or ADC^2 product candidates, we may be unable to complete our preclinical studies and clinical trials, meet the obligations of our collaboration and license agreements or commercialize our product candidates on a timely or profitable basis. If serious adverse events or unacceptable side effects are observed in preclinical studies or clinical trials of a product candidate based on our iADC or ADC^2 technology, or if iADCs or ADC^{2}s were shown to have limited efficacy, our ability to develop other product candidates based on our iADC or ADC^2 technology would be adversely affected.

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 XpressCF® and XpressCF+® platforms. 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 XpressCF® and XpressCF+® platforms and resulting product candidates.

Since 2014, we have entered into several collaborations to develop and commercialize certain cancer and other therapeutics. Our XpressCF® and XpressCF+® platforms have also supported a spin-out company, Vaxcyte Inc., focused on discovery and development of vaccines for the treatment and prophylaxis of infectious disease. In addition, we may in the future seek third-party collaborators for research, 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 the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Moreover, our ability to generate revenues from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

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

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- 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 studies or clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;

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

Our existing collaborations with Astellas, Merck, Vaxcyte and Tasly are important to our business. If our collaborators cease development efforts under our existing or future collaboration agreements, fail to fulfill their contract obligations, 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.

We have entered into collaborations with other biotechnology companies to develop or commercialize several of our product candidates, and such collaborations currently represent a significant portion of our product pipeline and discovery and preclinical programs. A substantial portion of our revenue to date has been derived from our collaborations, and a significant portion of our future revenue and cash resources is expected to be derived from some of these agreements, our royalty monetization agreement, or the Purchase Agreement, with an affiliate of Blackstone Life Sciences, or Blackstone, or other similar agreements into which we may enter in the future. Revenue from research and development collaborations depends upon continuation of the collaborations, payments for research and development and other services and product supply, and the achievement of milestones, contingent payments and royalties, if any, derived from future products developed from our research. If we are unable to successfully advance the development of our product candidates, achieve milestones or earn contingent payments under our collaboration agreements or royalty monetization agreement, future revenue and cash resources will be substantially less than expected.

We are unable to predict the success of our collaborations and we may not realize the anticipated benefits of our strategic collaborations. Our collaborators have discretion in determining and directing the efforts and resources, including the ability to discontinue all efforts and resources, they apply to the development and, if approval is obtained, commercialization and marketing of the product candidates covered by such collaborations. As a result, our collaborators may elect to de-prioritize our programs, change their strategic focus or pursue alternative technologies in a manner that results in reduced, delayed or no revenue to us. For example, each of EMD Serono and BMS elected not to continue the development of their licensed candidates based on strategic portfolio considerations. Our collaborators may have other marketed products and product candidates under collaboration with other companies, including some of our competitors, and their corporate objectives may not be consistent with our best interests. Our collaborators may also be unsuccessful in developing or commercializing our products. If our collaborations are unsuccessful, our business, financial condition, results of operations and prospects could be adversely affected. Our collaborators may fail to live up to the terms of their agreements with us, which would require us to seek to enforce our agreements in accordance with the dispute resolution procedures set forth therein. These procedures may require us to engage in litigation or arbitration to enforce our

rights, which can be expensive, time-consuming and distracting to our management and Board of Directors. Further, the type and timing of resolution of such disputes are difficult to predict; and there is the potential that we could fail to enforce our rights either in part or in whole. Lastly, even if we successfully enforce our rights under our agreements with our collaborators, there is the possibility that we could fail to recover our expectancy following the litigation or arbitration, particularly for collaborators that are not subject to the jurisdiction of U.S. courts.

In addition, from time to time we may have disputes with our collaborators. Any dispute or litigation proceedings we may have with our collaborators could delay development programs, reduce or eliminate potential milestone or other payments, create uncertainty as to ownership of intellectual property rights, distract management from other business activities and generate substantial expense.

Moreover, to the extent that any of our existing or future collaborators were to terminate a collaboration agreement, we may be forced to independently develop these product candidates, including funding preclinical studies or clinical trials, assuming marketing and distribution costs and defending intellectual property rights, or, in certain instances, abandon product candidates altogether, any of which could result in a change to our business plan and have a material adverse effect on our business, financial condition, results of operations and prospects.

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 expenses and present significant distractions to our management.

From time to time, we may consider strategic transactions, such as additional collaborations, acquisitions of companies, asset purchases or sales and out- or in-licensing of product candidates or technologies that we believe will complement or augment our existing business. 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. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future strategic partners. Additionally, antitrust or other competition laws, including increased enforcement within the United States in the healthcare space, may also limit our ability to enter into collaborations with certain businesses or to fully realize the benefits of strategic transactions. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the strategic partner's resources and expertise, the terms and conditions of the proposed collaboration and the proposed strategic partner's evaluation of a number of factors. These factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership, without regard to the merits of the challenge, and industry and market conditions generally. Moreover, if we acquire assets with promising markets or technologies, we may not be able to realize the benefit of acquiring such assets due to an inability to successfully integrate them with our existing technologies and may encounter numerous difficulties in developing, manufacturing and marketing any new products resulting from a strategic acquisition that delay or prevent us from realizing their expected benefits or enhancing our business.

We cannot assure you that following any such collaboration, or other strategic transaction, we will achieve the expected synergies to justify the transaction. For example, such transactions 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 would have a material and adverse effect on our business, financial condition, results of operations and prospects. 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.

To date, no product developed on a cell-free manufacturing platform has received approval from the FDA, so the requirements for the manufacturing of products using our XpressCF® and XpressCF+® platforms are uncertain.

We have invested in our own current Good Manufacturing Practices, or cGMP, compliant manufacturing facility in San Carlos, California. In this facility, we are developing and implementing novel, proprietary cell-free production technologies to supply our planned preclinical and clinical trials. However, before we may initiate a clinical trial or commercialize any of our product candidates, we must demonstrate to the FDA that the chemistry, manufacturing and controls for our product candidates meet applicable requirements, and in the European Union, or EU, a manufacturing authorization must be obtained from the appropriate EU regulatory authorities. The FDA has allowed clinical trial use of our product candidate luvelta, and our partner Merck's MK-1484 product candidate, portions of which are manufactured in our San Carlos manufacturing facility; however, because no product manufactured on a cell-free manufacturing platform has yet been approved in the United States, there is no manufacturing facility that has demonstrated the ability to comply with FDA requirements for later stage clinical development or commercialization, and, therefore, the time frame for demonstrating compliance to the FDA's satisfaction is uncertain. Delays in establishing that our manufacturing process and facility comply with cGMPs or disruptions in our manufacturing processes, implementation of novel in-house technologies or scale-up activities, may delay or disrupt our development efforts.

We have ongoing technology transfers to enable large scale manufacture of extract and the reagents necessary to manufacture our products using our XpressCF® and XpressCF+® platforms. These large scale technology transfers may fail or be delayed, resulting in impacts to our development timelines and the costs associated with manufacturing our development products.

We expect to rely on third parties to conduct certain of our preclinical studies or clinical trials. If those third parties do not perform as contractually required, fail to satisfy regulatory or legal requirements or miss expected deadlines, our development program could be delayed with potentially material and adverse effects on our business, financial condition, results of operations and prospects.

We do not have the ability to independently conduct all aspects of our preclinical testing or clinical trials ourselves. We have accordingly relied in some cases and intend to rely in the future on third-party clinical investigators, clinical research organizations, or CROs, clinical data management organizations and consultants to assist or provide the design, conduct, supervision and monitoring of preclinical studies and clinical trials of our product candidates. Because we intend to rely on these third parties and will not have the ability to conduct all preclinical studies or clinical trials independently, we will have less control over the timing, quality and other aspects of preclinical studies and clinical trials than we would have had we conducted them on our own. These investigators, CROs and consultants will not be our employees and we will 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 may 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.

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 and clinical trials to be conducted in accordance with good clinical practices, 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 preclinical studies or clinical trials as a result of our reliance on third parties could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our inability to manufacture sufficient quantities of our product candidates, or the loss of our third-party suppliers, or our or their failure to comply with applicable regulatory requirements or to supply sufficient quantities at acceptable quality levels or prices, or at all, would materially and adversely affect our business.

Manufacturing is a vital component of our business strategy. To ensure timely and consistent product supply, we currently use a hybrid product supply approach wherein certain elements of our product candidates are manufactured internally at our manufacturing facilities in San Carlos, California, and other elements, including raw and intermediate materials, are manufactured at qualified third-party CMOs. Since our own manufacturing facilities may be limited or unable to manufacture certain of our preclinical and clinical trial product materials and supplies, we rely on third-party contract manufacturers to manufacture such clinical trial product materials and supplies for our or our collaborator's needs. For example, we have entered into a manufacturing agreement with EMD Millipore Corporation to perform conjugation of the applicable linker-warhead with the antibody component of our luvelta and STRO-003 product candidates. We have also entered into agreements with Capua Bioservices, S.p.A. and with AGC Biologics GmbH for the manufacture of certain reagents used in the manufacture of our products with our XpressCF® and XpressCF+® platforms. 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. Further, while efforts are made to diversify our sources of raw and intermediate materials, in certain instances we acquire raw and intermediate materials from a sole supplier. In particular, any replacement of our manufacturer could require significant effort and expertise because there may be a limited number of qualified replacements. In addition, replacement of a manufacturer may require a technology transfer to the new manufacturer, which involves technical risk that the transfer may not succeed or may be delayed, and which can incur significant costs.

The manufacturing process for a product candidate is subject to FDA and foreign regulatory authority review. We, and our suppliers and manufacturers, must meet applicable manufacturing requirements and undergo rigorous facility and process validation tests required by regulatory authorities in order to comply with regulatory standards, such as cGMPs. If we or our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or comparable foreign regulatory authorities, we may not be able to rely on our or their manufacturing facilities for the manufacture of elements of our product candidates. Moreover, we do not control the manufacturing process at our contract manufacturers and are completely dependent on them for compliance with current regulatory requirements. In the event that any of our manufacturers fails to comply with such requirements or to perform its obligations in relation to quality, timing or otherwise, or if our supply of components or other materials becomes limited or interrupted for other reasons, we may be forced to manufacture the materials ourselves 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 applying such skills or technology ourselves, or in transferring such to another third party. These factors would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to enable us, or to have another third party, manufacture 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; and we may be required to repeat some of the development program. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop product candidates in a timely manner or within budget.

We expect to continue to rely on 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. 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 an existing or future collaborator;
- losses resulting from an inability to utilize reserved manufacturing capacity because of delays or difficulties encountered in the supply chain;
- 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.

Additionally, we and our contract manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes, unstable political environments, or epidemics, pandemics, or contagious diseases or failures or delays in our manufacturing supply chain. For example, restrictions on travel imposed by governments, including China, or restrictions on person-in-plant permissions imposed by our contract manufacturers may limit the ability of our subject matter experts to visit our manufacturers and assist with technology transfers. If we or our contract manufacturers were to encounter interruptions from any of these events or other unforeseen events, our ability to provide our product candidates to patients in clinical trials, or to provide product for treatment of patients once approved, would be jeopardized.

We, or third-party manufacturers, may be unable to successfully scale-up manufacturing of our product candidates or materials used to manufacture components of our product candidates in sufficient quality and quantity, which would delay or prevent us from developing our product candidates and commercializing approved products, if any.

In order to conduct clinical trials of our product candidates, we will need to manufacture them in large quantities. We, or any manufacturing partners, may be unable to successfully increase the manufacturing capacity for any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If we, or any manufacturing partners, are unable to successfully scale up the manufacture of our product candidates, or materials used in manufacturing components 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.

Scaling up a biologic manufacturing process is a difficult and uncertain task, and we may not be successful in transferring our production system or our third-party manufacturers may not have the necessary capabilities to complete the implementation and development process. If we are unable to adequately validate or scale-up the manufacturing process at our own manufacturing facilities or those of our current manufacturers, we will need to transfer to another manufacturer and complete the manufacturing validation process, which can be lengthy. If we are able to adequately validate and scale-up the manufacturing process for our product candidates at our manufacturing facility or with a contract manufacturer, we will still need to negotiate with such contract manufacturer an agreement for commercial supply and it is not certain we will be able to come to agreement on terms acceptable to us.

The manufacture of biologics is complex and we or our third-party manufacturers may encounter difficulties in production. If we or any of our third-party manufacturers encounter such difficulties, our ability to provide supply of our product candidates for clinical trials, our ability to obtain marketing approval, or our ability to provide supply of our products for patients, if approved, could be delayed or stopped.

Our product candidates are considered to be biologics and the process of manufacturing biologics and materials used to manufacture components of our products can be complex, time-consuming, highly regulated and subject to multiple risks. We and our contract manufacturers must comply with cGMPs, regulations and guidelines for the manufacturing of biologics used in clinical trials and, if approved, marketed products. To date, we and our contract manufacturers have limited experience in the manufacturing of cGMP batches of our product candidates and materials used to manufacture components of our product candidates.

Manufacturing biologics is highly susceptible to product loss due to contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, inconsistency in yields, variability in product characteristics and difficulties in scaling the production process. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects and other supply disruptions. If microbial, viral or other contaminations are discovered at our manufacturing facilities or those of our third-party manufacturers, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could delay clinical trials and adversely harm our business. Moreover, if the FDA determines that our manufacturing facilities or those of our third-party manufacturers are not in compliance with FDA laws and regulations, including those governing cGMPs, the FDA may deny BLA approval until the deficiencies are corrected or we replace the manufacturer in our BLA with a manufacturer that is in compliance.

In addition, there are risks associated with large scale manufacturing for clinical trials or commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, compliance with cGMPs, lot consistency, timely availability of raw materials and other technical challenges. Even if we or our collaborators obtain regulatory approval for any of our product candidates, there is no assurance that manufacturers will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product or to meet potential future demand. If our manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization, commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and prospects.

We cannot assure you that any stability or other issues relating to the manufacture of any of our product candidates or products will not occur in the future. If we or our third-party manufacturers were to encounter any of these difficulties, our ability to provide any product candidates to patients in planned clinical trials and products to patients, once approved, would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of planned clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely. Any adverse developments affecting clinical or commercial manufacturing of our product candidates or products, such as epidemics, pandemics or contagious diseases, may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our product candidates or products. We may also have to take inventory write-offs and incur other charges and expenses for product candidates or products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. Accordingly, failures or difficulties faced at any level of our supply chain could adversely affect our business and delay or impede the development and commercialization of any of our product candidates or products, if approved, and could have an adverse effect on our business, financial condition, results of operations and prospects.

As part of our process development efforts, we also may make changes to our manufacturing processes at various points during development, for various reasons, such as controlling costs, achieving scale, decreasing processing time, increasing manufacturing success rate or other reasons. Such changes carry the risk that they will not achieve their intended objectives, and any of these changes could cause our product candidates to perform differently and affect the results of our ongoing clinical trials or future clinical trials. In some circumstances, changes in the manufacturing process may require us to perform *ex vivo* comparability studies and to collect additional data from patients prior to undertaking more advanced clinical trials. For instance, changes in our process during the course of clinical development may require us to show the comparability of the

product used in earlier clinical phases or at earlier portions of a trial to the product used in later clinical phases or later portions of the trial.

We may not be successful in our efforts to use our XpressCF® and XpressCF+® platforms to expand our pipeline of product candidates and develop marketable products.

The success of our business depends in large part upon our ability to identify, develop and commercialize products based on our XpressCF® and XpressCF+® platforms. Luvelta is our most advanced clinical stage program, and our preclinical and research programs may fail to identify other potential product candidates for clinical development for a number of reasons. Our research methodology may be unsuccessful in identifying potential product candidates or our potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval. If any of these events occur, we may be forced to abandon our development efforts for a program or for multiple programs, which would materially harm our business and could potentially cause us to cease operations. Research programs to identify new product candidates require substantial technical, financial and human resources. We may focus our efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful.

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 our research and development efforts on certain selected product candidates. As a result, we may forgo or delay pursuit of opportunities 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 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. For example, in June 2023, we announced our Purchase Agreement with Blackstone.

Failure to successfully validate, develop and obtain regulatory approval for companion diagnostics for our product candidates could harm our drug development strategy and operational results.

If companion diagnostics are developed in conjunction with clinical programs, the FDA may require regulatory approval of a companion diagnostic as a condition to approval of the product candidate. For example, as we are developing luvelta for treatment of patients having ovarian cancer with elevated FolRα expression levels, we are likely to be required to obtain FDA approval or clearance of a companion diagnostic, concurrent with approval of luvelta, to test for elevated FolRα expression. We do not have experience or capabilities in developing or commercializing diagnostics and plan to rely in large part on third parties to perform these functions. We have entered into an agreement to develop diagnostic assays suitable for use as a companion diagnostic for luvelta. Companion diagnostics are subject to regulation by the FDA and foreign regulatory authorities as medical devices and require separate regulatory approval or clearance prior to commercialization. We may also be required to demonstrate to the FDA the predictive utility of the companion diagnostic—namely, that the diagnostic selects for patients in whom the biologic therapy will be effective or more effective compared to patients not selected for by the diagnostic.

If we or our collaborators, or any third party, are unable to successfully develop companion diagnostics for our product candidates, or experience delays in doing so:

- the development of our product candidates may be adversely affected if we are unable to appropriately select patients for enrollment in our planned clinical trials;

- our product candidates may not receive marketing approval if their safe and effective use depends on a companion diagnostic; and

- we may not realize the full commercial potential of any product candidates that receive marketing approval if, among other reasons, we are unable to appropriately identify patients with the specific genetic alterations targeted by our product candidates.

In addition, although we believe genetic testing is becoming more prevalent in the diagnosis and treatment of various diseases and conditions, our product candidates may be perceived negatively compared to alternative treatments that do not require the use of companion diagnostics, either due to the additional cost of the companion diagnostic or the need to complete additional procedures to identify genetic markers prior to administering our product candidates. If any of these events were to occur, our business would be harmed, possibly materially.

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. Our product candidates, if approved, will face significant competition and our failure to effectively compete may prevent us from achieving significant market penetration. Most of our competitors have significantly greater resources, including financial, technical, manufacturing, marketing, sales, supply, human resources, or general experience than we do and we may not be able to successfully compete. We compete with a variety of multinational biopharmaceutical companies, specialized biotechnology companies and emerging biotechnology companies, as well as with technologies and product candidates 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 and processes. Competitive therapeutic treatments include those that have already been approved and accepted by the medical community and any new treatments, including those based on novel technology platforms, that enter the market. 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 are trying, or may try, to develop product candidates. There is intense and rapidly evolving competition in the biotechnology, biopharmaceutical and antibody and immunoregulatory therapeutics fields. While we believe that our XpressCF® and XpressCF+® platforms, associated intellectual property and our scientific and technical know-how give us a competitive advantage in this space, competition from many sources exists or may arise in the future. Our competitors include larger and well-funded biopharmaceutical, biotechnological and therapeutics companies, including large and specialty companies focused on cancer immunotherapies and ADCs, as well as numerous small and mid-cap companies. Moreover, we also compete with current and future therapeutics developed at research-stage biotechnology companies, universities and other research institutions.

We are aware of several companies that are developing ADCs, cytokine derivatives, bispecific antibodies and cancer immunotherapies, including companies developing ADCs directed to the same target as luvelta. For example, Immunogen recently received approval for a folate receptor α targeted ADC, mirvetuximab soravtansine (Elahere®). In addition, large pharmaceutical companies and smaller biotechnology companies are developing other ADCs; and we anticipate more FolRα-targeting ADCs and other potential FolRα-targeting modalities to be evaluated in the clinic in the coming years. Further, other companies may develop ADCs targeting receptors other than folate receptor α for the treatment of the same indications for which we are developing luvelta. Many of these companies are well-capitalized and, in contrast to us, have significant clinical experience, and may include our existing or future collaborators. In addition, these companies compete with us in recruiting scientific and managerial talent.

Our success will depend partially 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 are safer, more effective, or less expensive than the therapeutics we develop.

If our most advanced product candidates are approved, they will compete with a range of therapeutic treatments that are either in development or currently marketed. Currently marketed oncology therapeutics include a range of biologic modalities with the top selling products by class spanning tumor targeting monoclonal antibodies, to ADCs, to immune checkpoint inhibitors, to T cell-engager immunotherapies, and to CAR-T cell therapies. In addition, numerous compounds are in clinical development for cancer treatment. The clinical

development pipeline for cancer includes small molecules, antibodies, vaccines, cell therapies and immunotherapies from a variety of companies and institutions.

Further, 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 obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates.

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

We are highly dependent on the research and development, clinical development, manufacturing, and business development expertise of our management team, advisors and other specialized personnel. 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 XpressCF® and XpressCF+® platform 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. 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. Should our competitors recruit our key employees, our level of expertise and ability to execute our business plan would be negatively impacted. Further, if we are unable to continue to attract and retain high-quality personnel, the rate and success at which we can discover and develop product candidates will be limited, which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We will need to grow our organization, and we may experience difficulties in managing our growth and expanding our operations.

As of December 31, 2023, we had 302 full-time employees. As our development and commercialization plans and strategies develop, we expect to expand our employee base for managerial, operational, financial and other resources. In addition, we have limited experience in product development and began our first clinical trial in 2018. As our product candidates enter and advance through preclinical studies and clinical trials, we will need to expand our development, regulatory and manufacturing capabilities or contract with other organizations to provide these capabilities for us. In the future, we expect to have to manage additional relationships with collaborators or partners, suppliers and other organizations. Our ability to manage our operations and future growth will require us to continue to improve our operational, financial and management controls, reporting systems and procedures. We may not be able to implement improvements to our management information and control systems in an efficient or timely manner and may discover deficiencies in existing systems and controls. Our inability to successfully manage our growth and expand our operations could have a material and adverse effect on our business, financial condition, results of operations and prospects.

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 limited sales, marketing and distribution capabilities or experience. If any of our product candidates are approved, we will need to develop additional 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.

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 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 fail to comply with the regulatory requirements in international markets and do not receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed and our business will be adversely affected. We may not obtain foreign regulatory approvals on a timely basis, if at all. Our failure to obtain approval of any of our product candidates by regulatory authorities in another country may significantly diminish the commercial prospects of that product candidate and our business, financial condition, results of operations and prospects could be materially and adversely affected. Moreover, even if we obtain approval of 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 reduced protection of intellectual property rights in some foreign countries.

Price controls imposed in either the U.S. or foreign markets may adversely affect our future profitability.

Recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in recent Executive Orders, several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. Current and future presidential budget proposals and future legislation may contain further drug price control measures that could be enacted. Congress and current and future U.S. presidential administrations may continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. If such pricing controls are enacted and are set at unsatisfactory levels, our business, financial condition, results of operations and prospects could be materially and adversely affected.

Additionally, in some countries, particularly member states of the EU, the pricing of prescription drugs is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU member states and parallel distribution, or arbitrage between low-priced and high-priced

member states, can further reduce prices. In some countries, we or current or future collaborators may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our 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 and prospects could be materially and adversely affected.

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.

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

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

As with all companies, we are exposed to the risk of employee fraud or other misconduct. Misconduct by employees 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 healthcare fraud and abuse laws and regulations, inappropriately share confidential and proprietary information externally, 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. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a material and adverse effect on our business, financial condition, results of operations and prospects, including the imposition of significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, the curtailment or restructuring of our operations, loss of eligibility to obtain approvals from the FDA, exclusion from participation in government contracting, healthcare reimbursement or other government programs, including Medicare and Medicaid, integrity oversight and reporting obligations, or reputational harm.

Moreover, our employees are increasingly utilizing social media tools and our website as a means of communication. Despite our efforts to monitor social media communications, there is risk that the unauthorized use of social media by our employees to communicate about our products or business, or any inadvertent disclosure of material, nonpublic information through these means, may result in violations of applicable laws and

regulations, which may give rise to liability and result in harm to our business. In addition, there is also risk of inappropriate disclosure of sensitive information, which could result in significant legal and financial exposure and reputational damages that could potentially have a material adverse impact on our business, financial condition, results of operations and prospects.

We depend on our information technology systems, and any failure of these systems, or those of our CROs, third-party vendors, or other contractors or consultants we may utilize, could harm our business. Security breaches, cyber-attacks, loss of data, and other disruptions could compromise sensitive information related to our business or other personal information or prevent us from accessing critical information and expose us to liability, which could adversely affect our business, reputation, results of operations, financial condition and prospects.

We collect, use and store information in digital form that is necessary to conduct our business, and we are increasingly dependent on information technology systems and infrastructure to operate our business. In the ordinary course of our business, we collect, use, store and transmit large amounts of confidential information, including intellectual property, proprietary business information health information, and personal information. We have established physical, electronic and organizational measures designed to safeguard and secure our systems to prevent a data security incident (which may include, for example: data breaches, viruses or other malicious code, coordinated attacks, data loss, phishing attacks, ransomware, denial of service attacks, or other security or information technology incidents caused by threat actors, technological vulnerabilities or human error), and rely on commercially available systems, software, tools, and monitoring to provide security for our information technology systems and the processing, transmission and storage of digital information. We have also outsourced elements of our information technology infrastructure, and as a result, a number of third-party vendors may or could have access to our confidential information subject to contractual protections. Our internal information technology systems and infrastructure, and those of our current and any future collaborators, CROs, third-party vendors, contractors and consultants and other third parties on which we rely, are vulnerable to damage from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyber-attacks or cyber-intrusions over the internet, attachments to emails, persons inside our organization, or persons with access to systems inside our organization.

The risk of a formal security breach or disruption or data loss, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. For example, targeted deep fakes supported by sophisticated AI tools and other forms of impersonation of our executives are becoming increasingly prevalent. In addition, the prevalent use of mobile devices that access confidential information increases the risk of data security breaches, which could lead to the loss of confidential information or other intellectual property. The costs to us or our CROs or other contractors or consultants we may utilize to mitigate a data security incident and security vulnerabilities could be significant, and while we have implemented security measures designed to protect our data security and information technology systems, our efforts to address these problems may not be successful, and these problems could result in unexpected interruptions, delays, cessation of service and other harm to our business and our competitive position. We have incurred successful phishing attempts in the past, although we believe that these attempts were detected and neutralized without any compromise to our data and prior to any significant impact to our business. We have also implemented measures to prevent such attacks, but we may still be subject to similar attacks in the future. We are also aware of publicly disclosed security breaches at certain third parties on which we rely. If such an event were to occur, whether to us or a third party on which we rely, and cause interruptions in our operations, it could result in a material disruption of our product development programs. For example, 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. Further, if we are unable to generate or maintain access to essential patient samples or data for our research, development, and manufacturing activities for our programs, our business could be materially adversely affected.

Moreover, if a computer security breach affects our systems or results in the unauthorized release of personally identifiable information, our reputation could be materially damaged. Such a breach may require formal notification to governmental agencies, the media or individuals pursuant to various federal and state privacy and security laws, such as the Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and its implementing rules and regulations, regulations promulgated by the Federal Trade Commission and state breach

notification laws. We also may be subject to global privacy laws, such as Europe's General Data Protection Regulation, or GDPR. We would also be exposed to a risk of loss or litigation and potential liability under laws, regulations and contracts that protect the privacy and security of personal information that may result in regulatory scrutiny, fines, private right of action settlements, and other consequences. Compliance with these and any other applicable privacy and data security laws and regulations is a rigorous and time-intensive process, and we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules and possible government oversight. Our failure to comply with such laws or to adequately secure the information we hold could result in significant liability or reputational harm and, in turn, a material adverse effect on our client base, member base and revenue.

Our information technology systems could face serious disruptions that could adversely affect our business.

Our information technology and other internal infrastructure systems, including corporate firewalls, servers, leased lines, and connection to the Internet, face the risk of systemic failure that could disrupt our operations. A significant disruption in the availability of our information technology and other internal infrastructure systems could cause interruptions and delays in our research and development and manufacturing work.

In addition, some of our employees work remotely from time to time, which presents certain risks to our business. For example, remote work presents significant demands on our information technology resources and systems and can be at risk for phishing and other malicious activity, which can result in an increase to the number of points of potential exposure, such as laptops and mobile devices, that need to be secured. Any failure to effectively manage these risks, including to timely identify and appropriately respond to any security incidents, may adversely affect our business.

In our ongoing efforts to innovate and optimize operational efficiency, we have integrated artificial intelligence, or AI, into various aspects of our workplace. For example, we are implementing AI machine learning for email behavioral monitoring. While AI presents opportunities for enhanced productivity and innovation, it also introduces inherent risks, including legal and regulatory, that could adversely impact our business and reputation. Proper use of AI can lead to improved decision-making, cost reduction, and competitive advantage. However, improper use, including algorithmic biases, ethical considerations, data privacy issues, unknown or zero-day software vulnerabilities, and potential regulatory non-compliance, could result in reputational damage, legal liabilities, and financial losses. The rapidly evolving regulatory landscape surrounding AI also poses a risk, as new laws and regulations could impose additional compliance burdens, resulting in increased operational costs. We are committed to implementing robust governance and control mechanisms to mitigate these risks, but there can be no assurance that such measures will adequately prevent or mitigate the adverse effects that the integration and use of AI may have 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 affected adversely.

Our research, development and manufacturing involve the use of hazardous chemicals and materials, including radioactive materials. We maintain quantities of various flammable and toxic chemicals in our facilities in South San Francisco and San Carlos, California that are required for our research, development and manufacturing activities. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. We and our third-party contractors are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous chemicals and materials. We believe our and our third-party contractors' procedures for storing, handling and disposing these materials in our South San Francisco and San Carlos facilities comply with the relevant guidelines of the two municipalities, the county of San Mateo, 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, including employee and contractor training and procedures regarding safe handling and disposal, the risk of accidental or mistaken 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 and exceed any available insurance. 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 or from other hazards potentially present in our workplaces, such as high voltage electricity, process steam or other hot material, liquid nitrogen or other cold material, materials stored under pressure, laboratory instruments that incorporate powerful lasers or magnets, sonic resonance, heavy machinery, and the like, this insurance may not provide adequate coverage against potential liabilities. While we maintain pollution legal liability insurance for our manufacturing facility in San Carlos, California, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological or hazardous materials in our other locations. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future and existing laws and regulations could become more stringent. Further, we may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions and other trade laws and regulations. We can face serious consequences for violations.

U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions and other trade laws and regulations prohibit, among other things, companies and their employees, agents, CROs, CMOs, legal counsel, accountants, consultants, contractors and other partners from authorizing, promising, offering, providing, soliciting, or making or receiving directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. Violations of these laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities and other organizations. We also expect our non-U.S. activities to increase over time. We expect to rely on third parties for research, preclinical studies and clinical trials and/or to obtain necessary permits, licenses, patent registrations and other marketing authorizations. We can be held liable for corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

Our current operations are in two cities in the San Francisco Bay Area, and we, or the third parties upon whom we depend, may be adversely affected by earthquakes, other natural disasters, pandemics or other catastrophic events 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 and San Carlos, California. Any unplanned event, such as earthquake, flood, fire, explosion, extreme weather condition, epidemic, pandemic or contagious disease, power shortage, telecommunication failure or other natural or man-made 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, epidemics, pandemics or contagious diseases, 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, epidemics, pandemics or contagious disease, or other events occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as our research or manufacturing 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. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business. However, in the event of an accident or incident at these facilities, we cannot assure you that the amounts of insurance will be sufficient to satisfy any damages and losses. In addition, the long-term effects of climate change on general economic conditions and the pharmaceutical industry in particular are unclear, and

may heighten or intensify existing risk of natural disasters. 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. Further, many of our employees conduct business outside of our leased or owned facilities and these locations may be subject to additional security risks outside of our control. Any business interruption could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Changes in tax laws or regulations that are applied adversely to us or our customers may have a material adverse effect on our business, cash flows, 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, or the 2017 Tax Act, enacted many significant changes to the U.S. tax laws. Beginning in 2022, the 2017 Tax Act eliminates the option to currently deduct research and development expenditures and requires taxpayers to capitalize and amortize U.S. based and non-U.S. based research and development expenditures over five and fifteen years, respectively, pursuant to IRC Section 174. Although there have been legislative proposals to repeal or defer the capitalization requirement to later years, there can be no assurance that the provision will be repealed or otherwise modified. We also cannot predict whether, when, in what form, or with what effective dates, tax laws, regulations and rulings may be enacted, promulgated or issued, which could result in an increase in our or our stockholders' tax liability or require changes in the manner in which we operate in order to minimize or mitigate any adverse effects of changes in tax law. Changes in corporate tax rates, the realization of net deferred tax assets relating to our operations, or future reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges, and could increase our future U.S. tax expense.

Our ability to use net operating loss carryforwards to offset taxable income could be limited.

Under current law, our net operating loss carryforwards generated in tax years ending on or prior to December 31, 2017, are permitted to be carried forward for 20 years and our federal net operating losses generated in tax years beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such federal net operating losses, is limited to 80% of taxable income (without regard to certain deductions).

In addition, under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, if we experience an "ownership change" which is generally defined as a greater than 50% change, by value, in its equity ownership over a three-year period, our ability to use our pre-change net operating loss carryforwards to offset our post-change income may be limited. Based on Section 382 studies performed for certain prior periods, we experienced an ownership change on November 20, 2019 and December 31, 2022, which imposed limitations on the use of our net operating losses arising before that date. In addition, we may have experienced other ownership changes in the past and may also experience ownership changes in the future as a result of equity offerings or other shifts in our stock ownership, some of which are outside our control. As a result, our use of federal NOL carryforwards could be limited. State net operating loss carryforwards may be similarly limited. In addition, at the state level, there may be periods during which the use of net operating losses is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. Any such limitations may result in greater tax liabilities than we would incur in the absence of such limitations and any increased liabilities could adversely affect our business, results of operations, financial position and cash flows.

Our investment in Vaxcyte is subject to risk

As of December 31, 2023, we held Vaxcyte common stock with a fair value of $41.9 million. Vaxcyte common stock is publicly traded and therefore subject to the various risk factors associated with any publicly traded company, including risks associated with Vaxcyte's business, its business outlook, cash flow requirements and financial performance, the state of the market and the general economic climate, including the impact of health pandemics, regional geopolitical conflicts, changes in interest rates, inflation, potential uncertainty with respect to the debt ceiling and potential government shutdowns related thereto. Vaxcyte common stock has been subject to substantial volatility, and the change in fair value of our interests in Vaxcyte will materially impact our reported net income or net loss in our financial statements.

Our cash and investments could be adversely affected if the financial institutions in which we hold our cash and investments fail.

We regularly maintain cash balances at third-party financial institutions in excess of the FDIC insurance limit and similar regulatory insurance limits outside the United States and governments may not guarantee all depositors if such financial institutions were to fail, as the U.S. government did in 2023 with Silicon Valley Bank depositors, in the event of further bank closures and continued instability in the global banking system. Any future adverse developments in the global banking system could directly or indirectly negatively impact our business, financial condition, results of operations and prospects. Further, if we enter into a credit, loan or other similar facility with a financial institution, certain covenants included in such facility may require as security that we keep a significant portion of our cash with the institution providing such facility. If a depository institution where we maintain deposits fails or is subject to adverse conditions in the financial or credit markets, we may not be able to recover all, if any, of our deposits, which could adversely impact our operating liquidity and financial performance.

Our financial results may be adversely affected by changes in accounting principles generally accepted in the United States.

Generally accepted accounting principles in the United States, or U.S. GAAP, are subject to interpretation by the Financial Accounting Standards Board, or the FASB, the American Institute of Certified Public Accountants, the SEC and various bodies formed to promulgate and interpret appropriate accounting principles. For example, in May 2014, the FASB issued accounting standards update No. 2014-09 (Topic 606), Revenue from Contracts with Customers, which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. We adopted this new accounting standard as of January 1, 2019. Any difficulties in implementing this guidance could cause us to fail to meet our financial reporting obligations, which could result in regulatory discipline and harm investors' confidence in us. Additionally, the implementation of this guidance or a change in other principles or interpretations could have a significant effect on our financial results, and could affect the reporting of transactions completed before the announcement of a change. Furthermore, we have adopted Topic 606 through the modified retrospective method. This will impact the comparability of our financial results, which might lead investors to draw incorrect conclusions that could harm investor interest in holding or purchasing our equity.

Risks Related to Intellectual Property

If we are not able to obtain, maintain and enforce sufficient patent and other intellectual property 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, our licensor's and our collaborators' 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, our licensors and collaborators may not be able to apply for patents on certain aspects of our product candidates in a timely fashion or at all. Further, we, our licensors and collaborators may not be able to prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we, our licensors and collaborators will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. It is also possible that we, our licensors, and our collaborators will fail to file patent applications covering inventions made in the course of development and commercialization activities before a competitor or another third party files a patent application covering, or publishes information disclosing, a similar, independently-developed invention. Such competitor's patent application may pose obstacles to our ability to obtain or limit the scope of patent protection we may obtain. We may not have the right to control the preparation, filing and prosecution of all patent applications that we license from third parties, or to maintain the rights to patents licensed to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. If our licensors or collaborators fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If our licensors, licensees or collaborators are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. Also, although we enter into non-disclosure and confidentiality agreements with parties who have access to confidential or

patentable aspects of our research and development output, such as our employees, collaborators, CROs, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. In addition, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we, our licensors or collaborators were the first to make the inventions claimed in our patents or pending patent applications, or were the first to file for patent protection of such inventions, or if such patents rights may otherwise become invalid. Composition of matter patents for biological and pharmaceutical therapeutic candidates often provide a strong form of intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain that the claims in our pending patent applications directed to composition of matter of our therapeutic candidates will be considered patentable by the United States Patent and Trademark Office (USPTO) or by patent offices in foreign countries, or that the claims in any of our issued patents will be considered valid and enforceable by courts in the United States or foreign countries. Method of use patents protect the use of a product for the specified method. This type of patent does not prevent a competitor from making and marketing a product that is identical to our therapeutics for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, clinicians may prescribe these products “off-label.” Although off-label prescriptions may infringe or contribute to the infringement of method of use patents, the practice is common and such infringement is difficult to prevent or prosecute. 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, or 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.

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 existing or future collaborators are the first to make the inventions covered by each of our issued patents and pending patent applications that we own or license;

- we or our licensors, or our existing or future collaborators are the first to file patent applications covering certain aspects of our inventions;

- others will not independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;

- a third party may not challenge our patents and, if challenged, a court would hold that our patents are valid, enforceable and infringed;

- any issued patents that we own or have licensed will provide us with any competitive advantages, or will not be challenged by third parties;

- we may develop additional proprietary technologies that are patentable;

- the patents of others will not have a material or adverse effect on our business, financial condition, results of operations and prospects; and

- our competitors may conduct research and development activities in countries where we do not have enforceable patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets.

If we or our licensors or collaborators fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

In addition, our in-licensed patents may be subject to a reservation of rights by the licensor, its affiliates and one or more third parties. When new technologies are developed with government funding, the government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention for noncommercial purposes. These rights may permit the government to disclose our confidential information to third parties or allow third parties to use our licensed technology. The government can also exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any of the foregoing could harm our competitive position, business, financial condition, results of operations and prospects.

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 United States and certain foreign jurisdictions are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

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.

Therapeutics in oncology or other disease areas developed in cell-free-based synthesis systems are a relatively new scientific field. We have obtained grants and issuances of, and have obtained a license from a third party on an exclusive basis to, patents related to our proprietary XpressCF® and XpressCF+® platforms. 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-based and other therapeutics.

As the field of antibody-based therapeutics continues to mature, patent applications are being processed by national patent offices around the world. There is uncertainty about which patents will issue and, if they do, as to when, to whom, and with what claims. In addition, third parties may attempt to invalidate our intellectual property rights. Even if our rights are not directly challenged, disputes could lead to the weakening of our intellectual property rights. Our defense against any attempt by third parties to circumvent or invalidate our intellectual property rights could be costly to us, could require significant time and attention of our management and could have a material and adverse effect on our business, financial condition, results of operations and prospects or our ability to successfully compete.

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

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, EU, Japan, Australia and Canada and, depending on the individual case, also in any or all of, inter alia, Brazil, China, Hong Kong, India, Israel, Mexico, New Zealand, 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.

Geopolitical actions in the United States and in foreign countries could increase the uncertainties and costs surrounding the prosecution or maintenance of patent applications and the maintenance, enforcement or defense of issued patents. For example, the United States and foreign government actions related to Russia's invasion of Ukraine may limit or prevent filing, prosecution and maintenance of patent applications in Russia. Government

actions may also prevent maintenance of issued patents in Russia. These actions could result in abandonment or lapse of patents or patent applications, resulting in partial or complete loss of patent rights in Russia. If such an event were to occur, it could have a material adverse effect on our business. In addition, a decree was adopted by the Russian government in March 2022, allowing Russian companies and individuals to exploit inventions owned by patentees that have citizenship or nationality in, are registered in, or have predominately primary place of business or profit-making activities in the United States and other countries that Russia has deemed unfriendly without consent or compensation. Consequently, we would not be able to prevent third parties from practicing our inventions in Russia or from selling or importing products made using our inventions in and into Russia. Accordingly, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected.

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

European patent applications now have the option, upon grant of a patent, of becoming a Unitary Patent which will be subject to the jurisdiction of the Unitary Patent Court, or UPC. This will be a significant change in European patent practice. As the UPC is a new court system, there is very limited precedent for the court, increasing the uncertainty of any litigation. Limited information is available to make judgments about advantages and disadvantages of either opting into or remaining out of UPC jurisdiction; either choice may ultimately prove to have significant implications as to cost, enforceability and scope of protection, among other factors, for applicable European patents.

We, our licensors or collaborators, or any future strategic partners 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.

Competitors may infringe our patents or other intellectual property. If we were to initiate legal proceedings against a third party to enforce a patent covering one of our products or our technology, the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that an individual connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity 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. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results

of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock. Patents and other intellectual property rights also will not protect our technology if competitors design around our protected technology without legally infringing our patents or other intellectual property rights.

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

As the biopharmaceutical industry expands and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties. There can be no assurance that our operations do not, or will not in the future, infringe existing or future third-party patents. Identification of third-party patent rights that may be relevant to our operations is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our therapeutic candidates in any jurisdiction.

Numerous U.S. and foreign patents and pending patent applications exist in our market that are owned by third parties. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may have applied for or obtained or may in the future apply for and obtain, patents that will prevent, limit or otherwise interfere with our ability to make, use and sell our therapeutics. We do not always conduct independent reviews of pending patent applications of and patents issued to third parties. Patent applications in the United States and elsewhere are typically 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. Certain U.S. applications that will not be filed outside the U.S. can remain confidential until patents issue. In addition, patent applications in the United States and elsewhere can be pending for many years before issuance, or unintentionally abandoned patents or applications can be revived. Furthermore, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our technologies, our therapeutics or the use of our therapeutics. As such, there may be applications of others now pending or recently revived patents of which we are unaware. These patent applications may later result in issued patents, or the revival of previously abandoned patents, that will prevent, limit or otherwise interfere with our ability to make, use or sell our therapeutics.

The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect. For example, we may incorrectly determine that our therapeutics are not covered by a third-party patent or may incorrectly predict whether a third-party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our product candidates.

We cannot provide any assurances that third-party patents do not exist which might be enforced against our current technology, including our research programs, product candidates, their respective methods of use, manufacture and formulations thereof, and could result in either an injunction prohibiting our manufacture or future sales, or, with respect to our future sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties, which could be significant.

Intellectual property rights of third parties could adversely affect our ability to commercialize our product candidates, and we, our licensors or collaborators, or any future strategic partners may become subject to third party claims or litigation alleging infringement of patents or other proprietary rights or seeking to invalidate patents or other proprietary rights. We might be required to litigate or obtain

licenses from third parties in order to develop or market our product candidates. Such litigation or licenses could be costly or not available on commercially reasonable terms.

We, our licensors or collaborators, or any future strategic partners may be subject to third-party claims for infringement or misappropriation of patent or other proprietary rights. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and *inter partes* review proceedings before the USPTO, and corresponding foreign patent offices. For example, one of our European patents related to technology auxiliary to our XpressCF® platform is involved in an opposition proceeding at the European Patent Office, or EPO, and was revoked by the EPO in 2021. In April 2022, an appeal was filed; the process for this appeal is ongoing. This may prevent us from asserting this patent against our competitors practicing otherwise infringing methods in relevant European countries where this patent has been granted. There are many issued and pending patents that might 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, portions of antibodies, cytokines, half-life extending polymers, linkers, cytotoxins, or other warheads that may be relevant for the products we wish to develop. Thus, it is possible that one or more organizations will hold patent rights to which we will need a license. If those organizations refuse to grant us a license to such patent rights on reasonable terms, we may be delayed or may not be able to market products or perform research and development or other activities covered by these patents which could have a material and adverse effect on our business, financial condition, results of operations and prospects. We are obligated under certain of our license and collaboration agreements to indemnify and hold harmless our licensors or collaborators for damages arising from intellectual property infringement by use. For example, we are obligated under the Stanford Agreement to indemnify and hold harmless Stanford for damages arising from intellectual property infringement by us resulting from exercise of the license from Stanford. If we, our licensors or collaborators, or any future strategic partners are found to infringe a third-party patent or other intellectual property rights, we could be required to pay damages, potentially including treble damages, if we are found to have infringed willfully. In addition, we, our licensors or collaborators, or any future strategic partners may choose to seek, or be required to seek, a license from a third party, which may not be available on acceptable terms, if at all. Even if a license can be obtained on acceptable terms, the rights may be non-exclusive, which could give our competitors access to the same technology or intellectual property rights licensed to us. If we fail to obtain a required license, we or our existing or future collaborators may be unable to effectively market product candidates based on our technology, which could limit our ability to generate revenue or achieve profitability and possibly prevent us from generating revenue sufficient to sustain our operations. In addition, we may find it necessary to pursue claims or initiate lawsuits to protect or enforce our patent or other intellectual property rights. The cost to us in defending or initiating any litigation or other proceeding relating to patent or other proprietary rights, even if resolved in our favor, could be substantial, and litigation could divert our management's attention. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could delay our research and development efforts and limit our ability to continue our operations.

Because the antibody-based therapeutics landscape is still evolving, 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, covering antibodies directed against the same targets as, or targets similar to, those we are pursuing, or covering linkers and cytotoxic warheads similar to those that we are using in our product candidates. For example, we are aware of an issued patent, expected to expire in 2031, that relates to strained alkyne reagents that can be used as synthetic precursors for certain of our linker-warheads. We are further aware of an issued patent, expected to expire in 2034, relating to certain conjugates comprising a genus of hemiasterlin derivatives that may be potentially relevant to products incorporating our hemiasterlin-derived linker-warhead. If any of these patents are valid and not yet expired when, and if, we receive marketing approval for luvelta, as applicable, we may need to seek a license to one or more of these patents, each of which may not be available on commercially reasonable terms or at all. Failure to receive a license to any of these patents, or other potentially relevant patents currently unknown to us, could delay commercialization of any or all of luvelta, STRO-003 or STRO-004. Our competitive position may suffer if patents issued to third parties or other third-party intellectual property rights cover our products or product candidates or elements thereof, or our manufacture or uses relevant to our development plans. In such cases, we may not be in a position to develop or commercialize products or product candidates until such patents expire or unless we successfully pursue litigation to nullify or invalidate the third-party intellectual property right concerned, or enter

into a license agreement with the intellectual property right holder, if available on commercially reasonable terms. There may be issued patents of which we are not aware, held by third parties that, if found to be valid and enforceable, could be alleged to be infringed by our XpressCF® and XpressCF+® platforms and related technologies and product candidates. There also may be pending patent applications of which we are not aware that may result in issued patents, which could be alleged to be infringed by our XpressCF® and XpressCF+® platforms and related technologies and product candidates. If such an infringement claim should be brought and be successful, we may be required to pay substantial damages, including potentially treble damages and attorneys' fees for willful infringement, and we may be forced to abandon 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 United States remain confidential until patents issue. Patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our products or platform technologies 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. Parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects. If we fail in any such dispute, in addition to being forced to pay damages, we may be temporarily or permanently prohibited from commercializing any of 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 and could have a material and adverse effect on our business, financial condition, results of operations and prospects.

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

Litigation 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. Moreover, such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

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

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

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

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

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

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

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.

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

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

Depending upon the timing, duration and conditions of any FDA marketing approval of our product candidates, one or more 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 Amendments, and similar legislation in the European Union. The Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. Only one patent per approved product can be extended, the extension cannot extend the total patent term beyond 14 years from approval and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for the applicable product candidate will be shortened and our competitors may obtain approval to market competing products sooner. As a result, our revenue from applicable products could be reduced. Further, if this occurs, our competitors may take advantage of our investment in development and trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case, and our competitive position, business, financial condition, results of operations and prospects could be materially harmed.

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

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

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

Changes in either the patent laws or interpretation of the patent laws in the United States or in other ex-U.S. jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. In the United States, numerous recent changes to the patent laws and

proposed changes to the rules of the USPTO 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, enacted within the last several years involves significant changes in patent legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, some of which cases either narrow the scope of patent protection available in certain circumstances or weaken the rights of patent owners in certain situations. For example, the decision by the U.S. Supreme Court in Association for Molecular Pathology v. Myriad Genetics, Inc. precludes a claim to a nucleic acid having a stated nucleotide sequence that is identical to a sequence found in nature and unmodified. 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 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, and similar legislative and regulatory bodies in other countries in which we may pursue patent protection, 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. We may become subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

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

Our current or future licensors may have relied on third-party consultants or collaborators or on funds from third parties, such as the U.S. government, such that our licensors are not the sole and exclusive owners of the patents we in-licensed. If other third parties have ownership rights or other rights to our in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, 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. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

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

Risks Related to Government Regulation

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

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 completed successfully in the United States 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. It is possible that none of the product candidates we may develop, either alone or with our collaborators, will obtain the regulatory approvals necessary for us or our existing or future collaborators to begin selling them.

Although some of our employees have experience in conducting and managing clinical trials from prior employment at other companies, we, as a company, have no prior experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA. The time required to obtain FDA and other approvals is unpredictable but typically takes many years following the commencement of clinical trials, depending upon the type, complexity and novelty of the product candidate, and may be further delayed due to one or more temporary federal government shutdowns. The standards that the FDA and its foreign counterparts use when regulating us require judgment and can change, which makes it difficult to predict with certainty their application. Any analysis we perform of data from preclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We or our collaborators 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. It is impossible to predict whether legislative changes will be enacted, or whether FDA or foreign regulations, guidance or interpretations will be changed, or the impact of such changes, if any. For example, the Oncology Center of Excellence within the FDA has recently advanced Project Optimus, which is an initiative to reform the dose optimization and dose selection paradigm in oncology drug development to emphasize selection of an optimal dose, which is a dose or doses that maximizes not only the efficacy of a drug but the safety and tolerability as well. This shift from the prior approach, which generally determined the maximum tolerated dose, may require sponsors to spend additional time and resources to further explore a product candidate's dose-response relationship to facilitate optimum dose selection in a target population. Other recent Oncology Center of Excellence initiatives have included Project FrontRunner, a new initiative with a goal of developing a framework for identifying candidate drugs for initial clinical development in the earlier advanced setting rather than for treatment of patients who have received numerous prior lines of therapies or have exhausted available treatment options. We are considering these policy changes as they relate to our programs. We may also be affected by ex-US regulatory requirements, given that our trials may be conducted globally; current and unforeseen new EU-specific clinical trial conduct regulations, such as IVDR and GDPR, may delay, or increase the difficulty and expense of conducting, our clinical studies.

Given that the product candidates we are developing, either alone or with our collaborators, represent a new approach to the manufacturing and type of therapeutic biologics, the FDA and its foreign counterparts have not yet established any definitive policies, practices or guidelines in relation to these product candidates. Moreover, the FDA may respond to any BLA that we may submit by defining requirements that we do not anticipate. Such responses could delay 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 FDA 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 on the labeling or other restrictions. In addition, the FDA has the authority to require a risk

evaluation and mitigation strategy, or REMS, as part of a BLA or after approval, which may impose further requirements or restrictions on the distribution or use of an approved 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 process described above, as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval. FDA approval does not ensure approval by regulatory authorities outside the United States and vice versa. Any delay or failure to obtain U.S. or foreign regulatory approval for a product candidate could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Delays in obtaining regulatory approval of our manufacturing process may delay or disrupt our commercialization efforts. To date, no product using a cell-free manufacturing process in the United States has received approval from the FDA.

Before we can begin to commercially manufacture our product candidates in third-party or our own facilities, we must obtain regulatory approval from the FDA for a BLA that describes in detail the chemistry, manufacturing, and controls for the product. A manufacturing authorization must also be obtained from the appropriate EU regulatory authorities. The timeframe required to obtain such approval or authorization is uncertain. In addition, we must pass a pre-approval inspection of our manufacturing facility by the FDA before any of our product candidates can obtain marketing approval, if ever. In order to obtain approval, we will need to ensure that all of our processes, methods and equipment are compliant with cGMP, and perform extensive audits of vendors, contract laboratories and suppliers. If any of our vendors, contract laboratories or suppliers is found to be out of compliance with cGMP, we may experience delays or disruptions in manufacturing while we work with these third parties to remedy the violation or while we work to identify suitable replacement vendors. The cGMP requirements govern quality control of the manufacturing process and documentation policies and procedures. In complying with cGMP, we will be obligated to expend time, money and effort in production, record keeping and quality control to assure that the product meets applicable specifications and other requirements. If we fail to comply with these requirements, we would be subject to possible regulatory action and may not be permitted to sell any products that we may develop.

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 expenses. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal. We may also be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

Any regulatory approvals that we or our existing or future 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. 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 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 existing or future collaborators, manufacturers or service providers fail to comply with applicable continuing regulatory requirements in the United States or foreign jurisdictions in which we seek to market our products, we or they may be subject to, among other things, fines, warning letters, holds on clinical trials, delay of approval or refusal by the FDA or similar foreign regulatory bodies to approve pending applications or supplements to approved applications, suspension or withdrawal of regulatory approval, product recalls and seizures, administrative detention of products, refusal to permit the import or export of products, operating restrictions, injunction, civil penalties and criminal prosecution.

Subsequent discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our 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 or untitled letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or our strategic partners;
- suspension or revocation of product license approvals;
- product seizure or detention or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

The FDA policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of 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.

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. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business.

The ability of the FDA and other government agencies to properly administer their functions is highly dependent on the levels of government funding and the ability to fill key leadership appointments, among various factors. Delays in filling or replacing key positions could significantly impact the ability of the FDA and other agencies to fulfill their functions, and could greatly impact healthcare and the pharmaceutical industry.

If a prolonged government shutdown occurs, or if global health concerns 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.

We may face difficulties from healthcare legislative reform measures.

Existing regulatory policies may change and additional government regulations may be enacted that could affect pricing and third-party payments for our product candidates, which could negatively affect our business, financial condition and prospects. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

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 Healthcare and Education Reconciliation Act, or together, the ACA, was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry.

While there have been legislative and judicial efforts to modify, repeal or otherwise invalidate all or certain aspects of the ACA or its implementing regulations, the ACA remains in effect in its current form. It is unclear how any such efforts in the future will impact the ACA or our business.

In addition, other legislative changes have been proposed and adopted in the United States federal and state levels to reduce healthcare expenditures, including the Budget Control Act, which, subject to certain temporary suspension periods, imposed 2% reductions in Medicare payments to providers per fiscal year starting April 1, 2013 and, due to subsequent legislative amendments to the statute, that will remain in effect through 2031, unless additional Congressional action is taken, and the Infrastructure Investment and Jobs Act, which added a requirement for manufacturers of certain single-source drugs (including biologics and biosimilars) separately paid for under Medicare Part B for at least 18 months and marketed in single-dose containers or packages (known as refundable single-dose containers or single-use package drugs) to provide annual refunds for any portions of the dispensed drug that are unused and discarded if those unused or discarded portions exceed an applicable percentage defined by statute or regulation. Further, in November 2020, the U.S. Department of Health and Human Services, or HHS, finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers. The implementation of this final rule was delayed by the Inflation Reduction Act, or IRA, until January 1, 2032. In December 2020, CMS issued a final rule implementing significant manufacturer price reporting changes under the Medicaid Drug Rebate Program, including regulations that affect manufacturer-sponsored patient assistance programs subject to pharmacy benefit manager accumulator programs and Best Price reporting related to certain value-based purchasing arrangements. Under the American Rescue Plan Act of 2021, effective January 1, 2024, the statutory cap on Medicaid Drug Rebate Program rebates that manufacturers pay to state Medicaid programs is eliminated. Elimination of this cap may require pharmaceutical manufacturers to pay more in rebates than they receive on the sale of products.

Moreover, 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. CMS has begun bundling the Medicare payments for certain laboratory tests ordered while a patient received services in a hospital outpatient setting and, beginning in 2018, CMS will pay for clinical laboratory services based on a weighted average of reported prices that private payors, Medicare Advantage plans, and Medicaid Managed Care plans pay for laboratory services. Further, on March 16,

2018, CMS finalized its National Coverage Determination, or NCD, for certain diagnostic laboratory tests using next generation sequencing 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 NCD, diagnostic tests that gain FDA approval or clearance as an *in vitro* companion diagnostic will automatically receive full coverage and be available for patients with recurrent, metastatic relapsed, refractory or stages III and IV cancer. Additionally, the NCD extended coverage to repeat testing when the patient has a new primary diagnosis of cancer.

There has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several presidential executive orders, Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. The FDA released a final rule in September 2020 providing guidance for states to build and submit importation plans for drugs from Canada, and the FDA authorized the first such plan in January 2024.

Recently, several healthcare reform initiatives culminated in the enactment of the IRA in August 2022, which allows, among other things, HHS to negotiate the selling price of a statutorily specified number of drugs and biologics each year that CMS reimburses under Medicare Part B and Part D. Only high-expenditure single-source biologics that have been approved for at least 11 years (7 years for single-source drugs) can qualify for negotiations, with the negotiated price taking effect two years after the selection year. Negotiations for Medicare Part D products begin in 2024 with the negotiated price taking effect in 2026, and negotiations for Medicare Part B products begin in 2026 with the negotiated price taking effect in 2028. HHS will announce the negotiated maximum fair price by September 1, 2024, and this price cap, which cannot exceed a statutory ceiling price, will come into effect on January 1, 2026. A drug or biological product that has an orphan drug designation for only one rare disease or condition will be excluded from the IRA's price negotiations requirements, but loses that exclusion if it has designations for more than one rare disease or condition, or if it is approved for an indication that is not within that single designated rare disease or condition, unless such additional designation or such disqualifying approvals are withdrawn by the time CMS evaluates the drug for selection for negotiation. In August 2023, HHS announced the ten Medicare Part D drugs and biologics that it selected for negotiations, and by October 1, 2023, each manufacturer of the selected drugs signed a manufacturer agreement to participate in the negotiations. The IRA also penalizes drug manufacturers that increase prices of Medicare Part D and Part B drugs at a rate greater than the rate of inflation. In addition, the law eliminates the "donut hole" under Medicare Part D beginning in 2025 by significantly lowering the enrollee maximum out-of-pocket cost and requiring manufacturers to subsidize, through a newly established manufacturer discount program, 10% of Part D enrollees' prescription costs for brand drugs below the out-of-pocket maximum, and 20% once the out-of-pocket maximum has been reached. The IRA permits the Secretary of HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. Manufacturers that fail to comply with the IRA may be subject to various penalties, some significant, including civil monetary penalties. The IRA also extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. These provisions are taking effect progressively starting in 2023, although they may be subject to legal challenges. For example, the provisions related to the negotiation of selling prices of high-expenditure single-source drugs and biologics have been challenged in multiple lawsuits. Thus, while it is unclear how the IRA will be implemented, it will likely have a significant impact on the pharmaceutical industry and our product candidates.

At the state level, legislatures are increasingly enacting laws and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

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

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

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

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

- the federal Anti-Kickback Statute, which prohibits, among other things, individuals and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal and state healthcare program such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

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

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

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

- the federal legislation commonly referred to as Physician Payments Sunshine Act, enacted as part of the ACA, and its implementing regulations, which requires certain manufacturers of covered drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program, with certain exceptions, to report annually to CMS information related to certain payments and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), physician assistants, certain types of advanced practice nurses, and

teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members, with the information made publicly available on a searchable website;

- the U.S. Foreign Corrupt Practices Act of 1977, as amended, which prohibits, among other things, U.S. companies and their employees and agents from authorizing, promising, offering, or providing, directly or indirectly, corrupt or improper payments or anything else of value to foreign government officials, employees of public international organizations and foreign government owned or affiliated entities, candidates for foreign political office, and foreign political parties or officials thereof;

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

- certain state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug and therapeutic biologics manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures and pricing information, state and local laws that require the registration of pharmaceutical sales representatives, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

If we or our 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:

- exclusion from participation in government-funded healthcare programs;

- exclusion of company products from coverage under federal health care programs; and

- exclusion from eligibility for the award of government contracts for our products.

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

Our failure to comply with privacy and data security laws, regulations and standards may cause our business to be materially adversely affected.

We maintain a quantity of sensitive information, including confidential business and patient health information in connection with our clinical trials that are subject to US and international laws and regulations governing the privacy and data protection of such information. Each of these laws is subject to varying interpretations and subject to evolving regulations. For example, the EU and United Kingdom ("UK") GDPR, which applies

extraterritorially, imposes several strict requirements for controllers and processors of personal information, which include higher standards for obtaining consent from individuals to process their personal information, increased requirements pertaining to the processing of special categories of personal information (such as health information) and pseudonymized (i.e., key-coded) data, and heightened transfer requirements of personal information from the European Economic Area/UK/Switzerland to countries not deemed to have adequate data protections laws. Notably, the U.S. is one such country as of January 1, 2024, although effective July 10, 2023, the new EU-U.S. Data Privacy Framework ("DPF") has been recognized as adequate under EU law to allow transfers of personal data from the EU (as well as the U.K. and Switzerland) to certified companies in the U.S. However, the DPF is likely to face legal challenge at the Court of Justice of the European Union which could cause the legal requirements for personal data transfers from the Europe to the U.S. to become uncertain once again. We will monitor these legal developments and continue to use best practices to follow established European legal standards to conduct cross-border transfer of personal data. The GDPR also provides that countries in the European Economic Area may establish their own laws and regulations further restricting the processing of certain personal information, including genetic data, biometric data, and health data. 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 (approximately $22.6 million) or 4 percent of the annual global revenues of the noncompliant company, whichever is greater.

In the United States, in addition to HIPAA, various federal (for example, the Federal Trade Commission) and state regulators have adopted, or are considering adopting, laws and regulations concerning personal information and data security that may conflict or be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than existing federal, international, or other state laws. For example, California, which continues to be a critical state with respect to evolving consumer privacy laws after enacting the California Consumer Privacy Act (the "CCPA"), as amended by the California Privacy Rights Act, took effect in January 2023 and may be subject to additional regulations promulgated through a newly created enforcement agency called the California Privacy Protection Agency ("CPPA"). Failure to comply with the CCPA may result in significant civil penalties, injunctive relief, or statutory or actual damages as determined by the CPPA and California Attorney General, the latter still retaining some CCPA enforcement authority. Following California's lead, several other state enacted privacy laws that took effect in 2023: the Colorado Privacy Act, the Connecticut Personal Data Privacy and Online Monitoring Act, the Utah Consumer Privacy Act, and the Virginia Consumer Data Protection Act. Additional state privacy laws are to take effect in 2024: the Florida Digital Bill of Rights (July 1, 2024), Montana's Consumer Data Privacy Act (October 1, 2024), Oregon's protections for the personal data of consumers enacted through SB 619 (July 1, 2024), and the Texas Data Privacy and Security Act (July 1, 2024).

We cannot provide assurance that (i) current or future legislation will not prevent us from generating or maintaining personal information, or (ii) that patients will consent to the use of their personal information (as necessary). Either of these circumstances may prevent us from undertaking or publishing essential research and development, manufacturing, and commercialization, which could have a material adverse effect on our business, results of operations, financial condition, and prospects.

Further, on July 26, 2023, the SEC adopted new cybersecurity disclosure rules for public companies that require disclosure regarding cybersecurity risk management (including our board's role in overseeing cybersecurity risks, management's role and expertise in assessing and managing cybersecurity risks and processes for assessing, identifying and managing cybersecurity risks) in annual reports on Form 10-K. These new cybersecurity disclosure rules also require the disclosure of material cybersecurity incidents by Form 8-K.

In addition to government regulation, privacy advocates and industry groups have and may in the future propose self-regulatory standards from time to time. These and other industry standards may legally or contractually apply to us, or we may elect to comply with such standards. It is possible that if our practices are not consistent or viewed as not consistent with legal and regulatory requirements and interpretations, we may become subject to audits, inquiries, whistleblower complaints, adverse media coverage, investigations, loss of export privileges, or severe criminal or civil sanctions, all of which may have a material adverse effect on our business, operating results, reputation, and financial condition.

All of these evolving compliance and operational requirements impose significant costs, such as costs related to organizational changes, implementing additional protection technologies, training employees and engaging consultants, which are likely to increase over time. In addition, such requirements may require us to modify our

data processing practices and policies, distract management or divert resources from other initiatives and projects, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Any failure or perceived failure by us to comply with any applicable federal, state, or similar foreign laws and regulations relating to data privacy and security could result in damage to our reputation, as well as proceedings or litigation by governmental agencies or other third parties, including class action privacy litigation in certain jurisdictions, which would subject us to significant fines, sanctions, awards, injunctions, penalties, or judgments. Any of the foregoing could have a material adverse effect on our business, results of operations, financial condition, and prospects.

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

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

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

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

With the enactment of the Biologics Price Competition and Innovation Act of 2009, or BPCIA, an abbreviated pathway for the licensure of biosimilar biological products (both highly similar and interchangeable biological products) was created. The abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as interchangeable based on its similarity to an existing reference product. The BPCIA provides a period of exclusivity for products granted "reference product exclusivity," under which an application for a biosimilar product referencing such products cannot be licensed by the FDA until 12 years after the first licensure date of the reference product licensed under a BLA.

During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA licenses a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement BPCIA may be fully adopted by the FDA, any such processes could have an adverse effect on the future commercial prospects for our product candidates.

There is a risk that any product candidates we may develop that are licensed as a biological product under a BLA would not qualify for the 12-year period of exclusivity or that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider any product candidates we may develop to be

reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated.

Most states have enacted substitution laws that permit substitution of interchangeable biosimilars. The extent to which a highly similar biosimilar, once licensed, will be substituted for any one of our reference products that may be approved 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.

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

Undesirable side effects caused by our product candidates could cause regulatory authorities to interrupt, delay or halt clinical trials and could result in more restrictive labeling or the delay or denial of regulatory approval by the FDA or other regulatory authorities. Given the nature of ADCs, it is likely that there may be side effects associated with their use. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects. In such an event, our clinical trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could 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 clinical trials or result in potential product liability claims. Any of these occurrences may materially and adversely affect our business, financial condition, results of operations and prospects.

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

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

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

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

While we have been granted a Fast Track Designation by the FDA for luvelta, it may not lead to a faster development or regulatory review or approval process.

We have been granted a Fast Track Designation for luvelta for the treatment of patients with platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer who have received one to three prior lines of systemic therapy. As part of our business strategy, we may also seek Fast Track Designation for other of our product candidates. If a drug or biologic is intended for the treatment of a serious or life-threatening condition and the drug or biologic demonstrates the potential to address unmet medical needs for this condition, the product sponsor may apply for FDA Fast Track Designation. 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, as we have for luvelta, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program, which may happen in connection with luvelta or other of our product candidates if granted Fast Track Designation.

While we have been granted Orphan Drug Designation by the FDA for luvelta for the treatment of Pediatric (CBF/GLIS) AML, if we decide to seek Orphan Drug Designation for some of our other product candidates, we may be unsuccessful or may be unable to maintain the benefits associated with Orphan Drug Designation, including the potential for orphan drug exclusivity.

We have been granted Orphan Drug Designation by the FDA for luvelta for the treatment of Pediatric CBF/GLIS AML. As part of our business strategy, we may seek Orphan Drug Designation for our other 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 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 condition 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 conditions, we may not be the first to obtain marketing approval of these product candidates for the orphan-designated condition due to the uncertainties associated with developing pharmaceutical products; in such case, no orphan drug exclusivity would be available unless we could demonstrate “clinical superiority.” In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated condition 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 drugs or therapeutic biologics with different principal molecular structural features 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 with the same principal molecular structural features 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.

The tax reform legislation signed into law on December 22, 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%. This may further limit the advantage and may impact our future business strategy of seeking the Orphan Drug Designation.

If we decide to pursue accelerated approval for any of our product candidates, it may not lead to a faster development or regulatory review or approval process and does not increase the likelihood that our product candidates will receive marketing approval.

In the future, we may decide to pursue accelerated approval for one or more of our product candidates. Under the FDA's accelerated approval program, the FDA may approve a drug or biologic for a serious or life-threatening disease or condition that provides a meaningful advantage over available therapies based upon 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. For drugs or biologics granted accelerated approval, post-marketing confirmatory trials are required to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. These confirmatory trials must be completed with due diligence, and the FDA may require that the trial be designed, initiated, and/or fully enrolled prior to approval. If we were to pursue accelerated approval for a product candidate for a disease or condition, we would do so on the basis that there is no available therapy for that disease or condition or that our product candidate provides a benefit over available therapy. If standard of care were to evolve or if any of our competitors were to receive full approval on the basis of a confirmatory trial for a drug or biologic for a disease or condition for which we are seeking accelerated approval before we receive accelerated approval, the disease or condition would no longer qualify as one for which there is no available therapy, and accelerated approval of our product candidate would not occur without a showing of benefit over available therapy. Many cancer therapies rely on accelerated approval, and the treatment landscape can change quickly as the FDA converts accelerated approvals to full approvals on the basis of successful confirmatory trials. Whether any trial is sufficient to receive FDA approval under the accelerated approval pathway will depend on the design and safety and efficacy results of such trial and will only be determined by the FDA upon review of the trial design and a submitted BLA.

Moreover, the FDA may withdraw approval of any product candidate approved under the accelerated approval pathway if, for example:

- the trial or trials required to verify the predicted clinical benefit of our product candidate fail to verify such benefit or do not demonstrate sufficient clinical benefit to justify the risks associated with such product;
- other evidence demonstrates that our product candidate is not shown to be safe or effective under the conditions of use;
- we fail to conduct any required post-approval trial of our product candidate with due diligence; or
- we disseminate false or misleading promotional materials relating to the relevant product candidate.

In addition, the FDA may terminate the accelerated approval program or change the standards under which accelerated approvals are considered and granted in response to public pressure or other concerns regarding the accelerated approval program. Changes to or termination of the accelerated approval program could prevent or limit our ability to obtain accelerated approval of any of our clinical development programs.

Recently, the accelerated approval pathway has come under scrutiny within the FDA and by Congress. The FDA has put increased focus on ensuring that confirmatory studies are conducted with diligence and, ultimately, that such studies confirm the benefit. For example, the FDA has convened its Oncologic Drugs Advisory Committee to review what the FDA has called "dangling" or delinquent accelerated approvals, where confirmatory studies have not been completed or where results did not confirm benefit, but for which marketing approval continues in effect, and some companies have subsequently voluntarily requested withdrawal of approval of their products. In addition, the Oncology Center of Excellence has announced Project Confirm, which is an initiative to promote the transparency of outcomes related to accelerated approvals for oncology indications and provide a framework to foster discussion, research and innovation in approval and post-marketing processes, with the goal to enhance the balance of access and verification of benefit for therapies available to patients with cancer and hematologic malignancies.

Further, the enactment of The Food and Drug Omnibus Reform Act, or FDORA, included provisions related to the accelerated approval pathway. Pursuant to FDORA, the FDA is authorized to require a post-approval study to be underway prior to approval or within a specified time period following approval. FDORA also requires the FDA

to specify conditions of any required post-approval study and requires sponsors to submit progress reports for required post-approval studies and any conditions required by the FDA. FDORA enables the FDA to initiate enforcement action for the failure to conduct with due diligence a required post-approval study, including a failure to meet any required conditions specified by the FDA or to submit timely reports.

Risks Related to Our Common Stock

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

We expect our operating results to be subject to quarterly and annual fluctuations. Our net income or 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 XpressCF® and XpressCF+® platforms, our product candidates or future development programs;
- the fair value of our holding of common stock of Vaxcyte;
- results of preclinical and 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;
- any intellectual property infringement lawsuit or opposition, interference or cancellation proceeding in which we may become involved;
- additions and departures of key personnel;
- strategic decisions by us or our competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- if any of our product candidates receives regulatory 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;
- the impact of accounting principles and tax laws, including as a result of recent tax law changes;
- epidemics, pandemics or contagious diseases;
- changes in general market and economic conditions; and
- cybersecurity incidents

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

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.

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

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

In addition, our restated certificate of incorporation, to the fullest extent permitted by law, provides that the Court of Chancery of the State of Delaware is the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, or the DGCL, our restated certificate of incorporation, or our restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Furthermore, our amended and restated bylaws also provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act (a Federal Forum Provision). While the Supreme Court of the State of Delaware has held that such provisions are facially valid under Delaware law, there can be no assurance that federal or state courts will follow the holding of the Delaware Supreme Court or determine that the Federal Forum Provision should be enforced in a particular case; application of the Federal Forum Provision means that suits brought by our stockholders to enforce any duty or liability created by the Securities Act must be brought in federal court and cannot be brought in state court.

These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. Stockholders who do bring a claim in the specified courts could face additional litigation costs in pursuing any such claim. The specified courts may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. Alternatively, if a court were to find these provisions of our governance documents 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 have a material adverse effect on our business, financial condition, results of operations and prospects.

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

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

Our amended and restated certificate of incorporation provides that, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware is the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. This exclusive forum provision does not apply to suits brought to enforce a duty or liability created by the Securities Exchange Act of 1934, as amended, or the Exchange Act. It could apply, however, to a suit that falls within one or more of the categories enumerated in the exclusive forum provision.

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

Section 22 of the Securities Act of 1933, as amended, or the Securities Act, creates concurrent jurisdiction for federal and state courts over all claims brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Our amended and restated bylaws provide that the federal district courts of the United States of America will, to the fullest extent permitted by law, be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, or a Federal Forum Provision, including for all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. Our decision to adopt a Federal Forum Provision followed a decision by the Supreme Court of the State of Delaware holding that such provisions are facially valid under Delaware law. While federal or state courts may not follow the holding of the Delaware Supreme Court or may determine that the Federal Forum Provision should be enforced in a particular case, application of the Federal Forum Provision means that suits brought by our stockholders to enforce any duty or liability created by the Securities Act must be brought in federal court and cannot be brought in state court, and our stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

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.

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

The trading price of our common stock may be highly volatile and subject to wide fluctuations in response to various factors, some of which we cannot control. As a result of this volatility, investors may not be able to sell their common stock at or above the purchase price. The market price for our common stock may be influenced by many factors, including the other risks described in this section and the following:

- results of preclinical studies and clinical trials of our product candidates, or those of our competitors or our existing or future collaborators;
- regulatory or legal developments in the United States and other countries, especially changes in laws or regulations applicable to our product candidates;
- 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;
- 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 current 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;
- general economic uncertainty and capital markets disruptions, including changes in interest rates, rising inflation, potential instability with respect to the federal debt ceiling and budget and potential government shutdowns related thereto, which have been substantially impacted by regional geopolitical instability due to the impact of geopolitical tensions and the ongoing military conflicts around the world;
- any adverse impact of health pandemics, including on our clinical trials and clinical trial operations;
- 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 product candidates and 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;
- changes in accounting principles or tax laws;
- terrorist acts, acts of war or periods of widespread civil unrest, including the ongoing armed conflicts around the world;
- natural disasters, epidemics, pandemics or contagious diseases, and other calamities;
- political instability; and
- general economic, industry and market conditions.

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

The future sale and 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 sale and issuance of shares or other securities convertible into shares, our stockholders will be diluted. Future issuances of our common stock or other equity securities, or the perception that such sales may occur, could adversely affect the trading price of our common stock and impair our ability to raise capital through future offerings of shares or equity securities. 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.

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

Sales of a substantial number of shares of our common stock in the public market could occur at any time. If our stockholders sell, or the market perceives that our stockholders intend to sell, substantial amounts of our common stock in the public market, the market price of our common stock could decline significantly.

We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. However, future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of outstanding options or warrants, or the perception that such sales may occur, could adversely affect the market price of our common stock. For example, we are party to a Sales Agreement with Jefferies, pursuant to which, from time to time, we may offer and sell through Jefferies common stock pursuant to one or more "at the market" offerings. Sales of our common stock under the Sales Agreement with Jefferies could be subject to business, economic or competitive uncertainties and contingencies, many of which may be beyond our control, and which could cause actual results from the sale of our common stock to differ materially from expectations. Any future sales of common stock through our "at the market" offering program will result in dilution and may have a negative impact on the price of our common stock.

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

General Risk Factors

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our business, financial condition or results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. For example, the global financial crisis caused extreme volatility and disruptions in the capital and credit markets, and the global economy has continued to be impacted by changes in interest rates, rising inflation, potential uncertainty with respect to the federal debt ceiling and budget and potential government shutdowns related thereto. Likewise, the capital and credit markets may be adversely affected by rising regional geopolitical tensions, and global sanctions imposed in response thereto. A severe or prolonged economic downturn, such as the global financial crisis, could result in a variety of risks to our business, including, weakened demand for our product candidates and our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption, or cause our customers to delay making payments for our services. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

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

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not have any control over the analysts or the content and opinions included in their reports. If any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, financial condition and results of operations, our intellectual property or our stock performance, or if our preclinical studies and clinical trials and operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of such analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause a decline in our stock price or trading volume.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain additional executive management and qualified board members. The additional requirements we must comply with may strain our resources and divert management's attention from other business concerns.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the listing requirements of The Nasdaq Global Select Market, and other applicable securities rules and regulations. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming, or costly, and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly, and current reports with respect to our business and operating results. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. Additionally, we may be subject to stockholder activism, which can be costly and time-consuming, disrupting our operations and diverting the attention of management and may lead to additional compliance costs and impact the manner in which we operate our business. In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could adversely affect our business and operating results. In order to comply with these requirements, we may need to hire more employees in the future or engage outside consultants, or may have difficulty attracting and retaining sufficient employees, which would increase our costs and expenses.

As a result of no longer being an emerging growth company, we have incurred, and will continue to incur, significant additional expenses that we did not previously incur in complying with the Sarbanes-Oxley Act and rules implemented by the SEC. The cost of compliance with Section 404 of the Sarbanes-Oxley Act has required us to incur substantial accounting expense and expend significant management time on compliance-related issues as we implement additional corporate governance practices and comply with reporting requirements.

We became a “smaller reporting company” as of December 31, 2022. We will continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than $250.0 million or (ii) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700.0 million. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and are eligible to take advantage of certain of the reduced disclosure obligations regarding compensation disclosures in 2023. As a smaller reporting company and a “non-accelerated filer”, we still need to comply with Section 404(a) of the Sarbanes-Oxley Act, which will continue to require substantial management time and expense.

In addition, changing laws, regulations, and standards relating to corporate governance, stockholder litigation, and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs, making some activities more time consuming, and increasing the likelihood and expense of litigation. These laws, regulations, and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve or otherwise change over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters, higher costs necessitated by ongoing revisions to disclosure and governance practices, and increased expenses and management attention due to actual or threatened litigation. We intend to invest resources to comply with evolving laws, regulations and standards (or changing interpretations of them), and this investment may result in increased general and administrative expenses and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If our efforts to comply with these laws, regulations, and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us, and our business may be adversely affected. Being a public company and complying with the associated rules and regulations, and being subject to heightened likelihood of litigation, makes it more expensive for us to obtain director and officer liability insurance, the costs of which can fluctuate significantly from year-to-year due to general market conditions in obtaining such insurance, but in recent years have risen significantly, consistent with the increase in market rates. As a result, we may be required to accept reduced coverage, incur substantially higher costs to obtain coverage or may be unable to obtain coverage on economically reasonable terms, or at all. These factors could also make it more difficult for us to attract and retain qualified executives and qualified members of our board of directors, particularly to serve on our audit committee, our compensation committee, and our nominating and corporate governance committee.

As a result of disclosure of information in filings required of a public company, our business and financial condition has become more visible, which may result in threatened or actual litigation, including by competitors. If such claims are successful, our business and operating results could be adversely affected, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and adversely affect our business and operating results.

In addition, as a result of our disclosure obligations as a public company, we could face pressure to focus on short-term results, which may adversely affect our ability to achieve long-term profitability.

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

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

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

None

Item 1C. Cybersecurity

Our board recognizes the critical importance of maintaining the trust and confidence of our patients, business partners and employees. Our board is actively involved in oversight of our risk management program, and cybersecurity represents an important component of our overall approach to enterprise risk management ("ERM"). Through our ERM program, risks are identified, assessed and managed at the organization level, mission and business process level, and information system level. Our cybersecurity program, policies and procedures are fully integrated into our ERM program and are maintained in accordance with industry good standards. We also have an Information Security program that more specifically addresses cybersecurity risks and is focused on preserving the confidentiality, security and availability of the information that we collect and store by identifying, preventing and mitigating cybersecurity threats and effectively responding to cybersecurity incidents when they occur.

Risk Management and Strategy

As one of the critical elements of our overall ERM approach, our cybersecurity program is focused on the following key areas:

1. Governance: Our board's oversight of cybersecurity risk management is supported by our Audit Committee of our board (the "Audit Committee"), which regularly interacts with our executive leadership, including our Chief Executive Officer, Chief Financial Officer and our General Counsel and other key officers.

2. Collaborative Approach: We have implemented a comprehensive, cross-functional approach to identifying, preventing and mitigating cybersecurity threats and incidents, while also implementing controls and procedures that provide for the prompt escalation of certain cybersecurity incidents so that decisions regarding the public disclosure and reporting of such incidents can be made by management in a timely manner. We also engage security vendors with credentialed security professionals to bolster our cybersecurity risk management, security event monitoring and detection, and incident and crisis response capability.

3. Technical Safeguards: We deploy technical safeguards that are designed to protect our information systems from cybersecurity threats, including mail flow algorithms, firewalls, intrusion prevention and detection systems, malware and antivirus protection, network security protection, cloud console security and single sign-on multi-factor authentication. We also regularly conduct security and patch vulnerability scanning to help safeguard our security infrastructure.

4. Incident Response and Recovery Planning: We have established and maintain comprehensive incident response and recovery plans that fully address our response to a cybersecurity incident, and such plans are periodically evaluated. We utilize an established internal framework designed to assess promptly the severity and materiality of cybersecurity events and incidents based on various predefined quantitative and qualitative criteria, including the impact to potential personally identifiable information and/or patient health information, and to determine the appropriate level of response. Incidents are escalated based on their severity and materiality for prompt response and mitigation. This systematic approach involves preliminary investigations and detailed assessments to determine the severity and materiality of each incident, and there are established communication channels and engagement processes with those involved in this incident response process.

5. Third-Party Risk Management: We maintain a comprehensive, risk-based approach to identifying and overseeing cybersecurity risks presented by third parties, including vendors, service providers and other external users of our systems, as well as the systems of third parties that could adversely impact our business in the event of a cybersecurity incident affecting those third-party systems. We have implemented communication channels with our key third-party vendors to communicate regarding

potential cybersecurity risks and incidents, and generally seek to include appropriate security clauses in our contracts with our vendors, including notification requirements.

6. Education and Awareness: We provide regular, mandatory security awareness training for personnel regarding cybersecurity threats as a means to equip our personnel with effective tools to address cybersecurity threats, and to communicate our evolving information security policies, standards, processes and practices.

We engage in a periodic assessment of our policies, standards, processes and practices that are designed to address cybersecurity threats and incidents at least annually. We evaluate our cybersecurity program's capabilities and processes, and we aim to continuously enhance our program according to our internal and external risk assessments. These efforts include a wide range of activities, including audits, assessments, vulnerability testing and other exercises focused on evaluating the effectiveness of our cybersecurity measures and planning.

We have previously engaged, and may engage in the future, with third parties to perform assessments on our cybersecurity measures, including information security maturity assessments, vulnerability assessments, audits and independent reviews of our information security control environment and operating effectiveness. The results of such assessments, audits and reviews are reported to the Audit Committee and the board, and we adjust our cybersecurity policies, standards, processes and practices as necessary based on the information provided by these assessments, audits and reviews.

Although we are subject to ongoing and evolving cybersecurity threats, we are not aware of any cybersecurity threats, that have materially affected or are likely to affect us, including our business strategy, results of operations or financial condition. If we were to experience a material cybersecurity incident in the future, such incident may have a material effect, including on our business strategy, operating results, or financial condition. For more information regarding cybersecurity risks that we face and potential impacts on our business related thereto, see the "Risk Factors" disclosures in Item 1A of this Annual Report on Form 10-K.

Governance

Our board, in coordination with the Audit Committee, oversees our ERM process, including the management of risks arising from cybersecurity threats. Our Audit Committee receives regular presentations and reports on cybersecurity risks, which address a wide range of topics including our information security strategy, ongoing cybersecurity preparedness projects and programs, recent cybersecurity-related developments, changing regulations, evolving standards, vulnerability assessments, third-party and independent reviews, the threat environment, technological trends and information security considerations arising with respect to our peers and third parties. Further, our Information Security Team, consisting of Company IT staff, meets biannually with our Information Security Governance Committee to review our policies, incidents, responses and preventative measures. In addition, our Information Security Team presents a summary of information security key performance indicators quarterly to our Audit Committee.

Our Chief Executive Officer, Chief Financial Officer, General Counsel and other key officers and our Information Security team work collaboratively across the Company to implement and monitor our Information Security Program, which is designed to protect our information systems from cybersecurity threats and to promptly respond to any cybersecurity incidents in accordance with our incident response and recovery plans. Our Information Security team is deployed to address cybersecurity threats and to respond to cybersecurity incidents, including those stemming from any violation of our cybersecurity policies. Further, our Information Security Team monitors the prevention, detection, mitigation and remediation of cybersecurity threats and incidents in real time and reports such threats and incidents to the Audit Committee when appropriate.

Our Information Security team collectively has a combined experience of over 70 years managing and supporting information technology in the biotech industry and oversees our cybersecurity program. They have experience developing and leading cybersecurity programs, including evaluating and implementing tools and technologies that enable defense and response capabilities, and developing critical cybersecurity procedures and training and awareness programs. Our cybersecurity consultant has served in various roles in information technology and information security for approximately 25 years. We also consult with two different service providers who specialize in corporate cybersecurity.

Item 2. *Properties*

Our principal executive office is located in South San Francisco, California, where we lease approximately 115,466 square feet for our corporate headquarters and to conduct, or expand, research and development activities. The lease expires in December 2027.

We also have a manufacturing facility and manufacturing-support facility in San Carlos, California, where we lease a total of approximately 29,600 square feet of space in two buildings. In June 2021, we extended the lease of the manufacturing facility and manufacturing-support facility for a period of five years. The lease on such facilities will expire in July 2026 and June 2026, respectively, and both lease terms include the option to renew the lease for an additional five years.

Item 3. *Legal Proceedings*

From time to time, we may be involved in legal proceedings arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, in the opinion of management, would have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on us due to defense and settlement costs, diversion of management resources, negative publicity and reputational harm, and other factors.

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 is listed on The Nasdaq Global Market under the symbol "STRO."

Holders of Record

As of March 20, 2024, there were approximately 69 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.

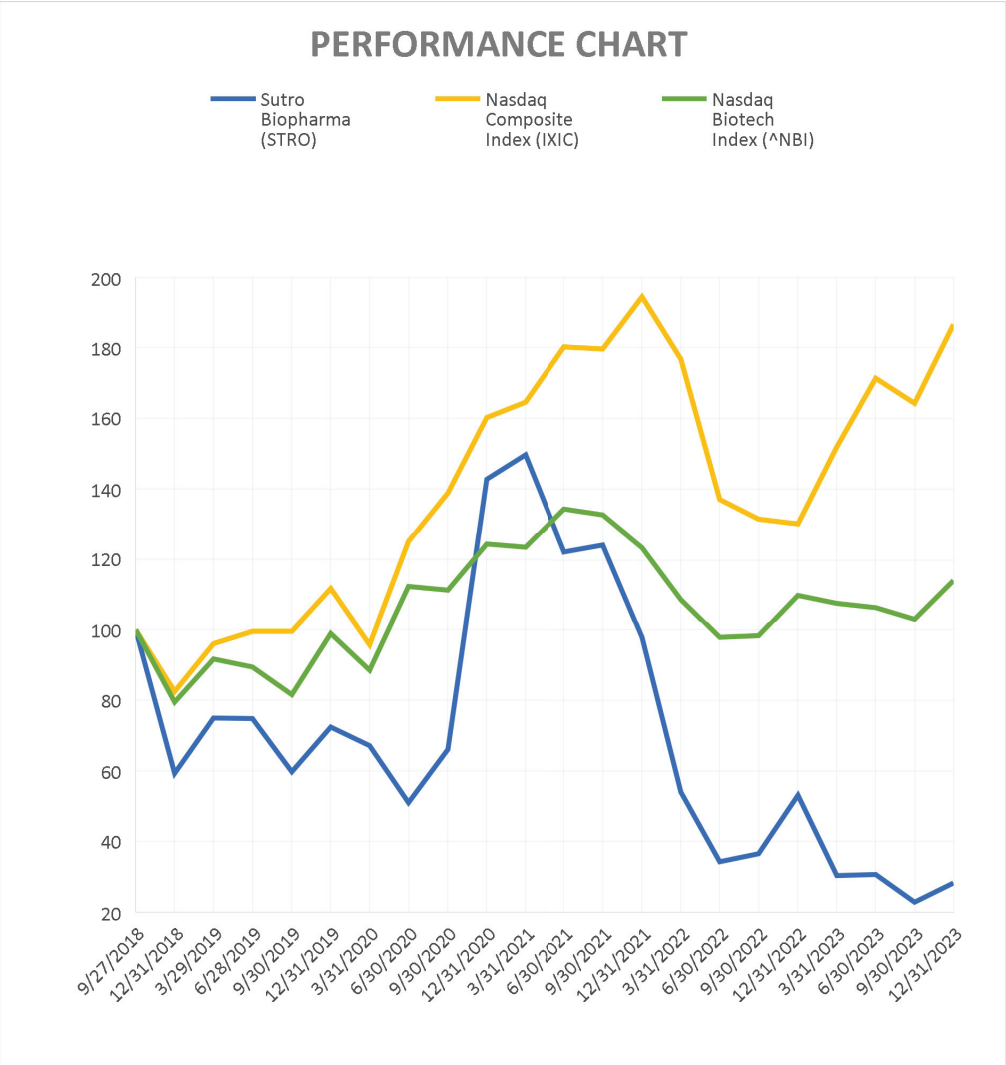
Dividend Policy

We currently intend to retain future earnings, if any, for use in the 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 initial investment of $100 in cash at market close on September 27, 2018 (the first day of trading of our common stock), through December 31, 2023 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 or intended to forecast 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, or 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, or Securities Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.



Trade Date	Sutro Biopharma (STRO)	Nasdaq Composite Index (IXIC)	Nasdaq Biotech Index (^NBI)
9/27/2018	100.00	100.00	100.00
12/31/2018	59.34	82.51	79.47
3/29/2019	74.93	96.11	91.71
6/28/2019	74.87	99.56	89.51
9/30/2019	59.80	99.47	81.67
12/31/2019	72.37	111.57	98.87
3/31/2020	67.11	95.75	88.57
6/30/2020	51.05	125.08	112.21
9/30/2020	66.12	138.87	111.15
12/31/2020	142.83	160.26	124.26
3/31/2021	149.74	164.72	123.37
6/30/2021	122.30	180.35	134.42
9/30/2021	124.28	179.66	132.78
12/31/2021	97.89	194.54	123.48
3/31/2022	54.08	176.83	108.78
6/30/2022	34.28	137.14	97.88
9/30/2022	36.51	131.51	98.37
12/31/2022	53.16	130.15	110.01
3/31/2023	30.39	151.98	107.71
6/30/2023	30.59	171.45	106.45
9/30/2023	22.83	164.38	103.23
12/31/2023	28.22	186.66	114.12

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.

Unregistered Sales of Equity Securities

None.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

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.

Overview

We are a clinical-stage oncology company developing site-specific and novel-format antibody drug conjugates, or ADCs, enabled by our proprietary integrated cell-free protein synthesis platform, XpressCF®, and our site-specific conjugation platform, XpressCF+®. We aim to design and develop therapeutics using the most relevant and potent modalities, including ADCs, bispecific ADCs, immunostimulatory ADCs, or iADCs, dual conjugate ADCs, or ADC^{2}s, and cytokine derivatives. Our molecules are directed primarily against clinically validated targets where the current standard of care is suboptimal. We believe that our platform allows us to accelerate the discovery and development of potential first-in-class and/or best-in-class molecules by enabling the rapid and systematic evaluation of protein structure-activity relationships to create optimized homogeneous product candidates. Our mission is to transform the lives of patients by creating medicines with improved therapeutic profiles for areas of unmet need.

Once identified, production of protein drug candidates can be rapidly and predictably scaled in our current Good Manufacturing Practices, or cGMP, compliant manufacturing facility. We have the ability to manufacture our proprietary cell-free extract that supports our production of proteins on a large scale using a semi-continuous fermentation process. Our most advanced product candidate is STRO-002, or luveltamab tazevibulin, or luvelta, an ADC directed against folate receptor-alpha, or FolRα, for patients with FolRα-expressing cancers, including ovarian cancer.

Luvelta was designed and optimized for an improved therapeutic index by placing a precise number of linker-warheads at four specific locations within the antibody using our proprietary XpressCF+® platform. Our first Phase 1 trial for luvelta is an open-label study evaluating luvelta as a monotherapy for patients with ovarian and endometrial cancers. This trial is being conducted in two-parts, dose escalation and dose expansion. The primary objectives of the clinical trial are to determine the safety and tolerability profile, to define the recommended Phase 2 dose level and interval and to evaluate preliminary anti-tumor activity. Our secondary objectives are to characterize the human pharmacokinetics and additional safety, tolerability and efficacy measures.

In 2019, we began enrolling patients in a Phase 1 trial of luvelta that focused on ovarian and endometrial cancers. The Phase 1 trial assessing safety, tolerability and preliminary efficacy of luvelta to treat platinum resistant ovarian cancer has been completed. In January 2024, we reported near-final results from this Phase 1 trial, in which luvelta exhibited a manageable safety profile together with promising preliminary efficacy data in the tested patient population. We also presented data from Phase 1b trials assessing safety, tolerability and preliminary efficacy for the treatment of ovarian cancer with luvelta in combination with bevacizumab and for treatment of endometrial cancer. In August 2021, luvelta was granted Fast Track designation by the U.S. Food and Drug Administration, or FDA, for the treatment of patients with platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer who have received one to three prior lines of systemic therapy. We began enrolling patients in a Phase 2/3 trial of luvelta for the treatment of platinum-resistant ovarian cancer, the REFRαME-O1 study, in June 2023.

In January 2024, we presented an aggregated data set from of our Phase I trials of luvelta. This data set included data from all ovarian cancer patients treated with luvelta as a monotherapy in Phase 1 studies, regardless of FolRα expression levels, dose level of luvelta, or platinum sensitivity or resistance, corresponding to a total of 99 patients, of which 92 were RECIST-evaluable, with 21% platinum sensitive patients and 78% platinum refractory patients. Patients received a median of three prior lines of therapy. There were 72% of the patients that had experienced prior bevacizumab therapy and 70% had been treated with a PARP inhibitor. These patients were not selected for FolRα expression levels and were treated at starting dose levels ≤2.9 mg/kg, 4.3 mg/kg, 5.2 mg/kg or ≥5.6 mg/kg.

The safety profile of luvelta from these aggregated data was shown to be manageable, with a low rate of discontinuation of treatment resulting from neutropenia. The predominant TEAE was neutropenia, encompassing neutropenia, febrile neutropenia, and decreased neutrophil count, with 69.7% patients reporting any grade neutropenia and 64.6% patients reporting Grade 3 or higher neutropenia. Neuropathy and arthralgia were the other most commonly reported significant TEAEs, with 57.6% and 16% of patients reporting any grade and Grade 3 or higher arthralgia, respectively, and 44% and 7% patients reporting any grade and Grade 3 or higher neuropathy, respectively. The observed neutropenia was primarily uncomplicated, with less than 5% incidence of febrile neutropenia. Neutropenia and arthralgia each led to discontinuation of treatment in 1.5% of patients. Neuropathy led to discontinuation of treatment in 2.9% of patients. There were six patients that experienced grade 5 safety events on study, with one such event assessed as probably luvelta related and the remainder assessed as unrelated to luvelta.

We also presented a subset of the aggregated data from our Phase 1 trials of luvelta for which 43 patients with platinum resistant ovarian cancer selected for FolRα TPS ≥25%, or tumors with ≥25% of the tumor cells expressing FolRα at any level of staining intensity, were treated with 4.3 mg/kg or 5.2 mg/kg doses of luvelta, corresponding to all patients treated in phase 1 studies that would be eligible for enrollment in the REFRαME-O1 registrational study. The ORR observed for this subset population was 28%, with a DOR of 5.7 months and PFS of 5.8 months.

Based on the data from our Phase 1 program, we selected FolRα expression TPS ≥25% as the target eligibility cutoff or threshold for further study in clinical development of luvelta. We estimate that approximately 80% of the platinum resistant ovarian cancer patients would be eligible for luvelta treatment based on this TPS ≥25% threshold for FolRα expression.

We also opened for enrollment a Phase 1 trial to assess the combination of luvelta and bevacizumab for treatment of ovarian cancer in December 2021 and presented initial preliminary results of this study in January 2024. Safety signals from this study were generally consistent with those previously reported and the combination treatment with luvelta and bevacizumab demonstrated clinical activity in treated patients regardless of their FolRα expression status.

We also began enrolling patients in an expansion cohort for FolRα-selected endometrial cancer in the fourth quarter of 2021 and presented initial preliminary results from the study at the 2023 ESMO Congress in October 2023. In this trial, luvelta showed encouraging preliminary anti-tumor activity in FolRα-selected patients, defined by a TPS of >25% FolRα expression, and the safety profile was consistent with prior data in patients with platinum-resistant ovarian cancer. We expect to present updated results from the bevacizumab combination study in 2024. Further, we plan to submit an IND for the treatment of NSCLC with luvelta in the first half of 2024.

In addition to the Phase 1 studies discussed above, we initiated a Phase 2/3 study, the REFRαME-O1 study, of luvelta for the treatment of platinum-resistant ovarian cancer in June 2023. This study comprises two parts; in Part 1, we anticipate enrolling 50 patients randomized 1:1 to two different doses of luvelta, either 4.3 mg/kg or 5.2 mg/kg plus prophylactic pegfilgrastim for two cycles, followed by reduction to 4.3 mg/kg. After proceeding to Part 2 of the study, the non-optimized dose of luvelta will be dropped and approximately 516 patients will be randomized 1:1 to the selected luvelta dose or investigators choice of chemotherapy. The protocol will include an optional interim analysis for ORR and DOR to support a potential application for accelerated approval and the endpoints that will be assessed for a potential full approval are PFS and OS. The REFRαME-O1 study patient population includes those with platinum-resistant ovarian cancer, 1-3 lines of prior treatment and tumors that express FolRα at TPS≥25% and excludes primary platinum refractory patients and those with ECOG PS of 0-1. We announced the initiation of Part 1 of the REFRαME-O1 study in June 2023 and the study is ongoing. We anticipate that Part 1 will be fully enrolled by the end of the first half of 2024.

In 2022 we initiated an exploratory cohort, or cohort C, of 15 patients to assess the safety of treatment with luvelta at 5.2 mg/kg in combination with prophylactic pegfilgrastim and presented preliminary data from ten patients from this cohort in January 2023. In January 2024 we announced updated data from this cohort based on 16 patients. In particular:

- Grade 3+ neutropenia was reduced from 66.7% to 6.3%, resulting in a 90.6% decrease in Grade 3+ neutropenia rates at the first cycle of luvelta (p=0.0002); Grade 3 neutropenia was reduced from 71.4% to 18.8%, resulting in a 73.7% decrease in Grade 3+ neutropenia rates at the first and second cycle (p=0015)
- Overall Grade 3+ neutropenia was reduced from 76.2% to 37.5%

In addition, we have been offering compassionate use of luvelta to treat pediatric patients with relapsed/refractory CBFA2T3-GLIS2, or CBF/GLIS, acute myeloid leukemia, or AML, commonly known as RAM phenotype AML. Updated compassionate use data continued to show anti-leukemic activity of luvelta in pediatric patients with relapsed/refractory CBF/GLIS AML and was presented at the ASH 2023 in December 2023. The data showed that luvelta was well tolerated as a monotherapy agent and in combination with standard cancer therapies. Luvelta was granted Orphan Drug Designation by the FDA in December 2022 in this pediatric patient population. We expect to begin enrollment of a registration-directed trial of luvelta for treatment of pediatric RAM phenotype AML in the second half of 2024.

Our most advanced assets in preclinical development are STRO-003 and STRO-004. We believe STRO-003 has the potential to be a first-in-class and best-in-class ADC targeting ROR1 and that STRO-004 has the potential to be a best-in-class ADC targeting TF. Preclinical data suggest that both STRO-003 and STRO-004 have potent antitumor activity and potential for a differentiated safety profile. We anticipate being ready to file an IND for each of STRO-003 and STRO-004 in 2024 and 2025, respectively.

Enabled through our proprietary XpressCF® and XpressCF+®platforms, we have entered into multi-target, product-focused collaborations with leading pharmaceutical and biotechnology companies in the field of oncology, with our ongoing relationships that include an immunostimulatory antibody-drug conjugates collaboration with Astellas, a cytokine derivatives collaboration with Merck, and a licensing agreement for luvelta in Greater China with Tasly. In August 2023, Tasly received its first IND clearance by NMPA in Greater China for luvelta.

Our XpressCF® and XpressCF+® platforms have also supported Vaxcyte, focused on discovery and development of vaccines for the treatment and prophylaxis of infectious disease. The lead programs for Vaxcyte are VAX-31 and VAX-24, its 31-valent and 24-valent, respectively, pneumococcal conjugate vaccine candidates. Vaxcyte is responsible for performing all research and development activities, and we provide technical support and supply XtractCF® and other materials to Vaxcyte. In June 2023, we entered into a purchase and sale agreement (the “Purchase Agreement”) with Blackstone, in which Blackstone acquired the right to receive our 4% revenue interest in Vaxcyte’s future products, including Vaxcyte’s pneumococcal conjugate vaccine, or PCV, products such as VAX-24 and its second-generation PCV product, VAX-31. As described further below, following agreement with Vaxcyte on the Form Definitive Agreement and upon effectiveness of an amendment to the licensing agreement, the revenue interest in the 4% royalty on potential future sales of Vaxcyte products other than Vaxcyte’s PCV products reverted to us. In November 2023, Vaxcyte exercised its option to access expanded rights to develop and manufacture cell-free extract for use in development and manufacture of its vaccine products, among certain other rights.

Since the commencement of our operations, we have devoted substantially all of our resources to performing research and development and manufacturing activities in support of our own product development efforts and those of our collaborators, raising capital to support and expand such activities and providing general and administrative support for these operations. We have funded our operations to date primarily from upfront, milestone and other payments under our collaboration agreements with BMS, Merck, Astellas, EMD Serono, Vaxcyte, BioNova, and Tasly, the issuance and sale of redeemable convertible preferred stock, our initial public offering, or IPO, follow-on public offerings of common stock, sales of our common stock through our ATM Facility, debt financing, and the royalty monetization agreement with Blackstone.

We do not have any products approved for commercial sale and have not generated any revenue from commercial product sales. We had a loss from operations of $89.3 million and a net loss of $106.8 million for the year ended December 31, 2023, which net loss included the non-operating, unrealized gain of $9.9 million related to our holdings of Vaxcyte common stock. We had a loss from operations of $128.9 million and net loss of $119.2 million, which net loss included the non-operating, unrealized gain of $12.1 million related to our holdings of Vaxcyte common stock, for the year ended December 31, 2022. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations. We cannot assure you that we will have net income or that we will generate positive cash flow from operating activities in the future. As of December 31, 2023, we had an accumulated deficit of $559.4 million. We do not expect to generate any revenue from commercial product sales unless and until we successfully complete development and obtain regulatory approval for one or more of our product candidates, which we expect will take a number of years. If we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, access, marketing, manufacturing and distribution. Our operating expenses would significantly increase due to continued activities to develop, and seek regulatory approvals for, our product candidates, engage in other research and development activities, expand our pipeline of product candidates, continue to develop our manufacturing facility and capabilities, maintain and expand our intellectual property portfolio, seek regulatory and marketing approval for any product candidates that we may develop, acquire or in-license other assets or technologies, ultimately establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval, and operate as a public company. Current capital market conditions provide a challenging financing environment. In this context, we are continuing our process of evaluating our programs and spending. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical trials, our expenditures on other research and development activities and the timing of achievement and receipt of upfront, milestones and other collaboration agreement payments.

A discussion and analysis of our financial condition, results of operations, and cash flows for the year ended December 31, 2021 is included in Item 7 of Part II "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 30, 2023.

Financial Operations Overview

Revenue

We do not have any products approved for commercial sale and have not generated any revenue from commercial product sales. Our total revenue to date has been generated principally from our collaboration and license agreements with BMS, Merck, Astellas, EMD Serono, Vaxcyte, BioNova and Tasly, and to a lesser extent, from manufacturing, supply and services and materials we provide to the above collaborators.

We derive revenue from collaboration arrangements, under which we may grant licenses to our collaboration partners to further develop and commercialize our proprietary product candidates. We may also perform research and development activities under the collaboration agreements. Consideration under these contracts generally includes a nonrefundable upfront payment, development, regulatory and commercial milestones and other contingent payments, and royalties based on net sales of approved products. Additionally, the collaborations may provide options for the customer to acquire from us materials and reagents, clinical product supply or additional research and development services under separate agreements. We assess which activities in the collaboration agreements are considered distinct performance obligations that should be accounted for separately. We develop assumptions that require judgement to determine whether the license to our intellectual property is distinct from the research and development services or participation in activities under the collaboration agreements.

At the inception of each agreement, we determine the arrangement transaction price, which includes variable consideration, based on the assessment of the probability of achievement of future milestones and contingent payments and other potential consideration. We recognize revenue over time by measuring our progress towards the complete satisfaction of the relevant performance obligation using an appropriate input or output method based on the nature of the service promised to the customer.

For arrangements that include multiple performance obligations, we allocate the transaction price to the identified performance obligations based on the standalone selling price, or SSP, of each distinct performance obligation. In instances where SSP is not directly observable, we develop assumptions that require judgment to

determine the SSP for each performance obligation identified in the contract. These key assumptions may include full-time equivalent, or FTE, personnel effort, estimated costs, discount rates and probabilities of clinical development and regulatory success.

Please see further discussion on the revenue recognition treatment of performance obligations under Critical Accounting Policies and Estimates.

Operating Expenses

Research and Development

Research and development expenses represent costs incurred in performing research, development and manufacturing activities in support of our own product development efforts and those of our collaborators, and include salaries, employee benefits, stock-based compensation, laboratory supplies, outsourced research and development expenses, professional services and allocated facilities-related costs. We expense both internal and external research and development costs as they are incurred. Nonrefundable advance payments for services that will be used or rendered for future research and development activities are recorded as prepaid expenses and recognized as expenses as the related services are performed.

Our research and development expenses would increase in the future due to continued activities to advance our product candidates into and through preclinical studies and clinical trials, pursue regulatory approval of our product candidates, expand our pipeline of product candidates, and continue to develop our manufacturing facility and capabilities. The process of conducting the necessary preclinical and 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 programs, 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.

The following table summarizes our research and development expenses incurred during the indicated periods. The internal costs include personnel, facility costs and research and scientific related activities associated with our pipeline. The external program costs reflect external costs attributable to our clinical development candidates and preclinical candidates selected for further development. Such expenses include third-party costs for preclinical and clinical studies and research, development and manufacturing services, and other consulting costs.

	Year ended December 31,	
	2023	2022
	(in thousands)	
Internal costs:		
Research and drug discovery	$ 34,822	$ 34,571
Process and product development	20,810	15,708
Manufacturing	44,176	39,613
Clinical development	12,601	9,159
Total internal costs	112,409	99,051
External Program Costs:		
Research and drug discovery	3,955	3,621
Process and product development	3,052	642
Manufacturing	36,085	20,758
Clinical development	24,924	13,099
Total external program costs	68,016	38,120
Total research and development expenses	$ 180,425	$ 137,171

General and Administrative

Our general and administrative expenses consist primarily of personnel costs, expenses for outside professional services, including legal, human resources, audit, accounting and tax services and allocated facilities-related costs. Personnel costs include salaries, employee benefits and stock-based compensation. We expect to incur expenses operating as a public company, including expenses related to compliance with the rules and regulations of the SEC and listing standards applicable to companies listed on the Nasdaq Global Market, additional insurance expenses, investor relations activities and other administrative and professional services. The size of our administrative function and our general and administrative expenses to support the anticipated growth of our business would increase as we continue to advance our product candidates into and through the clinic.

Interest Income

Interest income consists primarily of interest earned on our invested funds.

Unrealized Gain (Loss) on Equity Securities

Unrealized gain (loss) on equity securities consists of the remeasurement of our investment in Vaxcyte common stock.

Non-cash interest expense related to the sale of future royalties

Non-cash interest expense related to the sale of future Vaxcyte royalties represents the imputed interest expense on our deferred royalty obligation related to the sale of future Vaxcyte royalties pursuant to the Purchase Agreement, using the effective interest method. As further described in the financial statements in Note 10. Deferred Royalty Obligation Related to the Sale of Future Royalties, in June 2023, we entered into the Purchase Agreement with Blackstone, pursuant to which we sold to Blackstone our 4% royalty, or revenue interest, in the potential future net sales of Vaxcyte products, including Vaxcyte's PCV products, such as VAX-24 and VAX-31. As described further below, following agreement with Vaxcyte on the Form Definitive Agreement and upon effectiveness of an amendment to the licensing agreement, the revenue interest in the 4% royalty on potential future sales of Vaxcyte products other than Vaxcyte's PCV products reverted to us.

Non-cash interest expense will be recognized over the estimated life of the royalty term arrangement using the effective interest method based on the imputed interest rate derived from estimated amounts and timing of potential future royalty payments to be earned and received by Blackstone from Vaxcyte under the 2015 License Agreement.

Interest and Other Income (Expense), Net

Interest expense includes interest incurred on our debt and amortization of debt issuance costs, including accretion of the final payment. Additionally, we identified a financing component under the Astellas Agreement and recorded interest expense associated with the upfront payment. Other income (expense) includes realized gain (loss) on the equity securities.

Income Taxes

We recorded an income tax charge of $18.2 million during the year ended December 31, 2023. The income tax charge was primarily due to unfavorable book-tax differences related to capitalizing and amortizing research and development expenditures under Internal Revenue Code, or IRC, Section 174, the upfront payment from the sale of future royalties, deferred revenue, foreign income tax, and IRC Section 382 limitations imposed on the utilization of our historical tax attributes as a result of cumulative ownership changes that we experienced in prior years.

We recorded a foreign income tax charge of $2.5 million during the year ended December 31, 2022, due to a withholding tax in China on an upfront license fee payment received from Tasly.

All other income tax charges and benefits for the years ended December 31, 2023 and 2022 have been immaterial, primarily due to the net loss in each year.

Our deferred assets continue to be subject to full valuation allowance for the tax years ended December 31, 2023 and 2022. A valuation allowance is recorded when it is more likely than not that all or some portion of the deferred income tax assets will not be realized. We regularly assess the need for a valuation allowance against our deferred income tax assets by considering both positive and negative evidence related to whether it is more likely than not that our deferred income tax assets will be realized. In evaluating our ability to recover our deferred income tax assets within the jurisdiction from which they arise, we consider all available positive and negative evidence, including scheduled reversals of deferred income tax liabilities, future tax rates, projected future taxable income, tax-planning strategies, and results of recent operations.

Comparison of the Years Ended December 31, 2023 and 2022

	Year ended December 31,		Change	
	2023	2022	$	%
	(in thousands)			
Revenue	$ 153,731	$ 67,772	$ 85,959	127%
Operating expenses:				
Research and development	180,425	137,171	43,254	32%
General and administrative	62,584	59,544	3,040	5%
Total operating expenses	243,009	196,715	46,294	24%
Loss from operations	(89,278)	(128,943)	39,665	(31)%
Interest income	14,510	3,455	11,055	320%
Unrealized gain on equity securities	9,917	12,130	(2,213)	(18)%
Non-cash interest expense related to the sale of future royalties	(12,570)	-	(12,570)	*
Interest and other income (expense), net	(11,180)	(3,346)	(7,834)	234%
Loss before provision for income taxes	(88,601)	(116,704)	28,103	(24)%
Provision for income taxes	18,192	2,500	15,692	628%
Net loss	$ (106,793)	$ (119,204)	$ 12,411	(10)%

*Percentage not meaningful

Revenue

We have recognized revenue as follows during the indicated periods:

	Year Ended December 31,		Change	
	2023	2022	$	%
	(in thousands)			
Bristol-Myers Squibb Company ("BMS")	$ 5,590	$ 9,752	$ (4,162)	(43)%
Merck Sharp & Dohme Corporation ("Merck")	5,869	11,600	(5,731)	(49)%
Merck KGaA, Darmstadt, Germany (operating in the United States and Canada under the name "EMD Serono")	8	2,695	(2,687)	(100)%
Astellas Pharma Inc. (“Astellas”)	33,992	10,897	23,095	212%
Tasly Biopharmaceuticals Co., Ltd. (“Tasly”)	6,970	25,000	(18,030)	(72)%
Vaxcyte	101,302	3,828	97,474	2,546%
BioNova Pharmaceuticals, Ltd. (“BioNova”)	-	4,000	(4,000)	(100)%
Total revenue	$ 153,731	$ 67,772	$ 85,959	127%

Total revenue increased by $86.0 million, or 127%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. This was primarily due to a $97.5 million increase in Vaxcyte revenue from an earned $97.5 million in upfront and option exercise payments related to the Option exercised by Vaxcyte under the Vaxcyte Agreement, and a $23.1 million increase from Astellas, of which $13.1 million was from the ongoing performance related to partially unsatisfied performance obligations, $5.3 million was from research and development services, and $4.7 million was from the financing component related to the Astellas Agreement,. These increases were partially offset by an $18.0 million decrease in Tasly revenue from an earned $25.0 million upfront payment in 2022 under the Tasly License Agreement, partially offset by a contingent payment of $5.0 million earned in 2023, and a $2.0 million in clinical product supply under the 2023 Tasly Supply Agreement, a $5.7 million decrease in Merck revenue primarily due to an earned $10.0 million contingent payment from Merck in 2022, a $0.8 million decrease from the 2022 completion of the performance obligation associated with the extension of the research term for the first target program under the 2018 Merck Agreement, partially offset by a $5.1 million increase in manufacturing activities supporting clinical trial supply, a $4.0 million decrease in BioNova revenue due to an earned licensing option payment in 2022, and a $4.2 million and $2.7 million decrease in BMS and EMD Serono revenue, respectively, due to their decisions to end clinical development of CC-99712 and M1231, respectively, in 2023.

Research and Development Expense

Research and development expense increased by $43.2 million, or 32%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The overall increase was primarily due to increases of $18.1 million in consulting and outside services mainly due to increased CMO-related activities, $13.4 million in personnel-related expenses due to higher headcount, $11.4 million in clinical development expenses, $3.9 million in facilities-related expenses, and $1.3 million in equipment and office-related expenses, partially offset by a decrease of $3.0 million in preclinical research expenses, and $1.9 million in laboratory supplies.

General and Administrative Expense

General and administrative expense increased by $3.0 million, or 5%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The overall increase was primarily due to increases of $2.6 million in consulting and outside services, $1.1 million in equipment and office-related expenses, and $0.7 million in facilities-related expenses, partially offset by a $1.4 million decrease in personnel-related expenses.

Interest Income

Interest income increased by $11.0 million during the year ended December 31, 2023 as compared to the year ended December 31, 2022, due primarily to higher average investment balances and higher average rates of return in 2023.

Unrealized Gain on Equity Securities

Unrealized gain on equity securities was $9.9 million during the year ended December 31, 2023 as compared to an unrealized gain of $12.1 million during the year ended December 31, 2022. The unrealized gain on equity securities in each period was entirely due to the remeasurement of the estimated fair value of our investment in Vaxcyte common stock.

Non-cash Interest Expense related to the Sale of Future Royalties

Non-cash interest expense increased by $12.6 million during the year ended December 31, 2023, as compared to the year ended December 31, 2022. Non-cash interest expense was recognized on our deferred royalty obligation related to the June 2023 sale of future Vaxcyte royalties pursuant to the Purchase Agreement using the effective interest method based on the imputed interest rate derived from estimated amounts and timing of potential future royalty payments to be earned and received by Blackstone from Vaxcyte under the 2015 License Agreement. No non-cash interest expense was recorded during the year ended December 31, 2022.

Interest and Other Income (Expense), Net

Interest and other income (expense), net, increased by $7.8 million during the year ended December 31, 2023 as compared to the year ended December 31, 2022, primarily due to the increase of $4.7 million from the financing component related to the Astellas Agreement, a $4.1 million decrease in recognized gain on sale of equity securities sold during the year ended December 31, 2022, partially offset by a decrease of $1.1 million in interest incurred on our outstanding loan.

Liquidity and Capital Resources

Sources of Liquidity

To date, we have incurred significant net losses, and negative cash flows from operations. Our operations have been funded primarily by payments received from our collaborators, and net proceeds from equity sales, debt, and a royalty monetization. As of December 31, 2023, we had $333.7 million in cash, cash equivalents and marketable securities, equity securities of $41.9 million, outstanding debt of $4.1 million and an accumulated deficit of $559.4 million.

Upfront Payment from Blackstone

In June 2023, we entered into a Purchase Agreement with Blackstone, pursuant to which we sold to Blackstone our 4% royalty, or revenue interest, in potential future net sales of Vaxcyte products, including Vaxcyte's PCV products, such as VAX-24 and VAX-31. As described further below, following agreement with Vaxcyte on the Form Definitive Agreement and upon effectiveness of an amendment to the licensing agreement, the revenue interest in the 4% royalty on potential future sales of Vaxcyte products other than Vaxcyte's PCV products reverted to us.

We retain the right to discover and develop vaccines for the treatment or prophylaxis of any disease that is not caused by an infectious pathogen, including cancer.

Blackstone made an upfront payment of $140.0 million to us and is also obligated to pay up to an additional $250.0 million upon the achievement of various return thresholds, as set forth in the Purchase Agreement.

Upfront Payments from Vaxcyte and Vaxcyte Equity Ownership

In December 2022, we entered into a letter agreement (the "Vaxcyte Agreement") with Vaxcyte under which the Company granted to Vaxcyte (i) authorization to enter into an agreement with an independent alternate contract manufacturing organization, or CMO, to source cell-free extract solely for the products it licensed from the us, allowing Vaxcyte to have direct oversight over financial and operational aspects of the relationship with the CMO, and (ii) a right, but not an obligation, to obtain certain exclusive rights to internally manufacture and/or source extract from certain CMOs and the right to independently develop and make improvements to extract for use in connection with the exploitation of certain vaccine compositions (the "Option").

Pursuant to the Vaxcyte Agreement, we received from Vaxcyte a one-time, nonrefundable, non-creditable, upfront payment of $10.0 million in cash, and 167,780 shares of Vaxcyte's common stock with a fair value of $7.5 million at the date of the transaction in December 2022.

Additionally, pursuant to the Vaxcyte Agreement, we agreed with Vaxcyte to negotiate the terms and conditions of the Form Definitive Agreement to be entered into in the event Vaxcyte exercises the Option. In September 2023, we mutually agreed in writing with Vaxcyte upon the Form Definitive Agreement, and in October 2023, we received a $5.0 million payment from Vaxcyte.

In November 2023 (the "Exercise Date"), Vaxcyte exercised the Option by submitting written notice thereof to us and concurrently paid us $50.0 million in cash as the first of two installment payments for the Option exercise price. Under the Vaxcyte Agreement, Vaxcyte is obligated to pay us an additional $25.0 million in cash within six months of the Exercise Date as the second of two installment payments for the Option exercise price. Upon the occurrence of certain regulatory milestones, Vaxcyte would be obligated to pay us up to $60.0 million in cash. In the event that Vaxcyte undergoes a change of control, certain rights and payments may be accelerated.

As of December 31, 2023, we held 667,780 shares of Vaxcyte common stock, which include the 167,780 shares received from Vaxcyte under the Vaxcyte Agreement. The estimated fair value of Vaxcyte common stock was $41.9 million as of December 31, 2023.

At-The-Market Sales

During the year ended December 31, 2023, we sold an aggregate of 1,857,410 shares of our common stock through our ATM Facility pursuant to the Sales Agreement with Jefferies. The gross proceeds from these sales were approximately $12.4 million, before deducting fees of approximately $0.4 million, resulting in net proceeds of approximately $12.0 million.

Contingent and Upfront Payments from Tasly

In August 2023, Tasly received the first IND clearance by the NMPA in Greater China. As a result of this achievement, we earned a $5.0 million contingent payment from Tasly under the Tasly License Agreement. The contingent payment, net of withholding tax of $0.5 million, resulted in a net payment to us of $4.5 million received in October 2023.

In September 2023, we received a $5.0 million contingent payment from Tasly related to the first patient dosed in our REFRaME-O1 trial for luvelta, net of withholding tax of $0.5 million. The REFRaME-O1 study consists of two parts, Part I being the dose-finding portion and Part II being the portion of the study that will focus on the selected dose from Part I, and is intended to generate data to enable the potential registration of luvelta. Although we currently intend to conduct the REFRaME-O1 study to completion, we have the sole discretion to terminate the REFRaME-O1 study at any time. As such, we have agreed with Tasly, that in the event we terminate the REFRaME-O1 study prior to dosing the first patient in Part II, we will refund Tasly the contingent payment received by us within 30 days of such study termination.

During the year ended December 31, 2022, we earned a $25.0 million nonrefundable upfront payment from Tasly under the Tasly License Agreement to grant Tasly an exclusive license to develop and commercialize luvelta in Greater China. The upfront payment, net of a withholding tax of $2.5 million, resulted in a net payment to us of $22.5 million received during the year ended December 31, 2022.

Upfront Payment from Astellas

In June 2022, we entered into a License and Collaboration Agreement with Astellas, for the development of immunostimulatory antibody-drug conjugates for up to three biological targets, to be identified by Astellas. Pursuant to the agreement with Astellas, we received from Astellas a one-time, nonrefundable, non-creditable, upfront payment of $90.0 million during the year ended December 31, 2022.

Contingent Payment from Merck

In July 2022, the first patient was dosed in a Phase 1 study of MK-1484, an investigational candidate resulting from the 2018 Merck Agreement for the first program in our collaboration to develop novel cytokine derivative therapeutics for the treatment of cancer. As a result of this achievement, we earned and received a $10.0 million contingent payment from Merck during the year ended December 31, 2022.

Term Loan

On February 28, 2020, or the Effective Date, we entered into a loan and security agreement, (the "LSA"), with Oxford Finance LLC, or Oxford, as the collateral agent and a lender, and Silicon Valley Bank, as a lender, together with Oxford, the Lenders, pursuant to which the Lenders have agreed to lend us up to an aggregate of $25.0 million (the "Term A Loan"). Upon entering into the Loan and Security Agreement, we borrowed $25.0 million from the Lenders, with approximately $9.6 million of such amount applied to the repayment of the outstanding principal, interest and final payment fees owed pursuant to the prior loan and security agreement dated August 4, 2017.

In June 2022, we entered into an amendment to the LSA with Oxford and SVB (the “LSA Amendment”). The LSA Amendment added a financial covenant that requires us to maintain a minimum unrestricted cash balance of

$10.0 million. We were in compliance with the financial covenant under the LSA Amendment as of December 31, 2023.

In June 2023, we entered into an amendment to the LSA with Oxford and SVB (the "5th LSA Amendment"). Under the 5th LSA Amendment, effective July 1, 2023, the loan bears interest at the floating per annum rate of interest equal to the greater of (i) 8.07% and (ii) the sum of (a) a specific published 1-month secured overnight financing rate (SOFR) reported on the last business day of the month that immediately precedes the month in which the interest will accrue, plus (b) 0.10%, plus (c) 6.40%. There was an immaterial impact of the 5th LSA Amendment on our financial statements.

The Term A Loan matured on March 1, 2024 (the "Maturity Date") and the Company made a final payment of 3.83% of the original principal amount of the Term A Loan on the Maturity Date under the LSA.

In connection with entering into the LSA, we issued to the Lenders warrants exercisable for 81,257 shares of our common stock, or the Debt Warrants. The Debt Warrants are exercisable in whole or in part, immediately, and have a per share exercise price of $9.23, which was the closing price of our common stock reported on the Nasdaq Global Market on the day prior to the Effective Date. The Debt Warrants will terminate on the earlier of February 28, 2030 or the closing of certain merger or consolidation transactions.

Leases

In June 2021, we entered into a third amendment, or Third Amendment, to our manufacturing facility lease, dated May 18, 2011, as amended, by and between Alemany Plaza LLC, located at San Carlos, California, or San Carlos Lease, as an extension to the term of the San Carlos Lease for a period of five years, or the Lease Extension Period. Pursuant to the Third Amendment, the San Carlos Lease will expire on July 31, 2026, and it includes an option to renew the San Carlos Lease for an additional five years. The aggregate estimated base rent payments due over the Lease Extension Period is approximately $4.2 million, subject to certain terms contained in the San Carlos Lease.

In June 2021, we entered into a first amendment, or First Amendment, to our manufacturing facility lease, dated March 4, 2015, as amended, by and between 870 Industrial Road LLC, located at San Carlos, California, or the Industrial Lease, as an extension to the term of the Industrial Lease for a period of five years, or the Industrial Lease Extension Period. Pursuant to the first Amendment, the Industrial Lease will expire on June 30, 2026, and it includes an option to renew the Industrial Lease for an additional five years. The aggregate estimated base rent payments due over the Industrial Lease Extension Period is approximately $4.3 million, subject to certain terms contained in the Industrial Lease.

In September 2020, we entered into a sublease agreement, or the Sublease with Five Prime Therapeutics, Inc., or the Sublessor, for approximately 115,466 square feet, in a building located in South San Francisco, California, or the Premises. We use the Premises as our corporate headquarters and to conduct (or expand) research and development activities. We commenced making monthly payments for the first 85,755 square feet of the Premises, or Initial Premises, in July 2021, with occupancy of such space commencing in August 2021. We were provided early access to the Initial Premises in the fourth quarter of 2020 to conduct certain planning and tenant improvement work. The Sublease is subordinate to the lease agreement, effective December 12, 2016, between the Sublessor and HCP Oyster Point III LLC, or the Landlord. We commenced using the remaining 29,711 square feet of the Premises, or the Expansion Premises, on July 1, 2023 under the sublease agreement. The Sublease for both the Initial Premises and Expansion Premises will expire on December 31, 2027. With a commencement date on the Initial Premises of July 1, 2021, and Expansion Premises of July 1, 2023, the aggregate estimated base rent payments due over the term of the Sublease are approximately $39.1 million, including the approximately $5.2 million in potential financial benefit to us of base rent abatement to be provided by the Sublessor, subject to certain terms contained in the Sublease. The Sublease contains customary provisions requiring us to pay our pro rata share of utilities and a portion of the operating expenses and certain taxes, assessments and fees of the Premises and provisions allowing the Sublessor to terminate the Sublease upon the termination of the lease with the Landlord or if we fail to remedy a breach of certain of its obligations within specified time periods. Additionally, we posted a security deposit of $0.9 million, which is reflected as restricted cash in non-current assets on our Balance Sheets as of December 31, 2023 and 2022.

Funding Requirements

Based upon our current operating plan, we believe that our existing capital resources will enable us to fund our operating expenses and capital expenditure requirements through at least the next twelve months after the date of this filing. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. We will continue to require additional financing to advance our current product candidates into and through clinical development, to develop, acquire or in-license other potential product candidates, pay our obligations and to fund operations for the foreseeable future.

We may seek to raise any necessary additional capital through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements, marketing and distribution arrangements, royalty monetizations, or other sources of financing. Adequate additional funding may not be available to us on acceptable terms, or at all. Any failure to raise capital as and when needed could have a negative impact on our financial condition and on our ability to pursue our business plans and strategies, and may cause us to delay, reduce the scope of or suspend one or more of our pre-clinical and clinical studies, research and development programs or commercialization efforts, and may necessitate us to delay, reduce or terminate planned activities in order to reduce costs. Due to the numerous risks and uncertainties associated with the development and commercialization of our product candidates and the extent to which we may enter into additional collaborations with third parties to participate in their development and commercialization, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical studies.

To the extent we raise additional capital through new collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our product candidates, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we do raise additional capital through public or private equity or convertible debt offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

Cash Flows

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

	Year Ended December 31,	
	2023	2022
	(in thousands)	
Cash (used in) provided by operating activities	$ (111,616)	$ 3,549
Cash used in investing activities	(3,924)	(35,022)
Cash provided by financing activities	137,554	48,313
Net increase in cash, cash equivalents and restricted cash	$ 22,014	$ 16,840

Cash Flows from Operating Activities

Cash used in operating activities for the year ended December 31, 2023 was $111.6 million. Our net loss of $106.8 million included non-cash charges of $24.9 million for stock-based compensation, $12.6 million for non-cash interest expense on our deferred royalty obligation, $9.9 million for the unrealized gain on equity securities as a result of the remeasurement of the estimated fair value of our investment in Vaxcyte common stock, $9.1 million for the accretion of discount on our marketable securities, $6.8 million for depreciation and amortization, $3.6 million for noncash lease expenses and $0.6 million in other non-cash charges. Cash used in operating activities also reflected a net change in operating assets and liabilities of $34.4 million, due to a decrease of $32.6 million in our deferred revenue from revenue recognized under our collaboration agreements, an increase of $28.9 million in accounts receivable primarily due to a receivable from Vaxcyte under the Vaxcyte Agreement, and a decrease of $4.6 million in our operating lease liability, which were partially offset by an increase of $30.1 million in accounts payable, accrued expenses and other liabilities mainly due to the tax liability and timing of payments, an increase of $1.5 million in accrued compensation due to increased headcount, and a decrease of $0.1 million in prepaid expenses and other assets.

Cash provided by operating activities for the year ended December 31, 2022 was $3.5 million. Our net loss of $119.2 million included non-cash charges of $26.3 million for stock-based compensation, $12.1 million for the unrealized gain on equity securities as a result of the remeasurement of the estimated fair value of our investment in Vaxcyte common stock, $5.7 million for depreciation and amortization, $4.1 million for the realized gain on equity securities, $2.6 million for noncash lease expenses, $0.4 million for the accretion of discount on our marketable securities and $0.3 million in other non-cash charges. Cash provided by operating activities also reflected a net change in operating assets and liabilities of $104.4 million, due to an increase of $93.6 million in our deferred revenue balance primarily due to the upfront payment from Astellas, a decrease of $5.3 million in accounts receivable from our collaborators, an increase of $5.3 million in accounts payable, accrued expenses and other liabilities due to timing of payments, an increase of $1.7 million in accrued compensation due to increased headcount, and an increase of $1.9 million in our operating lease liability, which were partially offset by an increase of $3.5 million in prepaid expenses and other assets.

Cash Flows from Investing Activities

Cash used in investing activities of $3.9 million for the year ended December 31, 2023 was primarily related to purchases of marketable securities of $460.3 million and purchases of property and equipment of $4.3 million, principally for laboratory equipment, partially offset by maturities and sales of marketable securities of $460.7 million.

Cash used in investing activities of $35.0 million for the year ended December 31, 2022 was primarily related to purchases of marketable securities of $216.7 million and purchases of property and equipment of $7.9 million, principally for laboratory equipment, partially offset by maturities and sales of marketable securities of $160.8 million and proceeds from sale of Vaxcyte equity securities of $28.7 million.

Cash Flows from Financing Activities

Cash provided by financing activities of $137.5 million for the year ended December 31, 2023 was primarily related to $136.2 million of net proceeds from the sale of future royalties, $12.0 million of net proceeds from our ATM Facility sales of common stock, $2.0 million of net proceeds received from participants in our employee equity plans and $0.3 million of proceeds received from the exercise of common stock options, partially offset by debt repayment of $12.5 million and a $0.5 million tax payment related to the net share settlement of certain vested restricted stock units.

Cash provided by financing activities of $48.3 million for the year ended December 31, 2022 was primarily related to $56.3 million of net proceeds from our ATM Facility sales of common stock, $1.6 million of net proceeds received from participants in our employee equity plans and $0.3 million of proceeds received from the exercise of common stock options, partially offset by debt repayment of $9.4 million and a $0.5 million tax payment related to the net share settlement of certain vested restricted stock units.

Contractual Obligations and Other Commitments

In addition to the contractual obligations and commitments as noted above and elsewhere in this Annual Report with regards to the leases and term loans, we enter into agreements in the normal course of business, including with contract research organizations for clinical trials, contract manufacturing organizations for certain manufacturing services, and vendors for preclinical studies and other services and products for operating purposes, which are generally cancelable upon written notice.

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. The preparation of these financial statements requires us to make estimates and assumptions 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 estimates under different assumptions or conditions.

While our significant accounting policies are described in the notes to our financial statements included elsewhere in this report, we believe that the following critical accounting policies are most important to understanding and evaluating our reported financial results.

Revenue Recognition

We do not have any products approved for commercial sale and have not generated any revenue from commercial product sales. Our total revenue to date has been generated principally from our collaboration and license agreements with BMS, Merck, Astellas, EMD Serono, Vaxcyte, BioNova, Tasly, and to a lesser extent, from manufacturing, supply and services and materials we provide to our collaborators.

When we enter into collaboration agreements, we assess whether the arrangements fall within the scope of ASC 808, Collaborative Arrangements (ASC 808) based on whether the arrangements involve joint operating activities and whether both parties have active participation in the arrangement and are exposed to significant risks and rewards. To the extent that the arrangement falls within the scope of ASC 808, we assess whether the payments between us and our collaboration partner fall within the scope of other accounting literature. If we conclude that payments from the collaboration partner to us represent consideration from a customer, such as license fees and contract research and development activities, we account for those payments within the scope of ASC 606, Revenue from Contracts with Customers.

Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii)

identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. However, if we conclude that our collaboration partner is not a customer for certain activities and associated payments, such as for certain collaborative research, development, manufacturing and commercial activities, we present such payments as a reduction of research and development expense or general and administrative expense, based on where we present the underlying expense.

Collaboration revenue: We derive revenue from collaboration arrangements, under which we may grant licenses to our collaboration partners to further develop and commercialize our proprietary product candidates. We may also perform research and development activities under the collaboration agreements. Consideration under these contracts generally includes a nonrefundable upfront payment, development, regulatory and commercial milestones and other contingent payments, and royalties based on net sales of approved products. Additionally, the collaborations may provide options for the customer to acquire from us materials and reagents, clinical product supply or additional research and development services under separate agreements.

We assess which activities in the collaboration agreements are considered distinct performance obligations that should be accounted for separately. We develop assumptions that require judgement to determine whether the license to our intellectual property is distinct from the research and development services or participation in activities under the collaboration agreements.

At the inception of each agreement, we determine the arrangement transaction price, which includes variable consideration, based on the assessment of the probability of achievement of future milestones and contingent payments and other potential consideration. We recognize revenue over time by measuring the progress towards the complete satisfaction of the relevant performance obligation using an appropriate input or output method based on the nature of the service promised to the customer.

For arrangements that include multiple performance obligations, we allocate the transaction price to the identified performance obligations based on the standalone selling price, or SSP, of each distinct performance obligation. In instances where SSP is not directly observable, we develop assumptions that require judgment to determine the SSP for each performance obligation identified in the contract. These key assumptions may include full-time equivalent, or FTE, personnel effort, estimated costs, discount rates and probabilities of clinical development and regulatory success.

Upfront Payments: For collaboration arrangements that include a nonrefundable upfront payment, if the license fee and research and development services cannot be accounted for as separate performance obligations, the transaction price is deferred and recognized as revenue over the expected period of performance using a cost-based input methodology. We use judgement to assess the pattern of delivery of the performance obligation. In addition, amounts paid in advance of services being rendered may result in an associated financing component to the upfront payment. Accordingly, the interest on such borrowing cost component will be recorded as interest expense and revenue, based on an appropriate borrowing rate applied to the value of services to be performed by us over the estimated service performance period.

License Grants: For collaboration arrangements that include a grant of a license to our intellectual property, we consider whether the license grant is distinct from the other performance obligations included in the arrangement. For licenses that are distinct, we recognize revenues from nonrefundable, upfront payments and other consideration allocated to the license when the license term has begun and we have provided all necessary information regarding the underlying intellectual property to the customer, which generally occurs at or near the inception of the arrangement.

Milestone and Contingent Payments: At the inception of the arrangement and at each reporting date thereafter, we assess whether we should include any milestone and contingent payments or other forms of variable consideration in the transaction price using the most likely amount method. If it is probable that a significant reversal of cumulative revenue would not occur upon resolution of the uncertainty, the associated milestone value is included in the transaction price. At the end of each subsequent reporting period, we re-evaluate the probability of achievement of each such milestone and any related constraint and, if necessary, adjust our estimate of the overall transaction price. Since milestone and contingent payments may become payable to us upon the initiation of a clinical study or filing for or receipt of regulatory approval, we review the relevant facts and circumstances to determine when we should update the transaction price, which may occur

before the triggering event. When we update the transaction price for milestone and contingent payments, we allocate the changes in the total transaction price to each performance obligation in the agreement on the same basis as the initial allocation. Any such adjustments are recorded on a cumulative catch-up basis in the period of adjustment, which may result in recognizing revenue for previously satisfied performance obligations in such period. Our collaborators generally pay milestones and contingent payments subsequent to achievement of the triggering event.

Research and Development Services: For amounts allocated to our research and development obligations in a collaboration arrangement, we recognize revenue over time using a cost-based input methodology, representing the transfer of goods or services as activities are performed over the term of the agreement.

Materials Supply: We provide materials and reagents, clinical materials and services to certain of our collaborators under separate agreements. The consideration for such services is generally based on FTE personnel effort used to manufacture those materials, reimbursed at an agreed upon rate in addition to agreed-upon pricing for the provided materials. The amounts billed are recognized as revenue as the performance obligations are met by us.

Revenue subject to governmental withholding taxes is recognized on a gross basis with the withholding taxes recorded as a component of income tax expense.

Research and Development

We record accrued expenses for estimated costs of our research and development activities conducted by third party service providers, which include outsourced research and development expenses, professional services and contract manufacturing activities. We record the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced, and include these costs in current liabilities in the Balance Sheets and within research and development expense in the Statements of Operations.

Nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized and recognized as an expense as the goods are delivered or the related services are performed.

For outsourced research and development expenses, such as professional fees payable to third parties for preclinical studies, clinical trials and research services and other consulting costs, we estimate the expenses based on the services performed, pursuant to contracts with research institutions that conduct and manage preclinical studies, clinical trials and research services on our behalf. We estimate these expenses based on discussions with internal management personnel and external service providers as to the progress or stage of completion of services and the contracted fees to be paid for such services. If the actual timing of the performance of services or the level of effort varies from the original estimates, we will adjust the accrual accordingly. Payments made to third parties under these arrangements in advance of the performance of the related services by the third parties are recorded as prepaid expenses until the services are rendered.

Stock-Based Compensation

We measure and recognize compensation expense for all stock-based awards, including restricted stock units, stock options, and the ESPP, to employees, consultants and nonemployee directors based on the estimated fair value of the awards on the grant date. The fair value of stock options and purchase rights under the ESPP are estimated using the Black-Scholes option-pricing model. The Black-Scholes model requires use of assumptions and judgments about the variables used in the calculations, including the expected term, the expected volatility of the underlying stock, the related risk-free interest rate for the expected term of the award and the expected dividends.

Stock-based compensation expense for restricted stock units and stock options is generally recognized on a straight line basis over the requisite service period. Stock-based compensation expense for the ESPP is recognized on a straight-line basis over the offering period. We account for forfeitures of stock-based awards as they occur.

The closing sale price per share of our common stock as reported on the Nasdaq Global Market on the date of grant is used to determine the exercise price per share of our stock-based awards to purchase common stock.

Deferred Royalty Obligation related to the Sale of Future Royalties and Non-cash Interest Expense

We treated the sale of Vaxcyte future royalties to Blackstone as a deferred royalty obligation, as we had ongoing manufacturing obligations under the 2015 License Agreement in the generation of the cash flows. Due to our then ongoing manufacturing obligations, we will account for any royalties earned as non-cash revenue. As royalties are remitted to Blackstone from Vaxcyte, the balance of the deferred royalty obligation will be effectively amortized over the estimated life of the royalty term arrangement. We recorded the proceeds from this transaction as a liability on our Balance Sheets related to the sale of future royalties to be amortized to interest expense using the effective interest rate method over the estimated life of the royalty term arrangement. The liability related to the sale of future royalties and the related interest expense are based on our current estimates of future royalties expected to be earned by Blackstone from Vaxcyte over the estimated life of the royalty term arrangement. We periodically assess the estimated royalties to be earned using forecasts from external sources. To the extent our future estimates of earned royalties are greater or less than previous estimates or the estimated timing of such payments is materially different than our previous estimates, we will prospectively recognize related non-cash interest expense.

Income Taxes

As of December 31, 2023, we had federal net operating loss, or NOL, carryforwards of $140.2 million and federal general business credits from research and development expenses totaling $20.0 million, as well as state NOL carryforwards of $100.5 million and state research and development credits of $26.0 million. If not utilized, the federal NOL carryforwards will expire at various dates beginning in 2027, and the federal credits will expire at various dates beginning in 2032. The state NOL carryforwards will expire at various dates beginning in 2031, if not utilized. The state research and development tax credits can be carried forward indefinitely.

Utilization of the net operating loss carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by the Tax Reform Act of 1986, or the Tax Reform Act, as amended, and similar state provisions. The annual limitation may result in the expiration of NOLs and credits before utilization. We have performed Section 382 study through December 31, 2022, and concluded that we experienced an ownership change on November 20, 2019, and December 31, 2022. This change does not limit our ability to use our existing NOLs within the carryforward period provided by the Internal Revenue Code, subject to availability of taxable income. We may experience ownership changes in the future as a result of equity offerings or other shifts in our stock ownership, some of which are outside our control. If there is a subsequent event or further change in ownership, these losses may be subject to limitations, resulting in their expiration before they can be utilized.

We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position’s sustainability and is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

Recent Accounting Pronouncements

See Note 2 to our audited financial statements included elsewhere in this report for more information.

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 include interest rate sensitivities. The primary objective of our investment activities is to preserve our capital to fund our operations. We also seek to maximize income from our investments without assuming significant risk. To achieve our objectives, we maintain a portfolio of cash equivalents and investments in a variety of securities of high credit quality.

We had cash, cash equivalents and marketable securities of $333.7 million and $302.3 million as of December 31, 2023 and 2022, respectively, which consisted of money market funds, commercial paper, corporate debt securities, asset-backed securities, U.S. government securities, U.S. agency securities and supranational debt securities. Such interest earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant. Additionally, we had equity securities of $41.9 million as of December 31, 2023, consisting solely of common stock of Vaxcyte.

Equity risk is the risk we will incur economic losses due to adverse changes in equity prices. Our potential exposure to changes in equity prices results from our Vaxcyte common stock holdings. Therefore, we are subject to market risk if such holdings materially decrease in value. A hypothetical 10 percent decrease in the market price for our equity investments as of December 31, 2023 would decrease the fair value by $4.2 million. We intend to manage equity price risk going forward by continuously evaluating market conditions.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed nor do we anticipate being exposed to material risks due to changes in interest rates. A hypothetical 10% change in market interest rates would not have a material impact on our financial statements. We do not believe that our cash, cash equivalents or marketable securities have significant risk of default or illiquidity.

As of December 31, 2023 and 2022, we had $4.1 million and $16.3 million, respectively, in debt outstanding, net of debt discount and accretion of final payment. Until June 30, 2023, our existing debt with Oxford and SVB bore interest at a floating per annum rate equal to the greater of (i) 8.07% or (ii) the sum of (a) the greater of (1) the thirty (30) day U.S. LIBOR rate reported in the Wall Street Journal on the last business day of the month that immediately precedes the month in which the interest will accrue or (2) 1.67%, plus (b) 6.40%. In June 2023, we entered into an amendment to the LSA with Oxford and SVB (the “5th LSA Amendment”). Under the 5th LSA Amendment, effective July 1, 2023, the loan bears interest at the floating per annum rate of interest equal to the greater of (i) 8.07% and (ii) the sum of (a) a specific published 1-month secured overnight financing rate (SOFR) reported on the last business day of the month that immediately precedes the month in which the interest will accrue, plus (b) 0.10%, plus (c) 6.40%. There was an immaterial impact of the 5th LSA Amendment on our financial statements. This debt matured on March 1, 2024 and was interest-only through March 1, 2022. Such interest-bearing debt carried a limited degree of interest rate risk. If overall interest rates had increased or decreased by 100 basis points during the periods presented our interest expense would not have been materially affected.

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

SUTRO BIOPHARMA, INC.

ANNUAL REPORT ON FORM 10-K

INDEX TO AUDITED FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm ***(PCAOB ID 42)***	123
Financial Statements	
Balance Sheets	125
Statements of Operations	126
Statements of Comprehensive Loss	127
Statements of Stockholders' Equity	128
Statements of Cash Flows	129
Notes to Financial Statements	130

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Sutro Biopharma, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Sutro Biopharma, Inc. (the Company) as of December 31, 2023, and 2022, the related statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2023, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

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 accounts or disclosures to which it relates.

	Royalty agreement with Blackstone Life Sciences
Description of the Matter	As discussed in Note 2 and Note 10 to the financial statements, on June 21, 2023, the Company closed a purchase and sale agreement (the "Agreement") with Blackstone Life Sciences ("Blackstone"), pursuant to which the Company sold to Blackstone its 4% royalty in potential net sales of Vaxcyte Inc.'s products and received an upfront payment of $140 million. The Company concluded the Agreement represented a sale of future royalties and accounted for the transaction under Accounting Standards Codification (ASC) 470 as debt. The Company estimated the amount of future royalty payments and expected interest expense using the effective interest rate method over the life of the agreement. The carrying

value of the liability related to the sale of future royalties at December 31, 2023 was $149.1 million and the interest expense for the year ended December 31, 2023 was $12.6 million.

The auditing of the Agreement was complex due to the significant judgment and estimation used by management related to the sale of future royalties and due to the nature and extent of audit effort required to address these matters. The accounting involves significant judgment and inherent uncertainties as it relates to the Company's estimate of future sales for which royalties will be paid, which in turn significantly impacts the calculation of interest expense recognized.

How We Addressed the Matter in Our Audit

To test the carrying value of the liability related to the sale of future royalties and the amount of interest expense recognized, our audit procedures included, among others, assessing the methodology used, evaluating the reasonableness of the significant estimates discussed above, and testing the completeness and accuracy of the underlying data used by the Company. Specifically, we tested the calculation of the liability balance including the classification of the balance as non-current. In addition, we evaluated the Company’s estimate of future sales, by comparing the estimates to available peer data and market research. We also recalculated the current year interest expense using the effective interest method based on the Company’s estimate of future royalties to be paid. We involved professionals outside of the core audit team to assist in the assessment of the estimation methodology and significant assumptions used in determining the future sales for which royalties will be paid.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 2007.

San Mateo, California
March 25, 2024

SUTRO BIOPHARMA, INC.

BALANCE SHEETS

(in thousands, except share and per share data)

	December 31,	
	2023	**2022**
Assets		
Current assets:		
Cash and cash equivalents	$ 69,268	$ 47,254
Marketable securities	264,413	255,090
Investment in equity securities	41,937	32,020
Accounts receivable	36,078	7,122
Prepaid expenses and other current assets	9,846	11,667
Total current assets	421,542	353,153
Property and equipment, net	21,940	24,621
Operating lease right-of-use assets	22,815	26,443
Other non-current assets	3,567	1,855
Restricted cash	872	872
Total assets	$ 470,736	$ 406,944
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 9,440	$ 4,797
Accrued compensation	14,686	13,142
Deferred revenue-current	20,666	16,759
Operating lease liability-current	6,420	4,585
Debt-current	4,061	12,500
Accrued expenses and other current liabilities	38,473	14,764
Total current liabilities	93,746	66,547
Deferred revenue, non-current	53,379	89,885
Operating lease liability-non-current	23,154	29,574
Debt-non-current	-	3,771
Deferred royalty obligation related to the sale of future royalties	149,114	-
Other non-current liabilities	1,694	119
Total liabilities	321,087	189,896
Commitments and contingencies (Note 8)		
Stockholders' equity:		
Preferred stock, $0.001 par value — 10,000,000 shares authorized as of December 31, 2023 and 2022; 0 shares issued and outstanding as of December 31, 2023 and 2022	-	-
Common stock, $0.001 par value — 300,000,000 shares authorized as of December 31, 2023 and 2022; 61,009,829 and 57,499,541 shares issued and outstanding as of December 31, 2023 and 2022, respectively	61	58
Additional paid-in-capital	708,975	670,223
Accumulated other comprehensive income (loss)	21	(618)
Accumulated deficit	(559,408)	(452,615)
Total stockholders' equity	149,649	217,048
Total Liabilities and Stockholders' Equity	$ 470,736	$ 406,944

See accompanying notes to financial statements.

SUTRO BIOPHARMA, INC.

STATEMENTS OF OPERATIONS

(in thousands, except share and per share data)

	Year Ended December 31,		
	2023	**2022**	**2021**
Revenue	$ 153,731	$ 67,772	$ 61,880
Operating expenses			
Research and development	180,425	137,171	104,400
General and administrative	62,584	59,544	56,004
Total operating expenses	243,009	196,715	160,404
Loss from operations	(89,278)	(128,943)	(98,524)
Interest income	14,510	3,455	577
Unrealized gain (loss) on equity securities	9,917	12,130	(4,454)
Non-cash interest expense related to the sale of future royalties	(12,570)	-	-
Interest and other income (expense), net	(11,180)	(3,346)	(3,137)
Loss before provision for income taxes	(88,601)	(116,704)	(105,538)
Provision for income taxes	18,192	2,500	-
Net loss	$ (106,793)	$ (119,204)	$ (105,538)
Net loss per share, basic and diluted	$ (1.78)	$ (2.35)	$ (2.29)
Weighted-average shares used in computing basic and diluted net loss per share	60,163,542	50,739,185	46,119,089

See accompanying notes to financial statements.

SUTRO BIOPHARMA, INC.

STATEMENTS OF COMPREHENSIVE LOSS

(in thousands)

	Year Ended December 31,		
	2023	**2022**	**2021**
Net loss	$ (106,793)	$ (119,204)	$ (105,538)
Other comprehensive income (loss):			
Net unrealized income (loss) on available-for-sale securities	639	(304)	(443)
Comprehensive loss	$ (106,154)	$ (119,508)	$ (105,981)

See accompanying notes to financial statements.

SUTRO BIOPHARMA, INC.
Statements of Stockholders' Equity
(in thousands, except share amounts)

	Common Stock		Additional Paid-In-Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balances at December 31, 2020	45,752,116	46	559,746	129	(227,873)	332,048
Exercise of common stock options and common stock warrants	246,678	-	2,485	-	-	2,485
Return and retirement of common stock	(7,687)	-	(7)	-	-	(7)
Issuance of common stock under Employee Stock Purchase Plan	145,809	-	1,765	-	-	1,765
Vesting of restricted stock units	238,724	-	-	-	-	-
Stock transaction associated with taxes withheld on restricted stock units	(48,509)	-	(987)	-	-	(987)
Stock-based compensation expense	-	-	23,241	-	-	23,241
Net unrealized loss on available-for-sale securities	-	-	-	(443)	-	(443)
Net Loss	-	-	-	-	(105,538)	(105,538)
Balances at December 31, 2021	46,327,131	46	586,243	(314)	(333,411)	252,564
Exercise of common stock options	49,654	-	268	-	-	268
Issuance of common stock under Employee Stock Purchase Plan	270,516	-	1,613	-	-	1,613
Vesting of restricted stock units	620,647	1	(1)	-	-	-
Stock transaction associated with taxes withheld on restricted stock units	(53,567)	-	(463)	-	-	(463)
Stock-based compensation expense	-	-	26,304	-	-	26,304
Issuance of common stock in connection with At-The-Market sale, net of issuance costs of $2,026	10,285,160	11	56,259	-	-	56,270
Net unrealized loss on available-for-sale securities	-	-	-	(304)	-	(304)
Net Loss	-	-	-	-	(119,204)	(119,204)
Balances at December 31, 2022	57,499,541	$ 58	$ 670,223	$ (618)	$ (452,615)	$ 217,048
Exercise of common stock options	53,060	-	314	-	-	314
Issuance of common stock under Employee Stock Purchase Plan	526,079	-	2,051	-	-	2,051
Vesting of restricted stock units	1,155,644	1	-	-	-	1
Stock transaction associated with taxes withheld on restricted stock units	(81,905)	-	(490)	-	-	(490)
Stock-based compensation expense	-	-	24,908	-	-	24,908
Issuance of common stock in connection with At-The-Market sale, net of issuance costs of $459	1,857,410	2	11,969	-	-	11,971
Net unrealized income on available-for-sale securities	-	-	-	639	-	639
Net Loss	-	-	-	-	(106,793)	(106,793)
Balances at December 31, 2023	61,009,829	$ 61	$ 708,975	$ 21	$ (559,408)	$ 149,649

See accompanying notes to financial statements.

SUTRO BIOPHARMA, INC.

STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended December 31,		
	2023	2022	2021
Operating activities			
Net loss	$ (106,793)	$ (119,204)	$ (105,538)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	6,816	5,690	4,844
(Accretion of discount) amortization of premium on marketable securities	(9,075)	(364)	2,781
Stock-based compensation	24,908	26,304	23,241
Non-cash lease expenses	3,628	2,598	4,929
Realized gain on equity securities	-	(4,074)	-
Unrealized (gain) loss on equity securities	(9,917)	(12,130)	4,454
Non-cash interest expense on deferred royalty obligation	12,570	-	-
Other	622	324	1,230
Changes in operating assets and liabilities:			
Accounts receivable	(28,956)	5,341	(6,895)
Prepaid expenses and other assets	109	(3,544)	(3,959)
Accounts payable	4,812	(1,225)	2,708
Accrued compensation	1,544	1,725	2,594
Accrued expenses and other liabilities	25,300	6,562	5,866
Deferred revenue	(32,599)	93,648	(15,207)
Change in operating lease liability	(4,585)	1,898	(2,727)
Net cash provided by (used in) operating activities	(111,616)	3,549	(81,679)
Investing activities			
Purchases of marketable securities	(460,301)	(216,671)	(248,727)
Maturities of marketable securities	434,966	127,960	148,250
Sales of marketable securities	25,726	32,799	18,476
Proceeds from sale of equity securities, net	-	28,739	-
Purchases of equipment and leasehold improvements	(4,315)	(7,858)	(15,323)
Proceeds from exercise of options for Vaxcyte shares	-	9	9
Net cash (used in) provided by investing activities	(3,924)	(35,022)	(97,315)
Financing activities			
Proceeds from sales of common stock, net of issuance costs	11,971	56,270	-
Payments of debt	(12,500)	(9,375)	-
Proceeds from the sale of future royalties, net of issuance costs	136,208	-	-
Proceeds from exercise of common stock options	314	268	2,485
Taxes paid related to net share settlement of restricted stock units	(490)	(463)	(987)
Return and retirement of common stock	-	-	(7)
Proceeds from employee stock purchase plan	2,051	1,613	1,765
Net cash provided by financing activities	137,554	48,313	3,256
Net increase (decrease) in cash, cash equivalents and restricted cash	22,014	16,840	(175,738)
Cash, cash equivalents and restricted cash at beginning of year	48,126	31,286	207,024
Cash, cash equivalents and restricted cash at end of year	$ 70,140	$ 48,126	$ 31,286
Supplemental disclosure of cash flow information			
Cash paid for interest	$ 1,126	$ 1,869	$ 2,046
Income tax paid	$ 379	$ -	$ 103
Supplemental Disclosures of Non-cash Investing and Financing Information			
Purchase of property and equipment included in accounts payable	$ 214	$ 280	$ 370
Remeasurement of operating lease right-of-use assets for lease modification	$ -	$ -	$ 4,227
Financing component associated with program fees	$ 9,836	$ 5,079	$ 610
Value of 167,780 shares of Vaxcyte common stock received under the Vaxcyte Agreement	$ -	$ 7,500	$ -

See accompanying notes to financial statements.

SUTRO BIOPHARMA, Inc.

Notes to Financial Statements

1. Organization and Principal Activities

Description of Business

Sutro Biopharma, Inc. (the "Company"), is a clinical-stage oncology company developing site-specific and novel-format antibody drug conjugates, or ADCs. The Company was incorporated on April 21, 2003 and is headquartered in South San Francisco, California.

The Company operates in one business segment, the development of biopharmaceutical products. Operating segments are components of an enterprise for which separate financial information is available and is evaluated regularly by the Chief Executive Officer, the Company's chief operating decision maker, in deciding how to allocate resources and assessing performance. The Company operates and manages its business as one operating segment. The Company's Chief Executive Officer reviews financial information on an aggregate basis for the purposes of allocating and evaluating financial performance.

All of the Company's long-lived assets are maintained in the United States.

At-The-Market Sales

During the year ended December 31, 2023, the Company sold an aggregate of 1,857,410 shares of its common stock through its At-the-Market Facility ("ATM Facility") pursuant to its Open Market Sales Agreement℠ dated April 2, 2021 with Jefferies LLC ("Jefferies"), as sales agent (the "Sales Agreement").

During the year ended December 31, 2023, the gross proceeds from these sales were approximately $12.4 million, before deducting fees of approximately $0.4 million, resulting in net proceeds of approximately $12.0 million, to the Company.

Liquidity

The Company has incurred significant losses and has negative cash flows from operations. As of December 31, 2023, there was an accumulated deficit of $559.4 million. Management expects to continue to incur additional substantial losses in the foreseeable future as a result of the Company's research and development and other operational activities.

As of December 31, 2023, the Company had unrestricted cash, cash equivalents and marketable securities of $333.7 million and equity securities of $41.9 million, consisting solely of common stock of Vaxcyte, which are available to fund future operations. The Company will need to raise additional capital to support the completion of its research and development activities and to support its operations.

The Company believes that its unrestricted cash, cash equivalents, marketable securities and investments in equity securities as of December 31, 2023 will enable the Company to maintain its operations for a period of at least 12 months following the filing date of these financial statements.

2. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation and Use of Estimates

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The Company bases its estimates on historical experience and market-specific or other relevant assumptions that it believes are reasonable under the circumstances. The amounts of assets and liabilities reported in the Company's Balance Sheets and the amounts of expenses and income reported for each of the periods presented are affected by estimates and assumptions, which are used for, but are not limited to, determining research and development periods under collaboration arrangements, stock-based compensation expense, valuation of marketable securities, impairment of long-lived assets, income taxes, deferred royalty obligation related to the sale of future royalties and related non-cash interest expense, and certain accrued liabilities. Actual results could differ from such estimates or assumptions.

Recent Accounting Pronouncements Not Yet Adopted

In November 2023, the Financial Accounting Standards Board (FASB) issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which enhances the disclosures required for operating segments in the Company's annual and interim financial statements. ASU 2023-07 is effective for the Company in the Company's annual reporting for fiscal 2024 and for interim period reporting beginning in fiscal 2025 on a retrospective basis. Early adoption is permitted. The Company is currently evaluating the impact of ASU 2023-07 on the Company's financial statements.

In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which enhances the disclosures required for income taxes in the Company's annual financial statements. ASU 2023-09 is effective for the Company in the Company's annual reporting for fiscal 2025 on a prospective basis. Early adoption and retrospective reporting are permitted. The Company is currently evaluating the impact of ASU 2023-09 on the Company's financial statements.

Cash, Cash Equivalents, Marketable Securities and Restricted Cash

The Company considers all highly liquid investments with original maturities of 90 days or less from the date of purchase to be cash equivalents. Investments with original maturities of greater than 90 days from the date of purchase but less than one year from the balance sheet date, or where the Company's intent is to use the investments to fund current operations or to make them available for current operations are classified as current, while investments with maturities in one year or beyond one year from the balance sheet date are classified as long-term investments.

Available-for-sale marketable securities are carried at fair value, with unrealized gains and losses reported as a component of accumulated other comprehensive income (loss). Realized gains and losses are included in interest income in the Company's Statements of Operations. There were no material realized gains or losses in the periods presented. The cost of securities sold is based on the specific-identification method.

The Company evaluates, on a quarterly basis, its marketable securities for potential impairment. For marketable securities in an unrealized loss position, the Company assesses whether such declines are due to credit loss based on factors such as changes to the rating of the security by a ratings agency, market conditions and supportable forecasts of economic and market conditions, among others. If a credit loss exists, the Company assesses whether it has plans to sell the security or it is more likely than not it will be required to sell any marketable security before recovery of its amortized cost basis. If either condition is met, the security's amortized cost basis is written down to fair value and is recognized through interest and other income (expense), net.

If neither condition is met, declines as a result of credit losses, if any, are recognized as an allowance for credit loss, limited to the amount of unrealized loss, through interest and other income (expense), net. Any portion of unrealized loss that is not a result of a credit loss, is recognized in other comprehensive income (loss).

The Company invests in money market funds, commercial paper, corporate debt securities, asset-based securities, U.S. government securities, U.S. agency securities and supranational debt securities with high credit ratings. The Company has established guidelines regarding diversification of its investments and their maturities, with the objectives of maintaining safety and liquidity while maximizing yield.

Under certain agreements, the Company has pledged cash and cash equivalents as collateral. As of both December 31, 2023 and 2022, restricted cash related to such agreements was $0.9 million.

A reconciliation of cash, cash equivalents, and restricted cash reported within the Company's Balance Sheets to the amount reported within the accompanying Statements of Cash Flows was as follows:

	December 31,		
	2023	2022	2021
	(in thousands)		
Cash and cash equivalents	$ 69,268	$ 47,254	$ 30,414
Restricted cash	872	872	872
Total cash, cash equivalents and restricted cash shown in the Statements of Cash Flows	$ 70,140	$ 48,126	$ 31,286

Concentrations of Credit Risk

Cash and cash equivalents and marketable securities consist of financial instruments that potentially subject the Company to a concentration of credit risk, to the extent of the amounts recorded on the Balance Sheets. The Company minimizes the amount of credit exposure by investing cash that is not required for immediate operating needs in money market funds, government obligations and/or commercial paper with short maturities.

The Company performs a regular review of its collaborators' credit risk and payment histories when circumstances warrant, including payments made subsequent to year-end. When appropriate, the Company provides for an allowance for credit risks by reserving for specifically identified doubtful accounts, although historically the Company has not experienced credit losses from its accounts receivable.

Investments in Equity Securities

Vaxcyte common stock held by the Company is measured at fair value at each reporting period based on the closing price of Vaxcyte's common stock on the last trading day of each reporting period, with any realized or unrealized gains and losses recorded in the Company's Statements of Operations.

Property and Equipment, Net

Property and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation is determined using the straight-line method over the estimated useful lives of the respective assets, generally three to five years. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the term of the lease. Maintenance and repairs are charged to expense as incurred and costs of improvement are capitalized.

Impairment of Long-Lived Assets

The Company reviews long-lived assets, including property and equipment, leasehold improvements and right-of-use assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. An impairment loss would be recognized when the estimated, undiscounted future cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount. Impairment, if any, is measured at the amount by which the carrying amount of a long-lived asset exceeds its fair value.

The Company did not recognize any impairment charges during the years ended December 31, 2023, 2022 and 2021. As of December 31, 2023 and 2022, management believes that no revision to the remaining useful lives or write down of the remaining long-lived assets is required.

Leases

The Company adopted ASU 2016-02 (Topic 842), Leases (Accounting Standards Codification, or "ASC", 842) on July 1, 2021, effective as of January 1, 2021. The Company determines if an arrangement is or contains a lease at contract inception by assessing whether the arrangement contains an identified asset and whether the lessee has the right to control such asset. The Company is required to classify leases as either finance or operating leases and to record a Right-of-Use (ROU) asset and a lease liability for all leases with a term greater than 12 months regardless of the lease classification. The lease classification will determine whether the lease expense is recognized based on an effective interest rate method or on a straight-line basis over the term of the lease. The Company determines the initial classification and measurement of its ROU assets and lease liabilities at the lease commencement date and thereafter, if modified. The Company does not have material finance leases.

For leases with a term greater than 12 months, the Company records the related ROU asset and lease liability at the present value of lease payments over the term of the lease. The term of the Company's leases equals the non-cancellable period of the lease, including any rent-free periods provided by the lessor, and also includes options to extend or terminate the lease that the Company is reasonably certain to exercise. The ROU asset equals the carrying amount of the related lease liability, adjusted for any lease payments made prior to lease commencement and lease incentives provided by the lessor. Variable lease payments are expensed as incurred and do not factor into the measurement of the applicable ROU asset or lease liability.

The Company has elected, for all classes of underlying assets, not to recognize ROU assets and lease liabilities for leases with a term of 12 months or less. Lease cost for short-term leases is recognized on a straight-line basis over the lease term. The Company has also elected to not separate lease and non-lease components for its leases and, as a result, accounts for lease and non-lease components as one component.

The Company's leases do not provide a readily determinable implicit rate. Therefore, the Company estimates its incremental borrowing rate to discount the lease payments based on information available at lease commencement. The Company determines its incremental borrowing rate based on the rate of interest that the Company would have to pay to borrow, on a collateralized basis over a similar term, an amount equal to the lease payments in a similar economic environment.

Lease payments may be fixed or variable; however, only fixed payments are included in the Company's lease liability calculation. Lease costs for the Company's operating leases are recognized on a straight-line basis within operating expenses over the lease term. The Company's lease agreements may contain variable non-lease components such as common area maintenance, operating expenses or other costs, which are expensed as incurred.

Deferred Royalty Obligation related to the Sale of Future Royalties and Non-cash Interest Expense

In June 2023, the Company entered into a purchase and sale agreement (the "Purchase Agreement") with Blackstone, pursuant to which the Company sold to Blackstone its 4% royalty, or revenue interest, in the potential future net sales of Vaxcyte products, including Vaxcyte's pneumococcal conjugate vaccine, or PCV, products such as VAX-24 and its second-generation PCV product, VAX-31, (the "Purchased Interest") under that certain Amended and Restated SutroVax Agreement, dated October 12, 2015, by and between the Company and Vaxcyte, as amended (the "2015 License Agreement"). In June 2023, Blackstone made an upfront payment of

$140.0 million to the Company and will also pay up to an additional $250.0 million upon the achievement of various return thresholds as set forth in the Purchase Agreement. The net proceeds from the upfront payment received by the Company from the sale of future royalties from Vaxcyte are recorded as deferred royalty obligation related to the sale of future royalties on the Company's Balance Sheets. As royalties are earned and remitted pursuant to the 2015 License Agreement, the balance of the deferred royalty obligation will be amortized over the estimated life of the royalty term arrangement, and non-cash interest expense related to the sale of future royalties is recorded using the effective interest method. To determine the amortization of the deferred royalty obligation, the Company is required to estimate the total amount of future royalties to be earned under the 2015 License Agreement. There are a number of factors that could materially affect the amount and timing of royalty payments earned, most of which are not within the Company's control. The Company periodically assesses the amount of royalty payments expected to be earned which are subject to the Purchase Agreement and, to the extent that the amount or timing of such earned royalties is materially different than the Company's original estimates, the Company will prospectively adjust the imputed interest rate and the related amortization of the deferred royalty obligation. As described in Note 5. Collaboration and License Agreements and Supply Agreements, Vaxcyte Agreement, following agreement with Vaxcyte on the Form Definitive Agreement and upon effectiveness of the amendment No. 3 to the 2015 License Agreement, the revenue interest in the 4% royalty on potential future net sales of Vaxcyte products other than Vaxcyte’s PCV products reverted to the Company.

Issuance fees and costs directly related to the Purchase Agreement were offset against the initial carrying value of the deferred royalty obligation and were amortized using the effective interest method over the estimated life of the royalty term arrangement.

Revenue Recognition

When the Company enters into collaboration agreements, it assesses whether the arrangements fall within the scope of ASC 808, Collaborative Arrangements ("ASC 808") based on whether the arrangements involve joint operating activities and whether both parties have active participation in the arrangement and are exposed to significant risks and rewards. To the extent that the arrangement falls within the scope of ASC 808, the Company assesses whether the payments between the Company and its collaboration partner fall within the scope of other accounting literature. If it concludes that payments from the collaboration partner to the Company represent consideration from a customer, such as license fees and contract research and development activities, the Company accounts for those payments within the scope of Accounting Standards Update (ASU) No. 2014-09 (Topic 606), Revenue from Contracts with Customers (“ASC 606”).

Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies a performance obligation. However, if the Company concludes that its collaboration partner is not a customer for certain activities and associated payments, such as for certain collaborative research, development, manufacturing and commercial activities, the Company presents such payments as a reduction of research and development expense or general and administrative expense, based on where the Company presents the underlying expense.

The Company has no products approved for commercial sale and has not generated any revenue from commercial product sales. The total revenue to date has been generated principally from collaboration and license agreements and to a lesser extent, from manufacturing, supply and services and materials the Company provides to its collaboration partners.

Collaboration Revenue: The Company derives revenue from collaboration arrangements, under which the Company may grant licenses to its collaboration partners to further develop and commercialize its proprietary product candidates. The Company may also perform research and development activities under the collaboration agreements. Consideration under these contracts generally includes a nonrefundable upfront payment, development, regulatory and commercial milestones and other contingent payments, and royalties based on net sales of approved products. Additionally, the collaborations may provide options for the customer to acquire from the Company materials and reagents, clinical product supply or additional research and development services under separate agreements.

The Company assesses which activities in the collaboration agreements are considered distinct performance obligations that should be accounted for separately. The Company develops assumptions that require judgement to determine whether the license to the Company's intellectual property is distinct from the research and development services or participation in activities under the collaboration agreements.

At the inception of each agreement, the Company determines the arrangement transaction price, which includes variable consideration, based on the assessment of the probability of achievement of future milestones and contingent payments and other potential consideration. The Company recognizes revenue over time by measuring its progress towards the complete satisfaction of the relevant performance obligation using an appropriate input or output method based on the nature of the service promised to the customer.

For arrangements that include multiple performance obligations, the Company allocates the transaction price to the identified performance obligations based on the standalone selling price, or SSP, of each distinct performance obligation. In instances where SSP is not directly observable, the Company develops assumptions that require judgment to determine the SSP for each performance obligation identified in the contract. These key assumptions may include full-time equivalent, or FTE, personnel effort, estimated costs, discount rates and probabilities of clinical development and regulatory success.

Upfront Payments: For collaboration arrangements that include a nonrefundable upfront payment, if the license fee and research and development services cannot be accounted for as separate performance obligations, the transaction price is deferred and recognized as revenue over the expected period of performance using a cost-based input methodology. The Company uses judgement to assess the pattern of delivery of the performance obligation. In addition, amounts paid in advance of services being rendered may result in an associated financing component to the upfront payment. Accordingly, the interest on such borrowing cost component will be recorded as interest expense and revenue, based on an appropriate borrowing rate applied to the value of services to be performed by the Company over the estimated service performance period.

License Grants: For collaboration arrangements that include a grant of a license to the Company's intellectual property, the Company considers whether the license grant is distinct from the other performance obligations included in the arrangement. For licenses that are distinct, the Company recognizes revenues from nonrefundable, upfront payments and other consideration allocated to the license when the license term has begun and the Company has provided all necessary information regarding the underlying intellectual property to the customer, which generally occurs at or near the inception of the arrangement.

Milestone and Contingent Payments: At the inception of the arrangement and at each reporting date thereafter, the Company assesses whether it should include any milestone and contingent payments or other forms of variable consideration in the transaction price using the most likely amount method. If it is probable that a significant reversal of cumulative revenue would not occur upon resolution of the uncertainty, the associated milestone value is included in the transaction price. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of each milestone and any related constraint and, if necessary, adjusts its estimate of the overall transaction price. Since milestone and contingent payments may become payable to the Company upon the initiation of a clinical study or filing for or receipt of regulatory approval, the Company reviews the relevant facts and circumstances to determine when the Company should update the transaction price, which may occur before the triggering event. When the Company updates the transaction price for milestone and contingent payments, the Company allocates the changes in the total transaction price to each performance obligation in the agreement on the same basis as the initial allocation. Any such adjustments are recorded on a cumulative catch-up basis in the period of adjustment, which may result in recognizing revenue for previously satisfied performance obligations in such period. The Company's collaborators generally pay milestones and contingent payments subsequent to achievement of the triggering event.

Research and Development Services: For amounts allocated to the Company's research and development obligations in a collaboration arrangement, the Company recognizes revenue over time using a cost-based input methodology, representing the transfer of goods or services as activities are performed over the term of the agreement.

Materials Supply: The Company provides materials and reagents, clinical materials and services to certain of its collaborators under separate agreements. The consideration for such services is generally based on FTE personnel effort used to manufacture those materials reimbursed at an agreed upon rate in addition to agreed-upon pricing for the provided materials. The amounts billed are recognized as revenue as the performance obligations are met by the Company.

Revenue subject to governmental withholding taxes is recognized on a gross basis with the withholding taxes recorded as a component of income tax expense.

Research and Development

The Company records accrued expenses for estimated costs of the research and development activities conducted by third party service providers, which include outsourced research and development expenses, professional services 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 current liabilities in the Balance Sheets and within research and development expense in the Statements of Operations.

Nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized and recognized as an expense as the goods are delivered or the related services are performed.

For outsourced research and development expenses, such as professional fees payable to third parties for preclinical studies, clinical trials and research services and other consulting costs, the Company estimates the expenses based on the services performed, pursuant to contracts with research institutions that conduct and manage preclinical studies, clinical trials and research services on the Company's behalf. The Company estimates these expenses based on discussions with internal management personnel and external service providers as to the progress or stage of completion of services and the contracted fees to be paid for such services. If the actual timing of the performance of services or the level of effort varies from the original estimates, the Company will adjust the accrual accordingly. Payments made to third parties under these arrangements in advance of the performance of the related services by the third parties are recorded as prepaid expenses until the services are rendered.

Stock-Based Compensation

The Company maintains a stock-based compensation plan as a long-term incentive for employees, consultants, and members of the Company's Board of Directors. The plan allows for the issuance of restricted stock units, non-statutory and incentive stock options to employees and non-statutory stock options to nonemployees. The Company also maintains an employee stock purchase plan.

The Company measures and recognizes compensation expense for all stock-based awards, including restricted stock units, stock options, and the ESPP, to employees, consultants and nonemployee directors based on the estimated fair value of the awards on the grant date. The fair value of stock options and purchase rights under the ESPP are estimated using the Black-Scholes option-pricing model. The Black-Scholes model requires the Company to make assumptions and judgments about the variables used in the calculations, including the expected term, the expected volatility of the underlying stock over the expected term of the award, the related risk-free interest rate for the expected term of the award and the expected dividends.

Stock-based compensation expense for restricted stock units and stock options is generally recognized on a straight line basis over the requisite service period. Stock-based compensation expense for the ESPP is recognized on a straight-line basis over the offering period. The Company accounts for forfeitures of stock-based awards as they occur.

The closing sale price per share of our common stock as reported on the Nasdaq Global Market on the date of grant is used to determine the exercise price per share of our stock-based awards to purchase common stock.

Income Taxes

The Company provides for income taxes under the asset and liability method. Current income tax expense or benefit represents the amount of income taxes expected to be payable or refundable for the current year. Deferred income tax assets and liabilities are determined based on differences between the financial statement reporting and tax bases of assets and liabilities and net operating loss and credit carryforwards, and are measured using the enacted tax rates and laws that will be in effect when such items are expected to reverse. Deferred income tax assets are reduced, as necessary, by a valuation allowance when management determines it is more likely than not that some or all of the tax benefits will not be realized.

The Company accounts for uncertain tax positions in accordance with Accounting Standards Codification ("ASC") 740-10, *Accounting for Uncertainty in Income Taxes*. The Company assesses all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and the Company will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

The Company includes any penalties and interest expense related to income taxes as a component of interest and other income (expense), net, as necessary.

Fair Value Measurements

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability, or an exit price, in the principal or most advantageous market for that asset or liability in an orderly transaction between market participants on the measurement date, and establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs, where available, and minimize the use of unobservable inputs when measuring fair value. The Company determined the fair value of financial assets and liabilities using the fair value hierarchy that describes three levels of inputs that may be used to measure fair value, as follows:

Level 1—Quoted prices in active markets for identical assets and liabilities;

Level 2—Inputs other than Level 1 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; and

Level 3—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 accounts receivable, prepaid expenses, accounts payable, accrued liabilities and accrued compensation and benefits approximate fair value due to the short-term nature of these items.

The fair value of the Company's outstanding loan (See Note 7) is estimated using the net present value of the payments, discounted at an interest rate that is consistent with market interest rate, which is a Level 2 input. The estimated fair value of the Company's outstanding loan approximates the carrying amount, as the loan bears a floating rate that approximates the market interest rate.

The carrying value of the deferred royalty obligation related to the sale of future royalties under the 2015 License Agreement with Vaxcyte approximates its fair value as of December 31, 2023, and is based on the Company's current estimates of future royalties expected to be earned over the estimated life of the royalty term arrangement. See Note 10. Deferred Royalty Obligation Related to the Sale of Future Royalties for a description of the Level 3 inputs used to estimate the fair value of the liability.

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, without consideration for potential dilutive common shares. Basic net loss per share is the same as diluted net loss per share as the inclusion of all potentially dilutive securities would have been anti-dilutive given the net loss of the Company.

3. Fair Value Measurements

The following table sets forth the fair value of the Company's financial assets and liabilities measured on a recurring basis by level within the fair value hierarchy:

	December 31, 2023			
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Assets:				
Money market funds	$ 56,397	$ 56,397	$ -	$ -
Commercial paper	82,152	-	82,152	-
Corporate debt securities	61,894	-	61,894	-
Equity securities	41,937	41,937	-	-
Asset-backed securities	10,505	-	10,505	-
U.S. government securities	113,652	113,652	-	-
U.S. agency securities	4,961	-	4,961	-
Total	$ 371,498	$ 211,986	$ 159,512	$ -

	December 31, 2022			
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Assets:				
Money market funds	$ 36,486	$ 36,486	$ -	$ -
Commercial paper	87,140	-	87,140	-
Corporate debt securities	36,429	-	36,429	-
Equity securities	32,020	32,020	-	-
Asset-backed securities	14,016	-	14,016	-
U.S. government securities	91,251	91,251	-	-
U.S. agency securities	16,607	-	16,607	-
Supranational debt securities	16,481	-	16,481	-
Total	$ 330,430	$ 159,757	$ 170,673	$ -

Where applicable, the Company uses quoted market prices in active markets for identical assets to determine fair value. This pricing methodology applies to Level 1 investments, which are comprised of money market funds, U.S. government securities and the shares of Vaxcyte common stock held by the Company.

If quoted prices in active markets for identical assets are not available, then the Company uses quoted prices for similar assets or inputs other than quoted prices that are observable, either directly or indirectly. These investments are included in Level 2 and consist of commercial paper, corporate debt securities, asset-backed securities, U.S. agency securities and supranational debt securities. These assets are valued using market prices when available, adjusting for accretion of the purchase price to face value at maturity.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

In certain cases where there is limited activity or less transparency around inputs to valuation, securities are classified as Level 3 within the valuation hierarchy. As of December 31, 2023, the deferred royalty obligation

related to the sale of future Vaxcyte royalties was classified as Level 3 within the valuation hierarchy. Refer to Note 10 below for information relating to the Purchase Agreement between the Company and Blackstone, pursuant to which the Company sold to Blackstone its 4% royalty, or revenue interest, in potential future net sales of Vaxcyte products, including VAX-24 and VAX-31. As of December 31, 2022, the Company did not hold any securities that were classified as Level 3 within the valuation hierarchy.

Investments in Equity Securities

As of December 31, 2023 and 2022, the Company held 667,780 shares of Vaxcyte common stock with an estimated fair value of $41.9 million and $32.0 million, respectively. The Company recognized an unrealized gain (loss) of $9.9 million, $12.1 million and $(4.5) million for the years ended December 31, 2023, 2022 and 2021, respectively.

The Company sold zero and 1,058,434 shares of Vaxcyte common stock at their fair market value during the years ended December 31, 2023 and 2022, respectively. The Company recognized a gain of $4.1 million on equity securities during the year ended December 31, 2022 which is recorded under interest and other income (expense), net, in the Statements of Operations.

4. Cash Equivalents and Marketable Securities

Cash equivalents and marketable securities consisted of the following:

	December 31, 2023			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)			
Money market funds	$ 56,397	$ -	$ -	$ 56,397
Commercial paper	82,179	1	(28)	82,152
Corporate debt securities	61,887	12	(5)	61,894
Asset-based securities	10,505	-	-	10,505
U.S. government securities	113,612	40	-	113,652
U.S. agency securities	4,960	1	-	4,961
Total	329,540	54	(33)	329,561
Less: amounts classified as cash equivalents	(65,144)	(4)	-	(65,148)
Total marketable securities	$ 264,396	$ 50	$ (33)	$ 264,413

	December 31, 2022			
	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)			
Money market funds	$ 36,486	$ -	$ -	$ 36,486
Commercial paper	87,140	-	-	87,140
Corporate debt securities	36,554	2	(127)	36,429
Asset-based securities	14,026	-	(10)	14,016
U.S. government securities	91,619	8	(376)	91,251
U.S. agency securities	16,646	-	(39)	16,607
Supranational debt securities	16,555	-	(74)	16,481
Total	299,026	10	(626)	298,410
Less: amounts classified as cash equivalents	(43,318)	(2)	-	(43,320)
Total marketable securities	$ 255,708	$ 8	$ (626)	$ 255,090

No marketable securities had maturities of more than one year as of December 31, 2023 and 2022.

There were $110.9 million and $139.5 million of investments in an unrealized loss position of $33,000 and $0.6 million as of December 31, 2023 and 2022, respectively. During the years ended December 31, 2023, 2022 and 2021, the Company did not record any other-than-temporary impairment charges on its available-for-sale

securities. Based on the Company's procedures under the expected credit loss model, including an assessment of unrealized gains and losses on the portfolio after December 31, 2023, the Company concluded that the unrealized losses for its marketable securities were not attributable to credit and therefore an allowance for credit losses for these securities has not been recorded as of December 31, 2023. Also, based on the scheduled maturities of the investments, the Company was more likely than not to hold these investments for a period of time sufficient for a recovery of the Company's cost basis.

The Company recognized no material gains or losses on its cash equivalents and current marketable securities as of December 31, 2023 and as a result, the Company did not reclassify any amounts out of accumulated other comprehensive income (loss) for the year then ended.

5. Collaboration and License Agreements and Supply Agreements

The Company has entered into collaboration and license agreements and supply agreements with various pharmaceutical and biotechnology companies. The Company analyzes its agreements to determine whether it should account for the agreements within the scope of ASC 808, and, if so, it analyzes whether it should account for any elements under ASC 606.

The Company's accounts receivable balances may contain billed and unbilled amounts from upfront payments, milestones and other contingent payments, as well as reimbursable costs from collaboration and license agreements and supply agreements. The Company has not experienced credit losses from its accounts receivable and, therefore, has not recorded a reserve for estimated credit losses as of December 31, 2023 and 2022.

In accordance with the collaboration, license, and supply agreements, the Company recognized revenue as follows:

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Bristol-Myers Squibb Company ("BMS")	$ 5,590	$ 9,752	$ 11,483
Merck Sharp & Dohme Corporation ("Merck")	5,869	11,600	42,780
Merck KGaA, Darmstadt, Germany (operating in the United States and Canada under the name "EMD Serono")	8	2,695	4,576
Astellas Pharma Inc. ("Astellas")	33,992	10,897	-
Tasly Biopharmaceuticals Co., Ltd. ("Tasly")	6,970	25,000	-
Vaxcyte, Inc. ('Vaxcyte")	101,302	3,828	3,041
BioNova Pharmaceuticals, Ltd. ("BioNova")	-	4,000	-
Total revenue	$ 153,731	$ 67,772	$ 61,880

The following table presents the changes in the Company's deferred revenue balance from the agreements during the year ended December 31, 2023:

	Year ended December 31, 2023
	(in thousands)
Deferred revenue—December 31, 2022	$ 106,644
Additions to deferred revenue	11,018
Recognition of revenue in current period	(43,617)
Deferred revenue—December 31, 2023	$ 74,045

The Company's balance of deferred revenue contains upfront and contingent payments for obligations from our agreements which remain partially unsatisfied. The Company expects to recognize approximately $20.7 million of the deferred revenue over the next twelve months.

Collaboration with BMS

BMS Agreement and 2018 BMS Master Services Agreement

In September 2014, the Company signed a Collaboration and License Agreement (the “BMS Agreement”) with BMS to discover and develop bispecific antibodies and/or antibody-drug conjugates (“ADCs”), focused primarily on the field of immuno-oncology, using the Company’s proprietary integrated cell-free protein synthesis platform, XpressCF®. In August 2017, the Company entered into an amended and restated collaboration and license agreement with BMS to refocus the collaboration on four programs that were advancing through preclinical development, including an ADC program targeting B cell maturation antigen (“BCMA ADC” or “CC-99712”).

In May 2019, the U.S. Food and Drug Administration cleared the investigational new drug (“IND”) application for the BCMA ADC, which was discovered and manufactured by the Company and is the first collaboration program IND.

In March 2018, the Company entered into a Master Development and Clinical Manufacturing Services Agreement (the “2018 BMS Master Services Agreement”) with BMS, wherein BMS requested the Company to provide development, manufacturing and supply chain management services, including clinical product supply.

In June 2023, the Company received a notice of termination from BMS indicating that it was stopping development of CC-99712 due to a portfolio prioritization decision. The termination of the BMS Agreement was effective as of October 7, 2023 (the "Termination Date"). Following the Termination Date, the Company has sole worldwide rights to CC-99712.

As of December 31, 2023 and 2022, there was no deferred revenue under the BMS Agreement.

As of December 31, 2023 and 2022, there was zero and $3.1 million, respectively, of deferred revenue under the 2018 BMS Master Services Agreement.

Revenues under the BMS Agreement and the 2018 BMS Master Services Agreement were as follows:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Research and development services	$ 412	$ 700	$ 940
Materials supply	5,178	9,052	10,543
Total revenue	$ 5,590	$ 9,752	$ 11,483

Collaboration with Merck

2018 Merck Agreement

In July 2018, the Company entered into an agreement (the “2018 Merck Agreement”) with Merck for access to the Company’s technology and the identification and preclinical research and development of two target programs, with an option for Merck to engage the Company to continue these activities for a third program, upon the payment of an additional amount, focusing on cytokine derivatives for cancer and autoimmune disorders, with an initial transaction price of $60.0 million. The option to expand activities to a third program expired in January 2021.

In March 2020, Merck exercised its option to extend the research term of the collaboration’s first cytokine-derivative program by one year, which, pursuant to the terms of the 2018 Merck Agreement, triggered a payment of $5.0 million.

In April 2021, the Company earned a $15.0 million contingent payment for the initiation by Merck of the first IND-enabling toxicology study under the first cytokine-derivative program in the collaboration.

In September 2021, the Company entered into an amendment to the 2018 Merck Agreement (the "2021 Amendment") to extend the research term for the first program in the 2018 Merck Agreement. Under the terms of the 2021 Amendment, the Company received a payment of $2.5 million with an additional $7.5 million to be received upon the achievement of certain developmental milestones by Merck on a second molecule under the first cytokine-derivative program of the collaboration. Merck decided not to pursue further development of a second molecule under the first cytokine-derivative program of the collaboration and, therefore, allowed the option to extend the period for nomination of additional clinical candidates under the 2021 Amendment to expire in June 2022.

In December 2021, Merck did not extend the research term for the second research program of the collaboration, which research program reverted to the Company. The first research program of the collaboration is focused on MK-1484, a distinct cytokine derivative molecule for the treatment of cancer. The Company is eligible to receive aggregate contingent payments of up to approximately $500 million for the target program selected by Merck, assuming the development and sale of the therapeutic candidate and all possible indications identified under the collaboration. If one or more products from the target program is developed for non-oncology or a single indication, the Company will be eligible for reduced aggregate contingent payments. In addition, the Company is eligible to receive tiered royalties ranging from mid-single digit to low teen percentages on the worldwide sales of any commercial products that may result from the collaboration.

In July 2022, the first patient was dosed with MK-1484 in a Phase 1 study. As a result of this achievement, the Company earned and received a $10.0 million contingent payment from Merck during the year ended December 31, 2022.

As of December 31, 2023 and 2022, there was no deferred revenue under the 2018 Merck Agreement and 2021 Amendment.

2020 Merck Master Services Agreement

In August 2020, the Company entered into a Pre-Clinical and Clinical Supply Agreement (the "2020 Merck Master Services Agreement") with Merck, wherein Merck requested the Company to provide development, manufacturing and supply chain management services, including clinical product supply, upon completion of the research programs under the 2018 Merck Agreement.

As of both December 31, 2023 and 2022, there was no deferred revenue under the 2020 Merck Master Services Agreement.

Revenues under the 2018 Merck Agreement and the 2020 Merck Master Services Agreement were as follows:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Ongoing performance related to unsatisfied performance obligations	$ -	$ 862	$ 35,098
Contingent payment	-	10,000	-
Research and development services	245	577	2,666
Financing component on unearned revenue	-	-	610
Materials supply	5,624	161	4,406
Total revenue	$ 5,869	$ 11,600	$ 42,780

Collaboration with EMD Serono

MDA Agreement and 2019 EMD Serono Supply Agreement

The Company signed a Collaboration Agreement and a License Agreement with EMD Serono in May 2014 and September 2014, respectively, which were entered into in contemplation of each other and therefore treated as a single agreement for accounting purposes. The Collaboration Agreement was subsumed into the License Agreement (the "MDA Agreement"), which agreement is to develop ADCs for multiple cancer targets.

In April 2019, the Company entered into an ADC Product Preclinical and Phase I Clinical Supply Agreement (the "2019 EMD Serono Supply Agreement") with EMD Serono, wherein EMD Serono requested the Company to provide development, manufacturing and supply chain management services, including clinical product supply.

In March 2023, EMD Serono disclosed its decision to close the Phase 1a trial of M1231 in patients with solid tumors and not initiate a previously planned expansion study. EMD Serono stated that the decision was based on strategic portfolio considerations.

As of December 31, 2023 and 2022, there was no deferred revenue related to payments received by the Company under the EMD Serono agreements.

Revenues under the EMD Serono agreements were as follows:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Contingent payment	$ -	$ -	$ 2,000
Research and development services	6	510	851
Materials supply	2	2,185	1,725
Total revenue	$ 8	$ 2,695	$ 4,576

Astellas License and Collaboration Agreement

In June 2022, the Company entered into a License and Collaboration Agreement (the "Astellas Agreement") with Astellas for the development of immunostimulatory antibody-drug conjugates for up to three biological targets, to be identified by Astellas. The Company will conduct research and pre-clinical development of any compound (as designated by Astellas) in each of the three programs in accordance with the terms of a research plan between the Company and Astellas. Astellas will have an exclusive worldwide license to develop and commercialize any such designated compound, subject to the Company's rights to participate in cost and profit sharing in the United States, as described below.

Pursuant to the Astellas Agreement, the Company received from Astellas a one-time, nonrefundable, non-creditable, upfront payment of $90.0 million during the year ended December 31, 2022. Under ASC 808 and ASC 606, the Company determined that both parties are active participants in the activities and are exposed to significant risks and rewards dependent on the success of the development program, and identified four performance obligations under the Astellas Agreement as: (1) performance of services related to the first target program; (2) performance of services related to the second target program; (3) performance of services related to the third target program; and (4) the Company's estimated future services on the collaboration JSC. The transaction price of $90.0 million was allocated among the performance obligations using the Company's best estimate of the standalone selling price, or SSP, for each of the associated performance obligations. Revenue allocated to the three target programs, which totaled $89.1 million, is being recognized on a proportion of performance basis, using FTE cost as the basis of measurement, with such performance expected to occur over an estimated service period of four years for each target program. As it pertains to the JSC performance obligation, the revenue allocated to such performance obligation was $0.9 million, and is being recognized on a proportion of performance basis using FTE cost as the basis of measurement, and such effort is expected to be incurred on a relatively consistent basis throughout the term of the Astellas Agreement.

Additionally, under ASC 606, the Company determined a financing component associated with the $90.0 million upfront payment and has calculated $32.8 million as of December 31, 2023 on the unearned revenue portion beyond one year from the effective date of the agreement, which amount is being recognized as interest expense and revenue over the estimated service period for the three target programs.

The Company is also eligible to receive up to $422.5 million in development, regulatory and commercial milestones for each product candidate, and tiered royalties ranging from low double-digit to mid-teen percentages on worldwide sales of any commercial products that may result from the collaboration, subject to customary deductions under certain circumstances. The Company can also elect to convert any product candidate into a cost and profit-sharing arrangement, for the United States only. In the event the Company makes such election, it will share commercialization costs and profits relating to such product candidate equally with Astellas in the United States, and no royalties will be due from Astellas for net sales of such product candidates in the United States.

Revenues under the Astellas Agreement were as follows:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Ongoing performance related to unsatisfied performance obligations	$ 17,015	$ 3,940	$ -
Research and development services	6,584	1,878	-
Financing component on unearned revenue	9,836	5,079	-
Materials supply	557	-	-
Total revenue	$ 33,992	$ 10,897	$ -

As of December 31, 2023 and 2022, there was $69.0 million and $86.1 million of deferred revenue, respectively, related to the upfront payment received by the Company under the Astellas Agreement.

Collaboration with Tasly

Tasly License Agreement

In December 2021, the Company entered into a license agreement with Tasly to grant Tasly an exclusive license to develop and commercialize STRO-002, or luveltamab tazevibulin, or luvelta, in Greater China (the "Tasly License Agreement"). Tasly will pursue the clinical development, regulatory approval, and commercialization of luvelta in multiple indications, including ovarian cancer, non-small cell lung cancer, triple-negative breast cancer, and other indications in Greater China. The Company will retain development and commercial rights of luvelta globally outside of Greater China, including the United States.

Under the Tasly License Agreement, Tasly was obligated to make to the Company an initial nonrefundable upfront payment of $40.0 million, with additional potential payments totaling up to $345 million related to development, regulatory and commercialization contingent payments and milestones. The Company will provide luvelta to Tasly under appropriate clinical and commercial supply service agreements. Upon commercialization, the Company will receive tiered royalties, ranging from low- to mid-teen percentages based on annual net sales of luvelta in Greater China for at least ten years following the first commercial sale of luvelta in Greater China.

The Company determined that the Tasly License Agreement falls within the scope of ASC 808, as both parties are active participants in the activities and are exposed to significant risks and rewards dependent on the success of the commercialization of indications for luvelta in Greater China. The Company concluded that the Tasly License Agreement contained the following units of account: i) licensed know-how and Sutro patents, license to trademark rights, and initial regulatory data and information necessary to prepare an IND; and ii) collaboration governance and information sharing activities, such as JSC participation and ongoing regulatory and pharmacovigilance support.

The promises related to the licensed know-how and Sutro patents, license to trademark rights, and initial regulatory data and information necessary to prepare an IND are considered to be interdependent and not distinct from each other, representing a combined output. The Company determined that these promises are capable of being distinct from the collaboration governance and information sharing activities discussed below and further determined that this unit of account is a vendor-customer relationship and accounted for it in accordance with ASC 606. All potential future milestones and other payments were considered constrained at the inception of the Tasly License Agreement since the Company could not conclude it was probable that a significant reversal in the amount of revenue recognized would not occur. Since there is only one performance obligation accounted for under ASC 606, no allocation of the transaction price was necessary.

The Company determined that the unit of account consisting of collaboration governance and information sharing activities, such as JSC participation and ongoing regulatory and pharmacovigilance support, do not represent a customer-vendor relationship between the Company and Tasly. These promises are considered to be interdependent and not distinct from each other, representing a combined output. However, the Company determined that these promises are capable of being distinct from the intellectual property and data license promises discussed above. As such, based on the nature of the agreement and collaborative activities, the Company determined that the costs associated with these governance and information sharing activities performed under the agreement will be included in research and development expenses in the Statements of Operations, with any reimbursement of costs by Tasly reflected as a reduction of such expenses. During the year ended December 31, 2023 and 2022, the Company did not recognize any material reduction of research and development expenses under the Tasly License Agreement.

In April 2022, the Company entered into amendment No. 1 (the "Tasly Amendment") to the Tasly License Agreement with Tasly. Pursuant to the Tasly Amendment, the initial nonrefundable upfront payment due by Tasly was amended to $25.0 million, and a $15.0 million payment will become payable to the Company upon the achievement of certain regulatory milestones. The Tasly Amendment also added an additional regulatory milestone payment to the Tasly License Agreement, providing additional potential payments totaling up to $350.0 million related to development, regulatory and commercialization milestones, beyond the payments described above, and made certain other ministerial edits.

During the year ended December 31, 2022, the Company recognized the $25.0 million upfront payment as revenue after the payment, net of a withholding tax, was received by the Company from Tasly. The withholding tax of $2.5 million was recorded as an income tax charge related to the upfront payment.

During the year ended December 31, 2023, the Company recognized a $5.0 million contingent payment as revenue, net of withholding tax, after Tasly received its first IND clearance by National Medical Products Administration, or NMPA, in Greater China. The withholding tax of $0.5 million was recorded as an income tax charge related to the contingent payment.

During the year ended December 31, 2023, the Company also recorded a $5.0 million contingent payment, received by the Company from Tasly related to the first patient dosed in the Company's REFRaME-O1 trial for luvelta, as deferred revenue, net of withholding tax of $0.5 million. The REFRaME-O1 study consists of two parts, Part I being the dose-finding portion and Part II being the portion of the study that will focus on the selected dose from Part I, and is intended to generate data to enable the potential registration of luvelta. Although it currently intends to conduct the REFRaME-O1 study to completion, the Company has the sole discretion to terminate the REFRaME-O1 study at any time. As such, the Company has agreed with Tasly that, in the event the Company terminates the REFRaME-O1 study prior to dosing the first patient in Part II, the Company will refund Tasly the contingent payment received by the Company within 30 days of such study termination. Given the above, the contingent payment received by the Company was considered constrained for accounting purposes during the year ended December 31, 2023, since the Company could not conclude it was probable that a significant reversal in the amount of revenue recognized would not occur. The withholding tax was recorded by the Company as a tax charge related to the received contingent payment.

2023 Tasly Supply Agreement

In June 2023, the Company entered into a Master Development and Clinical Supply Agreement (the "2023 Tasly Supply Agreement") with Tasly, wherein Tasly requested the Company to provide development, manufacturing and supply chain management services, including clinical product supply.

Revenues under the Tasly agreements were as follows:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Upfront payment	$ -	$ 25,000	$ -
Contingent payment	5,000	-	-
Research and development services	92	-	-
Materials supply	1,878	-	-
Total revenue	$ 6,970	$ 25,000	$ -

Agreements with Vaxcyte

Vaxcyte Supply Agreement

In May 2018, the Company entered into a Supply Agreement (the "Supply Agreement") with Vaxcyte, wherein Vaxcyte engaged the Company to provide research and development services and to supply extracts and custom reagents, as requested by Vaxcyte. The pricing is based on an agreed upon cost-plus arrangement.

During 2020, upon Vaxcyte's request and their agreement to reimburse the related costs, the Company entered into agreements with third-party contract manufacturing organizations, or CMOs, to conduct process transfers to allow for such CMOs to manufacture and supply extract and custom reagents for Vaxcyte. As part of the agreement with Vaxcyte, should the Company decide to purchase extract from the extract CMO, the Company would be required to reimburse Vaxcyte for a portion of all incurred process transfer costs. As of December 31, 2023 and 2022, there was $6.9 million and $4.8 million in such accruals related to the Vaxcyte Supply Agreement.

For the years ended December 31, 2023, 2022 and 2021, the agreed-upon reimbursements by Vaxcyte of the costs associated with such arrangements, principally for pass-through costs from the CMOs, were $8.6 million, $12.4 million and $8.9 million, respectively, and were accounted for by the Company as a reduction to research and development expense based on the Company's conclusion that Vaxcyte was not a customer for such activities and associated payments.

Vaxcyte Agreement

In December 2022, the Company entered into a letter agreement (the "Vaxcyte Agreement") with Vaxcyte under which the Company granted to Vaxcyte (i) authorization to enter into an agreement with an independent alternate CMO to source cell-free extract solely for the products it licensed from the Company, allowing Vaxcyte to have direct oversight over financial and operational aspects of the relationship with the CMO ("CMO Relationship Rights"), and (ii) a right, but not an obligation, to obtain certain exclusive rights to internally manufacture and/or source extract from certain CMOs and the right to independently develop and make improvements to extract for use in connection with the exploitation of certain vaccine compositions (the "Option"). The Option was exercisable for five years following the effective date of the Vaxcyte Agreement (the "Option Period"), subject to potential acceleration in the event of a change of control of Vaxcyte.

Pursuant to the Vaxcyte Agreement, the Company received a one-time, nonrefundable, non-creditable, upfront payment of $10.0 million in cash, and 167,780 shares of Vaxcyte common stock with a fair value of $7.5 million in December 2022.

Additionally, pursuant to the Vaxcyte Agreement, the Company and Vaxcyte agreed to negotiate the terms and conditions of a form definitive agreement to be entered into in the event Vaxcyte exercises the Option (the "Form Definitive Agreement"). In September 2023, the Company and Vaxcyte mutually agreed upon the Form Definitive Agreement, and in October 2023, the Company received a $5.0 million payment from Vaxcyte.

Effective immediately upon agreement to the Form Definitive Agreement, the Company and Vaxcyte entered into amendment No 3. (the "Amendment") to that certain license agreement between the Company and Vaxcyte, dated August 1, 2014, and amended and restated on October 12, 2015, and amended again on May 9, 2018 and May 29, 2018 (the "License Agreement"). The Amendment amended certain terms of the License Agreement including with respect to (i) royalty reduction provisions applicable in the event of expiration of relevant patent

claims, which would result in lower royalties payable by Vaxcyte under certain circumstances, (ii) the ownership, prosecution, maintenance and enforcement of certain intellectual property rights licensed or arising under the License Agreement, and (iii) the timing and form for financial reporting of royalty payment calculations.

In November 2023 (the "Exercise Date"), Vaxcyte exercised the Option by submitting written notice thereof to the Company and concurrently paid the Company $50.0 million in cash as the first of two installment payments for the Option exercise price. Under the Vaxcyte Agreement, Vaxcyte is obligated to pay the Company an additional $25.0 million in cash within six months of the Exercise Date as the second of two installment payments for the Option exercise price.

Upon the occurrence of certain regulatory milestones, Vaxcyte would be obligated to pay the Company certain additional payments totaling up to $60.0 million in cash. In the event that Vaxcyte undergoes a change of control, certain rights and payments may be accelerated. These contingent payments were considered constrained variable consideration or otherwise not eligible for revenue recognition at inception and as of December 31, 2023.

The Company evaluated the terms of the Vaxcyte Agreement and concluded that the Vaxcyte Agreement is considered a new standalone contract and distinct from the previously existing agreements with Vaxcyte. Under ASC 606, the Company determined that Vaxcyte is a customer for this arrangement and identified the promised goods and services under the Vaxcyte Agreement as: (1) the Option; (2) the Form Definitive Agreement; (3) CMO Relationship Rights; and (4) Joint steering committee participation. The Company concluded that the promises within the contract are interrelated and interdependent of one another. As such, these are not considered distinct but are combined as a single performance obligation. This single performance obligation is considered a material right as it provides Vaxcyte with the right to acquire additional goods at a price it would not have received without having entered into the Vaxcyte Agreement. Revenue from the single performance obligation amounting to $97.5 million was recognized during the year ended December 31, 2023, as the Option was exercised by Vaxcyte on the Exercise Date and the single performance obligation was satisfied under the Vaxcyte Agreement.

As of December 31, 2023 and 2022, there was zero and $17.5 million, respectively, of deferred revenue related to the payments received by the Company under the Vaxcyte Agreement.

Revenues under the Vaxcyte agreements were as follows:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Upfront payments	$ 97,500	$ -	$ -
Research and development services	2,435	2,356	1,131
Materials supply	1,367	1,472	1,910
Total revenue	$ 101,302	$ 3,828	$ 3,041

Refer to Note 10 below for information relating to the Purchase Agreement between the Company and Blackstone, pursuant to which the Company sold to Blackstone its 4% royalty, or revenue interest, in potential future net sales of Vaxcyte products, including VAX-24 and VAX-31.

BioNova Option Agreement

In October 2021, the Company entered into an agreement with BioNova granting BioNova the option to obtain exclusive rights to develop and commercialize STRO-001 in China, Hong Kong, Macau and Taiwan (“Greater China”) and amended the BioNova Option Agreement with BioNova in the first quarter of 2023. In March 2024, BioNova notified the Company that it had decided to terminate both the BioNova Option Agreement and clinical development of STRO-001 in Greater China. Following receipt of this notice, the Company decided to suspend development of STRO-001.

6. Property and Equipment, Net

Property and equipment, net, consists of the following:

	December 31,	
	2023	2022
	(in thousands)	
Computer equipment and software	$ 1,750	$ 1,536
Furniture and office equipment	244	247
Laboratory equipment	38,006	35,843
Leasehold improvements	23,606	23,215
Construction in progress	497	1,685
Total	64,103	62,526
Less accumulated depreciation and amortization	(42,163)	(37,905)
Total property and equipment, net	$ 21,940	$ 24,621

Depreciation and amortization expense amounted to $6.8 million, $5.7 million and $4.8 million for the years ended December 31, 2023, 2022 and 2021, respectively.

7. Loan and Security Agreement

In August 2017, the Company entered into a loan and security agreement with Oxford Finance LLC (“Oxford”) and Silicon Valley Bank (“SVB”) under which it borrowed $15.0 million (the “August 2017 Loan”). In connection with the August 2017 Loan, the Company issued to Oxford and SVB warrants to purchase 46,359 shares of Company's common stock.

On February 28, 2020, (the “Effective Date”), the Company entered into a loan and security agreement (the “Loan and Security Agreement”) with Oxford as the collateral agent and a lender, and SVB as a lender (together with Oxford, the “Lenders”), pursuant to which the Lenders agreed to lend the Company up to an aggregate of $25.0 million (the “Term A Loan”). Upon entering into the Loan and Security Agreement, the Company borrowed $25.0 million from the Lenders, with approximately $9.6 million of such amount applied to the repayment of the outstanding principal, interest and final payment fees owed pursuant to the August 2017 Loan. As such, the August 2017 Loan has been paid in full. The Company accounted for the issuance of the Loan and Security Agreement and repayment of the August 2017 Loan as a debt modification. The associated unamortized debt discount on the August 2017 Loan and new lender fees from the debt issuance was amortized as interest expense using the effective interest method until the maturity date of the Term A Loan.

In June 2022, the Company entered into an amendment to the Loan and Security Agreement with Oxford and SVB (the “LSA Amendment”). The LSA Amendment added a financial covenant that requires the Company to maintain a minimum unrestricted cash balance of $10.0 million. The Company was in compliance with the financial covenant under the LSA Amendment as of December 31, 2023.

In June 2023, the Company entered into an amendment to the Loan and Security Agreement with Oxford and SVB (the “5th LSA Amendment”). Under the 5th LSA Amendment, effective July 1, 2023, the loan bore interest at the floating per annum rate of interest equal to the greater of (i) 8.07% and (ii) the sum of (a) a specific published 1-month secured overnight financing rate (SOFR) reported on the last business day of the month that immediately precedes the month in which the interest will accrue plus (b) 0.10%, plus (c) 6.40%. There was an immaterial impact of the 5th LSA Amendment on the financial statements of the Company.

The Term A Loan matured on March 1, 2024 (the “Maturity Date”) and the Company made a final payment of 3.83% of the original principal amount of the Term A Loan on the Maturity Date.

In connection with entering into the Loan and Security Agreement, the Company issued to the Lenders warrants exercisable for 81,257 shares of the Company's common stock (the "2020 Warrants"). The 2020 Warrants are exercisable in whole or in part, immediately, and have a per share exercise price of $9.23, which was the closing price of the Company's common stock reported on the Nasdaq Global Market on the day prior to the Effective Date. The 2020 Warrants will terminate on the earlier of February 28, 2030 or the closing of certain merger or consolidation transactions. The estimated fair value upon issuance of the Warrants of $0.6 million is recorded as a debt discount on the associated borrowings on the Company's Balance Sheet. The debt discount was amortized to interest expense over the repayment period of the loan using the effective-interest method.

During the years ended December 31, 2023, 2022 and 2021, the Company recorded interest expense related to loans outstanding of $1.3 million, $2.4 million and $2.6 million, respectively, with average interest rates of 11.49%, 8.72% and 8.07%, respectively, which includes interest related to the accretion of debt discount of $0.3 million, $0.5 million and $0.6 million, respectively.

Long-term debt and net premium balances are as follows:

	December 31,	
	2023	2022
	(in thousands)	
Principal amount of debt outstanding	$ 3,125	$ 15,625
Net premium associated with accretion of final payment and other debt issuance costs	936	646
Debt, current and non-current	4,061	16,271
Less: Debt, current portion	(4,061)	(12,500)
Debt, non-current portion	$ -	$ 3,771

Future minimum payments of principal and estimated payments of interest on the Company's Loan and Security Agreement as of December 31, 2023 are as follows:

Year Ending December 31:	Amount (in thousands)
Total future maturities - 2024	$ 4,126
Less: amount representing interest	(43)
Less: final payment	(958)
Total principal amount of debt outstanding	$ 3,125

8. Commitments and Contingencies

Leases

In June 2021, the Company entered into a third amendment (the "Third Amendment") to its manufacturing facility lease, dated May 18, 2011, as amended, by and between Alemany Plaza LLC, located in San Carlos, California (the "San Carlos Lease"), as an extension to the term of the San Carlos Lease for a period of five years (the "Lease Extension Period"). Pursuant to the Third Amendment, the San Carlos Lease will expire on July 31, 2026, and it includes an option to renew the San Carlos Lease for an additional five years. The aggregate estimated base rent payments due over the Lease Extension Period is approximately $4.2 million, subject to certain terms contained in the San Carlos Lease.

In June 2021, the Company entered into a first amendment (the "First Amendment") to its manufacturing support facility lease, dated March 4, 2015, as amended, by and between 870 Industrial Road LLC, located in San Carlos, California (the "Industrial Lease"), as an extension to the term of the Industrial Lease for a period of five years (the "Industrial Lease Extension Period"). Pursuant to the first Amendment, the Industrial Lease will expire on June 30, 2026, and it includes an option to renew the Industrial Lease for an additional five years. The aggregate estimated base rent payments due over the Industrial Lease Extension Period is approximately $4.3 million, subject to certain terms contained in the Industrial Lease.

In September 2020, the Company entered into a sublease agreement (the "Sublease") with Five Prime Therapeutics, Inc. (the "Sublessor"), for approximately 115,466 square feet, in a building located in South San Francisco, California (the "Premises"). The Company uses the Premises as its corporate headquarters and to conduct (or expand) research and development activities. The Company commenced making monthly payments for the first 85,755 square feet of the Premises ("Initial Premises") in July 2021, with occupancy of such space commencing in August 2021. The Company was provided early access to the Initial Premises commencing in the fourth quarter of 2020 to conduct certain planning and tenant improvement work. The Sublease is subordinate to the lease agreement, effective December 12, 2016, between the Sublessor and HCP Oyster Point III LLC (the "Landlord"). The Company commenced using the remaining 29,711 square feet of the Premises, or the Expansion Premises on July 1, 2023 under the sublease agreement. The Sublease for both the Initial Premises and Expansion Premises will expire on December 31, 2027. With a commencement date on the Initial Premises of July 1, 2021, and Expansion Premises of July 1, 2023, the aggregate estimated base rent payments due over the term of the Sublease are approximately $39.1 million, including the approximately $5.2 million in potential financial benefit to the Company of base rent abatement to be provided by the Sublessor, subject to certain terms contained in the Sublease. The Sublease contains customary provisions requiring the Company to pay its pro rata share of utilities and a portion of the operating expenses and certain taxes, assessments and fees of the Premises and provisions allowing the Sublessor to terminate the Sublease upon the termination of the lease with the Landlord or if the Company fails to remedy a breach of certain of its obligations within specified time periods. Additionally, the Company posted a security deposit of $0.9 million, which is reflected as restricted cash in non-current assets on the Company's Balance Sheets as of December 31, 2023 and 2022.

The Company recognizes rent expense for these operating leases on a straight-line basis over the lease period. The components of lease costs, which the Company includes in operating expenses in the Statements of Operations, were as follows:

	Year ended December 31,		
	2023	2022	2021
	(in thousands)		
Operating lease cost	$ 7,039	$ 6,154	$ 8,355
Short-term lease cost	274	82	117
Variable lease cost	2,047	1,610	2,089
Total lease cost	$ 9,360	$ 7,846	$ 10,561

During the years ended December 31, 2023, 2022 and 2021, the Company recorded operating lease expense of $7.0 million, $6.2 million and $8.4 million, respectively, and paid $8.0 million, $1.7 million, and $6.2 million, respectively, of operating lease payments related to the lease liabilities, which the Company includes in net cash used in operating activities in the Statements of Cash Flows.

As of December 31, 2023 and 2022, the weighted-average remaining lease term was 3.8 years and 4.8 years, respectively, and the weighted-average discount rate used to determine the operating lease liability was 10.8% for both years.

As of December 31, 2023, the maturities of the Company's operating lease liabilities were as follows:

Year Ending December 31,	Amount
	(in thousands)
2024	$ 9,219
2025	9,533
2026	8,994
2027	8,289
Total lease payments	36,035
Less: imputed interest	(6,461)
Operating lease liabilities	29,574
Less: current portion	(6,420)
Total lease liabilities, non-current	$ 23,154

Indemnification & Other

In the ordinary course of business, the Company may provide indemnifications of varying scope and terms to vendors, lessors, business partners, board members, officers, and other parties with respect to certain matters, including, but not limited to, losses arising out of breach of such agreements, services to be provided by the Company, negligence or willful misconduct of the Company, violations of law by the Company, or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with directors and certain officers and employees that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers or employees. No demands have been made upon the Company to provide indemnification under such agreements, and thus, there are no claims that the Company is aware of that could have a material effect on the Company's Balance Sheets, Statements of Operations, or Statements of Cash Flows. The Company currently has directors' and officers' liability insurance.

In addition, the Company enters into agreements in the normal course of business, including with contract research organizations for clinical trials, contract manufacturing organizations for certain manufacturing services, and vendors for preclinical studies and other services and products for operating purposes, which are generally cancelable upon written notice.

9. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

	December 31,	
	2023	2022
	(in thousands)	
Vaxcyte-related accrual under Vaxcyte Supply Agreement	$ 6,933	$ 4,830
CMO-related accrual	8,195	3,900
Clinical trials-related accrual	4,283	2,954
Tax and related expenses	15,165	-
Other	3,897	3,080
Total accrued expenses and other current liabilities	$ 38,473	$ 14,764

10. Deferred Royalty Obligation related to the Sale of Future Royalties

In June 2023, the Company entered into the Purchase Agreement with Blackstone, pursuant to which the Company sold to Blackstone its 4% royalty, or revenue interest, in the potential future net sales of Vaxcyte products, including the Purchased Interest under the 2015 License Agreement. As described in Note 5. Collaboration and License Agreements and Supply Agreements, Vaxcyte Agreement, following agreement with Vaxcyte on the Form Definitive Agreement and upon effectiveness of the amendment No. 3 to the 2015 License Agreement, the revenue interest in the 4% royalty on potential future net sales of Vaxcyte products other than Vaxcyte's PCV products reverted to the Company. The Company retains the right to discover and develop vaccines for the treatment or prophylaxis of any disease that is not caused by an infectious pathogen, including cancer.

In June 2023, Blackstone made an upfront payment of $140.0 million to the Company and will also pay up to an additional $250.0 million upon the achievement of various return thresholds as set forth in the Purchase Agreement.

Under the Purchase Agreement, and in connection with its sale of the Purchased Interest, the Company has agreed to certain covenants with respect to the exercise of its rights under the 2015 License Agreement, including with respect to the Company's right to amend, assign and terminate the 2015 License Agreement. The Purchase Agreement contains other customary terms and conditions, including representations and warranties, covenants, and indemnification obligations in favor of each party.

The Company recorded the $140.0 million upfront payment from Blackstone as a deferred royalty obligation related to the sale of future royalties on the Company's Balance Sheets. Due to the Company's then ongoing manufacturing obligations under the 2015 License Agreement, the Company accounted for the proceeds as imputed debt and, therefore, will recognize future non-cash royalty revenues. Non-cash interest expense will be

recognized over the estimated life of the royalty term arrangement using the effective interest method based on the imputed interest rate derived from estimated amounts and timing of potential future royalty payments to be received from Vaxcyte. As part of the sale, the Company incurred approximately $3.8 million in transaction costs, which are being amortized over the estimated life of the royalty term arrangement using the effective interest method. As future royalties are earned from Vaxcyte by Blackstone, the balance of the deferred royalty obligation will be amortized over the estimated life of the royalty term arrangement.

There are a number of factors that could materially affect the fair value of the deferred royalty obligation. Such factors include, but are not limited to, the amount and timing of potential future royalty payments to be earned and received by Blackstone from Vaxcyte under the 2015 License Agreement, changing standards of care, the introduction of competing products, manufacturing or other delays, intellectual property matters, adverse events that result in governmental health authority imposed restrictions on the use of the vaccine products, and other events or circumstances that could result in reduced royalty payments from Vaxcyte to Blackstone, which are not within the Company's control, and all of which would result in a reduction of non-cash royalty revenues and the non-cash interest expense over the estimated life of the royalty term arrangement. The Company periodically assesses the estimated royalty payments to be earned by Blackstone from Vaxcyte and, to the extent that the amount or timing of such payments is materially different than our original estimates, the Company will prospectively adjust the imputed interest rate and the related amortization of the deferred royalty obligation. As of December 31, 2023, our effective interest rate used to amortize the liability is 17.0%.

During the year ended December 31, 2023, the Company recognized approximately $12.6 million of non-cash interest expense on the deferred royalty obligation, which amount will increase such balance. As of December 31, 2023, Blackstone has not received any royalty payment from Vaxcyte and, therefore, the deferred royalty obligation has not begun to be amortized.

The following table shows the activity of the deferred royalty obligation since transaction inception through December 31, 2023:

	December 31, 2023
	(in thousands)
Proceeds from the sale of future Vaxcyte royalties	$ 140,000
Issuance costs	(3,792)
Non-cash interest expense associated with the sale of future Vaxcyte royalties	12,570
Amortization of issuance costs	336
Deferred royalty obligation related to the sale of future Vaxcyte royalties, net	$ 149,114

11. Stockholders' Equity

Common Stock

Holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders of the Company.

The Company has reserved common stock, on an if-converted basis, for issuance as follows:

	December 31,	
	2023	2022
Common stock options issued and outstanding	7,905,032	7,310,611
Common stock awards issued and outstanding	5,244,873	3,958,478
Remaining shares reserved for issuance under 2018 Equity Incentive Plan and 2021 Equity Inducement Plan	1,777,919	1,541,706
Shares reserved for issuance under 2018 Employee Stock Purchase Plan	914,911	865,995
Warrants to purchase common stock	127,616	127,616
Total	15,970,351	13,804,406

Preferred Stock

As of December 31, 2023 and 2022, the Company had 10,000,000 shares of preferred stock authorized with a par value of $0.001 per share. No shares of preferred stock were outstanding as of December 31, 2023 and 2022.

12. Equity Incentive Plans, Equity Inducement Plans, Employee Stock Purchase Plan and Stock-Based Compensation

2004 Equity Incentive Plan, 2018 Equity Incentive Plan, 2021 Equity Inducement Plan, and Amended and Restated 2021 Equity Inducement Plan

In September 2018, the Company adopted the 2018 Equity Incentive Plan ("2018 Plan"), which became effective on September 25, 2018. As a result, the Company will not grant any additional awards under the 2004 Equity Incentive Plan ("2004 Plan"). The terms of the 2004 Plan and applicable award agreements will continue to govern any outstanding awards thereunder. In addition to the shares of common stock reserved for future issuance under the 2004 Plan that were added to the 2018 Plan upon its effective date, the Company initially reserved 2,300,000 shares of common stock for issuance under the 2018 Plan. In addition, the number of shares of common stock reserved for issuance under the 2018 Plan will automatically increase on the first day of January for a period of up to ten years, commencing on January 1, 2019, in an amount equal to 5% of the total number of shares of the Company's capital stock outstanding on the last day of the preceding year (rounded to the nearest whole share), or a lesser number of shares determined by the Company's board of directors. As a result, common stock reserved for issuance under the 2018 Plan was increased by 2,874,977 shares on January 1, 2023.

In August 2021, the Company adopted the 2021 Equity Inducement Plan ("2021 Plan"), which became effective on August 4, 2021. Upon its effective date, the Company initially reserved 750,000 shares of common stock for issuance pursuant to non-qualified stock options and restricted stock units ("RSUs") under the 2021 Plan. In accordance with Rule 5635(c)(4) of the Nasdaq listing rules, equity awards under the 2021 Plan may only be made to an employee if he or she is granted such equity awards in connection with his or her commencement of employment with the Company and such grant is an inducement material to his or her entering into employment with the Company or such subsidiary. In addition, awards under the 2021 Plan may only be made to employees who have not previously been an employee or member of the Board (or any parent or subsidiary of the Company) or following a bona fide period of non-employment of the employee by the Company (or a parent or subsidiary of the Company). At all times the Company will reserve and keep available a sufficient number of shares as will be required to satisfy the requirements of all outstanding awards granted under the 2021 Plan.

In August 2022, the Company amended and restated the 2021 Plan (the "Amended and Restated 2021 Plan") and reserved an additional 750,000 shares of common stock available for issuance under the Amended and Restated 2021 Plan to be granted by the Company to certain employees as a material inducement to their acceptance of employment with the Company in accordance with Nasdaq Listing Rule 5635(c)(4).

Additionally, in February 2023, the Company amended and restated the Amended and Restated 2021 Plan and reserved an additional 500,000 shares of common stock available for issuance under the Amended and Restated 2021 Plan to be granted by the Company to certain employees as a material inducement to their acceptance of employment with the Company in accordance with Nasdaq Listing Rule 5635(c)(4). The total number of shares reserved for issuance pursuant to the Amended and Restated 2021 Plan is 2,000,000 shares.

As of December 31, 2023, the Company had 1,777,919 shares available for grant under the 2018 Plan and the 2021 Plan.

The following table summarizes option activity under the Company's 2004 Plan, 2018 Plan and 2021 Plan:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contract Term (Years)	Aggregate Intrinsic Value (in thousands)
Stock options outstanding at December 31, 2022	7,310,611	$ 12.68	6.66	$ 2,187
Granted	1,611,500	5.35		
Exercised	(53,060)	5.92		
Canceled and forfeited	(964,019)	12.63		
Stock options outstanding at December 31, 2023	7,905,032	$ 11.24	6.02	$ 180
Stock options exercisable at December 31, 2023	5,717,050	$ 12.42	5.14	$ 14

The aggregate intrinsic value in the table above represents the total intrinsic value (the difference between our closing stock price on the last trading day of fiscal 2023 and the exercise prices, multiplied by the number of in-the-money stock options) that would have been received by the stock option holders had all stock option holders exercised their stock options on December 31, 2023. For the years ended December 31, 2023, 2022 and 2021, the aggregate intrinsic value of stock options exercised was $30,000, $0.1 million and $2.8 million, respectively, determined at the date of the option exercise.

Employee Stock Options Valuation

For determining stock-based compensation expense, the fair-value-based measurement of each employee stock option was estimated as of the date of grant using the Black-Scholes option pricing model with assumptions as follows:

	Year Ended December 31,		
	2023	2022	2021
Expected term (in years)	5.3-6.1	5.3-6.1	5.3-6.1
Expected volatility	80.7%-84.1%	81.8%-83.5%	80.9%-84.9%
Risk-free interest rate	3.6%-4.7%	1.7%-4.2%	0.6%-1.3%
Expected dividend	-	-	-

Expected Term—The expected term represents the period that the stock-based awards are expected to be outstanding. The Company used the "simplified" method to determine the expected term of options granted, which calculates the expected term as the average of the weighted-average vesting term and the contractual term of the option.

Expected Volatility—Since the Company has limited information available on the volatility of its common stock due to its short trading history, the expected volatility was estimated based on the average historical volatilities of common stock of comparable publicly traded entities over a period equal to the expected term of the stock option grants. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available.

Risk-Free Interest Rate—The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero-coupon U.S. Treasury notes with maturities approximately equal to the expected term of the options.

Expected Dividend—The Company has never paid dividends on its common stock. Therefore, the Company used an expected dividend of zero.

Using the Black-Scholes option-valuation model, the weighted-average estimated grant-date fair value of employee stock options granted during the years ended December 31, 2023, 2022 and 2021 was $3.84, $5.03 and $14.24 per share, respectively.

Restricted Stock Units

Restricted stock units ("RSUs") are share awards that entitle the holder to receive freely tradable shares of the Company's common stock upon vesting. The RSUs cannot be transferred and the awards are subject to forfeiture if the holder's employment terminates prior to the release of the vesting restrictions. The RSUs generally vest over a four-year period provided the employee remains continuously employed with the Company. The fair value of the RSUs is equal to the closing price of the Company's common stock on the grant date.

A summary of the status and activity of non-vested RSUs for the year ended December 31, 2023 is as follows:

	Number of Shares	Weighted Average Grant-Date Fair Value
Non-vested December 31, 2022	3,958,478	$ 11.70
Granted	2,823,725	5.41
Released	(1,155,644)	12.31
Canceled	(381,686)	9.92
Non-vested December 31, 2023	5,244,873	$ 8.31

2018 Employee Stock Purchase Plan

In September 2018, the Company adopted the 2018 Employee Stock Purchase Plan ("ESPP"), which became effective on September 26, 2018, in order to enable eligible employees to purchase shares of the Company's common stock. The Company initially reserved 230,000 shares of common stock for sale under the ESPP. The aggregate number of shares reserved for sale under the ESPP will automatically increase on the first day of January for a period of up to ten years, commencing on January 1, 2019, in an amount equal to 1% of the total number of shares of the Company's capital stock outstanding on the last day of the preceding year (rounded to the nearest whole share), or a lesser number of shares determined by the Company's board of directors. As a result, common stock reserved for issuance under the ESPP was increased by 574,995 shares on January 1, 2023. The aggregate number of shares issued over the term of the Company's ESPP, subject to stock-splits, recapitalizations or similar events, may not exceed 2,300,000 shares of the Company's common stock.

The fair value of the ESPP shares is estimated using the Black-Scholes option pricing model. For the years ended December 31, 2023, 2022 and 2021, the fair value of ESPP shares was estimated using the following assumptions:

	Year Ended December 31,		
	2023	2022	2021
Expected term (in years)	0.5	0.5	0.5
Expected volatility	79.6-89.9%	65.9-88.1%	65.9-111.4%
Risk-free interest rate	3.8%-5.5%	0.1%-3.8%	0.1%
Expected dividend	-	-	-

During the years ended December 31, 2023, 2022 and 2021, 526,079, 270,516, and 145,809 shares, respectively, had been purchased. As of December 31, 2023, 914,911 shares were available for future issuance under the ESPP.

Stock-Based Compensation Expense

The Company believes that the fair value of the stock options, RSUs and ESPP shares is more reliably measurable than the fair value of services received.

Total stock-based compensation expense recognized was as follows:

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Research and development expense:			
Stock options	$ 2,183	$ 2,287	$ 2,208
Restricted stock units	8,885	7,227	4,280
ESPP	764	592	638
Subtotal	11,832	10,106	7,126
General and administrative expense:			
Stock options	6,066	10,261	11,045
Restricted stock units	6,796	5,781	4,920
ESPP	214	156	150
Subtotal	13,076	16,198	16,115
Total	$ 24,908	$ 26,304	$ 23,241

As of December 31, 2023, unrecognized stock-based compensation expense related to the unvested stock options and RSUs granted was $11.0 million and $30.9 million, respectively. The remaining unrecognized compensation cost is expected to be recognized over a weighted-average period of 2.0 years and 2.3 years, respectively. As of December 31, 2023, there is $0.3 million of unrecognized stock-based compensation expense related to the ESPP.

13. Income Taxes

Current provision for income taxes consists of the following:

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Federal	$ 16,646	$ -	$ -
State	603	-	-
Foreign	943	2,500	-
Total current provision for income taxes	$ 18,192	$ 2,500	$ -

For the year ended December 31, 2023, the Company recognized an income tax expense of $18.2 million. The income tax charge for the year ended December 31, 2023, was primarily due to unfavorable book-tax differences related to capitalizing and amortizing research and development expenditures under Internal Revenue Code, or IRC, Section 174, the upfront payment from the sale of future royalties, deferred revenue, foreign income tax, and IRC Section 382 limitations imposed on the utilization of the Company's historical tax attributes as a result of cumulative ownership changes that the Company experienced in prior years. The effective tax rates for the year ended December 31, 2023 vary from the U.S. federal statutory tax rate of 21% primarily due to the Company’s inability to recognize the benefit from its net deferred tax assets, which are offset by a valuation allowance. The Company has established a full valuation allowance against its net deferred tax assets due to the uncertainty surrounding the realization of such assets. All losses to date have been incurred domestically.

The Company recorded a foreign income tax charge of $2.5 million during the year ended December 31, 2022, due to a withholding tax in China on its license revenue from Tasly.

The effective tax rate of the Company's provision (benefit) for income taxes differs from the federal statutory rate as follows:

	Year Ended December 31,		
	2023	2022	2021
Federal statutory rate	21.0%	21.0%	21.0%
State tax	(0.6)	-	-
Change in valuation allowance	(41.2)	(26.2)	(24.7)
Tax credits	(0.7)	5.1	3.7
Stock compensation	(3.2)	(3.2)	(0.2)
Foreign-Derived Intangible Income deduction	1.5	-	-
Foreign withholding	(1.1)	(2.1)	-
Other	3.7	3.3	0.2
Total	(20.6)%	(2.1)%	0%

The components of the Company's deferred tax assets consist of the following:

	December 31	
	2023	2022
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 37,231	$ 60,952
Research and development credits	32,800	40,396
Capitalized research and development expenditure	46,260	24,481
Deferred royalty obligation	31,944	-
Deferred revenue	15,274	-
Accruals and other	5,309	3,849
Operating lease liability	6,335	7,471
Stock based compensation	5,613	4,562
Fixed asset basis	-	663
Total deferred tax assets	180,766	142,374
Less: valuation allowance	(167,693)	(131,228)
Gross deferred tax assets	13,073	11,146
Deferred tax liabilities:		
Operating lease right-of-use asset	(4,887)	(5,783)
Fixed asset basis	(809)	-
Vaxcyte investment	(7,377)	(5,363)
Total deferred tax liabilities	(13,073)	(11,146)
Total net deferred tax assets	$ -	$ -

Realization of the future tax benefits is dependent on the Company's ability to generate sufficient taxable income within the carryforward period. Due to the Company's history of operating losses and future sources of taxable income, the Company believes that the realization of the deferred tax assets is currently not more likely than not to be realized and, accordingly, have provided a full valuation allowance against net deferred tax assets. For the years ended December 31, 2023, 2022 and 2021, the net increase in the valuation allowance was $36.5 million, $30.6 million and $26.2 million, respectively.

As of December 31, 2023, the Company had federal net operating loss carryforwards of $140.2 million and federal general business credits from research and development expenses totaling $20.0 million, as well as state net operating loss carryforwards of $100.5 million and state research and development credits of $26.0 million.

The federal net operating loss carryforwards will expire at various dates beginning in 2027, and the federal credits will expire at various dates beginning in 2032, if not utilized. The state net operating loss carryforwards will expire at various dates beginning in 2031, if not utilized. The state research and development tax credits can be carried forward indefinitely.

Events which cause limitations in the amount of net operating losses that the Company may utilize in any one year include, but are not limited to, a cumulative ownership change of more than 50%, as defined, over a three-year testing period. Under the Internal Revenue Code and similar state provisions, certain substantial changes in the Company's ownership could result in an annual limitation on the amount of net operating loss and credit carryforwards that can be utilized in future years to offset future taxable income. The annual limitation may result in the expiration of net operating losses and credit carryforwards before utilization. The Company completed Section 382 analysis through December 31, 2022, and concluded that the Company experienced an ownership change on November 20, 2019, and December 31, 2022. If there is subsequent event or further change in ownership, these losses may be subject to limitations, resulting in their expiration before they can be utilized.

The Company files U.S. federal and state tax returns with varying statutes of limitations. Due to net operating loss and credit carryforwards, all of the tax years since inception through the 2022 tax year remain subject to examination by the U.S. federal and some state authorities. The actual amount of any taxes due could vary significantly depending on the ultimate timing and nature of any settlement. The amount of unrecognized tax benefits, if recognized, that would affect the effective tax rate is $8.7 million, $8.6 million and $6.4 million as of December 31, 2023, 2022 and 2021, respectively. One or more of these unrecognized tax benefits could be subject to a valuation allowance if and when recognized in a future period, which could impact the timing of any related effective tax rate benefit. The Company believes that the amount by which the unrecognized tax benefits may increase or decrease within the next 12 months is not estimable.

The Company has elected to recognize, if incurred, interest and penalties related to liabilities for uncertain tax positions as a part of income tax expense. Interest and penalties were immaterial during the year ended December 31, 2023.

The Company determines its uncertain tax positions based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings is more likely than not to be sustained upon examination by the relevant income tax authorities.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows:

	December 31		
	2023	2022	2021
	(in thousands)		
Gross unrecognized tax benefit at January 1	$ 8,649	$ 6,409	$ 4,902
Additions for tax positions taken in the current year	2,631	2,255	1,492
Additions / (Reductions) for tax positions of prior years	(2,550)	(15)	15
Gross unrecognized tax benefit at December 31	$ 8,730	$ 8,649	$ 6,409

14. Net Loss Per Share

The following table sets forth the computation of the Company’s basic and diluted net loss per share.

	Year Ended December 31,		
	2023	2022	2021
	(in thousands, except share and per share amounts)		
Numerator:			
Net loss	$ (106,793)	$ (119,204)	$ (105,538)
Denominator:			
Shares used in computing net loss per share	60,163,542	50,739,185	46,119,089
Net loss per share, basic and diluted	$ (1.78)	$ (2.35)	$ (2.29)

The following common stock equivalents were excluded from the computation of diluted net loss per share for the years ended December 31, 2023, 2022 and 2021 because including them would have been antidilutive:

	Year Ended December 31,		
	2023	2022	2021
Common stock options issued and outstanding	7,905,032	7,310,611	6,512,086
Restricted stock units issued and outstanding	5,244,873	3,958,478	2,403,826
Warrants to purchase common stock	127,616	127,616	127,616
Shares to be issued under ESPP	226,490	150,532	54,759
Total	13,504,011	11,547,237	9,098,287

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

None.

Item 9A. *Controls and Procedures*

Conclusions Regarding the Effectiveness of Disclosure Controls and Procedures

As of December 31, 2023, management, with the participation of our Chief Executive Officer (our principal executive officer) and Chief Financial Officer (our principal accounting officer), performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosures.

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2023, the design and operation of our disclosure controls and procedures were effective at a reasonable assurance level.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer and effected by our board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. 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. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our internal control over financial reporting as of December 31, 2023. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 Internal Control – Integrated Framework. Based on our assessment, our management has concluded that, as of December 31, 2023, our internal control over financial reporting is effective based on those criteria.

This Annual Report on Form 10-K does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal controls 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 our proxy statement with respect to our 2024 Annual Meeting of Stockholders, or Proxy Statement, to be filed with the Securities and Exchange Commission within 120 days after our fiscal year end and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this Item will be set forth in the Proxy Statement to be filed with the Securities and Exchange Commission within 120 days after our 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 Proxy Statement to be filed with the Securities and Exchange Commission within 120 days after our 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 Proxy Statement to be filed with the Securities and Exchange Commission within 120 days after our 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 Proxy Statement to be filled with the Securities and Exchange Commission within 120 days after our 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	Number	Exhibit	Date	
3.1	Amended and Restated Certificate of Incorporation of Sutro Biopharma, Inc.	10-Q	001-38662	3.1	11/13/2023	
3.2	Amended and Restated Bylaws of Sutro Biopharma, Inc.	8-K	001-38662	3.1	2/24/2023	
4.2	Description of Registrant’s Securities.					X
4.3	Form of Warrant to Purchase Shares of Common Stock.	S-1	333-227103	4.3	8/29/2018	
4.6	Form of Warrant to Oxford Finance LLC pursuant to the Loan and Security Agreement.	10-K	001-38662	10.21	3/16/2020	
4.7	Form of Warrant to Silicon Valley Bank pursuant to the Loan and Security Agreement.	10-K	001-38662	10.22	3/16/2020	
10.1	Form of Indemnity Agreement by and between the Registrant and its directors and officers.	S-1/A	333-227103	10.1	9/17/2018	
10.2‡	2018 Equity Incentive Plan and form of award agreements thereunder.	S-1/A	333-227103	10.4	9/17/2018	
10.3‡	Amended Form of Restricted Stock Unit Agreement under the 2018 Equity Incentive Plan.	10-Q	001-38662	10.1	11/8/2019	
10.4‡	Amended Form of Performance Stock Unit Agreement under the 2018 Equity Incentive Plan.	10-Q	001-38662	10.2	11/8/2019	
10.6‡	2018 Employee Stock Purchase Plan and form of award agreements thereunder.	S-1/A	333-227103	10.5	9/17/2018	
10.7‡	2004 Stock Plan, as amended, and forms of award agreements.	S-1	333-227103	10.2	8/29/2018	

10.9†	Exclusive Patent License and Research Collaboration Agreement, dated July 23, 2018, by and between the Registrant and Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ.	S-1/A	333-227103	10.15	9/17/2018	
10.12‡	Offer Letter, dated December 29, 2008, by and between the Registrant and William J. Newell, as amended.	S-1	333-227103	10.6	8/29/2018	
10.14‡	Offer Letter, dated August 28, 2013, by and between the Registrant and Hans-Peter Gerber.					X
10.16	Standard Industrial/Commercial Multi-Tenant Lease-Net, dated May 18, 2011, by and between the Registrant and Lydia Tseng and/or Alemany Plaza LLC, as amended.	S-1	333-227103	10.10	8/29/2018	
10.19†	Amended and Restated Exclusive Agreement, dated October 3, 2007, between The Board of Trustees of The Leland Stanford Junior University and Fundamental Applied Biology, Inc., as amended.	S-1/A	333-227103	10.13	9/17/2018	
10.23	Sublease Agreement, dated September 3, 2020, by and between the Company and Five Prime Therapeutics, Inc.	10-Q	001-38662	10.1	11/5/2020	
10.24‡	Severance and Change in Control Plan of the Company					X
10.25	Third Amendment to Lease 888-894 Industrial Road, San Carlos, CA.	10-Q	001-38662	10.2	8/9/2021	
10.27	Second Amendment to the Exclusive Patent License and Research Collaboration Agreement.	10-Q	001-38662	10.2	11/10/2021	
10.29	License Agreement, dated December 24, 2021, by and between the Registrant and Tasly Biopharmaceuticals Co., Ltd.	10-K	001-38662	10.29	2/28/2022	
10.30	Offer Letter, dated January 18, 2023, by and between the Registrant and Anne E. Borgman.					X
10.31†	First Amendment to the Tasly License Agreement dated April 18, 2022.	10-Q	001-38662	10.1	8/8/2022	
10.32†^	License and Collaboration Agreement, dated June 27, 2022, by and between the Registrant and Astellas Pharma Inc.	10-Q	001-38662	10.2	8/8/2022	

10.33	Offer Letter, dated May 23, 2021, by and between the Registrant and Jane Chung.	10-K	001-38662	10.30	2/28/2022	
10.34‡	Amended and Restated 2021 Equity Inducement Plan and forms of award agreements thereunder.					X
10.35	Letter Agreement, dated December 19, 2022, by and between the Registrant and Vaxcyte, Inc.	10-K	001-38662	10.35	3/30/2023	
10.41†^	Purchase Agreement, dated June 21, 2023, between the Registrant and an affiliate of Blackstone Life Sciences.	10-Q	001-38662	10.1	8/10/2023	
10.42	Third Amendment to the Vaxcyte License Agreement between the Registrant and Vaxcyte, Inc.	10-K	001-38662	10.1	11/13/2023	
10.43	Manufacturing Rights Agreement between the Registrant and Vaxcyte, Inc.					X
21.1	Subsidiaries of the Registrant.	S-1	333-227103	21.1	8/29/2018	
23.1	Consent of independent registered public accounting firm.					X
24.1	Power of Attorney. Reference is made to the signature page hereto.					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 Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2**	Certification of 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

97.1	Compensation Recovery Policy	X
101.INS	Inline XBRL Instance Document	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)	X

** This certification is deemed not filed for purposes of section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

‡ Indicates management contract or compensatory plan.

† Confidential treatment has been granted for portions of this exhibit pursuant to Rule 406 of the Securities Act, or Rule 24b-2 of the Exchange Act. The Registrant has omitted and filed separately with the SEC the confidential portions of this exhibit.

† Registrant has omitted portions of the exhibit as permitted under Item 601(b)(10) of Regulations S-K.

^ Registrant has omitted schedules and exhibits pursuant to Item 601(a)(5) of Regulation S-K. The Registrant agrees to furnish supplementally a copy of the omitted schedules and exhibits to the SEC upon request.

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 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized.

SUTRO BIOPHARMA, INC.

Date: March 25, 2024

By: /s/ William J. Newell

Name: William J. Newell

Title: Chief Executive Officer

Date: March 25, 2024

By: /s/ Edward C. Albini

Name: Edward C. Albini

Title: Chief Financial Officer

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints William J. Newell and Edward C. Albini 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/ William J. Newell	President, Chief Executive Officer and Director	March 25, 2024
William J. Newell	*(Principal Executive Officer)*	
/s/ Edward C. Albini	Chief Financial Officer and Corporate Secretary	March 25, 2024
Edward C. Albini	*(Principal Financial and Accounting Officer)*	
/s/ Michael Dybbs, Ph.D.	Director	March 25, 2024
Michael Dybbs, Ph.D.		
/s/ John G. Freund, M.D.	Director	March 25, 2024
John G. Freund, M.D.		
/s/ Heidi Hunter	Director	March 25, 2024
Heidi Hunter		
/s/ Joseph M. Lobacki	Director	March 25, 2024
Joseph M. Lobacki		
/s/ Connie Matsui	Director	March 25, 2024
Connie Matsui		
/s/ James Panek	Director	March 25, 2024
James Panek		
/s/ Daniel H. Petree	Director	March 25, 2024
Daniel H. Petree		
/s/ Jon M. Wigginton, M.D.	Director	March 25, 2024
Jon M. Wigginton, M.D.		

Exhibit 4.2

DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 300,000,000 shares of common stock, $0.001 par value per share, and 10,000,000 shares of undesignated preferred stock, $0.001 par value per share. The following description summarizes the most important terms of our capital stock. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description, you should refer to our restated certificate of incorporation and restated bylaws, which are included as exhibits to our most recent Annual Report on Form 10-K, and to the applicable provisions of Delaware law.

Common Stock

Dividend rights

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board of directors may determine.

Voting rights

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. We have not provided for cumulative voting for the election of directors in our restated certificate of incorporation, which means that holders of a majority of the shares of our common stock are able to elect all of our directors. Our restated certificate of incorporation establishes a classified board of directors, divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms.

No preemptive or similar rights

Our common stock is not entitled to preemptive rights, and is not subject to conversion, redemption or sinking fund provisions.

Right to receive liquidation distributions

Upon our liquidation, dissolution or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating preferred stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Preferred Stock

Our board of directors is authorized, subject to limitations prescribed by Delaware law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series and to fix the designation, powers, preferences and rights of the shares of each series and any of their qualifications, limitations or restrictions, in each case without further vote or action by our stockholders. Our board of directors can also increase or decrease the number of shares of any series of preferred stock, but not below the number of shares of that series then outstanding, without any further vote or action by our stockholders. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of our company and might adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. We have no current plan to issue any shares of preferred stock.

Anti-Takeover Provisions

The provisions of Delaware General Corporation Law, or DGCL, our restated certificate of incorporation and our restated bylaws, could have the effect of delaying, deferring or discouraging another person from acquiring control of our company. These provisions, which are summarized below, may have the effect of discouraging takeover bids.

They are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Delaware Law

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the date on which the person became an interested stockholder unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (i) shares owned by persons who are directors and also officers and (ii) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- at or subsequent to the date of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66.67% of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction or series of transactions together resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Restated Certificate of Incorporation and Restated Bylaw Provisions

Our restated certificate of incorporation and our restated bylaws include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of our company, including the following:

- ***Board of Directors vacancies.*** Our restated certificate of incorporation and restated bylaws authorize only our board of directors to fill vacant directorships, including newly created seats. In addition, the number of directors constituting our board of directors is permitted to be set only by a resolution adopted by a majority vote of our entire board of directors. These provisions prevent a stockholder from increasing the size of our board of directors and then gaining control of our board of directors by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of our board of directors but promotes continuity of management.

- ***Classified board.*** Our restated certificate of incorporation and restated bylaws provide that our board of directors is classified into three classes of directors, each with staggered three-year terms. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors.

- ***Stockholder action; special meetings of stockholders.*** Our restated certificate of incorporation provides that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. As a result, a holder controlling a majority of our capital stock would not be able to amend our restated bylaws or remove directors without holding a meeting of our stockholders called in accordance with our restated bylaws. Further, our restated bylaws provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairperson of our board of directors, our Chief Executive Officer or our President, thus prohibiting a stockholder from calling a special meeting. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.

- ***Advance notice requirements for stockholder proposals and director nominations.*** Our restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our restated bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions might also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

- ***No cumulative voting.*** The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless a corporation's certificate of incorporation provides otherwise. Our restated certificate of incorporation and restated bylaws do not provide for cumulative voting.

- ***Directors removed only for cause.*** Our restated certificate of incorporation provides that stockholders may remove directors only for cause and only by the affirmative vote of the holders of at least two-thirds of our outstanding common stock.

- ***Amendment of charter provisions.*** Any amendment of the above provisions in our restated certificate of incorporation requires approval by holders of at least two-thirds of our outstanding common stock.

- ***Issuance of undesignated preferred stock.*** Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock enables our board of directors to render more difficult or to discourage an attempt to obtain control of us by merger, tender offer, proxy contest or other means.

- ***Choice of forum.*** Our restated certificate of incorporation provides that, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our restated certificate of incorporation or our restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The provision does not apply to suits brought to enforce a duty or liability created by the Exchange Act. In addition, our amended and restated bylaws also provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged

in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company, LLC. The transfer agent's address is 6201 15th Avenue, Brooklyn, New York 11219, and its telephone number is (800) 937-5449.

Exchange Listing

Our common stock is listed on The Nasdaq Global Market under the symbol "STRO."

Exhibit 10.14

August 28, 2023

Han-Peter Gerber, PhD
[private address]

Dear Hans-Peter:

We are pleased to offer you a position with Sutro Biopharma, Inc. (the "Company"), as Chief Scientific Officer, reporting to Bill Newell, Chief Executive Officer, effective 9/18/2023. The Company is excited to have you join our exceptional team and we look forward to a purposeful and productive relationship. You should note that the Company may modify job titles, salaries and benefits from time to time as it deems necessary.

1. Compensation

a. **Base Pay.** In this position you will earn an annual salary of $500,000, which will be paid semi-monthly in accordance with the Company's normal payroll procedures. Your base pay will be periodically reviewed as a part of the Company's regular reviews of compensation.
b. **Bonus Eligibility.** In each calendar year during your employment with the Company, you will be eligible to receive an annual bonus dependent on performance objectives, which will be based on company objectives established by the Company's Board of Directors in their discretion. Your target bonus will be up to 40% of your base salary, assuming the achievement of such performance objectives as determined solely by the Company's Board of Directors. You will be eligible for bonus consideration, with the beginning of the 2023 performance year. Any bonus that you earn will be paid to you within the parameters agreed to by the Company CEO and the Company's Compensation Committee of the Board of Directors and shall be paid in cash, less any usual withholding.
c. **Sign-on Bonus**. You will receive a sign-on bonus of $350,000, less applicable taxes, $250,000 will be paid on the first payroll period following your start date. The remaining $100,000 will be paid on your one-year anniversary anticipated to be on or after September 18, 2024, please provide this request in writing to People and Culture ten days prior to the date you would like to receive the second sign-on bonus payment of $100,000. This sign-on bonus will be fully repayable should you choose to leave the company prior to your second-year anniversary of employment.

2. Equity

a. If you decide to join the Company, it will be recommended on the 15th of the month following your start date (or the first trading day following your start date), that the Company grant you an option to purchase 175,000 publicly traded shares (non-qualified) of the Company's Common Stock at a price per share equal to the fair market value per share of the Common Stock on the date of grant, as approved by the Company's Board of Directors. Twenty-five percent (25%) of the shares subject to the option shall vest 12 months after the date your vesting begins subject to your continuing employment with the Company, and no shares shall vest before such date. The remaining shares shall vest monthly over the next 36 months in equal monthly amounts subject to your continuing employment with the company.

This option grant shall be subject to the terms and conditions of the company's Stock Option Plan and Stock Option Agreement, including vesting requirements. No right to any stock is earned or accrued until such time that vesting occurs, nor does the grant confer any right to continue vesting or employment. In addition to your option grant, you will receive a grant of 150,000 shares of Restricted Stock (RSU's). This grant will vest annually, from your start date, over 4 years at the rate of 25% each year. No right to any stock is earned or accrued until such time that vesting occurs, nor does the grant confer any right to continue vesting or employment.

3. Employee Benefits

a. **Group Plans**. As an employee, you will be eligible to receive certain employee benefits including health insurance, life insurance and disability insurance, with reasonable and customary coverages and deductibles or co-payments.
b. **Paid Time Off**. Subject to the Company's PTO Policy, you will be eligible for 20 days Paid Time Off (PTO), accrued on a monthly basis at the rate of 13.34 hours per month. You will also eligible for 9 paid holidays per year.
c. **401k.** The Company will provide you with the opportunity to participate in the Sutro's 401k plan. The plan will match 50% of your 401(k) contributions on the first 6% of your salary (subject to IRS maximum deferral allowed). You are eligible to enroll the first of the month after your hire date and must be an active employee on 12/31 of the plan year to be eligible for the Company contribution.
d. **Employee Stock Purchase Program (ESPP).** Eligible employees can acquire Sutro stock through after-tax payroll deductions at a discounted purchase price. Offering periods run for a six-month period and occur twice each year on March 15th and September 15th.

4. Change of Control/Severance Eligibility

Effective with your first date of employment you will be a participant in Sutro's Change of Control and Severance plan with the provisions provided under Tier 2 of the Plan. We have included a copy of the plan document for your reference.

5. Additional Important Information

a. **At-Will Employment**. You should be aware that your employment with the Company is for no specified period and constitutes at-will employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, the Company is free to conclude its employment relationship with you at any time, with or without cause, and with or without notice. We request that, in the event of resignation, you give the Company at least two weeks' notice.

b. **Confidentiality & Arbitration Agreement**. As a condition of your employment, you are also required to sign and comply with an At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement which requires, among other provisions, the assignment of patent rights to any invention made during your employment at the Company, and non-disclosure of company proprietary information. In the event of any dispute or claim relating to or arising out of our employment relationship, you and the Company agree that (i) any and all disputes between you and the Company shall be fully and finally resolved by binding arbitration, (ii) you are waiving any and all rights to a jury trial but all court remedies will be available in arbitration, (iii) all disputes shall be resolved by a neutral arbitrator who shall issue a written opinion, (iv) the arbitration shall provide for adequate discovery, and

(v) the Company shall pay all but the first $125 of the arbitration fees. Please note that we must receive your signed Agreement before your first day of employment.

c. **Verification of Information**. The Company reserves the right to conduct background investigations and/or reference checks on all of its potential employees.

d. **Right to Work**. For purposes of federal immigration law, you will be required to provide to the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship with you may be terminated.

e. **Vaccination for COVID-19**. The Company requires all new hires to be fully vaccinated prior to the first date of employment. As required by applicable law, Sutro will consider requests for reasonable accommodation.

f. **No Conflicting Obligations**. We also ask that, if you have not already done so, you disclose to the Company any and all agreements relating to your prior employment that may affect your eligibility to be employed by the Company or limit the manner in which you may be employed. It is the Company's understanding that any such agreements will not prevent you from performing the duties of your position and you represent that such is the case. Moreover, you agree that, during the term of your employment with the company, you will not engage in any other employment, occupation, consulting or other business activity directly related to the business in which the Company is now involved or becomes involved during the term of your employment, nor will you engage in any other activities that conflict with your obligations to the Company. Similarly, you agree not to bring any third party confidential information to the Company, including that of your former employer, and that in performing your duties for the Company you will not in any way utilize any such information.

g. **General Obligations**. As a Company employee, you will be expected to abide by the company's rules and standards. Specifically, you will be required to sign an acknowledgment that you have read and that you understand the Company's rules of conduct, which are included in the Company Handbook.

To accept the Company's offer, please sign and date this letter in the space provided below. This letter, along with any agreements relating to proprietary rights between you and the Company, set forth the terms of your employment with the Company and supersede any prior representations or agreements including, but not limited to, any representations made during your recruitment, interviews or pre-employment negotiations, whether written or oral. This letter, including, but not limited to, its at-will employment provision, may not be modified or amended except by a written agreement signed by the CEO of the Company and you. This offer of employment will terminate if it is not accepted, signed and returned by **September 5, 2023**.

We look forward to your favorable reply and to working with you at Sutro Biopharma.

[*signature page follows*]

To indicate your acceptance of the Company's offer, please sign and date this letter in the space provided below and return it to me.

Sincerely,

_____

William J. Newell
CEO

ACCEPTED AND AGREED:

Signature:_____

Printed Name:_____

Date:_____

Enclosures:
Exhibit A: General Release of All Claims
Sutro Severance and Change of Control Plan
Sutro Biopharma 2020 Benefits Guide

EXHIBIT A

GENERAL RELEASE OF ALL CLAIMS

In consideration of the severance benefits to be provided to **Hans-Peter Gerber** by Sutro Biopharma, Inc. (the "Company"), pursuant to the terms of the letter you entered into with the Company dated as of **8/28/2023** (the "Agreement"), you, on your own behalf and on behalf of your heirs, executors, administrators, and assigns, hereby fully and forever release and discharge the Company and its directors, officers, employees, agents, successors, predecessors, subsidiaries, parent, stockholders, employee benefit plans and assigns (together called "the Releases'"), from all known and unknown claims and causes of action including, without limitation, any claims or causes of action arising out of or relating in any way to your employment with the Company, including the termination of that employment.

Eight days after you sign (and do not revoke) this General Release of All Claims ("Release"), provided that it is not signed earlier than your cessation of employment, you will be entitled to the severance benefits or change of control benefits set forth in the Agreement, subject to any other requirements set forth therein or on Exhibit B thereto, that are conditioned on this Release.

You understand and agree that this Release is a full and complete waiver of all claims, including (without limitation) claims to attorneys' fees or costs, claims of wrongful discharge, constructive discharge, breach of contract, breach of the covenant of good faith and fair dealing, harassment, retaliation, discrimination, violation of public policy, defamation, invasion of privacy, interference with a leave of absence, personal injury, fraud or emotional distress and any claims of discrimination or harassment based on sex, age, race, national origin, disability or any other basis under Title VII of the Civil Rights Act of 1964, the Fair Labor Standards Act, the Equal Pay Act of 1 963, the Americans With Disabilities Act, the Age Discrimination in Employment Act of 1967 (ADEA), the California Labor Code, the California Fair Employment and Housing Act, the California Family Rights Act, the Family Medical Leave Act or any other federal or state law or regulation relating to employment or employment discrimination. You further understand and agree that this waiver includes all claims, known and unknown, to the greatest extent permitted by applicable law.

You also hereby agree that nothing contained in this Release shall constitute or be treated as an admission of liability or wrongdoing by the Releasees or you.

In addition, you hereby expressly waive any and all rights and benefits conferred upon you by the provisions of Section 1542 of the Civil Code of the State of California, which states as follows:

A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor.

If any provision of this Release is found to be unenforceable, it shall not affect the enforceability of the remaining provisions and the court shall enforce all remaining provisions to the full extent permitted by law.

You agree to provide, at the Company's expense, including reimbursement of your time and/or the reasonable fees and expenses of your counsel, reasonable cooperation and complete and accurate information to the Company (voluntarily, without requiring a subpoena or other compulsion of law) in the event of litigation against the Company and/or its officers or directors. You also agree that you will not assist any person in bringing or pursuing any claim or action of any kind against the Company, unless pursuant to subpoena or other compulsion of law.

This Release constitutes the entire agreement between you and Releases' with regard to the subject matter of this Release. It supersedes any other agreements, representations or understandings, whether oral or written and whether express or implied, which relate to the subject matter of this Release except as otherwise set forth in the Agreement. However, this Release covers only those claims that arose prior to the execution of this Release. Execution of this Release does not bar any claim that arises hereafter, including (without limitation) a claim for breach of the Agreement.

You understand that you have the right to consult with an attorney before signing this Release. You have 21 days after receipt of this Release to review and consider this Release, discuss it with an attorney of your own choosing, and decide to execute it or not execute it. You also understand that you may revoke this Release during a period of seven days after you sign it and that this Release will not become effective for seven days after you sign it (and then only if you do not revoke it). In any event, this Release is not to be signed, and will not become effective, prior to your cessation of employment. In order to revoke this Release, within seven days after you execute this Release you must deliver to William Newell, at the Company, a letter stating that you are revoking it.

You understand that if you choose to revoke this Release within seven days after you sign it, you will not receive the severance benefits set forth in the Agreement that are conditioned on this Release and the Release will have no effect.

You agree not to disclose to others the terms of this Release, except that you may disclose such information to your spouse and to your attorney or accountant in order for such attorney or accountant to render services to you related to this Release.

You state that before signing this Release, you:

- Have read it,
- Understand it,
- Know that you are giving up important rights,
- Are aware of your right to consult an attorney before signing it, and
- Have signed it knowingly and voluntarily.

Date:

By: _____

Hans-Peter Gerber

TO BE SIGNED UPON CESSATION OF EMPLOYMENT

EXHIBIT 10.24

SUTRO BIOPHARMA, INC.

SEVERANCE AND CHANGE IN CONTROL PLAN

SECTION 1
PURPOSE

The Board of Sutro Biopharma, Inc., a Delaware corporation (together with its subsidiaries, the "***Company***"), considers it in the best interests of the stockholders of the Company to reinforce the continued attention and dedication of certain key employees of the Company to their duties of employment without personal distraction or conflict of interest, including as a result of the possibility or occurrence of a change in control of the Company. Accordingly, the Company will provide designated individuals with rights to receive severance payments and other benefits upon a Covered Termination pursuant to this Severance and Change in Control Plan (this "***Plan***"), as set forth below.

SECTION 2
ELIGIBILITY

2.1 Eligibility for Participation. Except to the extent the Committee provides otherwise, or except as the Committee specifically excludes an otherwise Eligible Employee, each Eligible Employee will automatically participate in the Plan upon hiring with a title of, or promotion to a title of, Vice President or above (including all SVPs, EVPs or C-Level employees). If required by the Committee, participation in this Plan will be contingent upon such Participant executing and delivering to the Company of an acknowledgement of participation in the form attached hereto, as Exhibit A (as such form may be amended or modified by the Board, a "***Participation Agreement***"), provided that if the Committee does not expressly require it, no Participation Agreement will be necessary to participate in this Plan.

2.2 Termination of Participation. An individual shall cease to be a Participant on the date that such individual terminates service with the Company or otherwise ceases to qualify as an Eligible Employee for any reason, in each case other than in connection with a Covered Termination.

SECTION 3
SEVERANCE PAYMENTS AND BENEFITS

3.1 Covered Termination outside the Change in Control Period. If any Participant experiences a Covered Termination other than during a Change in Control Period, the Participant shall be entitled to receive his or her Accrued Benefits and, subject to the requirements of Section 3.3, the following payments and benefits:

(a) *Cash Severance*. An amount equal to the sum of:

(i) the product of (A) the Participant's Severance Multiplier *multiplied* by (B) the Participant's Base Salary. Payment of such Base Salary severance pursuant this Section 3.1(a)(i) shall be made in monthly installments, beginning with the first regular payroll date occurring after the sixtieth (60th) day following the date of the Covered Termination, with any payments that would have occurred prior to such date payable in a lump sum without interest on such first payment date; and

(ii) Participant's bonus for the year in which the Covered Termination occurs based actual achievement of the applicable metrics multiplied by a fraction, the numerator of which is the number of days for which the Participant was employed by the Company during such bonus period and the denominator of which is the total number of calendar days in such bonus period (the "***Prorated Actual Bonus***"). The Prorated Actual Bonus will be paid at such time that the Company makes payment to all of its similarly situated employees under the applicable bonus plan.

(b) *Continued Healthcare Coverage*. If the Participant elects to receive continued healthcare coverage pursuant to the provisions of COBRA, the Company shall continue the Participant's coverage and directly pay, or reimburse the Participant for, the premium for the Participant and the Participant's covered dependents through the earlier of (i) the number of months following the Participant's Covered Termination equal to the Participant's COBRA Severance Period and (ii) the date that the Participant and the Participant's covered dependents become eligible for coverage under another employer's plans (the "***Continuation Period***"); *provided*, that as soon as administratively practicable following the date the Release becomes effective, the Company shall pay to the Participant a cash lump-sum payment equal to the monthly premiums that would have been paid on behalf of the Participant had such payments commenced on the date of the Covered Termination. Notwithstanding the foregoing, the Company may elect at any time during the Continuation Period that, in lieu of paying or reimbursing the premiums, the Company shall instead provide the Participant with a monthly cash payment equal to the amount the Company would have otherwise paid pursuant to this Section 3.1(b), less applicable tax withholdings.

(c) *Equity Awards*. Each then-outstanding and unvested Equity Award held by the Participant shall automatically become vested, and if applicable, exercisable and any forfeiture restrictions or rights of repurchase thereon shall lapse, in each case with respect to that number of shares underlying his or her outstanding Equity Awards as of the date of the Covered Termination that would have become vested if Participant had continued in employment or other service with the Company for a number of months equal to the Acceleration Multiplier; provided that any performance-based vesting criteria shall be treated in accordance with the applicable award agreement or other applicable equity incentive plan governing the terms of such equity award.

3.2 Covered Termination within the Change in Control Period. If any Participant experiences a Covered Termination during a Change in Control Period, then in lieu of the payments provided in Section 3.1 hereof, the Participant shall be entitled to receive his or her Accrued Benefits and, subject to the requirements of Section 3.3, the following payments and benefits:

(a) *Cash Severance*. An amount equal to the sum of:

(i) the product of (A) the Participant's CIC Severance Multiplier *multiplied* by (B) the Participant's Base Salary;

(ii) the product of (A) the Participant's CIC Bonus Multiplier *multiplied* by (B) the Participant's Target Bonus; and

(iii) the Participant's Target Bonus for the year in which the Covered Termination occurs multiplied by a fraction, the numerator of which is the number of days for which the Participant was employed by the Company during such bonus period and the denominator of which is the total number of calendar days in such bonus period;

provided that in clauses (i),(ii) and (iii), such amounts shall be calculated at the rate equal to the higher of (x) the rate in effect immediately prior to the Participant's Covered Termination and (y) the rate in effect

immediately prior to the Change in Control. The foregoing amounts shall be payable in a cash lump-sum, less applicable withholdings, which payment will be made no later than the first regular payroll date occurring after the sixtieth (60th) day following the date of the Covered Termination.

(b) *Continued Healthcare Coverage*. If the Participant elects to receive continued healthcare coverage pursuant to the provisions of COBRA, the Company shall continue a Participant's benefit plan coverage and directly pay, or reimburse the Participant for, the premium for the Participant and the Participant's covered dependents through the earlier of (i) the number of months following the Participant's Covered Termination, equal to the Participant's CIC COBRA Period and (ii) the date that the Participant and the Participant's covered dependents become eligible for coverage under another employer's plans (the "***CIC Continuation Period***"); *provided* that as soon as administratively practicable following the date the Release becomes effective, the Company shall pay to the Participant a cash lump-sum payment equal to the monthly premiums that would have been paid on behalf of the Participant had such payments commenced on the date of the Covered Termination. Notwithstanding the foregoing, the Company may elect at any time during the CIC Continuation Period that, in lieu of paying or reimbursing the premiums, the Company shall instead provide the Participant with a monthly cash payment equal to the amount the Company would have otherwise paid pursuant to this Section 3.2(b), less applicable tax withholdings.

(c) *Equity Awards*. Each then-outstanding and unvested Equity Award held by the Participant shall automatically become vested, and if applicable, exercisable and any forfeiture restrictions or rights of repurchase thereon shall lapse, in each case with respect to 100% of the shares underlying his or her outstanding Equity Awards as of the date of the Covered Termination for the Participant; *provided* that any performance-based vesting criteria shall be treated in accordance with the applicable award agreement or other applicable equity incentive plan governing the terms of such equity award. Any award that is not assumed or substituted for following a Change in Control shall accelerate in full.

3.3 Release. No Participant will be eligible for the severance payments and benefits described in Section 3.1 or Section 3.2, as applicable, unless the Participant has executed a general release of all claims that the Participant may have against the Company (or its successor) or entities or persons affiliated with the Company (or its successor), in the form prescribed and to be provided to the Participant by the Company (or its successor) (the "***Release***"), and such Release becomes effective on or before the 60th day following date of the Covered Termination. If the Participant fails to return the Release on or before such deadline, or if the Participant revokes the Release, then the Participant will not be entitled to any severance payments or benefits described in Section 3.1 or Section 3.2, as applicable.

3.4 Section 280G; Limitation on Payments. Notwithstanding anything in this Plan to the contrary, if any payment or distribution to a Participant pursuant to this Plan or otherwise ("***Payment***") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then such Payment shall either be (A) delivered in full or (B) delivered as to such lesser extent as would result in no portion of such Payment being subject to the Excise Tax, whichever of the foregoing amounts, after taking into account the applicable federal, state and local income taxes and the Excise Tax, results in the receipt by the Participant on an after-tax basis of the largest payment, notwithstanding that all or some portion of the Payment may be taxable under Section 4999 of the Code. The accounting firm engaged by the Company for general audit purposes as of the date prior to the effective date of the Change in Control, or such other person or entity as determined in good faith by the Company, shall perform the foregoing calculations and the Company shall bear all expenses with respect to the determinations by such accounting firm required to be made hereunder. Any good faith determinations of the accounting firm made pursuant to this Section 3.4 shall be final, binding and conclusive upon all parties. Any reduction in payments and/or benefits pursuant to the foregoing shall be made in accordance with Section 409A of the Code in the

following order (1) Payments that do not constitute "nonqualified compensation" subject to Section 409A of the Code shall be reduced first; and (2) all other Payments shall then be reduced as follows: (a) reduction of cash payments; (b) cancellation of accelerated vesting of equity awards other than stock options, if any; (c) cancellation of accelerated vesting of stock options, and (d) reduction of other benefits payable to the Participant.

SECTION 4
ADMINISTRATION

4.1 Administration; Duties and Powers of the Committee. The Compensation Committee of the Board (the "***Committee***") shall have the duties, power and authority to conduct the general administration of the Plan in accordance with its provisions and shall have the power to:

(a) determine which Eligible Employee shall be selected as Participants, including non-executive Eligible Employees, and the tiers at which any such Eligible Employees shall participate;

(b) make any determinations concerning the Plan, including whether any individual is an Eligible Employee or Participant and whether a Covered Termination or other termination of service has occurred;

(c) construe and interpret this Plan, any Participation Agreement and any other agreement or document executed pursuant to this Plan, and modify any Participation Agreement as it shall deem necessary;

(d) subject to any limitations under the Plan or applicable laws, prescribe, amend and rescind rules and regulations as it shall deem necessary for the efficient administration of the Plan; and

(e) make all other decisions and determinations (including factual determinations) as the Board may deem necessary or advisable in carrying out its duties and responsibilities or exercising its powers.

4.2 Delegation of Authority. The Committee may from time to time delegate to a committee of one or more members of the Committee the authority to take any actions pursuant to Section 4.1 to the extent permitted by the Charter of the Compensation Committee. Any delegation hereunder shall be subject to the restrictions and limits that the Committee specifies and the time of such delegation, and the Committee may, at any time rescind the authority so delegated or appoint a new delegate. In its sole discretion, the Board may, at any time and from time to time, exercise any and all rights and duties of the Committee under the Plan except with respect to matters which under applicable securities laws and exchange listing rules are required to be determined in the sole discretion of the Committee. Any references in this Plan to the Committee shall be construed as a reference to the committee to which the Committee has delegated such authority, if any.

4.3 Decisions Binding. Any determination made by the Committee with respect to this Plan or any Participation Agreement shall be final, binding and conclusive on all parties.

SECTION 5
TERM; AMENDMENT; TERMINATION

The initial term of this Plan shall be for a period commencing on the Effective Date and ending on the third anniversary of the Effective Date, and shall thereafter automatically renew for successive three-year periods, unless earlier terminated in accordance with this section. The Plan may otherwise be

amended, modified, suspended or earlier terminated by the Committee, in its sole discretion. Notwithstanding anything herein to the contrary, in no event shall any amendment, modification, suspension or termination adversely affect the rights of any Participant who is then receiving or entitled to receive payments or benefits under the Plan, without the prior written consent of such Participant.

SECTION 6
COVENANTS

6.1 Non-Solicitation. As a condition of participation in this Plan, each Participant shall have agreed, in addition to any non-solicitation obligation in existence in any other agreement with the Company (including any offer letter, employment agreement or proprietary information or confidentiality agreement), that during the 12-month period following the Participant's termination of service with the Company for any reason, the Participant shall not in any capacity, whether directly or indirectly, solicit or attempt to solicit away from the Company any of its officers or employees; provided, however, that a general advertisement to which an employee of the Company responds shall in no event be deemed to result in a breach of this Section 6.1.

6.2 Cooperation . For the period commencing on the effective date of his or her Covered Termination and ending on the one-year anniversary of such date, each Participant shall cooperate with the Company and use his or her best efforts to assist the Company with the transition of his or duties to a successor.

SECTION 7
SUCCESSORS; ASSIGNMENT

7.1 Successors. The Company shall require any successor (whether pursuant to a Change in Control, direct or indirect, and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the business and/or assets of the Company to expressly assume and agree to perform the obligations under this Plan in the same manner and to the same extent as the Company would be required to perform in the absence of such a succession of the Company.

7.2 Assignment by Participants. This Plan and the rights of each Participant hereunder shall inure to the benefit of, and be enforceable by, each Participant and the Company, and their respective successors, assigns, heirs, executors and administrators; provided, however, that a Participant may not assign any of his or her duties hereunder and may not assign any of his or her rights hereunder without the express written consent of the Company. If a Participant should die while any amount would still be payable to the Participant hereunder had the Participant continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of Plan to the Participant's estate.

SECTION 8
MISCELLANEOUS PROVISIONS

8.1 Section 409A.

(a) *Separation from Service; Installments.* For purposes of this Plan, no payment will be made to any Participant upon termination of the Participant's employment unless such termination constitutes a "separation from service" within the meaning of Section 409A of the Code. It is intended that the right of any Participant to receive installment payments pursuant to this Plan shall be treated as a right to receive a series of separate and distinct payments for purposes of Section 409A of the Code. It is further intended that all payments and benefits hereunder satisfy, to the greatest extent possible, the exemption from the application of Section 409A of the Code (and any state law of similar effect) provided under

Treasury Regulation Section 1.409A-1(b)(4) (as a "short-term deferral") and are otherwise exempt from or comply with Section 409A of the Code. Accordingly, to the maximum extent permitted, this Plan shall be interpreted in accordance with that intent. To the extent necessary to comply with Section 409A of the Code, if the designated payment period for any payment under this Plan begins in one taxable year and ends in the next taxable year, the payment will commence or otherwise be made in the later taxable year.

(b) *Specified Employee.* For purposes of Section 409A of the Code, if the Company determines that a Participant is a "specified employee" under Section 409A(a)(2)(B)(i) of the Code at the time of his or her separation from service, then to the extent delayed commencement of any portion of the payments or benefits to which the Participant is entitled pursuant to this Plan is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, such portion shall not be provided to the Participant until the earlier (i) the expiration of the six- month period measured from the Participant's separation from service or (ii) the date of the Participant's death. As soon as administratively practicable following the expiration of the applicable Section 409A(2)(B)(i) period, all payments deferred pursuant to the preceding sentence shall paid in a lump-sum to the Participant and any remaining payments due pursuant to the Plan shall be paid as otherwise provided herein.

8.2 Withholding Taxes. All payments made under this Plan shall be subject to reduction to reflect such federal, state, local foreign or other taxes or charges as are required to be withheld pursuant to any applicable law or regulation.

8.3 Source of Payments. All payments provided under this Plan shall be paid in cash from the general funds of the Company, and no special or separate fund or other segregation of assets shall be required to be made to assure payment. To the extent that any person acquires a right to receive payments from the Company under this Plan, such right shall be no greater than the right of an unsecured creditor of the Company.

8.4 Dispute Resolution. To ensure efficient and economical resolution of any and all disputes that might arise in connection with this Plan, all such disputes shall be settled by arbitration conducted before one arbitrator sitting in the State of California, or such other location agreed by the parties hereto, in accordance with the rules for expedited resolution of employment disputes of the American Arbitration Association then in effect. The arbitrator shall issue a written decision that contains the essential findings and conclusions on which the decision is based and such determination shall be final and binding on the parties. The Company shall pay the arbitrator's fees and arbitration expenses and any other costs associated with the arbitration or arbitration hearing that are unique to arbitration; *provided* that the Participant may voluntarily pay up to one- half of the costs and fees, or if the Company is successful in any legal or equitable action against the Participant, the Company shall be entitled to seek reimbursement from the Participant of up to one-half of the arbitration fees.

8.5 Notice. Notices and all other communications contemplated by this Plan shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by United States Post Office, by registered or certified mail, postage prepaid, addressed to the other party. In the case of the Company, mailed notices shall be addressed to its corporate headquarters and directed to the attention of the General Counsel (and in the case of any communication from the General Counsel to the Company, the General Counsel will direct it to the Chief Executive Officer). In the case of any Participant, mailed notices shall be addressed to the Participant at the Participant's home address that the Company has on file for the Participant.

8.6 Severability. The invalidity or unenforceability of any provision or provisions of this Plan shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

8.7 At-Will Employment. Nothing in this Plan or any Participation Agreement shall confer upon any Participant any right to employment or continuation of employment. The Company and each Participant shall each have reserved the right terminate employment of the Participant at any time and for any reason, with or without cause or prior notice.

8.8 Choice of Law. The validity, interpretation, construction and performance of this Plan shall be governed by the laws of the State of California (without regard to choice-of-law provisions).

8.9 Waiver. No waiver by the Board or any Participant at any time of any breach by the other party of, or compliance with, any condition or provision of this Plan to be performed by such other party shall be deemed a waiver of any other provision at that time, or of the same or any other provision at any prior or subsequent time.

8.10 Entire Agreement. This Plan, together with any Participation Agreement, shall constitute the entire agreement between the Company and each Participant with regard to cash payments, benefits or equity acceleration in connection with a termination of employment or a Change in Control. All understandings and agreements preceding the date of execution of a Participant's Participation Agreement as they apply to any subject matter other than cash payments, benefits and equity acceleration in connection with a termination of employment or a Change in Control shall not be superseded and shall remain fully in effect. All prior understandings and agreements with respect to cash payments, benefits and equity acceleration in connection with a termination of employment or a Change in Control shall be superseded by this Plan and the Participation Agreement.

SECTION 9
DEFINITIONS

Capitalized terms not otherwise defined in the Plan shall have the meanings set forth below:

9.1 "***Acceleration Multiplier***" means (i) 18 months for Tier 1 Participants, (ii) 15 months for Tier 2 Participants and (iii) 9 months for Tier 3 Participants.

9.2 "***Accrued Benefits***" means the Participant's accrued but unpaid base salary or wages, any annual bonus that has been earned for the Company's prior fiscal year, but not yet paid, accrued vacation pay (if applicable), unreimbursed business expenses for which proper documentation is provided, and other vested amounts and benefits earned by (but not yet paid to) or owed to the Participant under any applicable employee benefit plan of the Company through and including the date of the Covered Termination.

9.3 "***Base Salary***" means the Participant's annual base salary in effect on the date of the Participant's Covered Termination, provided, that, in the case of a Covered Termination due to Good Reason, such rate shall be that in effect immediately prior to the actions that resulted in the Covered Termination.

9.4 "***Board***" means the Board of Directors of the Company.

9.5 "***Cause***" means the Participant's (i) unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company; (ii) deliberate material failure in the performance of Participant's duties or any other duties as pertaining to employees of the Company generally which is not cured within fifteen (15) days after receiving written notification of such failure from the Board of Directors or the Chief Executive Officer; (iii) conviction of, or pleas of "guilty" or "no contest" to a felony under the laws of the United States or any state thereof; (iv) gross misconduct; or (v) continued failure to perform assigned duties customarily performed by the

Participant's role at a corporation of similar size, which is not cured within fifteen (15) days after receiving written notification of such failure from the Board of Directors or the Chief Executive Officer.

9.6 "***COBRA***" means the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended.

9.7 "***Code***" means the Internal Revenue Code of 1986, as amended.

9.8 "***Change in Control***" means the occurrence of any of the following events: (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the total voting power represented by the Company's then outstanding voting securities; or (ii) the consummation of the sale or disposition by the Company of all or substantially all of the Company's assets; or (iii) the consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) more than fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation; provided that the event also qualifies as a change in control under U.S. Treasury Regulation 1.409A-3(i)(5)(v) or 1.409A-3(i)(5)(vii).

9.9 "***Change in Control Period***" means the period commencing on the effective date of a Change in Control and ending eighteen (18) months following a Change in Control.

9.10 "***CIC Bonus Multiplier***" means (i) 1.5 times Participant's target annual cash bonus for Tier 1 Participants, (ii) 1.25 times Participant's target annual cash bonus for Tier 2 Participants and (iii) 0.75 times Participant's target annual cash bonus for Tier 3 Participants.

9.11 "***CIC Severance Multiplier***" means (i) 1.5 times Participant's Base Salary for Tier 1 Participants, (ii) 1.25 times the Participant's Base Salary for Tier 2 Participants and (iii) 0.75 times the Participant's Base Salary for Tier 3 Participants.

9.12 "***CIC COBRA Severance Period***" means (i) 18 months for Tier 1 Participants, (ii) 15 months for Tier 2 Participants and (iii) 9 months for Tier 3 Participants.

9.13 "***COBRA Severance Period***" means (i) 18 months for Tier 1 Participants, (ii) 15 months for Tier 2 Participants and (iii) 9 months for Tier 3 Participants.

9.14 "***Covered Termination***" means (a) the termination of a Participant's employment by the Company or any subsidiary, as applicable, without Cause, or (b) the Participant's termination of his or her employment with the Company or any subsidiary, as applicable, for Good Reason. A Covered Termination shall not include a termination of any Participant's employment by reason of the Participant's death or disability, the termination of a Participant's employment for Cause or the Participant's termination of his or her employment without Good Reason.

9.15 "***Eligible Employee***" means a U.S. based employee of the Company or any of its subsidiaries with a title of Vice President or above, unless such individual is party to an individual agreement with the Company that provides for severance upon a qualifying termination of employment which is not superseded by this Plan.

9.16 "***Effective Date***" means the date on which is Plan is adopted and approved by the Committee or otherwise specified by the Committee.

9.17 "***Equity Award***" means all options to purchase shares of Company common stock as well as any and all other stock-based awards granted to the Participant, including but not limited to restricted stock, restricted stock units and stock appreciation rights.

9.18 "***Good Reason***" means the occurrence of one or more of the following without the Participant's consent: (i) a material reduction in Participant's level of duties, responsibility and/or scope of authority; (ii) a material reduction in Participant's base salary (other than a reduction generally applicable to all similarly situated Participants and in generally the same proportion as for Participant implemented for expense management purposes); (iii) a requirement for Participant to relocate to an office that is more than fifty (50) miles from the location of the Participant's primary work location at the time of such relocation; and (iv) for the CEO of the Company, a change in reporting such that the CEO does not report to the board of directors of the ultimate parent company, and for any Tier 2 or Tier 3 Participant that directly reports to the Company CEO, a change in reporting to report to someone other than the Company CEO or the CEO of the ultimate parent company during a Change in Control Period; provided, however, that a resignation for Good Reason will not be deemed to have occurred unless the Participant (a) provides the Company with written notice of Participant's intention to terminate his or her employment for Good Reason within ninety (90) calendar days after the occurrence of the event that Participant believes would constitute Good Reason and (b) Participant provides the Company with the Company Cure Period following receipt of such notice in which to cure the event giving rise to such Good Reason termination, and (c) Participant's resignation is effective within ten (10) calendar days of the earlier of expiration of the Company Cure Period or written notice from the Company that it will not undertake to cure the condition set forth in set forth in subclauses (i) through (iv).

9.19 "***Participant***" means each Eligible Employee or any other employee selected by the Committee pursuant to Section 2 hereof.

9.20 "***Severance Multiplier***" means (i) 1.5 times the Participant's Base Salary for Tier 1 Participants, (ii) 1.25 times the Participant's Base Salary for Tier 2 Participants and (iii) 0.75 times the Participant's Base Salary for Tier 3 Participants.

9.21 "***Target Bonus***" means the Participant's target annual cash bonus (assuming achievement of performance goals at 100% of target) for the fiscal year in which the Covered Termination occurs.

9.22 "***Tier 1 Participant***" means the Company's Chief Executive Officer.

9.23 "***Tier 2 Participant***" means a Participant who is a C-level executive.

9.24 "***Tier 3 Participant***" means a Participant who is a Vice President or a Senior Vice President level employee.

* * * * *

EXHIBIT A

ARTICIPATION AGREEMENT

SUTRO BIOPHARMA, INC.
SEVERANCE AND CHANGE IN CONTROL PLAN

Sutro Biopharma, Inc., a Delaware corporation (the "***Company***"), pursuant to its Change in Control Severance Plan, as may be amended from time to time (the "***Plan***"), hereby designates _____ as a Participant in the Plan at the level indicated below:

FORMCHECKBOX **Tier 1 Participant**

FORMCHECKBOX **Tier 2 Participant**

FORMCHECKBOX **Tier 3 Participant**

By his or her signature below, the Participant hereby acknowledges and agrees that:

(i) The Participant has received and reviewed a copy of the Plan;

(ii) Any payment or benefit under the Plan shall be subject to the terms and conditions of this Participation Agreement and the Plan;

(iii) The Participant accepts as binding, conclusive and final all decisions or interpretations of the Board (as defined in the Plan) arising under the Plan;

(iv) This Participation Agreement, together with the Plan, shall constitute the entire agreement between the Company and the Participant with regard to cash payments, benefits or equity acceleration in connection with a termination of employment or a Change in Control. All prior understandings and agreements with respect to cash payments, benefits and equity acceleration in connection with a termination of employment or a Change in Control shall be superseded by this Plan and the Participation Agreement.

SUTRO BIOPHARMA, INC. **PARTICIPANT**

By: ___ By: ___

Print Name: Print Name:
Title: Date:

Exhibit 10.30

SUTRO BIOPHARMA

ugstg28, 03HaHn

Ass- PerG2bhgs3D e[e
pi2vdg]- g::2-VW

[-g2Ass-o

f-g2-ywgW:]GGSS-28Gt gyGWjvGs Bvjmlt]2GrvGymg2hg3cs.e(]m+ "CGhygs8")3gWCmv-SD-:v.gwOSSv.-23 2-yG2]vsb]GrwwN-B-w8CPO3-SS-.]vd- HEH0EHaHnexm+ CGhygs8vW-9.vj-:]Gmgd-8Gt /Gvs Gt2-9.-y]vGsgw]-ghgs:B-vGG1SG2Bg2:]Ggyt2yGW-Stwgs:y2G:t.]vd-2-vg]vGsWmyeTGt VmGtw sG]-]mg]]m+ CGhygs8hg8 hG:v88/Gj]vjwV8Wgvg2v-Vgs:j-s-SvjWS2Gh]vh-]G]vh-gWj:--hWs-.-Wg28e

1. Compensation

ge **Base Pay.** cs]mWyGWjvGs 8Gt Bww-g2s gs gsstgwWgvg28GSkYaa3aaa3Bmv.mBwwj-ygv. W-hv$hGs]mv8vs g..G2:gs.-Bvjm]m+ CGhygs85WsG2hgwyg82Gwwy2G.-:t2-VeTGt2jgW-yg8Bwwj-y-2vG:v.gwv8 2-dv-B-: gWgyg2]GS]m+ CGhygs85W2-btvg22-dv-BWGS.Ghy-sVg]vGse

je **Bonus Eligibility.** cs-g.m.gws:g28-g2:t2vsb8Gt2-hyvG8h-s]Bvjm]m+ CGhygs838Gt Bwwj--wbvjw]G2-.-vd- gs gsstgwjGstW.-y-s:-s]Gsy-2SG2hgs.-Gj/-.]vd-W3Bmv.mBwwj-jgW:Gs.Ghygs8 Gj/-.]vd-W-Vjgjwvm+:j8]m+ CGhygs85WrGg2:GS[v2-.]G2Wvs]m+v2:vW2-]vGseTGt2]g2b-]jGstVBwwj-ty]G'a4 GS8Gt2jgW-Vgvg283gWVh vsb]m+ g.mv-d-h-s]GSW.my-2SG2hgs.-Gj/-.]vd-VgW.-]-2hvs-: WGwv8j8]m+ CGhygs85WrGg2:GS[v2-.]G2WeTGt Bwwj--wbvjwSG2jGstW.GsW.-2g]vGs3Bvjm]m+ j-bvssvsbGS]m+ HaHny-2SG2hgs.-8-g2eAs8jGstWjmg]8Gt-g2sBwwj-ygv.]G8Gt Bvjmvs]m+ yg2gh-]-2Vgb2--:]Gj8]m+ CGhygs8CPOgs:]m+ CGhygs85WCGhy-sVg]vGs CGhhvj]--GS]m+ rGg2: GS[v2-.]G2Vgs:Vmgwwj-ygv.vs.gWm3wVWgs8tWVgwBvjmmGwvsbe

.e **Sign-on Bonus**eTGt Bww2-.-vd-gWbs$Gsj GstVGSknYa3aaa3wVWgyyw.gjw]g9-W3kHYa3aaa Bwwj-ygv. Gs]m+ Sv2WjyG82Gwwy-2vG:SGwvGBvsb8Gt2Vjg2]:g]-exm+ 2-hgvsvsbk,aa3aaa Bwwj-ygv. Gs8Gt2Gs-$ 8-g2gssvd-2Vg28gs]v.vyg]-:]Gj-Gs G2gS]-2%j2tg28q3HaH'3ywgW-y2Gdv.-]mW2-7t-WjvsB2vsb]G i-Gywgs:Ctvjt2-]-s:g8Wy2vG2]G]m+:g]-8GtBGtwvw1-]G2-.-vd-]m+W.Gs:Wbs$Gsj GstW yg8h-s]GSk,aa3aaaexmWWbs$Gsj GstVBwwj-Stw82-yg8gjwVmGtw8Gt.mGGW]Gwgd-]m+ .Ghygs8y2vG2]G8Gt2W.Gs:8-g2gssvd-2Vg28GS-hyvG8h-s]e

2. Equity

ge cS8Gt:-.v.-]G/Gvs]m+ CGhygs83vjBwwj-2-.Ghh-s:-:Gs]m+ ,Y]mGS]m+ hGs]mSGwvGBvsb8Gt2Vjg2] :g]-(G2]m+ Sv2Wj]2g:vsb:g8SGwvGBvsb8Gt2Vjg2]:g]-)3]mg]]m+ CGhygs8b2gs]8Gt gsGy]vGs]G yt2.mgW-,qY3aaa ytjwv8]2g::Vmg2-W(sGs$7tgw8v-:)GS]m+ Sgv2hg21-]dgwv-y-2Vmg2-GS]m+ CGhhGs I]G.1g]gy2v-y-2 Vmg2--7tgwjG]m+ Sgv2hg21-]dgwv-y-2Vmg2-GS]m+ CGhhGs I]G.1Gs]m+:g]-GSb2gs]3gWgyy2Gd-: j8]m+ CGhygs85WrGg2:GS[v2-.]G2WexB-s]8$Svd-y-2.-s](HY4)GS]m+ Vmg2-WWj/-.]]G]m+ Gy]vGs Vmgwvd-Vj,HhGs]mVgS]-2]m+:g]-8Gt2d-Vjvsbj-bvsWWj/-.]]G8Gt2.Gs]vstvsb-hyvG8h-s]Bvjm]m+ CGhygs83gs:sGVmg2-WVmgwvd-Vj-SG2-W.m:g]-exm+ 2-hgvsvsbVmg2-WVmgwvd-VjhGs]mv8Gd-2]m+

s-9] n6 h Gs]mWs -7t gwh Gs]m8 gh Gt s]WWj /-.]]G 8Gt 2. Gs]vs t vs b-h yvG8h-s] B vj m]m+ .Gh ygs 8e xmWGy]vGs b2gs] Wmgwj- Wj /-.]]G]m+]-2h Wgs: .Gs: vjvGs WGS]m+ .Gh ygs 85W]G. 1 Oy]vGs i wgs gs: I]G. 1 Oy]vGs Ab2--h-s]3vs. wv: vs b d-WVs b 2-7t v2-h-s]We NG 2vbm]]G gs 8 VjG. 1 vW-g2s-: G2g..2t-: t s]wv Wv. m]vh-]mg] d-WVs b G..t 2V8s G2: G-Wj m+ b2gs]. Gs S-2gs 8 2vbm]]G. Gs]vs t-d-WVs b G2-h yvG8h-s]e cs g: : vjvGs]G 8Gt 2Gy]vGs b2gs]38Gt B vw2-.-vd-g b2gs]GS, Ya3aaa Wmg2-WGS R-Wj2v.]-: I]G. 1 (RI U5Wje xmWb2gs] B vwd-Wj gs s t gw83S2Gh 8Gt 2Vjg2]: g]-3Gd-2' 8-g2Wg]]m+ 2g]-GS HY4 -g. m8-g2eNG 2vbm]]G gs 8 VjG. 1 vW-g2s-: G2g..2t-: t s]wvWv. m]vh-]mg] d-WVs b G..t 2V8s G2: G-Wj m+ b2gs]. Gs S-2gs 8 2vbm]]G. Gs]vs t-d-WVs b G2-h yvG8h-s]e

3. Employee Benefits

ge **Group Plans**e AWgs -h yvG8--38Gt B vwj--wbvj w]G 2-.-vd-.-2]gvs -h yvG8--j-s-Sv]Ws. vv: vs b m+ gvjvm vs Vv2gs.-3wS- vs Vv2gs.-gs: : vWgj vwj8 vs Vv2gs.-3B vjm2-gVGs gj w gs: .t VjVGh g28. Gd-2gb-Vgs: : -: t.]vj wvWG2. G$yg8h-s]We

je **Paid Time Off**e I t j /-.]]G]m+ CGh ygs 85W xO i Gvv 838Gt B vwj--wbvj w SG2 Ha: g8W gv. xvh-OSS (i xO)3 g..2t-: Gs g h Gs]m8 j gWWg]]m+ 2g]-GS, nen' mGt 2Wy-2h Gs]meTGt B vwgvWG-wbvj w SG2 MygvmGvv g8Wy-28-g2e

.e **401k.** xm+ CGh ygs 8 B vwwy2Gdv.-8Gt B vjm]m+ GyyG2]t s vj8]G yg2]v. vyg]-vs]m+ I t]2G5W a, 1 ywgs exm+ ywgs B vwh g]. mYa4 GS8Gt 2' a, (1). Gs]2vj t]vGs WGs]m+ Sv2Vj64 GS8Gt 2Vgvg28 (Wj /-.]]G cRI h g9vh t h : -S-22gvgvGB-:)eTGt g2--wbvj w]G-s2Gvwj m+ Sv2Vj GS]m+ h Gs]mgS]-28Gt 2m2-: g]-gs: h t Vjj-gs g.]vd--h yvG8--Gs, HEn, GS]m+ ywgs 8-g2]G j--wbvj w SG2]m+ CGh ygs 8. Gs]2vj t]vGs e

:e **Employee Stock Purchase Program (ESPP).** Pwbvj w-h yvG8--W gs g. 7t v2-I t]2G VjG. 1]m2Gt bmgS]-2$]g9 yg82Gvv.-: t.]vGs Vg] g: vWGt s]-: yt 2. mgW y2v.-eOSS-2vs b y-2vG: W2t s SG2g W9$h Gs]my-2vG: gs: G..t 2]B v.--g. m8-g2Gs D g2. m, Y]mgs: I-y]-h j-2, Y]me

4. Change of Control/Severance Eligibility

PSS-.]vd-B vjm8Gt 2Sv2Vj: g]-GS-h yvG8h-s] 8Gt B vwj-g yg2]v. vygs]vs I t]2G5WCmgs b-GS CGs]2Gw gs: I-d-2gs.-ywgs B vjm]m+ y2GdvWGs Wy2Gdv.-: t s: -2xv-2H GS]m+ i wgs ef-mgd-vs. vv: -: g. Gy8 GS]m+ ywgs : G. t h-s] SG2 8Gt 22-S-2-s.-e

5. Additional Important Information

ge **At-Will Employment**e TGt WmGt w j-gB g2-]mg] 8Gt 2-h yvG8h-s] B vjm]m+ CGh ygs 8 vWSG2 s G Wj-. vSv-: y-2vG: gs: .Gs VjVjt]-Wg]$B vww-h yvG8h-s]eAWg 2-Wvj38Gt g2-S2--]G 2-Wbs g]gs 8]vh-3SG2 gs 8 2-gVGs G2 SG2 s G 2-gVGs eI vh wg2v83]m+ CGh ygs 8 vWS2--]G. Gs. vv: -vjW-h yvG8h-s] 2-wg]vGs Wmy B vjm8Gt g]gs 8]vh-3B vjmG2 B vjmGt]. gt W3gs: B vjmG2 B vjmGt] s G]v.-ef-2-7t-Vj]mg]3vs]m+ -d-s] GS 2-Wbs g]vGs 3 8Gt bvd-]m+ CGh ygs 8 g] wgVj]B G B--1V8s G]v.-e

je **Confidentiality & Arbitration Agreement**e AWg. Gs: vjvGs GS8Gt 2-h yvG8h-s]38Gt g2-gVG 2-7t v2-:]G Wbs gs: .Gh yv8 B vjmgs A]$f vwPh yvG8h-s]3CGs Sv.-s]vgvvs SG2h g]vGs 3 cs d-s]vGs AWWbs h-s] gs: A2j vj2g]vGs Ab2--h-s] B mv. m2-7t v2-V8gh Gs b G]m+ 2y2GdvWGs V8]m+ gWWbs h-s] GS yg]-s] 2vbm]Vj G gs 8 vs d-s]vGs h g: -: t 2vs b 8Gt 2-h yvG8h-s] g]]m+ CGh ygs 83gs: s Gs $; vWvGVv2-GS. Gh ygs 8 y2Gy2v+]g28 vs SG2h g]vGs ecs]m+ -d-s] GS gs 8: vWt]-G2. vgvh 2-vg]vs b]G G2 g2vWs b Gt] GS Gt 2-h yvG8h-s] 2-vg]vGs Wmy 38Gt gs:]m+ CGh ygs 8 gb2--]mg] (v) gs 8 gs: gvv. vWt]-Wj-]B--s 8Gt gs:]m+ CGh ygs 8 Wmgvwj-St v8 gs: Svs gv8 2-VGvd-: j 8 j vs: vs b g2j vj2g]vGs 3(w) 8Gt g2-B gvdvs b gs 8 gs: gvv2vbm]Vj G g /t 28]2gvwj t] gvv. Gt 2] 2-h-: v-WB vwj-gdgvvgj w vs g2j vj2g]vGs 3(vv) gvv. vWt]-WWmgvwj-2-VGvd-: j 8 g s-t]2gvv

g2j vj2g]G2 B mG Wmgwwv Wv- g B 2vj]- s Gyvs vGs 3(vd)]m+ g2j vj2g]vGs Wmgwwy2Gdv. - SG2 g: - 7t g]- : vWGd- 283gs : (d)]m+ CGh ygs 8 Wmgwwy g8 gwwj t]]m+ Sv2Wk, HY GS]m+ g2j vj2g]vGs S- - Wei wgW s G]-]mg] B - h t Wj 2- . - vd- 8Gt 2 Wbs - : Ab2- - h - s] j - SG2- 8Gt 2 Sv2Wj : g8 GS - h ywG8h - s]e

. e **Verification of Information**e x m+ CGh ygs 8 2- W2d- Wj m+ 2vbm]]G . Gs : t .] j g. 1b2Gt s : vs d- Wjwbg]vGs W gs : EG2 2- S- 2- s . - . m+ . 1WGs gwwGS vj Wy G]- s]vgw+ h ywG8- - We TGt 2 /Gj GSS- 23]m+ 2- SG2- 3vW. Gs]vs b- s] t yGs g . wg2gs . - GS W. mg j g. 1b2Gt s : vs d- Wjwbg]vGs gs : EG2 2- S- 2- s . - . m+ . 13vSgs 8e

: e **Right to Work**e %G2 yt 2yGW WGS S- : - 2gwwh h vb2g]vGs vgB 38Gt B wwj - 2- 7t v2- :]G y2Gdv. -]G]m+ CGh ygs 8 : G. t h - s]g28 - dv. - s . - GS 8Gt 2 v. - s]vj 8 gs : - wbvj wwj 8 SG2 - h ywG8h - s] vs]m+ Us vj - : I]g] - We I t . m : G. t h - s]g]vGs h t Wj - y2Gdv. - :]G t WB vj mvs]m2- - (n) j t Ws - WV. g8 WGS 8Gt 2 : g]- GS m2- 3G2 Gt 2 - h ywG8h - s] 2- vg]vGs Wmhy B vj m8Gt h g8 j -]- 2h vs g]- : e

- e **Vaccination for COVID-19**exm+ CGh ygs 8 2- 7t v2- Wgwvs - B m2- WjG j - St w8 dg. . vs g]- : y2vG2]G]m+ Sv2Wj : g]- GS - h ywG8h - s]eAW2- 7t v2- : j 8 gyyw gj w vgB 3I t]2G B wwv Gs W. - 2 2- 7t - WjWSG2 2- gWGs gj w g. . Gh h G: g]vGs e

Se **No Conflicting Obligations**e f - gWG gW1]mg]3vS 8Gt mgd- s G] gv2- g: 8 : Gs - WG38Gt : WWvGW]G]m+ CGh ygs 8 gs 8 gs : gwwgb2- - h - s]W2- vg]vs b]G 8Gt 2 y2vG2 - h ywG8h - s]]mg] h g8 gSS- .] 8Gt 2 - wbvj wwj 8]G j - - h ywG8- : j 8]m+ CGh ygs 8 G2 wh vj]m+ h gs s - 2vs B mv. m8Gt h g8 j - - h ywG8- : ec] vWjm+ CGh ygs 85W t s : - 2Wjgs : vs b]mg] gs 8 W. mgb2- - h - s]WB wws G] y2- d- s] 8Gt S2Gh y- 2SG2h vs b]m+ : t]v+ WGS 8Gt 2 yGWjvGs gs : 8Gt 2- y2- W-s]]mg] W. mWjm+ . gW-eD G2- Gd- 238Gt gb2- -]mg]3: t 2vs b]m+]- 2h GS 8Gt 2 - h ywG8h - s] B vj m]m+ . Gh ygs 838Gt B wws G] - s bgb- vs gs 8 G]m+ 2 - h ywG8h - s]3G. . t yg]vGs 3. Gs W vjvs b G2 G]m+ 2 j t Ws - WVg.]vdvj8 : v2- .]v8 2- vg]- :]G]m+ j t Ws - WWs B mv. m]m+ CGh ygs 8 vWs GB vs dGwd- : G2 j - . Gh - Wvs dGwd- : : t 2vs b]m+]- 2h GS 8Gt 2 - h ywG8h - s]3s G2 B ww8Gt - s bgb- vs gs 8 G]m+ 2 g.]vdvj v- Wjmg] . Gs Sw] B vj m8Gt 2 Gj wbg]vGs WjG]m+ CGh ygs 8e I vh vwg2v838Gt gb2- - s G]]G j 2vs b gs 8]m2: yg2]8 . Gs Sv. - s]vgwvs SG2h g]vGs]G]m+ CGh ygs 83vs . w: vs b]mg] GS 8Gt 2 SG2h - 2 - h ywG8- 23gs :]mg] vs y- 2SG2h vs b 8Gt 2 : t]v- WSG2]m+ CGh ygs 8 8Gt B wwvs G] vs gs 8 B g8 t]ww F- gs 8 W. mvs SG2h g]vGs e

be **General Obligations**e AWg CGh ygs 8 - h ywG8- - 38Gt B wwj - - 9y- .]- :]G gj v. - j 8]m+ . Gh ygs 85W2t w W gs : Wjgs : g2: We I y- . vSv. gw838Gt B wwj - 2- 7t v2- :]G Wbs gs g. 1s GB w: bh - s]]mg] 8Gt mgd- 2- g: gs :]mg] 8Gt t s : - 2Wjgs :]m+ CGh ygs 85W2t w WGS . Gs : t .]3B mv. mg2- vs . w: - : vs]m+ CGh ygs 8 z gs : j GG1e

xG g. . - y]]m+ CGh ygs 85WGSS- 23y w gW Wbs gs : : g]-]mWw]]- 2vs]m+ Wyg. - y2Gdv. - : j - vGB ex mWw]]- 23gvGs b B vj mgs 8 gb2- - h - s]W2- vg]vs b]G y2Gy2v-]g28 2vbm]Wj -]B - - s 8Gt gs :]m+ CGh ygs 83W] SG2]m]m+]- 2h WGS 8Gt 2 - h ywG8h - s] B vj m]m+ CGh ygs 8 gs : Wy - 2W: - gs 8 y2vG2 2- y2- W-s]g]vGs WG2 gb2- - h - s]Ws . w: vs b3j t] s G] wh vj - :]G3gs 8 2- y2- W-s]g]vGs Wh g: - : t 2vs b 8Gt 2 2- . 2t vjh - s]3vs]- 2dv- B WG2 y2- $- h ywG8h - s] s - bG]vg]vGs W8 B m+]m+ 2 B 2vj]- s G2 G2gwexmWw]]- 23vs . w: vs b3j t] s G] wh vj - :]G3vjWg]$B ww+ h ywG8h - s] y2GdvWGs 3h g8 s G] j - h G: vSv+ : G2 gh - s : - : - 9. - y] j 8 g B 2vj]- s gb2- - h - s] Wbs - : j 8]m+ CPO GS]m+ CGh ygs 8 gs : 8Gt exmWGSS- 2 GS - h ywG8h - s] B wwj - 2h vs g]- vSvj WvS G] g. . - y] - : 3Wbs - : gs : 2-]t 2s - : j 8 **January 25, 2023**e

f - vGG1 SG2B g2:]G 8Gt 2 SgdG2gj w 2- yv8 gs :]G B G21vs b B vj m8Gt g] I t]2G r vGymg2h ge

p*signature page follows*l

xGvs:v.g]- 8Gt2g..-y]gs.- GS]m+ CGh ygs85WGSS-23ywgW Wbs gs: :g]-]mWw]]-2vs]m+ Wyg.- y2Gdv.-:j-vGB gs: 2-]t2s vj]Gh-e

Ivs.-2-v83

f vwwgh ueN-B-wv
CPO

ACCPi xP[AN[AJ RPP[o

Ivbsg]t2-o_____

i2vs]-: Ngh-o_____

[g]-o_____

Ps.vGvW2-Wd
P9mjvj AoJ-s-2gwR-wgW GSAwvCvgvh W
It]2GI-d-2gs.- gs: Cmgsb- GSCGs]2Gwivgs
It]2GrvGymg2hg HaHar-s-SvjWvtv.-

EXHIBIT A

GENERAL RELEASE OF ALL CLAIMS

cs . Gs W- 2g]vGs GS]m+ W-d- 2gs . - j - s - SvJ W]G j - y2Gdv. - :]G **Anne E. Borgman** j 8 I t]2G r vGymg2h g3cs . e(]m+ "CGh ygs 8")3yt 2W gs]]G]m+]- 2h WGS]m+ w]]- 2 8Gt - s]- 2 - : vs]G B vJm]m+ CGh ygs 8 : g]- : gWGS **1/18/2023** (]m+ "Ab2- - h - s]")38Gt 3Gs 8Gt 2 GB s j - mgvGs gs : Gs j - mgvGGS 8Gt 2 m+ v2W8- 9- . t]G2W8g: h vs vWJ2g]G2W8gs : gWWbs W8 m+ 2- j 8 St w8 gs : SG2- d- 2 2- wgW gs : : vW/mg2b-]m+ CGh ygs 8 gs : vJW. v2- .]G2W8GSSv. - 2W8- h yvG8- - W8gb- s]W8 W. . - WG2W8y2- : - . - WG2W8WvjW. vg2v+ W8yg2- s]3WJG. 1mGw. - 2W8- h yvG8- - j - s - SvJ ygs Wgs : gWWbs W(]Gb-]m+ 2 . gww: "]m+ R- wgW-W8")3S2Gh gww1s GB s gs : t s 1s GB s . vgvh Wgs : . gt W-WGSg.]vGs vs . vv: vs b3B vJmGt] wh vJg]vGs 3gs 8 . vgvh WG2 . gt W-WGSg.]vGs g2Ws b Gt] GS G2 2- vg]vs b vs gs 8 B g8]G 8Gt 2 - h yvG8h - s] B vJm]m+ CGh ygs 83vs . vv: vs b]m+]- 2h vs g]vGs GS]mg] - h yvG8h - s]e

Pvbm] : g8WgS]- 2 8Gt Wbs (gs : : G s G] 2- dG1-)]mWJ - s - 2gwR- wgW GS AwuCvgvh W("R- wgW") 3y2Gdv. - :]mg] vJ vW s G] Wbs - : - g2w+ 2]mgs 8Gt 2 . - WJg]vGs GS - h yvG8h - s]38Gt B vwvj - - s]vJw:]G]m+ W-d- 2gs . - j - s - SvJ WG2 . mgs b- GS . Gs]2Gwj - s - SvJ WW] SG2]mvs]m+ Ab2- - h - s]3WJ /- .]]G gs 8 G]m+ 2 2- 7t v2- h - s]WW] SG2]m]m+ 2- vs G2 Gs P9mj vJ r]m+ 2-]G3]mg] g2- . Gs : vJvGs - : Gs]mWR- wgW-e

TGt t s : - 2WJgs : gs : gb2- -]mg]]mWR- wgW vWg St wgs : . Gh yw]- B gvd- 2 GS gww vgvh W8vs . vv: vs b (B vJmGt] wh vJg]vGs) . vgvh WJG g]]G2s - 8W8S- - WG2 . GWJW8. vgvh WGS B 2Gs bSt w: vW/mg2b- 3. Gs WJ2t .]vd- : vW/mg2b- 3j 2- g. mGS . Gs]2g.]3j 2- g. mGS]m+ . Gd- s gs] GS bGG: Sgv]mgs : Sgv2 : - gws b3mg2gWM - s]32-]gwg]vGs 3: vW/2h vs g]vGs 3dvGvg]vGs GS y t j w: y Gw: 83: - Sgh g]vGs 3vs dgWGs GS y 2vdg. 83vs]- 2S- 2- s . - B vJmg wgd- GS gj W-s . - 3y- 2WGs gwus /t 283S2gt : G2 - h G]vGs gw: vWJ2- WWgs : gs 8 . vgvh WGS : vW/2h vs g]vGs G2 mg2gWM - s] j gW-: Gs W-93gb- 32g. - 3s g]vGs gwG2vbvs 3 : vWgj ww]8 G2 gs 8 G]m+ 2 j gWWt s : - 2 x vJw VccGS]m+ CvdwRvbm]WA.] GS, M6' 3]m+ %gv2 Lgj G2 I]gs : g2: WA.]3]m+ P7t gw i g8 A.] GS, M6n3]m+ Ah - 2v gs Wf vJm[vWgj ww]v+ WA.]3]m+ Ab- [vW/2h vs g]vGs vs Ph yvG8h - s] A.] GS, M6q (A[PA)3]m+ CgwSG2s vg Lgj G2 CG: - 3]m+ CgwSG2s vg %gv2 Ph yvG8h - s] gs : z Gt Ws b A.]3]m+ CgwSG2s vg %gh vw8 Rvbm]WA.]3]m+ %gh vw8 D - : v gwL- gd- A.] G2 gs 8 G]m+ 2 S- : - 2gwG2 WJg]- vgB G2 2- bt vg]vGs 2- vg]vs b]G - h yvG8h - s] G2 - h yvG8h - s] : vW/2h vs g]vGs e TGt St 2]m+ 2 t s : - 2WJgs : gs : gb2- -]mg]]mWB gvd- 2 vs . vv: - Wgww vgvh W81s GB s gs : t s 1s GB s 3]G]m+ b2- g]- WJ - 9]- s] y - 2h vJ]- : j 8 gyy yw gj w vgB e

TGt gwWG m+ 2- j 8 gb2- -]mg] s G]mvs b . Gs]gvs - : vs]mWR- wgW Wvfgww Gs WJW]t]- G2 j -]2- g]- : gWgs g: h vWWGs GS wgj ww]8 G2 B 2Gs b: Gvs b j 8]m+ R- wgW- WG2 8Gt e

cs g: : vJvGs 3 8Gt m+ 2- j 8 - 9y2- WW8 B gvd- gs 8 gs : gww2vbm]Wgs : j - s - SvJ W. Gs S- 22- : t yGs 8Gt j 8]m+ y2GdvWGs WGS I - .]vGs , Y' H GS]m+ CvdwCG: - GS]m+ I]g]- GS Cgw8G2s vg 3B mv. mWJg]- WgW8GwGB Wd

A b- s - 2gw2- wgW : G- Ws G] - 9]- s :]G . vgvh WB mv. m]m+ . 2- : vJG2 : G- Ws G] 1s GB G2 WvWy - .]]G - 9vWJvs mWG2 m+ 2 SgdG2 g]]m+]vh - GS - 9- . t]vs b]m+ 2- wgW-3B mv. mvS 1s GB s j 8 mvh G2 m+ 2 h t WJ/mgd- h g]- 2gw8 gSS- .]- : mWG2 m+ 2 W-]]wh - s] B vJm]m+ : - j]G2e

cSgs 8 y2GdvWGs GS]mWR- wgW- vW8Gt s :]G j - t s - s SG2 . - gj w 3vJ Wvfgwws G] gSS- .]]m+ - s SG2 . - gj ww]8 GS]m+ 2- h gvs vs b y2GdvWGs Wgs :]m+ . Gt 2] Wvfgww+ s SG2 . - gww2- h gvs vs b y2GdvWGs WJG]m+ St ww+ 9]- s] y - 2h vJ]- : j 8 vgB e

TGt gb2- -]G y2Gdv. - 3g]]m+ CGh ygs 85W+ 9y- s W-3vs . vv: vs b 2- vh j t 2W-h - s] GS 8Gt 2]vh - gs : EG2]m+ 2- gWGs gj w S- - Wgs : - 9y- s W-WGS 8Gt 2 . Gt s W-vw82- gWGs gj w . GGy- 2g]vGs gs : . Gh yw]- gs : g. . t 2g]- vs SG2h g]vGs]G]m+ CGh ygs 8 (dGvvs]g2w83B vJmGt] 2- 7t v2vs b g Wvj yG- s g G2 G]m+ 2 . Gh yt vWGs GS vgB) vs]m+ - d- s] GS wJvbg]vGs gbgvs WJ]m+ CGh ygs 8 gs : EG2 vJWGSSv. - 2WG2 : v2- .]G2We TGt gwWG gb2- -]mg] 8Gt B vwvs G] gWWWJgs 8 y- 2WGs vs j 2s bvs b G2 yt 2W-vs b gs 8 . vgvh G2 g.]vGs GS gs 8 1vs : gbgvs WJ]m+ CGh ygs 83t s w WWy t 2W/gs]]G Wvj yG- s g G2 G]m+ 2 . Gh yt vWGs GS vgB e

xmWR-wgW.GsWWjt]-Wjm+-s]v2-gb2--h-s]j-]B--s8Gtgs:R-wgWVWBvjm2-bg2:]G]m+Wtj/-.]hg]]-2GS]mWR-wgWedjWty-2W:--Wgs8G]m+2gb2--h-s]W32-y2-Ws]g]vGsWG2ts:--2Wjgs:vsbVWBm+]m+2G2gwG2B2vj]-sgs:Bm+]m+2-9y2-WWG2vhyw+:3Bmvm2-wg]-]G]m+Wtj/-.]hg]]-2GS]mWR-wgW-9.-y]gWG]m+2BwWW]SG2]mvs]m+Ab2--h-s]ezGB-d-23]mWR-wgW.Gd-2WGsv8]mGW.wgvhWjmg]g2GWy2vG2]G]m+-9-.t]vGsGS]mWR-wgWeP9-.t]vGsGS]mWR-wgW:G-WsG]jg2gs8.wgvh]mg]g2WWVm+2-gS]-23vs.w:vsb(BvjmGt]whvjg]vGs)g.wgvhSG2j2-g.mGS]m+Ab2--h-s]e

TGtts:-2Wjgs:]mg]8Gtmgd-]m+2vbm]]G.GsWtvjvBvjmgsg]]G2s-8j-SG2-Wbsvsb]mWR-wgWeTGtmgd-H,:g8WgS]-22-.-wy]GS]mWR-wgW]G2-dv+Bgs:.GsW.-2]mWR-wgW3:WWtWWjBvjmgsg]]G2s-8GS8Gt2GBs.mGGWsb3gs::-.v.-]G-9-.t]-vjG2sG]-9-.t]-vjeTGtgWGtts:-2Wjgs:]mg]8Gthg82-dG1-]mWR-wgW:t2vsbgy-2vG:GSWd-s:g8WgS]-28Gt Wbsvjgs:]mg]]mWR-wgWBwwsG]j-.Gh--SS-.]vd-SG2Wd-s:g8WgS]-28Gt Wbsvj(gs:]m+sGsv8vS8Gt:GsG]2-dG1-vj)ecsgs8-d-s]3]mWR-wgWvWsG]]Gj-Wbs-:3gs:Bwwsg]j-.Gh--SS-.]vd-3y2vG2]G8Gt2.-Wg]vGsGS-hyvG8h-s]ecsG2:-2]G2-dG1-]mWR-wgW3BvjmsWd-s:g8WgS]-28Gt-9-.t]-]mWR-wgW8Gthtvj:-wd-2]Gfwwwgh N-B-w8g]]m+CGhygs83gw]]-2Wjg]vsb]mg]8Gtg2-2-dG1vsbvje

TGtts:-2Wjgs:]mg]vS8Gt.mGGW]G2-dG1-]mWR-wgWBvjmsWd-s:g8WgS]-28GtWbsvj38GtBwwsG]2-.-vd-]m+Wd-2gs.-j-s-SvjWWW]SG2]mvs]m+Ab2--h-s]]mg]g2-.Gs:vjvGs-:Gs]mWR-wgWgs:]m+R-wgWBwwmgd-sG-SS-.]e

TGtgb2--sG]]G:vWvGvW]GG]m+2Wjm+]-2hWGS]mWR-wgW3-9.-y]]mg]8Gthg8:vWvGvWWv.mvsSG2hg]vGs]G8Gt2WjGtWgs:]G8Gt2g]]G2s-8G2g..Gtts]gs]vsG2:-2SG2W.mg]]G2s-8G2g..Gtts]gs]]G2-s:--2W2dv-WjG8Gt2-wg]-:]G]mWR-wgWe

TGt VJg]-]mg] j - SG2- Vbos vs b]mVVR- wgW38Gt o

- z gd- 2- g: vJ3
- Us: - 2VJgs: vJ3
- Ks GB]mg] 8Gt g2- bvdvs b t y vh yG2]gs] 2vbm]V8
- A2- gB g2- GS8Gt 2 2vbm]]G . Gs VtVvJvgs g]]G2s - 8 j - SG2- Vbos vs b vJ3gs:
- z gd- Vbos - : vJ 1s GB vs bv8 gs: dGvtvs]g2vx8e

[g]- o
r 8o _____
Anne E. Borgman

xO r P I d NP[Ui ON CPI I AxcON O%PD i LOTD PNx

EXHIBIT 10.34

SUTRO BIOPHARMA, INC.

AMENDED AND RESTATED 2021 EQUITY INDUCEMENT PLAN

1.PURPOSE. The purpose of this Plan is to provide incentives to attract, retain and motivate eligible employees whose potential contributions are important to the success of the Company, and any Parents, Subsidiaries and Affiliates that exist now or in the future, by offering them an opportunity to participate in the Company's future performance through the grant of Awards. Capitalized terms not defined elsewhere in the text are defined in Section 21.

2.SHARES SUBJECT TO THE PLAN.

2.1 Number of Shares Available. Subject to Sections 2.4 and Section 15 and any other applicable provisions hereof, the total number of Shares reserved and available for grant and issuance pursuant to this Plan as of the date of adoption of the Plan by the Board, is Two Million (2,000,000) Shares.

2.2 Lapsed, Returned Awards. Shares subject to Awards, and Shares issued under the Plan under any Award, will again be available for grant and issuance in connection with subsequent Awards under this Plan to the extent such Shares: (a) are subject to issuance upon exercise of an Option granted under this Plan but which cease to be subject to the Option for any reason other than exercise of the Option; (b) are subject to Awards granted under this Plan that are forfeited or are repurchased by the Company at the original issue price; or (c) are subject to Awards granted under this Plan that otherwise terminate without such Shares being issued. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Shares used to pay the exercise price of an Award or withheld to satisfy the tax withholding obligations related to an Award will become available for future grant or sale under the Plan.

2.3 Minimum Share Reserve. At all times the Company will reserve and keep available a sufficient number of Shares as will be required to satisfy the requirements of all outstanding Awards granted under this Plan.

2.4 Adjustment of Shares. If the number of outstanding Shares is changed by a stock dividend, extraordinary dividend or distribution (whether in cash, shares or other property, other than a regular cash dividend) recapitalization, stock split, reverse stock split, subdivision, combination, consolidation, reclassification, spin-off or similar change in the capital structure of the Company, without consideration, then (a) the number and class of Shares reserved for issuance and future grant under the Plan set forth in Section 2.1, (b) the Exercise Prices of and number and class of Shares subject to outstanding Options, and (c) the number and class of Shares subject to other outstanding Awards will be proportionately adjusted, subject to any required action by the Board or the stockholders of the Company and in compliance with applicable securities laws; provided that fractions of a Share will not be issued.

If, by reason of an adjustment pursuant to this Section 2.4, a Participant's Award Agreement or other agreement related to any Award or the Shares subject to such Award covers additional or different shares of stock or securities, then such additional or different shares, and the Award Agreement or such other agreement in respect thereof, will be subject to all of the terms,

conditions and restrictions which were applicable to the Award or the Shares subject to such Award prior to such adjustment.

3.ELIGIBILITY. Awards may be granted only to persons who are being hired by the Company or any Subsidiary as an Employee and such Award is a material inducement to such person being hired.

4.ADMINISTRATION.

4.1 Committee Composition; Authority. This Plan will be administered by the Committee or by the Board acting as the Committee. Subject to the general purposes, terms and conditions of this Plan, and to the direction of the Board, the Committee will have full power to implement and carry out this Plan. The Committee will have the authority to:

(a)construe and interpret this Plan, any Award Agreement and any other agreement or document executed pursuant to this Plan;

(b)prescribe, amend and rescind rules and regulations relating to this Plan or any Award;

(c)select persons to receive Awards;

(d)determine the form and terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the Exercise Price, the time or times when Awards may vest and be exercised (which may be based on performance criteria) or settled, any vesting acceleration or waiver of forfeiture restrictions, the method to satisfy tax withholding obligations or any other tax liability legally due and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Committee will determine;

(e)determine the number of Shares or other consideration subject to Awards;

(f)determine the Fair Market Value in good faith and interpret the applicable provisions of this Plan and the definition of Fair Market Value in connection with circumstances that impact the Fair Market Value, if necessary;

(g)determine whether Awards will be granted singly, in combination with, in tandem with, or as alternatives to, other Awards under this Plan or any other incentive or compensation plan of the Company or any Parent, Subsidiary or Affiliate;

(h)grant waivers of Plan or Award conditions;

(i)determine the vesting, exercisable and payment of Awards;

(j)correct any defect, supply any omission or reconcile any inconsistency in this Plan, any Award or any Award Agreement;

(k)determine whether an Award has been vested and/or earned;

(l)reduce or waive any criteria with respect to Performance Factors;

(m)adjust Performance Factors;

(n)adopt terms and conditions, rules and/or procedures (including the adoption of any subplan under this Plan) relating to the operation and administration of the Plan to accommodate requirements of local law and procedures outside of the United States or to qualify Awards for special tax treatment under laws of jurisdictions other than the United States;

(o)exercise discretion with respect to Performance Factors;

(p)make all other determinations necessary or advisable for the administration of this Plan; and

(q)delegate any of the foregoing to a subcommittee or to one or more executive officers pursuant to a specific delegation as permitted by applicable law, including Section 157(c) of the Delaware General Corporation Law.

4.2 Committee Interpretation and Discretion. Any determination made by the Committee with respect to any Award will be made in its sole discretion at the time of grant of the Award or, unless in contravention of any express term of the Plan or Award, at any later time, and such determination will be final and binding on the Company and all persons having an interest in any Award under the Plan. Any dispute regarding the interpretation of the Plan or any Award Agreement will be submitted by the Participant or Company to the Committee for review. The resolution of such a dispute by the Committee will be final and binding on the Company and the Participant. The Committee may delegate to one or more executive officers the authority to review and resolve disputes with respect to Awards held by Participants who are not Insiders, and such resolution will be final and binding on the Company and the Participant.

4.3 Section 16 of the Exchange Act. Awards granted to Participants who are subject to Section 16 of the Exchange Act must be approved by two or more "non-employee directors" (as defined in the regulations promulgated under Section 16 of the Exchange Act).

4.4 Documentation. The Award Agreement for a given Award, the Plan and any other documents may be delivered to, and accepted by, a Participant or any other person in any manner (including electronic distribution or posting) that meets applicable legal requirements.

4.5 Foreign Award Recipients. Notwithstanding any provision of the Plan to the contrary, in order to comply with the laws and practices in other countries in which the Company and its Subsidiaries or Affiliates operate or have Employees eligible for Awards, the Committee, in its sole discretion, will have the power and authority to: (a) determine which Subsidiaries and Affiliates will be covered by the Plan; (b) determine which Employees outside the United States are eligible to participate in the Plan; (c) modify the terms and conditions of any Award granted to Employees outside the United States or foreign nationals to comply with applicable foreign laws, policies, customs and practices; (d) establish subplans and modify exercise procedures and other terms and procedures, to the extent the Committee determines such actions to be necessary or advisable (and such subplans and/or modifications will be attached to this Plan as appendices, if necessary); provided, however, that no such subplans and/or modifications will increase the share limitations contained in Section 2.1 hereof; and (e) take any action, before or after an Award is made, that the Committee determines to be necessary or advisable to obtain approval or comply with any local governmental regulatory exemptions or approvals. Notwithstanding the foregoing, the Committee may not take any actions hereunder, and no Awards will be granted, that would violate the Exchange Act or any other applicable United States securities law, the Code, or any other applicable United States governing statute or law.

5.OPTIONS. An Option is the right but not the obligation to purchase a Share, subject to certain conditions, if applicable. The Committee may grant Nonqualified Stock Options ("***NSOs***") to eligible Employees and the Committee will determine the number of Shares subject to the Option, the Exercise Price of the Option, the period during which the Option may vest and be exercised, and all other terms and conditions of the Option, subject to the following terms of this section.

5.1 Option Grant. Each Option granted under this Plan will be an NSO. An Option may be, but need not be, awarded upon satisfaction of such Performance Factors during any Performance Period as are set out in advance in the Participant's individual Award Agreement. If the Option is being earned upon the satisfaction of Performance Factors, then the Committee will: (a) determine the nature, length and starting date of any Performance Period for each Option; and

(b) select from among the Performance Factors to be used to measure the performance, if any. Performance Periods may overlap and Participants may participate simultaneously with respect to Options that are subject to different performance goals and other criteria.

5.2 Date of Grant. The date of grant of an Option will be the date on which the Committee makes the determination to grant such Option, or a specified future date. The Award Agreement will be delivered to the Participant within a reasonable time after the granting of the Option.

5.3 Exercise Period. Options may be vested and exercisable within the times or upon the conditions as set forth in the Award Agreement governing such Option; provided, however, that no Option will be exercisable after the expiration of ten (10) years from the date the Option is granted. The Committee also may provide for Options to become exercisable at one time or from time to time, periodically or otherwise, in such number of Shares or percentage of Shares as the Committee determines.

5.4 Exercise Price. The Exercise Price of an Option will be determined by the Committee when the Option is granted; provided that: the Exercise Price of an Option will be not less than one hundred percent (100%) of the Fair Market Value of the Shares on the date of grant. Payment for the Shares purchased may be made in accordance with Section 7 and the Award Agreement and in accordance with any procedures established by the Company.

5.5 Method of Exercise. Any Option granted hereunder will be vested and exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Committee and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share. An Option will be deemed exercised when the Company receives: (a) notice of exercise (in such form as the Committee may specify from time to time) from the person entitled to exercise the Option (and/or via electronic execution through the authorized third party administrator), and (b) full payment for the Shares with respect to which the Option is exercised (together with applicable withholding taxes). Full payment may consist of any consideration and method of payment authorized by the Committee and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 2.4 of the Plan. Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

5.6 Termination of Service. If the Participant's Service terminates for any reason except for Cause or the Participant's death or Disability, then the Participant may exercise such Participant's Options only to the extent that such Options would have been exercisable by the Participant on the date Participant's Service terminates no later than three (3) months after the date Participant's Service terminates (or such shorter or longer time period as may be determined by the Committee), but in any event no later than the expiration date of the Options.

(a)Death. If the Participant's Service terminates because of the Participant's death (or the Participant dies within three (3) months after Participant's Service terminates other than for Cause or because of the Participant's Disability), then the Participant's Options may be exercised

only to the extent that such Options would have been exercisable by the Participant on the date Participant's Service terminates and must be exercised by the Participant's legal representative, or authorized assignee, no later than twelve (12) months after the date Participant's Service terminates (or such shorter time period or longer time period-as may be determined by the Committee), but in any event no later than the expiration date of the Options.

(b)Disability. If the Participant's Service terminates because of the Participant's Disability, then the Participant's Options may be exercised only to the extent that such Options would have been exercisable by the Participant on the date Participant's Service terminates and must be exercised by the Participant (or the Participant's legal representative or authorized assignee) no later than twelve (12) months after the date Participant's Service terminates (or such shorter or longer time period as may be determined by the Committee), but in any event no later than the expiration date of the Options.

(c)Cause. If the Participant's Service terminates for Cause, then Participant's Options will expire on such Participant's date of termination of Service, or at such later time and on such conditions as are determined by the Committee, but in any event no later than the expiration date of the Options. Unless otherwise provided in an employment agreement, Award Agreement or other applicable agreement Cause will have the meaning set forth in the Plan.

5.7 Limitations on Exercise. The Committee may specify a minimum number of Shares that may be purchased on any exercise of an Option, provided that such minimum number will not prevent any Participant from exercising the Option for the full number of Shares for which it is then exercisable.

5.8 Modification, Extension or Renewal. The Committee may, in accordance with NASDAQ 5635(c)(4), modify, extend or renew outstanding Options and authorize the grant of new Options in substitution therefor, provided that any such action may not, without the written consent of a Participant, impair any of such Participant's rights under any Option previously granted.

6.RESTRICTED STOCK UNITS. A Restricted Stock Unit ("***RSU***"') is an award to an eligible Employee covering a number of Shares that may be settled in cash, or by issuance of those Shares (which may consist of restricted Shares). All RSUs shall be made pursuant to an Award Agreement.

6.1 Terms of RSUs. The Committee will determine the terms of an RSU including, without limitation: (a) the number of Shares subject to the RSU; (b) the time or times during which the RSU may be settled; (c) the consideration to be distributed on settlement; and (d) the effect of the Participant's termination of Service on each RSU; provided that no RSU shall have a term longer than ten (10) years. An RSU may be awarded upon satisfaction of such performance goals based on Performance Factors during any Performance Period as are set out in advance in the Participant's Award Agreement. If the RSU is being earned upon satisfaction of Performance Factors, then the Committee will: (x) determine the nature, length and starting date of any Performance Period for the RSU; (y) select from among the Performance Factors to be used to measure the performance, if any; and (z) determine the number of Shares deemed subject to the RSU. Performance Periods may overlap and Participants may participate simultaneously with respect to RSUs that are subject to different Performance Periods and different performance goals and other criteria.

6.2 Form and Timing of Settlement. Payment of earned RSUs shall be made as soon as practicable after the date(s) determined by the Committee and set forth in the Award Agreement.

The Committee, in its sole discretion, may settle earned RSUs in cash, Shares, or a combination of both. The Committee may also permit a Participant to defer payment under a RSU to a date or dates after the RSU is earned provided that the terms of the RSU and any deferral satisfy the requirements of Section 409A of the Code to the extent applicable.

6.3 Termination of Service. Except as may be set forth in the Participant's Award Agreement, vesting ceases on such date Participant's Service terminates (unless determined otherwise by the Committee).

7.PAYMENT FOR SHARE PURCHASES. Payment from a Participant for Shares purchased pursuant to this Plan may be made in cash or by check or, where approved for the Participant by the Committee and where permitted by law (and to the extent not otherwise set forth in the applicable Award Agreement):

(a)by cancellation of indebtedness of the Company to the Participant;

(b)by surrender of Shares by the Participant that have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Award will be exercised or settled;

(c)by waiver of compensation due or accrued to the Participant for services rendered or to be rendered to the Company or a Parent or Subsidiary;

(d)by consideration received by the Company pursuant to a broker-assisted or other form of cashless exercise program implemented by the Company in connection with the Plan;

(e)by any combination of the foregoing; or

(f)by any other method of payment as is permitted by applicable law.

8.WITHHOLDING TAXES.

8.1 Withholding Generally. Whenever Shares are to be issued in satisfaction of Awards granted under this Plan or a tax event occurs, the Company may require the Participant to remit to the Company, or to the Parent, Subsidiary or Affiliate, as applicable, employing the Participant, an amount sufficient to satisfy applicable U.S. federal, state, local and international tax or any other tax or social insurance liability (the "***Tax-Related Items***") required to be withheld from the Participant prior to the delivery of Shares pursuant to exercise or settlement of any Award. Whenever payments in satisfaction of Awards granted under this Plan are to be made in cash, such payment will be net of an amount sufficient to satisfy applicable withholding obligations for Tax-Related Items. Unless otherwise determined by the Committee, the Fair Market Value of the Shares will be determined as of the date that the taxes are required to be withheld and such Shares will be valued based on the value of the actual trade or, if there is none, the Fair Market Value of the Shares as of the previous trading day.

8.2 Stock Withholding. The Committee, or its delegate(s), as permitted by applicable law, in its sole discretion and pursuant to such procedures as it may specify from time to time and to limitations of local law, may require or permit a Participant to satisfy such Tax Related Items legally due from the Participant, in whole or in part by (without limitation) (a) paying cash, (b) having the Company withhold otherwise deliverable cash or Shares having a Fair Market Value equal to the Tax-Related Items to be withheld, (c) delivering to the Company already-owned shares having a Fair Market Value equal to the Tax-Related Items to be withheld or (d) withholding from the proceeds of the sale of otherwise deliverable Shares acquired pursuant to an Award either through a voluntary sale or through a mandatory sale arranged by the Company. The Company may withhold or account for these Tax-Related Items by considering applicable statutory

withholding rates or other applicable withholding rates, including up to (but not in excess of) the maximum permissible statutory tax rate for the applicable tax jurisdiction, to the extent consistent with applicable laws.

9.TRANSFERABILITY. Unless determined otherwise by the Committee, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution. If the Committee makes an Award transferable, including, without limitation, by instrument to an inter vivas or testamentary trust in which the Awards are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift or by domestic relations order to a Permitted Transferee, such Award will contain such additional terms and conditions as the Committee deems appropriate. All Awards will be exercisable: (a) during the Participant's lifetime only by the Participant, or the Participant's guardian or legal representative; (b) after the Participant's death, by the legal representative of the Participant's heirs or legatees; and (c) by a Permitted Transferee.

10.PRIVILEGES OF STOCK OWNERSHIP; RESTRICTIONS ON SHARES.

10.1 Voting and Dividends. No Participant will have any of the rights of a stockholder with respect to any Shares until the Shares are issued to the Participant, except for any dividend equivalent rights permitted by an applicable Award Agreement ("***Dividend Equivalent Rights***"). After Shares are issued to the Participant, the Participant will be a stockholder and have all the rights of a stockholder with respect to such Shares, including the right to vote and receive all dividends or other distributions made or paid with respect to such Shares; provided, that if such Shares are Restricted Stock, then any new, additional or different securities the Participant may become entitled to receive with respect to such Shares by virtue of a stock dividend, stock split or any other change in the corporate or capital structure of the Company will be subject to the same restrictions as the Restricted Stock; provided, further, that the Participant will have no right to such stock dividends or stock distributions with respect to Unvested Shares, and any such dividends or stock distributions will be accrued and paid only at such time, if any, as such Unvested Shares become vested Shares. The Committee, in its discretion, may provide in the Award Agreement evidencing any Award that the Participant will be entitled to Dividend Equivalent Rights with respect to the payment of cash dividends on Shares underlying an Award during the period beginning on the date the Award is granted and ending, with respect to each Share subject to the Award, on the earlier of the date on which the Award is exercised or settled or the date on which it is forfeited provided, that no Dividend Equivalent Right will be paid with respect to the Unvested Shares, and such dividends or stock distributions will be accrued and paid only at such time, if any, as such Unvested Shares become vested Shares. Such Dividend Equivalent Rights, if any, will be credited to the Participant in the form of additional whole Shares as of the date of payment of such cash dividends on Shares.

10.2 Restrictions on Shares. At the discretion of the Committee, the Company may reserve to itself and/or its assignee(s) a right to repurchase (a "***Right of Repurchase***") a portion of any or all Unvested Shares held by a Participant following such Participant's termination of Service at any time within ninety (90) days (or such longer or shorter time determined by the Committee) after the later of the date Participant's Service terminates and the date the Participant purchases Shares under this Plan, for cash and/or cancellation of purchase money indebtedness, at the Participant's Purchase Price or Exercise Price, as the case may be.

11.CERTIFICATES. All Shares or other securities whether or not certificated, delivered under this Plan will be subject to such stock transfer orders, legends and other restrictions as the

Committee may deem necessary or advisable, including restrictions under any applicable U.S. federal, state or foreign securities law, or any rules, regulations and other requirements of the SEC or any stock exchange or automated quotation system upon which the Shares may be listed or quoted and any non-U.S. exchange controls or securities law restrictions to which the Shares are subject.

12.ESCROW; PLEDGE OF SHARES. To enforce any restrictions on a Participant's Shares, the Committee may require the Participant to deposit all certificates representing Shares, together with stock powers or other instruments of transfer approved by the Committee, appropriately endorsed in blank, with the Company or an agent designated by the Company to hold in escrow until such restrictions have lapsed or terminated, and the Committee may cause a legend or legends referencing such restrictions to be placed on the certificates. Any Participant who is permitted to execute a promissory note as partial or full consideration for the purchase of Shares under this Plan will be required to pledge and deposit with the Company all or part of the Shares so purchased as collateral to secure the payment of the Participant's obligation to the Company under the promissory note; provided, however, that the Committee may require or accept other or additional forms of collateral to secure the payment of such obligation and, in any event, the Company will have full recourse against the Participant under the promissory note notwithstanding any pledge of the Participant's Shares or other collateral. In connection with any pledge of the Shares, the Participant will be required to execute and deliver a written pledge agreement in such form as the Committee will from time to time approve. The Shares purchased with the promissory note may be released from the pledge on a pro rata basis as the promissory note is paid.

13.SECURITIES LAW AND OTHER REGULATORY COMPLIANCE. An Award will not be effective unless such Award is in compliance with all applicable U.S. and foreign federal and state securities and exchange control laws, rules and regulations of any governmental body, and the requirements of any stock exchange or automated quotation system upon which the Shares may then be listed or quoted, as they are in effect on the date of grant of the Award and also on the date of exercise or other issuance. Notwithstanding any other provision in this Plan, the Company will have no obligation to issue or deliver certificates for Shares under this Plan prior to: (a) obtaining any approvals from governmental agencies that the Company determines are necessary or advisable; and/or (b) completion of any registration or other qualification of such Shares under any state or federal or foreign law or ruling of any governmental body that the Company determines to be necessary or advisable. The Company will be under no obligation to register the Shares with the SEC or to effect compliance with the registration, qualification or listing requirements of any foreign or state securities laws, exchange control laws, stock exchange or automated quotation system, and the Company will have no liability for any inability or failure to do so.

14.NO OBLIGATION TO EMPLOY. Nothing in this Plan or any Award granted under this Plan will confer or be deemed to confer on any Participant any right to continue in the employ of, or to continue any other relationship with, the Company or any Parent, Subsidiary or Affiliate or limit in any way the right of the Company or any Parent, Subsidiary or Affiliate to terminate Participant's employment or other relationship at any time.

15.CORPORATE TRANSACTIONS. In the event that the Company is subject to a Corporate Transaction, outstanding Awards acquired under the Plan shall be subject to the agreement evidencing the Corporate Transaction, which need not treat all outstanding Awards in an identical manner. Such agreement, without the Participant's consent, shall provide for one or more of the

following with respect to all outstanding Awards as of the effective date of such Corporate Transaction:

(a)The continuation of an outstanding Award by the Company (if the Company is the successor entity).

(b)The assumption of an outstanding Award by the successor or acquiring entity (if any) of such Corporate Transaction (or by its parents, if any), which assumption, will be binding on all selected Participants; provided that the exercise price and the number and nature of shares issuable upon exercise of any such option or stock appreciation right, or any award that is subject to Section 409A of the Code, will be adjusted appropriately pursuant to Section 424(a) of the Code and/or Section 409A of the Code, as applicable. The Board shall have full power and authority to assign the Company's right to repurchase or re-acquire or forfeiture rights to such successor or acquiring corporation.

(c)The substitution by the successor or acquiring entity in such Corporate Transaction (or by its parents, if any) of equivalent awards with substantially the same terms for such outstanding Awards (except that the exercise price and the number and nature of shares issuable upon exercise of any such option or stock appreciation right, or any award that is subject to Section 409A of the Code, will be adjusted appropriately pursuant to Section 424(a) of the Code and/or Section 409A of the Code, as applicable).

(d)The full or partial acceleration of exercisability or vesting and accelerated expiration of an outstanding Award and lapse of the Company's right to repurchase or re-acquire shares acquired under an Award or lapse of forfeiture rights with respect to shares acquired under an Award.

(e)The settlement of the full value of such outstanding Award (whether or not then vested or exercisable) in cash, cash equivalents, or securities of the successor entity (or its parent, if any) with a Fair Market Value equal to the required amount, followed by the cancellation of such Awards; provided however, that such Award may be cancelled if such Award has no value, as determined by the Committee, in its discretion. Subject to Section 409A of the Code, such payment may be made in installments and may be deferred until the date or dates the Award would have become exercisable or vested. Such payment may be subject to vesting based on the Participant's continued service, provided that the vesting schedule shall not be less favorable to the Participant than the schedule under which the Award would have become vested or exercisable. For purposes of this Section 15(e), the Fair Market Value of any security shall be determined without regard to any vesting conditions that may apply to such security.

In the event a successor or acquiring corporation refuses to assume, convert, replace or substitute Awards or it is otherwise determined that Awards shall not be so assumed, converted, replaced or substituted pursuant to this Section 15, each such Award shall become fully vested and, as applicable, exercisable (or deemed exercised if determined by the Committee in its sole discretion) immediately prior to the consummation of the Corporate Transaction and all forfeiture restrictions on any such Award shall lapse. If an Award vests and, as applicable, is exercisable in lieu of assumption or substitution in connection with a Corporate Transaction, the Committee will notify the Participant in writing or electronically of such vesting and that the Award will be exercisable for a period of time determined by the Committee in its sole discretion, and such Award will terminate upon the earlier of the expiration of such period or upon the Change in Control.

16.TERM OF PLAN/GOVERNING LAW. Unless earlier terminated as provided herein, this Plan will become effective on the Effective Date and will terminate ten (10) years from the date this Plan is adopted by the Board. This Plan and all Awards granted hereunder will be governed by and construed in accordance with the laws of the State of Delaware (excluding its conflict of laws rules).

17.AMENDMENT OR TERMINATION OF PLAN. The Board may at any time terminate or amend this Plan in any respect, including, without limitation, amendment of any form of Award Agreement or instrument to be executed pursuant to this Plan; provided, however, that the Board will not, without the approval of the stockholders of the Company, amend this Plan in any manner that requires such stockholder approval; provided further, that a Participant's Award will be governed by the version of this Plan then in effect at the time such Award was granted. No termination or amendment of the Plan or any outstanding Award may adversely affect any then outstanding Award without the consent of the Participant, unless such termination or amendment is necessary to comply with applicable law, regulation or rule.

18.NONEXCLUSIVITY OF THE PLAN. Neither the adoption of this Plan by the Board ;nor any provision of this Plan will be construed as creating any limitations on the power of the Board to adopt such additional compensation arrangements as it may deem desirable, including, without limitation, the granting of stock awards and bonuses otherwise than under this Plan, and such arrangements may be either generally applicable or applicable only in specific cases.

19.INSIDER TRADING POLICY. Each Participant who receives an Award will comply with any policy adopted by the Company from time to time covering transactions in the Company's securities by Employees, officers and/or directors of the Company, as well as with any applicable insider trading or market abuse laws to which the Participant may be subject.

20.ALL AWARDS SUBJECT TO COMPANY CLAWBACK OR RECOUPMENT POLICY. All Awards, subject to applicable law, shall be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by the Board or required by law during the term of Participant's employment or other service with the Company that is applicable to executive officers, employees, directors or other service providers of the Company, and in addition to any other remedies available under such policy and applicable law, may require the cancellation of outstanding Awards and the recoupment of any gains realized with respect to Awards.

21.DEFINITIONS. As used in this Plan, and except as elsewhere defined herein, the following terms will have the following meanings:

21.1"*Affiliate*" means any person or entity that directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with, the Company, including any general partner, managing member, officer or director of the Company, in each case as of the date on which, or at any time during the period for which, the determination of affiliation is being made. For purposes of this definition, the term "control" (including the correlative meanings of the terms "controlled by" and "under common control with"), as used with respect to any person or entity, means the possession, directly or indirectly, of the power to direct or cause the direction of the management policies of such person or entity, whether through the ownership of voting securities or by contract or otherwise.

21.2"*Award*" means any award under the Plan, including any Option or Restricted stock Unit.

21.3"*Award Agreement*" means, with respect to each Award, the written or electronic agreement between the Company and the Participant setting forth the terms and conditions of the Award, and country-specific appendix thereto for grants to non-U.S. Participants, which will be in substantially a form (which need not be the same for each Participant) that the Committee (or in the case of Award agreements that are not used for Insiders, the Committee's delegate(s)) has from time to time approved, and will comply with and be subject to the terms and conditions of this Plan.

21.4"*Board*" means the Board of Directors of the Company.

21.5"*Cause*" means (a) Participant's willful failure substantially to perform his or her duties and responsibilities to the Company or deliberate violation of a Company policy; (b) Participant's commission of any act of fraud, embezzlement, dishonesty or any other willful misconduct that has caused or is reasonably expected to result in material injury to the Company; (c) unauthorized use or disclosure by Participant of any proprietary information or trade secrets of the Company or any other party to whom the Participant owes an obligation of nondisclosure as a result of his or her relationship with the Company; or (d) Participant's willful breach of any of his or her obligations under any written agreement or covenant with the Company. The determination as to whether a Participant is being terminated for Cause will be made by the Company and will be final and binding on the Participant. The foregoing definition does not in any way limit the Company's ability to terminate a Participant's employment or consulting relationship at any time as provided in Section 14 above, and the term "Company" will be interpreted to include any Subsidiary or Parent, as appropriate. Notwithstanding the foregoing, the foregoing definition of "Cause" may, in part or in whole, be modified or replaced in each individual employment agreement, Award Agreement or other applicable agreement with any Participant.

21.6"*Code*" means the United States Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder.

21.7"*Committee*" means the Compensation Committee of the Board or those persons to whom administration of the Plan, or part of the Plan, has been delegated as permitted by law.

21.8"*Company*" means Sutro Biopharma, Inc., a Delaware corporation, or any successor corporation.

21.9"*Consultant*" means any natural person, including an advisor or independent contractor, engaged by the Company or a Parent, Subsidiary or Affiliate to render services to such entity.

21.10"*Corporate Transaction*" means the occurrence of any of the following events: (a) any "Person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the total voting power represented by the Company's then-outstanding voting securities; provided, however, that for purposes of this subclause (a) the acquisition of additional securities by any one Person who is considered to own more than fifty percent (50%) of the total voting power of the securities of the Company will not be considered a Corporate Transaction; (b) the consummation of the sale or disposition by the Company of all or substantially all of the Company's assets; (c) the consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of

the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation; (d) any other transaction which qualifies as a "corporate transaction" under Section 424(a) of the Code wherein the stockholders of the Company give up all of their equity interest in the Company (except for the acquisition, sale or transfer of all or substantially all of the outstanding shares of the Company) or (e) a change in the effective control of the Company that occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by members of the Board whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purpose of this subclause (e), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Corporate Transaction. For purposes of this definition, Persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company. Notwithstanding the foregoing, to the extent that any amount constituting deferred compensation (as defined in Section 409A of the Code) would become payable under this Plan by reason of a Corporate Transaction, such amount will become payable only if the event constituting a Corporate Transaction would also qualify as a change in ownership or effective control of the Company or a change in the ownership of a substantial portion of the assets of the Company, each as defined within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and IRS guidance that has been promulgated or may be promulgated thereunder from time to time.

21.11"*Disability*" means that the Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months.

21.12"*Dividend Equivalent Right*" means the right of a Participant, granted at the discretion of the Committee or as otherwise provided by the Plan, to receive a credit for the account of such Participant in an amount equal to the cash, stock or other property dividends in amounts equivalent to cash, stock or other property dividends for each Share represented by an Award held by such Participant.

21.13"*Effective Date*" means August 4, 2021, the date the Board adopted the Plan.

21.14"*Employee*" means any person, including Officers and Directors, providing services as an employee to the Company or any Parent, Subsidiary or Affiliate. Neither service as a member of the Board nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

21.15"*Exchange Act*" means the United States Securities Exchange Act of 1934, as amended.

21.16"*Exercise Price*" means, with respect to an Option, the price at which a holder may purchase the Shares issuable upon exercise of an Option.

21.17"*Fair Market Value*" means, as of any date, the value of a share of the Company's common stock determined as follows:

(a)if such common stock is publicly traded and is then listed on a national securities exchange, its closing price on the date of determination on the principal national

securities exchange on which the common stock is listed or admitted to trading as reported in The Wall Street Journal or such other source as the Committee deems reliable;

(b)If such common stock is publicly traded but is neither listed nor admitted to trading on a national securities exchange, the average of the closing bid and asked prices on the date of

21.18"*Insider*" means an officer or director of the Company or any other person whose transactions in the Company's common stock are subject to Section 16 of the Exchange Act.

21.19"*IRS*" means the United States Internal Revenue Service.

21.20"*Option*" means an Award as defined in Section 5 and granted under the Plan.

21.21"*Parent*" means any corporation (other than the Company) in an unbroken chain of corporations ending with the Company if each of such corporations other than the Company owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

21.22"*Participant*" means a person who holds an Award under this Plan.

21.23"*Performance Factors*" means any of the objective or subjective factors determined separately or selected by the Committee and specified in an Award Agreement, either individually, alternatively or in any combination applied to the Participant, the Company, any business unit or Subsidiary, either individually, alternatively, or in any combination, on a GAAP or non-GAAP basis, and measured, to the extent applicable on an absolute basis or relative to a pre-established target, to determine whether the performance goals established by the Committee with respect to applicable Awards have been satisfied: The Committee may provide for one or more equitable adjustments to the Performance Factors to preserve the Committee's original intent regarding the Performance Factors at the time of the initial award grant, such as but not limited to, adjustments in recognition of unusual or non-recurring items such as acquisition related activities or changes in applicable accounting rules. It is within the sole discretion of the Committee to make or not make any such equitable adjustments.

21.24"*Performance Period*" means one or more periods of time, which may be of varying and overlapping durations over which the attainment of one or more Performance Factors will be measured for the purpose of determining a Participant's right to, and the payment of, an Award subject to Performance Factors.

21.25"*Permitted Transferee*" means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister in-law (including adoptive relationships) of the Employee, any person sharing the Employee's household (other than a tenant or employee), a trust in which these persons (or the Employee) have more than 50% of the beneficial interest, a foundation in which these persons (or the Employee) control the management of assets, and any other entity in which these persons (or the Employee) own more than 50% of the voting interests.

21.26"*Plan*" means this Sutro Biopharma, Inc. 2021 Equity Inducement Plan.

21.27"*Purchase Price*" means the price to be paid for Shares acquired under the Plan, other than Shares acquired upon exercise of an Option.

21.28"*Restricted Stock Unit*" means an Award as defined in Section 6 and granted under the Plan.

21.29"*SEC*" means the United States Securities and Exchange Commission.

21.30"*Securities Act*" means the United States Securities Act of 1933, as amended.

21.31"*Service*" means service as an Employee, Consultant or member of the Board, to the Company or a Parent, Subsidiary or Affiliate, subject to such further limitations as may be set forth in the Plan or the applicable Award Agreement. An Employee will not be deemed to have ceased to provide Service in the case of (a) sick leave, (b) military leave, or (c) any other leave of absence approved by the Company; provided, that such leave is for a period of not more than 90 days unless reemployment upon the expiration of such leave is guaranteed by contract or statute. Notwithstanding anything to the contrary, an Employee will not be deemed to have ceased to provide Service if a formal policy adopted from time to time by the Company and issued and promulgated to employees in writing provides otherwise. In the case of any Employee on an approved leave of absence or a reduction in hours worked (for illustrative purposes only, a change in schedule from that of full-time to part-time), the Committee may make such provisions respecting suspension or modification of vesting of the Award while on leave from the employ of the Company or a Parent, Subsidiary or Affiliate or during such change in working hours as it may deem appropriate, except that in no event may an Award be exercised after the expiration of the term set forth in the applicable Award Agreement. In the event of military or other protected leave, if required by applicable laws, vesting will continue for the longest period that vesting continues under any other statutory or Company approved leave of absence and, upon a Participant's returning from military leave, he or she will be given vesting credit with respect to Awards to the same extent as would have applied had the Participant continued to provide Service to the Company throughout the leave on the same terms as he or she was providing Service immediately prior to such leave. An Employee will have terminated employment as of the date he or she ceases to provide Service (regardless of whether the termination is in breach of local employment laws or is later found to be invalid) and employment will not be extended by any notice period or garden leave mandated by local law, provided however, a change in status from an Employee to a Consultant or a member of the Board(or vice versa) will not terminate a Participant's Service, unless determined by the Committee, in its discretion or to the extent set forth in the applicable Award Agreement. The Committee will have sole discretion to determine whether a Participant has ceased to provide Service and the effective date on which the Participant ceased to provide Service.

21.32"*Shares*" means shares of the Company's common stock, and the common stock of any successor entity.

21.33"*Subsidiary*" means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company if each of the corporations other than the last corporation in the unbroken chain owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

21.34"*Treasury Regulations*" means regulations promulgated by the United States Treasury Department.

21.35"*Unvested Shares*" means Shares that have not yet vested or are subject to a right of repurchase in favor of the Company (or any successor thereto).

SUTRO BIOPHARMA, INC.
2021 EQUITY INDUCEMENT PLAN
GLOBAL NOTICE OF RESTRICTED STOCK UNIT AWARD

Unless otherwise defined herein, the terms defined in the Sutro Biopharma, Inc. (the "***Company***") 2021 Equity Inducement Plan (the "***Plan***") will have the same meanings in this Global Notice of Restricted Stock Unit Award and the electronic representation of this Global Notice of Restricted Stock Unit Award established and maintained by the Company or a third party designated by the Company (this "***Notice***").

Name:

Address:

You ("***Participant***") have been granted an award of Restricted Stock Units ("***RSUs***") under the Plan subject to the terms and conditions of the Plan, this Notice and the attached Global Restricted Stock Unit Award Agreement (the "***Agreement***"), including any applicable country-specific provisions in the appendix attached hereto (the "***Appendix***"), which constitutes part of the Agreement.

Grant Number:

Number of RSUs:

Date of Grant:

Vesting Commencement Date:

Expiration Date:	The earlier to occur of: (a) the date on which settlement of all RSUs granted hereunder occurs and (b) the tenth anniversary of the Date of Grant. This RSU expires earlier if Participant's Service terminates earlier, as described in the Agreement.
Vesting Schedule:	Subject to the limitations set forth in this Notice, the Plan and the Agreement, the RSUs will vest in accordance with the following schedule: [insert applicable vesting schedule, which may be time- and/or performance based]

By accepting (whether in writing, electronically or otherwise) the RSUs, Participant acknowledges and agrees to the following:

1) Participant understands that Participant's Service with the Company or a Parent or Subsidiary or Affiliate is for an unspecified duration, can be terminated at any time (*i.e.*, is "at-will"), except where otherwise prohibited by applicable law, and that nothing in this Notice, the Agreement or the Plan changes the nature of that relationship. Participant acknowledges that the vesting of the RSUs pursuant to this Notice is subject to Participant's continuing Service. Participant agrees and acknowledges that the Vesting Schedule may change prospectively in the event that Participant's service status changes between full- and part-time and/or in the event Participant is on a leave of absence, in accordance with Company policies relating to work schedules and vesting of Awards or as determined by the Committee.

2) This grant is made under and governed by the Plan, the Agreement and this Notice, and this Notice is subject to the terms and conditions of the Agreement and the Plan, both of which are incorporated herein by reference. Participant has read the Notice, the Agreement and the Plan.

3) Participant has read the Company's Insider Trading Policy, and agrees to comply with such policy, as it may be amended from time to time, whenever Participant acquires or disposes of the Company's securities.

4) By accepting the RSUs, Participant consents to electronic delivery and participation as set forth in the Agreement.

SUTRO BIOPHARMA, INC.
2021 EQUITY INDUCEMENT PLAN
GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT

Unless otherwise defined in this Global Restricted Stock Unit Award Agreement (this "***Agreement***"), any capitalized terms used herein will have the same meaning ascribed to them in the Sutro Biopharma, Inc. 2021 Equity Inducement Plan (the "***Plan***").

Participant has been granted Restricted Stock Units ("***RSUs***") subject to the terms, restrictions and conditions of the Plan, the Global Notice of Restricted Stock Unit Award (the "***Notice***") and this Agreement, including any applicable country-specific provisions in the appendix attached hereto (the "***Appendix***"), which constitutes part of this Agreement. In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of the Notice or this Agreement, the terms and conditions of the Plan shall prevail.

1. **Settlement.** Settlement of RSUs will be made within 30 days following the applicable date of vesting under the Vesting Schedule set forth in the Notice. Settlement of RSUs will be in Shares. No fractional RSUs or rights for fractional Shares shall be created pursuant to this Agreement.

2. **No Stockholder Rights.** Unless and until such time as Shares are issued in settlement of vested RSUs, Participant will have no ownership of the Shares allocated to the RSUs and will have no rights to dividends or to vote such Shares.

3. **Dividend Equivalents.** Dividends, if any (whether in cash or Shares), will not be credited to Participant.

4. **Non-Transferability of RSUs.** The RSUs and any interest therein will not be sold, assigned, transferred, pledged, hypothecated, or otherwise disposed of in any manner other than by will or by the laws of descent or distribution or court order or unless otherwise permitted by the Committee on a case-by-case basis.

5. **Termination.** If Participant's Service terminates for any reason, all unvested RSUs will be forfeited to the Company forthwith, and all rights of Participant to such RSUs will immediately terminate without payment of any consideration to Participant. Participant's Service will be considered terminated (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any) as of the date Participant is no longer actively providing Services and Participant's Service will not be extended by any notice period (e.g., Participant's Service would not include a period of "garden leave" or similar period mandated under employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any). Participant acknowledges and agrees that the Vesting Schedule may change prospectively in the event Participant's service status changes between full- and part-time and/or in the event Participant is on a leave of absence, in accordance with Company policies relating to work schedules and vesting of awards or as determined by the Committee. In case of any dispute as to whether and when a termination of Service has occurred, the Committee will have sole discretion to determine whether such termination of Service has occurred and the effective date of such termination (including whether Participant may still be considered to be actively providing Services while on a leave of absence).

6. Taxes.

(a) Responsibility for Taxes. Participant acknowledges that, regardless of any action taken by the Company or a Parent, Subsidiary or Affiliate employing or retaining Participant (the "***Employer***"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to Participant's participation in the Plan and legally applicable to Participant ("***Tax-Related Items***") is and remains Participant's responsibility and may exceed the amount actually withheld by the Company or the Employer, if any. Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including, but not limited to, the grant, vesting or settlement of the RSUs and the subsequent sale of Shares acquired pursuant to such settlement and the receipt of any dividends, and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if Participant is subject to Tax-Related Items in more than one jurisdiction, Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction. *PARTICIPANT SHOULD CONSULT A TAX ADVISER APPROPRIATELY QUALIFIED IN EACH OF THE JURISDICTIONS, INCLUDING COUNTRY OR COUNTRIES IN WHICH PARTICIPANT RESIDES OR IS SUBJECT TO TAXATION.*

(b) Withholding. Prior to any relevant taxable or tax withholding event, as applicable, Participant agrees to make arrangements satisfactory to the Company and/or the Employer to fulfill all Tax-Related Items. In this regard, Participant authorizes the Company and/or the Employer, or their respective agents, at their discretion, to satisfy any withholding obligations for Tax-Related Items by one or a combination of the following:

(i) withholding from Participant's wages or other cash compensation paid to Participant by the Company and/or the Employer or any Parent, Subsidiary or Affiliate; or

(ii) withholding from proceeds of the sale of Shares acquired upon settlement of the RSUs either through a voluntary sale or through a mandatory sale arranged by the Company (on Participant's behalf pursuant to this authorization and without further consent); or

(iii) withholding Shares to be issued upon settlement of the RSUs, provided the Company only withholds the number of Shares necessary to satisfy no more than the maximum statutory withholding amounts; or

(iv) Participant's payment of a cash amount (including by check representing readily available funds or a wire transfer); or

(v) any other arrangement approved by the Committee and permitted under applicable law;

all under such rules as may be established by the Committee and in compliance with the Company's Insider Trading Policy and 10b5-1 Trading Plan Policy, if applicable; provided however, that if Participant is a Section 16 officer of the Company under the Exchange Act, then unless determined otherwise by the Committee in advance of a Tax-Related Items withholding event, the method of withholding for this RSU will be (iii) above.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including up to the maximum permissible statutory rate for Participant's tax jurisdiction(s) in which case Participant

will have no entitlement to the equivalent amount in Shares and may receive a refund of any over-withheld amount in cash in accordance with applicable law. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, Participant is deemed to have been issued the full number of Shares subject to the vested RSUs, notwithstanding that a number of the Shares are held back solely for the purpose of satisfying the withholding obligation for Tax-Related Items.

Finally, Participant agrees to pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of Participant's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares, if Participant fails to comply with Participant's obligations in connection with the Tax-Related Items.

7. **Nature of Grant.** By accepting the RSUs, Participant acknowledges, understands and agrees that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;

(b) the grant of the RSUs is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of RSUs, or benefits in lieu of RSUs, even if RSUs have been granted in the past;

(c) all decisions with respect to future RSUs or other grants, if any, will be at the sole discretion of the Company;

(d) Participant is voluntarily participating in the Plan;

(e) the RSUs and Participant's participation in the Plan will not create a right to employment or be interpreted as forming or amending an employment or service contract with the Company, the Employer or any Parent, Subsidiary or Affiliate and shall not interfere with the ability of the Company, the Employer or any Parent, Subsidiary or Affiliate, as applicable, to terminate Participant's Service;

(f) the RSUs and the Shares subject to the RSUs, and the income from and value of same, are not intended to replace any pension rights or compensation;

(g) the RSUs and the Shares subject to the RSUs, and the income from and value of same, are not part of normal or expected compensation for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments;

(h) unless otherwise agreed with the Company, the RSUs and the Shares subject to the RSUs, and the income from and value of same, are not granted as consideration for, or in connection with, the service Participant may provide as a director of a Parent, Subsidiary or Affiliate;

(i) the future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty;

(j) no claim or entitlement to compensation or damages will arise from forfeiture of the RSUs resulting from Participant's termination of Service (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any); and

(k) neither the Company, the Employer nor any Parent, Subsidiary or Affiliate will be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar that may affect the value of the RSUs or of any amounts due to Participant pursuant to the settlement of the RSUs or the subsequent sale of any Shares acquired upon settlement.

8. **No Advice Regarding Grant.** The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant acknowledges, understands and agrees he or she should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

9. ***Data Privacy.*** ***Participant hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of Participant's personal data as described in this Agreement and any other RSU grant materials by and among, as applicable, the Employer, the Company and any Parent, Subsidiary or Affiliate for the exclusive purpose of implementing, administering and managing Participant's participation in the Plan.***

Participant understands that the Company and the Employer may hold certain personal information about Participant, including, but not limited to, Participant's name, home address, email address and telephone number, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all RSUs or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in Participant's favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan.

Participant understands that Data will be transferred to E*TRADE Financial Services, Solium-Shareworks, or other third party ("Online Administrator") and its affiliated companies or such other stock plan service provider as may be designated by the Company from time to time, which is assisting the Company with the implementation, administration and management of the Plan. Participant understands that the recipients of Data may be located in the United States or elsewhere, and that the recipients' country may have different data privacy laws and protections than Participant's country. Participant understands that if he or she resides outside the United States, he or she may request a list with the names and addresses of any potential recipients of Data by contacting his or her local human resources representative. Participant authorizes the Company, [Online Administrator], or such other stock plan service provider as may be designated by the Company from time to time, and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Plan to receive, possess, use, retain and transfer Data, in electronic or other form, for the sole purpose of implementing, administering and managing his or her participation in the Plan. Participant understands that Data will be held only as long as is necessary to implement, administer and manage Participant's participation in the Plan. Participant understands if he or she resides outside the United States, he or she may, at any time, view Data, request information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting his or her local human resources representative. Further, Participant understands that he or she is providing the consents herein on a purely voluntary basis. If Participant does not consent, or if Participant later seeks to revoke his or her consent, his or her employment status or service with the Employer will not be affected; the only consequence of refusing or withdrawing Participant's consent is that the Company would not be able to grant RSUs or other equity awards to Participant or administer or maintain such awards. Therefore, Participant understands that refusing or withdrawing his or her consent may affect Participant's ability to participate in the Plan. For more information on the consequences of Participant's refusal to consent

or withdrawal of consent, Participant understands that he or she may contact his or her local human resources representative.

Finally, upon request of the Company or the Employer, Participant agrees to provide an executed data privacy consent form (or any other agreements or consents) that the Company or the Employer may deem necessary to obtain from Participant for the purpose of administering Participant's participation in the Plan in compliance with the data privacy laws in Participant's country, either now or in the future. Participant understands and agrees that Participant will not be able to participate in the Plan if Participant fails to provide any such consent or agreement requested by the Company and/or the Employer.

10. Language. Participant acknowledges that he or she is sufficiently proficient in English to understand the terms and conditions of this Agreement. Furthermore, if Participant has received this Agreement or any other document related to the RSU and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

11. Appendix. Notwithstanding any provisions in this Agreement, the RSUs will be subject to any special terms and conditions set forth in any appendix to this Agreement for Participant's country. Moreover, if Participant relocates to one of the countries included in the Appendix, the special terms and conditions for such country will apply to Participant, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Agreement.

12. Imposition of Other Requirements. The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the RSUs and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

13. Acknowledgement. The Company and Participant agree that the RSUs are granted under and governed by the Notice, this Agreement and the provisions of the Plan (incorporated herein by reference). Participant: (a) acknowledges receipt of a copy of the Plan and the Plan prospectus, (b) represents that Participant has carefully read and is familiar with their provisions, and (c) hereby accepts the RSUs subject to all of the terms and conditions set forth herein and those set forth in the Plan and the Notice.

14. Entire Agreement; Enforcement of Rights. This Agreement, the Plan and the Notice constitute the entire agreement and understanding of the parties relating to the subject matter herein and supersede all prior discussions between them. Any prior agreements, commitments or negotiations concerning the purchase of the Shares hereunder are superseded. No adverse modification of or adverse amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by the parties to this Agreement (which writing and signing may be electronic). The failure by either party to enforce any rights under this Agreement will not be construed as a waiver of any rights of such party.

15. Compliance with Laws and Regulations. The issuance of Shares will be subject to and conditioned upon compliance by the Company and Participant with all applicable state, federal and foreign laws and regulations and with all applicable requirements of any stock exchange or automated quotation system on which the Company's Shares may be listed or quoted at the time of such issuance or transfer. Participant understands that the Company is under no obligation to register or qualify the Shares with any state, federal or foreign securities commission or to seek approval or clearance from any governmental

authority for the issuance or sale of the Shares. Further, Participant agrees that the Company shall have unilateral authority to amend the Plan and this RSU Agreement without Participant's consent to the extent necessary to comply with securities or other laws applicable to issuance of Shares. Finally, the Shares issued pursuant to this RSU Agreement shall be endorsed with appropriate legends, if any, determined by the Company.

16. Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, then such provision will be enforced to the maximum extent possible given the intent of the parties hereto. If such clause or provision cannot be so enforced, then (a) such provision will be excluded from this Agreement, (b) the balance of this Agreement will be interpreted as if such provision were so excluded and (c) the balance of this Agreement will be enforceable in accordance with its terms.

17. Governing Law and Venue. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto will be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to such state's conflict of laws rules.

Any and all disputes relating to, concerning or arising from this Agreement, or relating to, concerning or arising from the relationship between the parties evidenced by the Plan or this Agreement, will be brought and heard exclusively in the United States District Court for the District of Northern California or the Superior Court of California, County of San Mateo. Each of the parties hereby represents and agrees that such party is subject to the personal jurisdiction of said courts; hereby irrevocably consents to the jurisdiction of such courts in any legal or equitable proceedings related to, concerning or arising from such dispute, and waives, to the fullest extent permitted by law, any objection which such party may now or hereafter have that the laying of the venue of any legal or equitable proceedings related to, concerning or arising from such dispute which is brought in such courts is improper or that such proceedings have been brought in an inconvenient forum.

18. No Rights as an Employee. Nothing in this Agreement will affect in any manner whatsoever any right or power of the Company, or a Parent, Subsidiary or Affiliate, to terminate Participant's Service, for any reason, with or without Cause.

19. Consent to Electronic Delivery of All Plan Documents and Disclosures. By Participant's acceptance of the Notice (whether in writing or electronically), Participant and the Company agree that the RSUs are granted under and governed by the terms and conditions of the Plan, the Notice and this Agreement. Participant has reviewed the Plan, the Notice and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Notice and Agreement, and fully understands all provisions of the Plan, the Notice and this Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions relating to the Plan, the Notice and this Agreement. Participant further agrees to notify the Company upon any change in Participant's residence address. By acceptance of the RSUs, Participant agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company and consents to the electronic delivery of the Notice, this Agreement, the Plan, account statements, Plan prospectuses required by the SEC, U.S. financial reports of the Company, and all other documents that the Company is required to deliver to its security holders (including, without limitation, annual reports and proxy statements) or other communications or information related to the RSUs and current or future participation in the Plan. Electronic delivery may include the delivery of a link to the Company intranet or the internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other delivery determined at the Company's discretion. Participant acknowledges that Participant may receive from the Company a paper copy of any documents delivered electronically at no cost if Participant contacts the Company by telephone, through a postal service or electronic mail to Stock Administration. Participant further acknowledges that Participant will be provided

with a paper copy of any documents delivered electronically if electronic delivery fails; similarly, Participant understands that Participant must provide on request to the Company or any designated third party a paper copy of any documents delivered electronically if electronic delivery fails. Also, Participant understands that Participant's consent may be revoked or changed, including any change in the electronic mail address to which documents are delivered (if Participant has provided an electronic mail address), at any time by notifying the Company of such revised or revoked consent by telephone, postal service or electronic mail to Stock Administration.

20. Insider Trading Restrictions/Market Abuse Laws. Participant acknowledges that, depending on Participant's country of residence, the broker's country, or the country in which the Shares are listed, Participant may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, which may affect Participant's ability to directly or indirectly, accept, acquire, sell or attempt to sell or otherwise dispose of Shares, or rights to Shares (*e.g.*, RSUs), or rights linked to the value of Shares, during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws or regulations in the applicable jurisdiction). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders Participant placed before possessing the inside information. Furthermore, Participant may be prohibited from (i) disclosing the inside information to any third party, including fellow employees (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them to otherwise buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Participant acknowledges that it is Participant's responsibility to comply with any applicable restrictions and understands that Participant should consult his or her personal legal advisor on such matters. In addition, Participant acknowledges that he or she read the Company's Insider Trading Policy, and agrees to comply with such policy, as it may be amended from time to time, whenever Participant acquires or disposes of the Company's securities.

21. Foreign Asset/Account, Exchange Control and Tax Reporting. Participant may be subject to foreign asset/account, exchange control and/or tax reporting requirements as a result of the acquisition, holding and/or transfer of Shares or cash resulting from his or her participation in the Plan. Participant may be required to report such accounts, assets, the balances therein, the value thereof and/or the transactions related thereto to the applicable authorities in Participant's country and/or repatriate funds received in connection with the Plan within certain time limits or according to specified procedures. Participant acknowledges that he or she is responsible for ensuring compliance with any applicable foreign asset/account, exchange control and tax reporting requirements and should consult his or her personal legal and tax advisors on such matters.

22. Code Section 409A. For purposes of this Agreement, a termination of employment will be determined consistent with the rules relating to a "separation from service" as defined in Section 409A of the Internal Revenue Code and the regulations thereunder ("***Section 409A***"). Notwithstanding anything else provided herein, to the extent any payments provided under this RSU Agreement in connection with Participant's termination of employment constitute deferred compensation subject to Section 409A, and Participant is deemed at the time of such termination of employment to be a "specified employee" under Section 409A, then such payment shall not be made or commence until the earlier of (i) the expiration of the six-month period measured from Participant's separation from service from the Company or (ii) the date of Participant's death following such a separation from service; provided, however, that such deferral shall only be effected to the extent required to avoid adverse tax treatment to Participant including, without limitation, the additional tax for which Participant would otherwise be liable under Section 409A(a)(1)(B) in the absence of such a deferral. To the extent any payment under this RSU Agreement may be classified as a "short-term deferral" within the meaning of Section 409A, such payment shall be deemed a short-term deferral, even if it may also qualify for an exemption from Section 409A under another provision of Section

409A. Payments pursuant to this section are intended to constitute separate payments for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

23. **Award Subject to Company Clawback or Recoupment.** The RSUs shall be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by the Board or required by law during the term of Participant's employment or other Service that is applicable to Participant. In addition to any other remedies available under such policy, applicable law may require the cancellation of Participant's RSUs (whether vested or unvested) and the recoupment of any gains realized with respect to Participant's RSUs.

BY ACCEPTING THIS AWARD OF RSUS, PARTICIPANT AGREES TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

APPENDIX

SUTRO BIOPHARMA, INC.
2021 EQUITY INDUCEMENT PLAN
GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT

COUNTRY SPECIFIC PROVISIONS FOR EMPLOYEES OUTSIDE THE U.S.

Terms and Conditions

This Appendix includes additional terms and conditions that govern the RSUs granted to Participant under the Plan if Participant resides and/or works in one of the countries below. This Appendix forms part of the Agreement. Any capitalized term used in this Appendix without definition will have the meaning ascribed to it in the Notice, the Agreement or the Plan, as applicable.

If Participant is a citizen or resident of a country, or is considered resident of a country, other than the one in which Participant is currently working, or Participant transfers employment and/or residency between countries after the Date of Grant, the Company will, in its sole discretion, determine to what extent the additional terms and conditions included herein will apply to Participant under these circumstances.

Notifications

This Appendix also includes information relating to exchange control, securities laws, foreign asset/account reporting and other issues of which Participant should be aware with respect to Participant's participation in the Plan. The information is based on the securities, exchange control, foreign asset/account reporting and other laws in effect in the respective countries as of June 2021. Such laws are complex and change frequently. As a result, Participant should not rely on the information herein as the only source of information relating to the consequences of Participant's participation in the Plan because the information may be out of date at the time that Participant vests in the RSUs, sells Shares acquired under the Plan or takes any other action in connection with the Plan.

In addition, the information is general in nature and may not apply to Participant's particular situation, and the Company is not in a position to assure Participant of any particular result. Accordingly, Participant should seek appropriate professional advice as to how the relevant laws in Participant's country may apply to Participant's situation.

Finally, if Participant is a citizen or resident of a country, or is considered resident of a country, other than the one in which Participant is currently working and/or residing, or Participant transfers employment and/or residency after the Date of Grant, the information contained herein may not apply to Participant in the same manner.

None.

SUTRO BIOPHARMA, INC.
2021 EQUITY INDUCEMENT PLAN

GLOBAL NOTICE OF STOCK OPTION GRANT

Unless otherwise defined herein, the terms defined in the Sutro Biopharma, Inc. (the "***Company***") 2021 Equity Inducement Plan (the "***Plan***") will have the same meanings in this Global Notice of Stock Option Grant and the electronic representation of this Global Notice of Stock Option Grant established and maintained by the Company or a third party designated by the Company (this "***Notice***").

Name:

Address:

You ("***Participant***") have been granted an option to purchase shares of common stock of the Company (the "***Option***") under the Plan subject to the terms and conditions of the Plan, this Notice and the attached Global Stock Option Award Agreement (the "***Option Agreement***"), including any applicable country-specific provisions in the appendix attached hereto (the "***Appendix***"), which constitutes part of the Option Agreement.

Grant Number:

Date of Grant:

Vesting Commencement Date:

Exercise Price per Share:

Total Number of Shares:

Type of Option:	Non-Qualified Stock Option
Expiration Date:	_____ __, 20__; This Option expires earlier if Participant's Service terminates earlier, as described in the Option Agreement.
Vesting Schedule:	Subject to the limitations set forth in this Notice, the Plan and the Option Agreement, the Option will vest in accordance with the following schedule: [insert applicable vesting schedule, which may be time and/or performance based]

By accepting (whether in writing, electronically or otherwise) the Option, Participant acknowledges and agrees to the following:

1) Participant understands that Participant's Service with the Company or a Parent or Subsidiary or Affiliate is for an unspecified duration, can be terminated at any time (*i.e.*, is "at-will"), except where otherwise prohibited by applicable law, and that nothing in this Notice, the Option Agreement or the Plan changes the nature of that relationship. Participant acknowledges that the vesting of the Option pursuant to this Notice is subject to Participant's continuing Service. Participant agrees and acknowledges that the Vesting Schedule may change prospectively in the event that Participant's service status changes between full- and part-time and/or in the event Participant is on a leave of absence, in accordance with Company policies relating to work schedules and vesting of Awards or as determined by the Committee. Furthermore, the period during which Participant may exercise the Option after termination of Service, if any, will commence on the Termination Date (as defined in the Option Agreement).

2) This grant is made under and governed by the Plan, the Option Agreement and this Notice, and this Notice is subject to the terms and conditions of the Option Agreement and the Plan, both of which are incorporated herein by reference. Participant has read the Notice, the Option Agreement and the Plan.

3) Participant has read the Company's Insider Trading Policy, and agrees to comply with such policy, as it may be

amended from time to time, whenever Participant acquires or disposes of the Company's securities.

4) By accepting the Option, Participant consents to electronic delivery and participation as set forth in the Option Agreement.

SUTRO BIOPHARMA, INC.

2021 EQUITY INDUCEMENT PLAN

GLOBAL STOCK OPTION AWARD AGREEMENT

Unless otherwise defined in this Global Stock Option Award Agreement (this "***Option Agreement***"), any capitalized terms used herein will have the meaning ascribed to them in the Sutro Biopharma, Inc. 2021 Equity Inducement Plan (the "***Plan***").

Participant has been granted an option to purchase Shares (the "***Option***") of Sutro Biopharma, Inc. (the "***Company***"), subject to the terms, restrictions and conditions of the Plan, the Global Notice of Stock Option Grant (the "***Notice***") and this Option Agreement, including any applicable country-specific provisions in the appendix attached hereto (the "***Appendix***"), which constitutes part of this Option Agreement.

1. Vesting Rights. Subject to the applicable provisions of the Plan and this Option Agreement, this Option may be exercised, in whole or in part, in accordance with the Vesting Schedule set forth in the Notice. Participant acknowledges that the vesting of the Option pursuant to this Notice and Agreement is subject to Participant's continuing Service.

2. Grant of Option. Participant has been granted an Option for the number of Shares set forth in the Notice at the exercise price per Share in U.S. Dollars set forth in the Notice (the "***Exercise Price***"). In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Option Agreement, the terms and conditions of the Plan shall prevail.

3. Termination Period.

(a) General Rule. If Participant's Service terminates for any reason except death or Disability, and other than for Cause, then this Option will expire at the close of business at Company headquarters on the date three (3) months after Participant's Termination Date (as defined below) (or such shorter time period not less than thirty (30) days or longer time period as may be determined by the Committee). If Participant's Service is terminated for Cause, this Option will expire upon the date of such termination. The Company determines when Participant's Service terminates for all purposes under this Option Agreement.

(b) Death; Disability. If Participant dies before Participant's Service terminates (or Participant dies within three months of Participant's termination of Service other than for Cause), then this Option will expire at the close of business at Company headquarters on the date twelve (12) months after the date of death (or such shorter time period not less than six (6) months or longer time period as may be determined by the Committee or a shorter period set forth in the Appendix for a specific jurisdiction, subject to the expiration details in Section 7). If Participant's Service terminates because of Participant's Disability, then this Option will expire at the close of business at Company headquarters on the date twelve (12) months after Participant's Termination Date (or such shorter time period not less than six (6) months or longer time period as may be determined by the Committee or a shorter period set forth in the Appendix for a specific jurisdiction, subject to the expiration details in Section 7).

(c) No Notification of Exercise Periods. Participant is responsible for keeping track of these exercise periods following Participant's termination of Service for any reason. The Company will not provide further notice of such periods. In no event shall this Option be exercised later than the Expiration Date set forth in the Notice.

(d) Termination. For purposes of this Option, Participant's Service will be considered terminated (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any) as of the date Participant is no longer actively providing Service to the Company, its Parent or one of its Subsidiaries or Affiliates (*i.e.*, Participant's period of Service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any) (the "***Termination Date***"). Unless otherwise provided in this Option Agreement or determined by the Company, Participant's right to vest in the Option under the Plan, if any, will terminate as of the Termination Date and Participant's right to exercise the Option after termination of Service, if any, will be measured from the Termination Date.

In case of any dispute as to whether and when a termination of Service has occurred, the Committee will have sole discretion to determine whether such termination of Service has occurred and the effective date of such termination (including whether Participant may still be considered to be actively providing Services while on a leave of absence).

If Participant does not exercise this Option within the termination period set forth in the Notice or the termination periods set forth above, the Option shall terminate in its entirety. In no event, may any Option be exercised after the Expiration Date of the Option as set forth in the Notice.

4. Exercise of Option.

(a) Right to Exercise. This Option is exercisable during its term in accordance with the Vesting Schedule set forth in the Notice and the applicable provisions of the Plan and this Option Agreement. In the event of Participant's death, Disability, termination for Cause or other cessation of Service, the exercisability of the Option is governed by the applicable provisions of the Plan, the Notice and this Option Agreement. This Option may not be exercised for a fraction of a Share.

(b) Method of Exercise. This Option is exercisable by delivery of an exercise notice in a form specified by the Company (the "***Exercise Notice***"), which will state the election to exercise the Option, the number of Shares in respect of which the Option is being exercised (the "***Exercised Shares***"), and such other representations and agreements as may be required by the Company pursuant to the provisions of the Plan. The Exercise Notice will be delivered in person, by mail, via electronic mail or facsimile or by other authorized method to the Secretary of the Company or other person designated by the Company. The Exercise Notice will be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares together with any applicable Tax-Related Items (as defined in Section 8 below). This Option will be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by such aggregate Exercise Price and payment of any applicable Tax-Related Items (as defined below). No Shares will be issued pursuant to the exercise of this Option unless such issuance and exercise complies with all relevant provisions of law and the requirements of any stock exchange or quotation service upon which the Shares are then listed and any exchange control registrations. Assuming such compliance, for United States income tax purposes the Exercised Shares will be considered transferred to Participant on the date the Option is exercised with respect to such Exercised Shares.

(c) Exercise by Another. If another person wants to exercise this Option after it has been transferred to him or her in compliance with this Option Agreement, that person must prove to the Company's satisfaction that he or she is entitled to exercise this Option. That person must also complete the proper Exercise Notice form (as described above) and pay the Exercise Price (as described below) and any applicable Tax-Related Items (as described below).

5. Method of Payment. Payment of the aggregate Exercise Price, and any Tax-Related Items (as defined below) withholding, will be by any of the following, or a combination thereof, at the election of Participant:

(a) Participant's personal check (representing readily available funds), wire transfer, or a cashier's check;

(b) if permitted by the Committee, certificates for shares of Company stock that Participant owns, along with any forms needed to effect a transfer of those shares to the Company; the value of the shares, determined as of the effective date of the Option exercise, will be applied to the Exercise Price. Instead of surrendering shares of Company stock, Participant may attest to the ownership of those shares on a form provided by the Company and have the same number of shares subtracted from the Option shares issued to Participant. However, Participant may not surrender, or attest to the ownership of, shares of Company stock in payment of the Exercise Price of Participant's Option if Participant's action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to this Option for financial reporting purposes;

(c) cashless exercise through irrevocable directions to a securities broker approved by the Company to sell all or part of the Shares covered by this Option and to deliver to the Company from the sale proceeds an amount sufficient to pay the Exercise Price and any applicable Tax-Related Items (as defined below) withholding. The balance of the sale proceeds, if any, will be delivered to Participant unless otherwise provided in this Option Agreement. The directions must be given by signing a special notice of exercise form provided by the Company; or

(d) other method authorized by the Company;

provided, however, that the Company may restrict the available methods of payment due to facilitate compliance with applicable law or administration of the Plan. In particular, if Participant is located outside the United States, Participant should review the applicable provisions of the Appendix for any such restrictions that may currently apply.

6. Non-Transferability of Option. This Option may not be sold, assigned, transferred, pledged, hypothecated, or otherwise disposed of other than by will or by the laws of descent or distribution or court order and may be exercised during the lifetime of Participant only by Participant or unless otherwise permitted by the Committee on a case-by-case basis. The terms of the Plan and this Option Agreement will be binding upon the executors, administrators, heirs, successors and assigns of Participant.

7. Term of Option. This Option will in any event expire on the expiration date set forth in the Notice, which date is 10 years after the Date of Grant.

8. Taxes.

(a) Responsibility for Taxes. Participant acknowledges that, regardless of any action taken by the Company or a Parent, Subsidiary or Affiliate employing or retaining Participant (the "***Employer***"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax related items related to Participant's participation in the Plan and legally applicable to Participant ("***Tax-Related Items***") is and remains Participant's responsibility and may exceed the amount actually withheld by the Company or the Employer, if any. Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of this Option, including, but not limited to, the grant, vesting or exercise of this Option, the subsequent sale of Shares acquired pursuant to such exercise and the receipt of any dividends; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of this Option to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if Participant is subject to Tax-Related Items in more than one

jurisdiction, Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction. *PARTICIPANT SHOULD CONSULT A TAX ADVISER APPROPRIATELY QUALIFIED IN EACH OF THE JURISDICTIONS, INCLUDING COUNTRY OR COUNTRIES IN WHICH PARTICIPANT RESIDES OR IS SUBJECT TO TAXATION BEFORE EXERCISING THE OPTION OR DISPOSING OF THE SHARES.*

(b) Withholding. Prior to any relevant taxable or tax withholding event, as applicable, Participant agrees to make arrangements satisfactory to the Company and/or the Employer to fulfill all Tax-Related Items. In this regard, Participant authorizes the Company and/or the Employer, or their respective agents, at their discretion, to satisfy any withholding obligations for Tax-Related Items by one or a combination of the following:

(i) withholding from Participant's wages or other cash compensation paid to Participant by the Company and/or the Employer or any Parent, Subsidiary or Affiliate; or

(ii) withholding from proceeds of the sale of Shares acquired at exercise of this Option either through a voluntary sale or through a mandatory sale arranged by the Company (on Participant's behalf pursuant to this authorization and without further consent); or

(iii) withholding Shares to be issued upon exercise of the Option, provided the Company only withholds the number of Shares necessary to satisfy no more than the maximum statutory withholding amounts;

(iv) Participant's payment of a cash amount (including by check representing readily available funds or a wire transfer); or

(v) any other arrangement approved by the Committee and permitted under applicable law;

all under such rules as may be established by the Committee and in compliance with the Company's Insider Trading Policy and 10b5-1 Trading Plan Policy, if applicable; provided however, that if Participant is a Section 16 officer of the Company under the Exchange Act, then the Committee (as constituted in accordance with Rule 16b-3 under the Exchange Act) shall establish the method of withholding from alternatives (i)-(v) above, and the Committee shall establish the method prior to the Tax-Related Items withholding event.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable statutory withholding rates or other applicable withholding rates, including up to the maximum permissible statutory rate for Participant's tax jurisdiction(s) in which case Participant will have no entitlement to the equivalent amount in Shares and may receive a refund of any over-withheld amount in cash in accordance with applicable law. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, Participant is deemed to have been issued the full number of Exercised Shares; notwithstanding that a number of the Shares are held back solely for the purpose of satisfying the withholding obligation for Tax-Related Items.

Finally, Participant agrees to pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of Participant's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares, if Participant fails to comply with Participant's obligations in connection with the Tax-Related Items.

9. **Nature of Grant.** By accepting the Option, Participant acknowledges, understands and agrees that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;

(b) the grant of the Option is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of options, or benefits in lieu of options, even if options have been granted in the past;

(c) all decisions with respect to future options or other grants, if any, will be at the sole discretion of the Company;

(d) Participant is voluntarily participating in the Plan;

(e) the Option and Participant's participation in the Plan will not create a right to employment or be interpreted as forming or amending an employment or service contract with the Company, the Employer or any Parent, Subsidiary or Affiliate, and shall not interfere with the ability of the Company, the Employer or any Parent, Subsidiary or Affiliate, as applicable, to terminate Participant's employment or service relationship (if any);

(f) the Option and the Shares subject to the Option, and the income from and value of same, are not intended to replace any pension rights or compensation;

(g) the Option and the Shares subject to the Option, and the income from and value of same, are not part of normal or expected compensation for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments;

(h) unless otherwise agreed with the Company, the Option and the Shares subject to the Option, and the income from and value of same, are not granted as consideration for, or in connection with, the service Participant may provide as a director of a Parent, Subsidiary or Affiliate;

(i) the future value of the Shares underlying the Option is unknown, indeterminable and cannot be predicted with certainty; if the underlying Shares do not increase in value, the Option will have no value; if Participant exercises the Option and acquires Shares, the value of such Shares may increase or decrease, even below the Exercise Price;

(j) no claim or entitlement to compensation or damages will arise from forfeiture of the Option resulting from Participant's termination of Service (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any); and

(k) neither the Company, the Employer nor any Parent, Subsidiary or Affiliate will be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar that may affect the value of the Option or of any amounts due to Participant pursuant to the exercise of the Option or the subsequent sale of any Shares acquired upon exercise.

10. **No Advice Regarding Grant.** The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant acknowledges, understands and agrees that he or she should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

11. ***Data Privacy.*** ***Participant hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of Participant's personal data as described in this Option Agreement and any other Option grant materials by and among, as applicable, the Employer, the Company and any Parent, Subsidiary or Affiliate for the exclusive purpose of implementing, administering and managing Participant's participation in the Plan.***

Participant understands that the Company and the Employer may hold certain personal information about Participant, including, but not limited to, Participant's name, home address, email address and telephone number, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Options or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in Participant's favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan.

Participant understands that Data will be transferred to E*TRADE Financial Services, Solium-Shareworks, or other third party ("Online Administrator") and its affiliated companies or such other stock plan service provider as may be designated by the Company from time to time, which is assisting the Company with the implementation, administration and management of the Plan. Participant understands that the recipients of Data may be located in the United States or elsewhere, and that the recipients' country may have different data privacy laws and protections than Participant's country. Participant understands that if he or she resides outside the United States, he or she may request a list with the names and addresses of any potential recipients of Data by contacting his or her local human resources representative. Participant authorizes the Company, [Online Administrator], or such other stock plan service provider as may be designated by the Company from time to time, and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Plan to receive, possess, use, retain and transfer Data, in electronic or other form, for the sole purpose of implementing, administering and managing his or her participation in the Plan. Participant understands that Data will be held only as long as is necessary to implement, administer and manage Participant's participation in the Plan. Participant understands if he or she resides outside the United States, he or she may, at any time, view Data, request information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting his or her local human resources representative. Further, Participant understands that he or she is providing the consents herein on a purely voluntary basis. If Participant does not consent, or if Participant later seeks to revoke his or her consent, his or her employment status or service with the Employer will not be affected; the only consequence of refusing or withdrawing Participant's consent is that the Company would not be able to grant Options or other equity awards to Participant or administer or maintain such awards. Therefore, Participant understands that refusing or withdrawing his or her consent may affect Participant's ability to participate in the Plan. For more information on the consequences of Participant's refusal to consent or withdrawal of consent, Participant understands that he or she may contact his or her local human resources representative.

Finally, upon request of the Company or the Employer, Participant agrees to provide an executed data privacy consent form (or any other agreements or consents) that the Company or the Employer may deem necessary to obtain from Participant for the purpose of administering Participant's participation in the Plan in compliance with the data privacy laws in Participant's country, either now or in the future. Participant understands and agrees that Participant will not be able to participate in the Plan if Participant fails to provide any such consent or agreement requested by the Company and/or the Employer.

12. **Language.** Participant acknowledges that he or she is sufficiently proficient in English to understand the terms and conditions of this Option Agreement. Furthermore, if Participant has received this Option Agreement, or any other document related to the Option and/or the Plan translated into a

language other than English and if the meaning of the translated version is different than the English version, the English version will control.

13. Appendix. Notwithstanding any provisions in this Option Agreement, the Option will be subject to any special terms and conditions set forth in any appendix to this Option Agreement for Participant's country. Moreover, if Participant relocates to one of the countries included in the Appendix, the special terms and conditions for such country will apply to Participant, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Option Agreement.

14. Imposition of Other Requirements. The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the Option and on any Shares purchased upon exercise of the Option, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

15. Acknowledgement. The Company and Participant agree that the Option is granted under and governed by the Notice, this Option Agreement and the provisions of the Plan (incorporated herein by reference). Participant: (a) acknowledges receipt of a copy of the Plan and the Plan prospectus, (b) represents that Participant has carefully read and is familiar with their provisions, and (c) hereby accepts the Option subject to all of the terms and conditions set forth herein and those set forth in the Plan and the Notice.

16. Entire Agreement; Enforcement of Rights. This Option Agreement, the Plan and the Notice constitute the entire agreement and understanding of the parties relating to the subject matter herein and supersede all prior discussions between them. Any prior agreements, commitments or negotiations concerning the purchase of the Shares hereunder are superseded. No adverse modification of, or adverse amendment to, this Option Agreement, nor any waiver of any rights under this Option Agreement, will be effective unless in writing and signed by the parties to this Option Agreement (which writing and signing may be electronic). The failure by either party to enforce any rights under this Option Agreement will not be construed as a waiver of any rights of such party.

17. Compliance with Laws and Regulations. The issuance of Shares will be subject to and conditioned upon compliance by the Company and Participant with all applicable state, federal and foreign laws and regulations and with all applicable requirements of any stock exchange or automated quotation system on which the Company's Shares may be listed or quoted at the time of such issuance or transfer. Participant understands that the Company is under no obligation to register or qualify the Shares with any state, federal or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the Shares. Further, Participant agrees that the Company shall have unilateral authority to amend the Plan and this Option Agreement without Participant's consent to the extent necessary to comply with securities or other laws applicable to issuance of Shares. Finally, the Shares issued pursuant to this Option Agreement shall be endorsed with appropriate legends, if any, determined by the Company.

18. Severability. If one or more provisions of this Option Agreement are held to be unenforceable under applicable law, then such provision will be enforced to the maximum extent possible given the intent of the parties hereto. If such clause or provision cannot be so enforced, then (a) such provision will be excluded from this Option Agreement, (b) the balance of this Option Agreement will be interpreted as if such provision were so excluded and (c) the balance of this Option Agreement will be enforceable in accordance with its terms.

19. Governing Law and Venue. This Option Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto will be governed, construed and

interpreted in accordance with the laws of the State of Delaware, without giving effect to such state's conflict of laws rules.

Any and all disputes relating to, concerning or arising from this Option Agreement, or relating to, concerning or arising from the relationship between the parties evidenced by the Plan or this Option Agreement, will be brought and heard exclusively in the United States District Court for the District of Northern California or the Superior Court of California, County of San Mateo. Each of the parties hereby represents and agrees that such party is subject to the personal jurisdiction of said courts; hereby irrevocably consents to the jurisdiction of such courts in any legal or equitable proceedings related to, concerning or arising from such dispute, and waives, to the fullest extent permitted by law, any objection which such party may now or hereafter have that the laying of the venue of any legal or equitable proceedings related to, concerning or arising from such dispute which is brought in such courts is improper or that such proceedings have been brought in an inconvenient forum.

20. No Rights as an Employee. Nothing in this Option Agreement will affect in any manner whatsoever any right or power of the Company, or a Parent, Subsidiary or Affiliate, to terminate Participant's Service, for any reason, with or without Cause.

21. Consent to Electronic Delivery of All Plan Documents and Disclosures. By Participant's acceptance of the Notice (whether in writing or electronically), Participant and the Company agree that this Option is granted under and governed by the terms and conditions of the Plan, the Notice and this Option Agreement. Participant has reviewed the Plan, the Notice and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing the Notice and Agreement, and fully understands all provisions of the Plan, the Notice and this Option Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions relating to the Plan, the Notice and this Option Agreement. Participant further agrees to notify the Company upon any change in the residence address. By acceptance of this Option, Participant agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company and consents to the electronic delivery of the Notice, this Option Agreement, the Plan, account statements, Plan prospectuses required by the SEC, U.S. financial reports of the Company, and all other documents that the Company is required to deliver to its security holders (including, without limitation, annual reports and proxy statements) or other communications or information related to the Option and current or future participation in the Plan. Electronic delivery may include the delivery of a link to the Company intranet or the internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other delivery determined at the Company's discretion. Participant acknowledges that Participant may receive from the Company a paper copy of any documents delivered electronically at no cost if Participant contacts the Company by telephone, through a postal service or electronic mail to Stock Administration. Participant further acknowledges that Participant will be provided with a paper copy of any documents delivered electronically if electronic delivery fails; similarly, Participant understands that Participant must provide on request to the Company or any designated third party a paper copy of any documents delivered electronically if electronic delivery fails. Also, Participant understands that Participant's consent may be revoked or changed, including any change in the electronic mail address to which documents are delivered (if Participant has provided an electronic mail address), at any time by notifying the Company of such revised or revoked consent by telephone, postal service or electronic mail to Stock Administration.

22. Insider Trading Restrictions/Market Abuse Laws. Participant acknowledges that, depending on Participant's country of residence, the broker's country, or the country in which the Shares are listed, Participant may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, which may affect Participant's ability to directly or indirectly, accept, acquire, sell or attempt to sell or otherwise dispose of Shares, or rights to Shares (*e.g.,* Options), or rights linked to the value of Shares, during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws or regulations in the applicable jurisdiction). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders Participant placed before possessing the

inside information. Furthermore, Participant may be prohibited from (i) disclosing the inside information to any third party, including fellow employees (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them to otherwise buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Participant acknowledges that it is Participant's responsibility to comply with any applicable restrictions and understands that Participant should consult his or her personal legal advisor on such matters. In addition, Participant acknowledges that he or she read the Company's Insider Trading Policy, and agrees to comply with such policy, as it may be amended from time to time, whenever Participant acquires or disposes of the Company's securities.

23. **Foreign Asset/Account, Exchange Control and Tax Reporting**. Participant may be subject to foreign asset/account, exchange control and/or tax reporting requirements as a result of the acquisition, holding and/or transfer of Shares or cash resulting from his or her participation in the Plan. Participant may be required to report such accounts, assets, the balances therein, the value thereof and/or the transactions related thereto to the applicable authorities in Participant's country and/or repatriate funds received in connection with the Plan within certain time limits or according to specified procedures. Participant acknowledges that he or she is responsible for ensuring compliance with any applicable foreign asset/account, exchange control and tax reporting requirements and should consult his or her personal legal and tax advisors on such matters.

24. **Award Subject to Company Clawback or Recoupment.** The Option shall be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by the Board or required by law during the term of Participant's employment or other Service that is applicable to Participant. In addition to any other remedies available under such policy, applicable law may require the cancellation of Participant's Option (whether vested or unvested) and the recoupment of any gains realized with respect to Participant's Option.

BY ACCEPTING THIS OPTION, PARTICIPANT AGREES TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

APPENDIX

SUTRO BIOPHARMA, INC.

2021 EQUITY INDUCEMENT PLAN

GLOBAL STOCK OPTION AWARD AGREEMENT

COUNTRY SPECIFIC PROVISIONS FOR EMPLOYEES OUTSIDE THE U.S.

Terms and Conditions

This Appendix includes additional terms and conditions that govern the Option granted to Participant under the Plan if Participant resides and/or works in one of the countries below. This Appendix forms part of the Option Agreement. Any capitalized term used in this Appendix without definition will have the meaning ascribed to it in the Notice, the Option Agreement or the Plan, as applicable.

If Participant is a citizen or resident of a country, or is considered resident of a country, other than the one in which Participant is currently working, or Participant transfers employment and/or residency between countries after the Date of Grant, the Company will, in its sole discretion, determine to what extent the additional terms and conditions included herein will apply to Participant under these circumstances.

Notifications

This Appendix also includes information relating to exchange control, securities laws, foreign asset/account reporting and other issues of which Participant should be aware with respect to Participant's participation in the Plan. The information is based on the securities, exchange control, foreign asset/account reporting and other laws in effect in the respective countries as of June 2021. Such laws are complex and change frequently. As a result, Participant should not rely on the information herein as the only source of information relating to the consequences of Participant's participation in the Plan because the information may be out of date at the time that Participant exercises the Option, sells Shares acquired under the Plan or takes any other action in connection with the Plan.

In addition, the information is general in nature and may not apply to Participant's particular situation, and the Company is not in a position to assure Participant of any particular result. Accordingly, Participant should seek appropriate professional advice as to how the relevant laws in Participant's country may apply to Participant's situation.

Finally, if Participant is a citizen or resident of a country, or is considered resident of a country, other than the one in which Participant is currently working and/or residing, or Participant transfers employment and/or residency after the Date of Grant, the information contained herein may not apply to Participant in the same manner.

None

Exhibit 10.43

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

MANUFACTURING RIGHTS AGREEMENT

This MANUFACTURING RIGHTS AGREEMENT (this "**Agreement**"), effective as of the Effective Date, is entered into by and between Vaxcyte, Inc., a Delaware corporation ("**Vaxcyte**") and Sutro Biopharma, Inc., a Delaware corporation ("**Sutro**") (each of Vaxcyte and Sutro, a "**Party**," and collectively, the "**Parties**").

WHEREAS, Vaxcyte and Sutro have entered into (i) that certain Amended and Restated SutroVax Agreement, dated October 12, 2015, as amended (the "**License Agreement**"), (ii) that certain Supply Agreement, dated May 29, 2018, as amended (the "**Supply Agreement**"), and (iii) that certain Key Process Transfer Terms regarding [***] (the "**[***] Term Sheet**," and collectively with the License Agreement and the Supply Agreement, the "**Existing Agreements**");

WHEREAS, Vaxcyte and Sutro have entered into that certain letter agreement regarding an Option on Extract Rights, dated December 19, 2022 (the "**Option Agreement**"), pursuant to which Vaxcyte purchased from Sutro an option to obtain certain exclusive rights to manufacture Extract for use in the research, development, use, sale, offering for sale, export, import, commercialization or other exploitation of Vaccine Compositions, as more fully set forth therein;

WHEREAS, Vaxcyte has notified Sutro pursuant to Section 4 of the Option Agreement that Vaxcyte elected to exercise such option, and has paid the Initial Exercise Price as of the Effective Date, and Vaxcyte has paid, or will pay, the Delayed Exercise Price (as defined in the Option Agreement) in accordance with the terms of the Option Agreement; and

WHEREAS, Sutro wishes to grant to Vaxcyte, and Vaxcyte wishes to receive from Sutro, the rights contemplated by such exercised option, as more fully set forth herein and on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements, provisions and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, the Parties hereby agree as follows:

ARTICLE I
DEFINITIONS

Section 1.1 General. As used in this Agreement (including the foregoing Recitals), the following terms shall have the meanings set forth in this Section 1.1. All capitalized terms used

but not defined in this Agreement shall have the meanings assigned to them in the Existing Agreements.

(a) "**Acquirer**" has the meaning set forth in Section 14.8(a).

(b) "**Affiliate**" means, with respect to either Party, any business entity controlling, controlled by, or under common control with such Party. For the purpose of this definition only, "control" means (A) the possession, directly or indirectly, of the power to direct the management or policies of a business entity, whether through the ownership of voting securities, by contract or otherwise, or (B) the ownership, directly or indirectly, of at least fifty percent (50%) of the voting securities or other ownership interest of a business entity. Notwithstanding the above, in no event shall Sutro (or any entity that would be an Affiliate of Vaxcyte solely because it is an Affiliate of Sutro) be deemed an Affiliate of Vaxcyte, or Vaxcyte (or any entity that would be an Affiliate of Sutro solely because it is an Affiliate of Vaxcyte) be deemed an Affiliate of Sutro.

(c) "**Agreement**" has the meaning set forth in the Preamble.

(d) "**Announcing Party**" has the meaning set forth in Section 14.18.

(e) "**Approved CMO**" means (A) the CMOs set forth on **Schedule 2.15.1** to the Supply Agreement, (B) [***], and (C) any other CMO proposed by Vaxcyte and approved by Sutro (such approval not to be unreasonably withheld, conditioned or delayed).

(f) "**Approved Contractor**" means any reputable Third Party contractor (excluding any CMO) to be utilized by Vaxcyte to provide services or undertake activities for the benefit of Vaxcyte to support technology transfer or the exercise of the Manufacturing Rights (including, for clarity, any audit under Section 7.1).

(g) "**Audit Report**" has the meaning set forth in Section 7.3(a).

(h) [***].

(i) "**[***] Letter Agreement**" [***].

(j) "**[***] Letter of Intent**" [***].

(k) "**[***] Term Sheet**" [***].

(l) "**cGMP**" has the meaning set forth in the Supply Agreement.

(m) "**Change of Control**" has the meaning set forth in the License Agreement.

(n) "**Change of Control Party**" has the meaning set forth in Section 14.8(a).

(o) "**Claim**" has the meaning set forth in Section 11.1.

(p) "**CMO**" means any Third Party (or any joint venture between Sutro (or its Affiliates) and a Third Party) that manufactures, or is capable (including following any Tech

Transfer of the applicable Sutro Know-How and Sutro Core Know-How) of manufacturing, Extract.

(q) "**Commercially Reasonable Efforts**" has the meaning set forth in the License Agreement.

(r) "**Declining Party**" has the meaning set forth in Section 5.4(e).

(s) "**Designated Jurisdictions**" has the meaning set forth in Section 3.3.

(t) "**Discloser's Information**" has the meaning set forth in Section 6.1(a).

(u) "**Dispute**" has the meaning set forth in Section 13.2.

(v) "**Dispute Notice**" has the meaning set forth in Section 13.2.

(w) "**DMF**" means drug master file or any equivalent such file used in support of a biologics license.

(x) "**Effective Date**" means (A) the Execution Date, if the Parties execute this Agreement after Vaxcyte exercises the Option pursuant to Section 4(a) of the Option Agreement, or (B) if Vaxcyte exercises the Option pursuant to Section 4(a) of the Option Agreement after the Execution Date, the date this Agreement is released from escrow pursuant to the terms and conditions of the Option Agreement.

(y) "**Enforcement Action**" has the meaning set forth in Section 5.5(a)(ii).

(z) "**Execution Date**" means the date this Agreement is signed by both Parties.

(aa) "**Existing Agreement**" has the meaning set forth in the Recitals.

(bb) "**Extract**" means any extract derived from strains of E. coli and (A) supplied to Vaxcyte or its Affiliates by or on behalf of Sutro pursuant to the Existing Agreements, the [***] Letter Agreement or any subsequent written agreement between the Parties or their respective Affiliates, or (B) made by or on behalf of Vaxcyte or its Affiliates pursuant to this Agreement. For clarity, Extract includes [***].

(cc) [***].

(dd) "**Facility Audit**" has the meaning set forth in Section 7.2(a).

(ee) "**FDA**" means the U.S. Food and Drug Administration, and any successor entity thereto.

(ff) "**First Tech Transfer**" has the meaning set forth in Section 4.1(a).

(gg) "**FTE Rate**" means [***], which represents the fully burdened rate for such full-time equivalent and covers all employee salaries and benefits. Commencing January 1, 2024, and

upon every January 1st thereafter during the Term, the FTE Rate will be adjusted in accordance with [***].

(hh) "**Governmental Authority**" has the meaning set forth in the Supply Agreement.

(ii) "**Indemnified Parties**" has the meaning set forth in Section 11.3.

(jj) "**Indemnifying Party**" means the Party obligated to indemnify the applicable Indemnified Parties pursuant to Section 11.1 or Section 11.2, as applicable.

(kk) "**Joint Patent**" has the meaning set forth in Section 5.4(b).

(ll) "**Jointly-Owned IP**" has the meaning set forth in Section 5.1(a).

(mm) "**Lab Audit**" has the meaning set forth in Section 7.3(b).

(nn) "**Lead Enforcement Party**" has the meaning set forth in Section 5.5(a)(iv).

(oo) "**License Agreement**" has the meaning set forth in the Recitals.

(pp) "**Manufacture**" means to manufacture, process, store, test, retain samples of, quality control, release and dispatch, and to conduct other activities reasonably necessary in furtherance of any of the foregoing.

(qq) "**Manufacturing Rights**" has the meaning set forth in Section 2.1(a).

(rr) [***].

(ss) "**New IP**" means, collectively and including all intellectual property rights therein, any and all (A) [***] and (B) other improvements to the Sutro Platform, that are, in each case of the foregoing clauses (A) and (B), developed by or on behalf of Vaxcyte, its Affiliates or Sublicensees (as defined in the License Agreement) pursuant to Vaxcyte's exercise of the Manufacturing Rights, or other rights under the Existing Agreements, the [***] Letter Agreement or otherwise.

(tt) "**Option Agreement**" has the meaning set forth in the Recitals.

(uu) "**Party**" and "**Parties**" have the meaning set forth in the Preamble.

(vv) "**Patent**" has the meaning set forth in the License Agreement.

(ww) "**Payee**" has the meaning set forth in Section 8.2(b).

(xx) "**Payor**" has the meaning set forth in Section 8.2(b).

(yy) "**Principal Contact**" has the meaning set forth in Section 13.1.

(zz) "**Regulatory Approval**" has the meaning set forth in the License Agreement.

(aaa) "**Restricted Systems**" has the meaning set forth in Section 6.2.

(bbb) "**Restricted Systems Audit**" has the meaning set forth in Section 7.4.

(ccc) "**Rules**" has the meaning set forth in Section 13.3(a).

(ddd) "**Second Tech Transfer**" has the meaning set forth in Section 4.2.

(eee) "**Segregated Technology**" has the meaning set forth in Section 14.8(d).

(fff) "**Senior Management**" has the meaning set forth in Section 13.2.

(ggg) "**Step-In Party"** has the meaning set forth in Section 5.4(e).

(hhh) "**Successful Completion**" or "**Successfully Completed**" means the successful manufacture, at the facility receiving the applicable Tech Transfer, of [***] cGMP batches of Extract that meet the relevant specifications with no material, major or critical cGMP deviations.

(iii) "**Supply Agreement**" has the meaning set forth in the Recitals.

(jjj) "**Sutro**" has the meaning set forth in the Preamble.

(kkk) "**Sutro Core Know-How**" means any processes, documents, and materials or other Sutro Know-How that are, subject to Section 14.8 of this Agreement, owned or controlled by Sutro at any time during the Term of this Agreement and that relate to the manufacture or supply of Extracts (including, but not limited to, Sutro Know-How regarding the generation and/or use of strains from which Extract is produced).

(lll) "**Sutro Indemnitees**" has the meaning set forth in Section 11.1.

(mmm)"**[***] IP**" has the meaning set forth in Section 5.1(c).

(nnn) "**Sutro Know-How**" means all information and materials pertaining to the Extracts or Vaccine Compositions, or the manufacture, use or, in the case of Vaccine Compositions, development thereof, as the case may be, that are, subject to Section 14.8 of this Agreement, owned or controlled by Sutro or its Affiliates at any time during the Term of this Agreement, including (A) practices, protocols, methods, techniques, specifications, formulae, standard operating procedures, analytical methods, material and vendor lists, (B) analytical, quality control and stability data, batch records, and other chemistry, manufacturing and control (CMC) data, (C) regulatory documentation, and (D) tangible materials and reagents; in each case as and to the extent reasonably necessary or useful for Vaxcyte to exercise the rights granted to it under the Existing Agreements (during the relevant term of such Agreements) or this Agreement. Notwithstanding the foregoing, in no event shall Sutro Know-How include any information or materials of Sutro's Third Party collaborators or sublicensees, except for such information or materials pertaining to the Sutro Platform which Sutro has the right to provide to Vaxcyte in accordance with this Agreement.

(ooo) "**Sutro Patents**" means any Patents, subject to Section 14.8 of this Agreement, owned or controlled by Sutro or its Affiliates at any time during the Term of this Agreement covering the Sutro Platform, Extracts, Vaccine Compositions or the Manufacture or use thereof.

(ppp) "**Sutro Platform**" has the meaning set forth in the License Agreement.

(qqq) "**Tech Transfer**" means the technology transfer to Vaxcyte, its Affiliate or an Approved CMO designated by Vaxcyte (for clarity, other than [***]) of any and all know-how, materials and information (including any Sutro Know-How, Sutro Core Know-How, technical information, and documentation and data directed to Manufacturing, testing and standard operating procedures) owned or controlled by Sutro (subject to Section 14.8 of this Agreement) or its Affiliates as is necessary or useful to enable Vaxcyte, such Affiliate or such Approved CMO (as applicable) to Manufacture Extract using Sutro's then-current Manufacturing process, including any such know-how, materials and information as would be needed for Vaxcyte, such Affiliate or such Approved CMO (as applicable) to scale up such Manufacture of Extract to reasonably required commercial volumes (and including by Sutro making available its applicable personnel on-site to provide technical support and trouble-shooting in furtherance of the foregoing). For the avoidance of doubt, references to Tech Transfer in this Agreement shall include Process Transfers (as defined in the Supply Agreement), as applicable.

(rrr) "**Term**" has the meaning set forth in Section 12.1.

(sss) "**Third Party**" means any person or entity other than Sutro, Vaxcyte and their respective Affiliates.

(ttt) "**Vaccine Composition**" has the meaning set forth in the License Agreement.

(uuu) "**Vaccine Field**" has the meaning set forth in the License Agreement.

(vvv) "**Vaccine Field Infringement**" has the meaning set forth in Section 5.5(a)(i).

(www) "**VAT**" has the meaning set forth in Section 8.2(a).

(xxx) "**Vaxcyte**" has the meaning set forth in the Preamble.

(yyy) "[***] **Extract IP**" has the meaning set forth in Section 5.1(b).

(zzz) "[***] **Extract Patent**" has the meaning set forth in Section 5.5(a)(i).

(aaaa) "**Vaxcyte Indemnitees**" has the meaning set forth in Section 11.2.

(bbbb) "[***] **IP**" has the meaning set forth in Section 5.1(d).

(cccc) "[***] **Patent**" has the meaning set forth in Section 5.4(c).

(dddd) "**Winddown Period**" has the meaning set forth in Section 12.6(a)(ii).

ARTICLE II
GRANTS OF RIGHTS

Section 2.1 Manufacturing Rights.

(a) Subject to the terms and conditions of this Agreement, Sutro hereby grants to Vaxcyte the following (collectively, the "**Manufacturing Rights**"):

(i) an exclusive (except as to Sutro), perpetual (subject to Article XII), worldwide, non-sublicensable (except as set forth in Section 2.3), at no additional royalty (i.e., royalty-free, other than any royalties due under the License Agreement), fully paid-up (subject to Vaxcyte's payment of the Exercise Price and any Milestone Payments due in accordance with the Option Agreement, each such term as defined in the Option Agreement) license under the Sutro Patents, Sutro Know-How, Sutro Core Know-How, [***] IP and Sutro's ownership interest in and to any Jointly-Owned IP to Manufacture or have Manufactured Extract and [***] (in any form, including fresh, liquid, frozen and spray-dried forms), solely for use in the research, development, use, production, sale, offering for sale, export, import, commercialization or other exploitation of Vaccine Compositions; and

(ii) solely in connection with Vaxcyte's exercise of the rights granted pursuant to the foregoing Section 2.1(a)(i), (A) as between the Parties, the authority and control over, and ability to address, regulatory (subject to, and including the rights set forth in, Article III), quality assurance, quality control and batch release matters in respect of such Manufacture of such Extract and [***] (and the resulting Manufactured Extract and [***]), and (B) the right to access and use, and to permit Approved CMOs to access and use, Sutro Know-How and Sutro Core Know-How; provided, that:

(1) Vaxcyte shall not have the right to make changes to Sutro's DMF or other regulatory filings for Extract or [***] without Sutro's prior written consent; provided, further, that, for clarity, Vaxcyte shall have the right to make and amend its own regulatory filings in respect of Extract and [***] made by or on behalf of Vaxcyte in connection with Vaccine Compositions developed by Vaxcyte; and

(2) Approved Contractors shall not have the right to access, transfer or use any cell banks (including master and working cell banks) that constitute Sutro Core Know-How, except for purposes of storage, quality control and characterization of cell banks, and making new working cell banks, in support of Vaxcyte's exercise of the Manufacturing Rights, or as otherwise consented to by Sutro (such consent not to be unreasonably withheld, conditioned or delayed in respect of activities reasonably necessary or useful in support of Vaxcyte's exercise of the Manufacturing Rights).

(b) For clarity, (A) the Manufacturing Rights will not include the right for Vaxcyte to operate as a contractor manufacturer for a Third Party (i.e., to Manufacture Extract for sale to Third Parties for the independent use of such Third Parties); provided, that, for clarity, the Manufacturing Rights shall include the right to, and Vaxcyte may, Manufacture and supply Extract to Vaxcyte's

Sublicensees (as defined in, and subject to the terms of, the License Agreement), and (B) the Manufacturing Rights shall include the right to make [***].

(c) For the avoidance of doubt, the Manufacturing Rights (and the rights granted by Sutro to Vaxcyte under this Agreement), shall be in addition to, and shall not in any way limit, the licenses and rights granted by Sutro to Vaxcyte under the Existing Agreements, the [***] Letter Agreement or the [***] Letter of Intent (including, for example, that the Manufacturing Rights shall apply with respect to any process, platform, composition, extract or intellectual property developed (or otherwise acquired) by Sutro following the effective date of the Option Agreement or the Effective Date of this Agreement (including any improvements to or in respect of the Sutro Platform, Extract, or the process for Manufacturing Extract), if such process, platform, composition, extract or intellectual property would be covered by the licenses and rights granted to Vaxcyte under the Existing Agreements). The Parties acknowledge and agree that the Manufacturing Rights do not include the right to manufacture, sell or offer to sell Vaccine Compositions, which are addressed under the License Agreement, or any other rights licensed to Vaxcyte pursuant to Section 4.1(a) of the License Agreement, and if and to the extent a composition is a Vaccine Composition under the License Agreement, then notwithstanding anything herein to the contrary, such composition shall continue to be a Vaccine Composition under the License Agreement for payment purposes, including royalties, as set forth in the License Agreement (for clarity, subject to Section 5.2 hereof). For clarity, (i) nothing in this Agreement (including Vaxcyte's practice of the Manufacturing Rights) shall alter or limit Vaxcyte's royalty payment obligations under the License Agreement (for clarity, subject to Section 5.2 hereof), and (ii) in the event that the License Agreement is terminated, but this Agreement remains in effect, Vaxcyte shall not have the right to manufacture, sell or offer to sell Vaccine Compositions under this Agreement (or to practice hereunder any other rights that are licensed to Vaxcyte pursuant to Section 4.1(a) of the License Agreement to the extent not expressly included in the Manufacturing Rights). Notwithstanding anything to the contrary in the License Agreement, nothing in the License Agreement shall require Vaxcyte to provide Sutro notice or obtain Sutro's consent (or otherwise restrict Vaxcyte's rights) in respect of the exercise of the Manufacturing Rights under (and in accordance with the terms of) this Agreement (including the Manufacture of Extract and [***] by an Approved CMO).

Section 2.2 Restrictions on Use Outside of Manufacturing Rights. Vaxcyte covenants not to use any Sutro Know-How or Sutro Core Know-How outside of the scope of the Vaccine Field or the scope of the Manufacturing Rights (except as permitted pursuant to the Existing Agreements, the [***] Letter Agreement or any subsequent written agreement between the Parties or their respective Affiliates). For clarity, the Vaccine Field includes the research, development, use, sale, offering for sale, export, import, commercialization or other exploitation of Vaccine Compositions for prophylactic, therapeutic and/or companion diagnostic applications. In addition, Vaxcyte shall not, except as permitted pursuant to this Agreement, the Existing Agreements, the [***] Letter Agreement or a subsequent written agreement between the Parties or their respective Affiliates, (A) sell, transfer, lease, exchange or otherwise dispose of or provide Extract to any Third Party, (B) knowingly use Extract to produce cancer vaccines or any other proteins except for Vaccine

Compositions, and (C) use Extract in human subjects, in clinical trials, or for diagnostic purposes involving human subjects.

Section 2.3 Sublicensing.

(a) Vaxcyte shall have the right to extend Vaxcyte's rights and obligations hereunder (including the right to sublicense the Manufacturing Rights through multiple tiers) to its Affiliates (for clarity, including both current and future Affiliates, but only for so long as the applicable entity is an Affiliate of Vaxcyte); provided, that [***]. In the event that any Affiliate of Vaxcyte enters into an agreement with an Approved CMO or Approved Contractor that includes a sublicense of any of the Manufacturing Rights, then such agreement shall provide that, if such Affiliate ceases to be an Affiliate of Vaxcyte prior to such agreement being assigned or transferred to Vaxcyte or another Affiliate of Vaxcyte, such agreement will immediately terminate or be automatically assigned or transferred by such Affiliate to Vaxcyte (or another Affiliate of Vaxcyte), at Vaxcyte's discretion.

(b) Vaxcyte, and Vaxcyte's Affiliates to which Vaxcyte granted a sublicense under Section 2.3(a), may sublicense the Manufacturing Rights through a single tier to Approved CMOs and Approved Contractors for the benefit of Vaxcyte (but not, for clarity, for the independent commercial use of such Approved CMOs or Approved Contractors). Each sublicense granted to an Approved CMO or Approved Contractor pursuant to this Section 2.3(b) shall be granted pursuant to a written agreement between the Approved CMO or Approved Contractor and Vaxcyte that [***]. With respect to any Approved CMO, and any Approved Contractor that will have access to, or use, Sutro Core Know-How:

(i) Vaxcyte shall provide to Sutro Vaxcyte's proposed agreement with such Approved CMO or Approved Contractor at least [***] prior to Vaxcyte executing such agreement, and Vaxcyte shall [***];

(ii) In the event any Approved CMO or Approved Contractor breaches such agreement with Vaxcyte with respect to provisions of such agreement relating to safeguarding the Sutro Know-How and Sutro Core Know-How, then upon Sutro's reasonable request, Vaxcyte will use Commercially Reasonable Efforts to enforce such agreement (and to otherwise fully cooperate with Sutro in enforcing Sutro's rights in Sutro Know-How and Sutro Core Know-How) against such Approved CMO or Approved Contractor in respect of such breach, [***]. Any amounts recovered by Sutro or Vaxcyte in enforcing any such claim shall be paid as follows: [***]; and

(iii) Vaxcyte shall include all reasonably necessary and appropriate protections for Sutro's applicable intellectual property rights (including provisions to effect Sutro's ownership of the New IP) in any such agreement with an Approved CMO or Approved Contractor for manufacturing Extract, and such Approved CMO or Approved Contractor shall not be permitted thereunder to use any intellectual property or Discloser's Information of Sutro, except in connection with the exercise of the Manufacturing Rights on behalf of Vaxcyte (or as otherwise may be authorized by Sutro in writing). Vaxcyte shall provide to Sutro copies of the applicable contractual provisions in such agreement related to

protection of Sutro's intellectual property with such Approved CMO or Approved Contractor, and shall [***].

ARTICLE III
REGULATORY MATTERS

Section 3.1 Regulatory Activities for Vaccines.

(a) Notwithstanding anything to the contrary in the Existing Agreements, as between Vaxcyte and Sutro, Vaxcyte shall have full control (subject to Section 3.3 in respect of efforts to maintain confidentiality of Sutro Know-How and Sutro Core Know-How and the scope of Vaxcyte's regulatory rights set forth in the Manufacturing Rights), in its sole and absolute discretion, with respect to any and all regulatory matters related to research, development, Manufacture or commercialization of a Pneumococcal Conjugate Vaccine or other Vaccine Composition developed by or on behalf of Vaxcyte and Manufactured using Extract or [***] (including the preparation and filing of investigational new drug applications and biologic license applications (and foreign equivalents thereof) with any applicable regulatory authorities and any interactions therewith); provided, [***].

(b) Vaxcyte shall have the right to (A) reference Sutro's DMF (and any regulatory filings and Regulatory Approvals controlled by Sutro) with respect to any regulatory filings or Regulatory Approvals relating to [***] made by or on behalf of Vaxcyte in accordance with the Manufacturing Rights or otherwise relating to Vaccine Compositions (or any components thereof) produced using Extract or [***] (or to otherwise include information from Sutro's DMF therein), and (B) file its own DMF (or other applicable regulatory filings) in respect of the foregoing (in which case, Sutro shall provide Vaxcyte with chemistry, manufacturing and controls data and other data reasonably required for such filings). If the FDA or other applicable Governmental Authority requires that certain information in the possession or control of Sutro regarding Extract or [***] (or any component of the Vaccine Compositions) be expressly included in any of Vaxcyte's regulatory filings or Regulatory Approvals described in the foregoing clause (A) above (e.g., in the event the FDA declines to permit Vaxcyte to rely upon Sutro's DMFs in support of any regulatory filings or Regulatory Approvals and Vaxcyte has a reasonable need to include such information in its regulatory filings under applicable laws or regulations), then to the extent not already provided to Vaxcyte, Sutro shall provide Vaxcyte such information for inclusion therein (subject to Section 3.3 in respect of efforts to maintain confidentiality of Sutro Know-How and Sutro Core Know-How).

Section 3.2 Regulatory Activities for Extract and [***]. Vaxcyte shall have the right to control (to the extent included in the Manufacturing Rights) regulatory matters related to [***] made by or on behalf of Vaxcyte in accordance with the Manufacturing Rights (including, for clarity, regulatory submissions and interactions in connection with any such resulting [***] made by or on behalf of Vaxcyte in accordance with the Manufacturing Rights), and Sutro will have the right to control all other regulatory matters related to Extract and [***]. Vaxcyte and Sutro shall cooperate in good faith on a mutually agreeable regulatory strategy relating to Extract and [***]

made by Vaxcyte, and each Party shall not take any action that would materially and adversely affect the other Party's regulatory interests in respect of Extract or [***].

Section 3.3 Confidentiality in Regulatory Submissions. Vaxcyte shall use reasonable best efforts, to the extent permitted under applicable laws and regulations, to maintain the confidentiality of any Sutro Know-How and Sutro Core Know-How in regulatory documents submitted by or on behalf of Vaxcyte. If any Sutro Know-How or Sutro Core Know-How is required by applicable laws or regulations to be included in regulatory documents to be submitted by or on behalf of Vaxcyte, Vaxcyte shall be permitted to do so; [***].

Section 3.4 Safety Data. Each Party understands and acknowledges that the other Party and its Affiliates and respective licensees and sublicensees may need to access, utilize and include certain safety data (e.g., adverse event reports) pertaining to products made using Extract (including [***]) in its applicable regulatory materials and filings as required by applicable law. Each Party shall have the right to share any and all such safety data generated by the other Party or the other Party's Affiliates, licensees or sublicensees with such first Party's Affiliates and other Third Parties (including its licensees and sublicensees) as permitted by Section 6.1.

Section 3.5 Cooperation. Each Party agrees to (A) during the Term, make its personnel reasonably available at their respective places of employment to consult with the other Party on issues related to the activities conducted in accordance with this Article III or otherwise relating to the Manufacture of Extract, [***] or Vaccine Compositions Manufactured through the use of Extract in connection with any request from any Regulatory Authority, including any such request with respect to regulatory, scientific, technical and clinical testing issues, or otherwise, and (B) for a period of [***] after the Effective Date, otherwise provide such assistance as may be reasonably requested by the other Party from time to time in connection with the activities conducted in accordance with this Article III. Each Party shall reimburse the other Party for the following costs incurred by such other Party in connection with this Section 3.5: (A) [***]; and (B) [***].

ARTICLE IV
TECHNOLOGY TRANSFER

Section 4.1 First Tech Transfer.

(a) Upon Vaxcyte's request to Sutro following the Successful Completion (or other termination or abandonment) of Sutro's technology transfer to [***] under the Existing Agreements (as modified by this Agreement), the [***] Letter Agreement, the [***] Letter of Intent or any other subsequent written agreement between the Parties or their respective Affiliates, Sutro shall support and cooperate with Vaxcyte to conduct a Tech Transfer to Vaxcyte, or an Affiliate of Vaxcyte or an Approved CMO (other than [***]) designated by Vaxcyte, in a manner sufficient for Vaxcyte to fully exercise the Manufacturing Rights at the facilities of such designated recipient (the "**First Tech Transfer**"). Without limiting the generality of the foregoing, in connection with the First Tech Transfer, Sutro shall (A) provide to the designated recipient of the First Tech Transfer full access to [***] necessary or useful for the Manufacture of Extract using Sutro's then-current Manufacturing process, to the extent owned or controlled by Sutro or its Affiliates, and (B) make its relevant personnel reasonably available to Vaxcyte or its designated

recipient (whether its Affiliate or an Approved CMO) for technical support and trouble-shooting (both off and on-site) with respect to the Manufacture of Extract; [***].

(b) **Schedule 1** to this Agreement sets forth certain know-how, materials and information to be transferred by Sutro in connection with its obligations under Section 4.1(a) (which Sutro shall transfer as part of the First Tech Transfer), the timeline for conducting the First Tech Transfer, the responsibilities of each Party in connection with the First Tech Transfer, and each Party's respective personnel to be involved in performing the First Tech Transfer; provided, that (i) the Parties acknowledge that the information on such **Schedule 1** as of the Execution Date may not be fulsome or accurately reflect the intended First Tech Transfer given that it has been prepared potentially significantly in advance of the First Tech Transfer, and (ii) the Parties shall, acting reasonably and in good faith, mutually agree upon updates, revisions and additions to such **Schedule 1** to more accurately reflect the requirements for the First Tech Transfer reasonably in advance of the anticipated start of the First Tech Transfer. The Parties may modify **Schedule 1** by mutual written agreement.

(c) Vaxcyte shall reimburse Sutro for the following costs incurred by Sutro in performing the First Tech Transfer: (A) [***]; and (B) [***].

(d) Following Successful Completion of the First Tech Transfer, Sutro shall not be obligated to notify or transfer to Vaxcyte [***] made by or on behalf of Sutro (other than Available Extracts), except in connection with a Second Tech Transfer (or as otherwise may be agreed by the Parties in writing in respect of another Tech Transfer).

(e) Sutro shall use Commercially Reasonable Efforts to fulfill its obligations in connection with the First Tech Transfer. [***].

(f) For the avoidance of doubt, any Tech Transfer shall exclude any Patents, know-how and other intellectual property of an Acquirer (as defined in the License Agreement) of Sutro pursuant to Section 14.8 of this Agreement and pursuant to Section 15.2 of the License Agreement.

Section 4.2 Second Tech Transfer. Upon Vaxcyte's reasonable request, made no earlier than [***] and no later than [***], Sutro shall support and cooperate with Vaxcyte to conduct an additional Tech Transfer to Vaxcyte, or an Affiliate of Vaxcyte or an Approved CMO designated by Vaxcyte, in a manner sufficient for Vaxcyte to fully exercise the Manufacturing Rights at the facilities of such designated recipient (the "**Second Tech Transfer**"). Section 4.1 shall apply to the Second Tech Transfer, *mutatis mutandis* (i.e., the rights and obligations of the Parties with respect to the First Tech Transfer shall apply in the same manner to the Second Tech Transfer).

Section 4.3 Reverse Tech Transfer. In the event that Vaxcyte or its Approved CMO makes [***] and successfully scales up manufacture of Extract incorporating such [***] to the applicable commercial volumes of such [***] pursuant to its exercise of the Manufacturing Rights, upon Sutro's reasonable request to Vaxcyte, Vaxcyte shall conduct a technology transfer to Sutro of know-how, materials and information in Vaxcyte's control to the extent necessary or useful for Sutro to implement the relevant [***] for the manufacture of Extract incorporating such [***].

Sutro shall reimburse Vaxcyte for the following costs incurred by Vaxcyte in performing such technology transfer: (A) [***]; and (B) [***].

Section 4.4 Existing Tech Transfer Obligations. For clarity, the obligations of the Parties in this Article IV are intended, and shall be deemed, to be in addition to and not in limitation of Sutro's obligations to perform any Tech Transfers to [***] pursuant to the Existing Agreements (as modified by this Agreement), the [***] Letter Agreement, the [***] Letter of Intent or any other subsequent written agreement between the Parties or their respective Affiliates.

Section 4.5 Excess Capacity; Supply to Sutro. Following Successful Completion of (A) the First Tech Transfer or Second Tech Transfer to an Approved CMO's facility, or to Vaxcyte's or its Affiliates' internal facility, or (B) the technology transfer to [***] (with respect to frozen liquid Extract) pursuant to the [***] Letter Agreement, if there is excess capacity at the facility where such Tech Transfer (or technology transfer) was Successfully Completed, upon Sutro's reasonable request to Vaxcyte the Parties shall negotiate in good faith for a reasonable period of time with respect to Sutro's use of such excess capacity for itself or Sutro's other customers. In the event that Sutro purchases frozen liquid Extract from an Approved CMO or Vaxcyte in respect of the foregoing clause (A), or from [***] in respect of the foregoing clause (B), Sutro shall first reimburse Vaxcyte for [***]; provided, that for clarity, Sutro shall not be obligated to reimburse Vaxcyte for [***].

ARTICLE V
INTELLECTUAL PROPERTY

Section 5.1 Ownership of Intellectual Property. Notwithstanding anything to the contrary in the Existing Agreements, as between the Parties and their respective Affiliates:

(a) Vaxcyte and Sutro shall jointly own any New IP that is a method of using Extract or [***] that relates to both the Vaccine Field and to other applications outside the Vaccine Field (such methods, including all intellectual property rights therein, the "**Jointly-Owned IP**");

(b) [***] shall solely own all New IP (excluding the Jointly-Owned IP, which shall be subject to joint-ownership as provided herein) that is a method of using Extract or [***] that relates solely to [***] (such methods, including all intellectual property rights therein, the "**[***] Extract IP**");

(c) [***] shall solely own all New IP (excluding Jointly-Owned IP, which shall be subject to joint-ownership as provided herein, and [***] Extract IP) (the "[***] IP," and any Patent claiming such [***] IP, a "[***] **New IP Patent**"); and

(d) Notwithstanding anything to the contrary in this Agreement, [***] shall solely own any and all inventions and intellectual property rights therein (and Patents and know-how with respect thereto) conceived, made, developed or otherwise invented by or on behalf of [***], its Affiliates or sublicensees that are directed to the composition, formulation or use of a [***] through the use of Extract or [***]) (the "**[***] IP**").

Section 5.2 Licensed-Back; Effect on Royalties. The [***] IP shall be (and is hereby) licensed back to Vaxcyte under the License Agreement (and, for clarity, this Agreement) on the same terms

as the Sutro Patents, Sutro Know-How and Sutro Core Know-How are licensed under the License Agreement (as amended and modified by this Agreement) and this Agreement, respectively; provided, that notwithstanding anything to the contrary herein or in the Existing Agreements, Sutro acknowledges and agrees that neither Sutro's ownership of any such [***] IP nor Sutro's ownership interest in any Jointly-Owned IP shall cause the Royalty Term under the License Agreement to extend [***] (i.e., such ownership or ownership interest [***] in respect of the references to [***] in the definition of [***], the definition of [***] or in [***]). Each Party's interest in the Jointly-Owned IP shall be subject to the licenses granted under the Existing Agreements and this Agreement (and is hereby licensed in such manner), such that [***] shall have the exclusive right to exploit and freely sublicense the Jointly-Owned IP [***] in accordance with the Existing Agreements and this Agreement, and [***] shall have the exclusive right to exploit and freely sublicense the Jointly-Owned IP [***] in accordance with the Existing Agreements and this Agreement, in each case, without the obligation to obtain any consent from (or account to) the other Party in respect thereof.

Section 5.3 Assignment of Intellectual Property. If and to the extent that Vaxcyte or its Affiliates obtains any ownership interest in or to any [***] IP, Vaxcyte hereby assigns, and shall cause its Affiliates to assign, to Sutro all such ownership interest in [***] IP. In addition, if and to the extent necessary to effectuate the joint ownership between Vaxcyte and Sutro of the Jointly-Owned IP, Vaxcyte hereby assigns, and shall cause its Affiliates to assign, to Sutro its and their ownership interest in and to the Jointly-Owned IP as is necessary to fully effectuate such joint ownership contemplated in Section 5.1(a).

Section 5.4 Patent Prosecution.

(a) Sutro shall not file (and shall prohibit its Affiliates from filing) any Patents claiming any [***] IP or [***] Extract IP. Vaxcyte shall not file (and shall prohibit its Affiliates, Approved CMOs and Approved Contractors from filing) any Patents claiming [***] IP or Jointly-Owned IP, and Vaxcyte will reasonably cooperate with Sutro in connection with any filings for such Patents.

(b) Notwithstanding anything to the contrary in the Existing Agreements, [***] shall have the first right to control the prosecution of Patent applications covering Jointly-Owned IP (each, a "**Joint Patent**"); provided, that:

(i) The Parties shall reasonably cooperate and collaborate in good faith with respect to any such prosecution and strategy related thereto, and [***] shall keep [***] up-to-date and reasonably informed, including by providing to [***] drafts of all Patent applications and other material submissions and communications with any applicable Governmental Authorities (including, for clarity, patent offices) reasonably in advance of any submission thereof to enable [***] to comment thereon;

(ii) [***] shall take [***] direction in respect of such Joint Patent (including in respect of prosecution strategy and claims) [***]; provided, that [***]; and

(iii) With respect to matters not covered under Section 5.4(b)(ii) [***] shall reasonably consider incorporating [***] comments; [***].

(c) [***] shall, at the request of [***] and to the extent permitted by applicable law,

file a continuation or divisional Patent application from each such Joint Patent, which continuation or divisional has claims [***] (each a "**[***] Patent**"). [***] shall prosecute each such [***] Patent according to [***] reasonable instructions and [***]. Upon issuance of each such [***] Patent, [***] shall, and hereby does, and shall cause its Affiliates to, assign to [***] or its Affiliates' right, title and interest in and to each such [***] Patent. With respect to any Joint Patent and related [***] Patent [***], the Parties shall coordinate and cooperate in good faith regarding, and discuss in good faith, the appropriate claim strategies for such continuations and divisionals [***].

(d) Notwithstanding anything to the contrary in this Agreement, if prior to the filing of any Joint Patent, [***] notifies [***] that it wishes to protect [***], then the Parties shall discuss in good faith and mutually agree upon a reasonable approach to take in respect thereof prior to filing any such Joint Patent (subject to the escalation procedure set forth in Section 5.4(f)). [***].

(e) In respect of any Joint Patent, if the Party controlling prosecution determines it does not want to pursue (or does not want to continue to pursue or maintain) such Joint Patent (such Party, the "**Declining Party**"), then the other Party shall have the right to pursue (or, as applicable, continue to pursue and maintain) such Joint Patent on its own (such Party, the "**Step-In Party**"). In such event, [***].

(f) If, in connection with this Section 5.4, the Parties are obligated to discuss in good faith and mutually agree upon a reasonable approach to take, and representatives of the Parties are unable to mutually agree upon such a reasonable approach, either Party may [***], Article XIII shall apply.

Section 5.5 Enforcement.

(a) Generally.

(i) Notice. If either Party reasonably believes that any [***] Patent (including any [***] New IP Patent), Joint Patent, [***] Patent or Patent covering [***] Extract IP ("**[***] Extract Patent**") is being infringed by a Third Party with respect to activities within the scope of the Vaccine Field, or is subject to a declaratory judgment action arising from such activities (a "**Vaccine Field Infringement**"), such Party shall promptly notify the other Party and the Parties shall discuss in good faith how best to respond.

(ii) [***] Enforcement. As between the Parties, [***] shall have the first right, but not the obligation, itself or through a designee, to enforce [***], including (A) initiating or prosecuting an infringement or other appropriate suit or action against such Third Party, and (B) defending any declaratory judgment action with respect thereto (the type of action described in each of (A) and (B), an "**Enforcement Action**").

(iii) [***] Enforcement. As between the Parties, [***] shall have the first right, but not the obligation, itself or through a designee, to enforce [***] (i.e., (x) initiating or prosecuting an infringement or other appropriate suit or action against a Third Party, and (y) defending any declaratory judgment action with respect thereto) [***]. As between the Parties, [***] shall have the sole right to initiate and control any Enforcement Action [***] with respect to any Vaccine Field Infringement.

(iv) Secondary Enforcement. Reasonably in advance of undertaking any Enforcement Action under Section 5.5(a)(ii) or Section 5.5(a)(iii), the Party with the first right to undertake such Enforcement Action (the "**Lead Enforcement Party**") shall notify the other Party of its intent to take such Enforcement Action. In the event a Party does not initiate an Enforcement Action with respect to a particular Patent for which it is the Lead Enforcement Party within [***] of a request from the other Party to do so, such other Party shall have the right, but not the obligation, itself or through a designee, to initiate and control such Enforcement Action at its discretion and expense.

(v) Recoveries. Any amounts recovered by Vaxcyte or Sutro with respect to an Enforcement Action under this Section 5.5(a) will be used first to reimburse the reasonable costs and expenses, including attorneys' fees, incurred in bringing and maintaining the applicable Enforcement Action, then to satisfy any Third Party obligations with respect to such recovery, and any remainder by Vaxcyte or Sutro shall be allocated between the Parties as follows: (A) if Vaxcyte is the enforcing Party: [***] shall be paid to Sutro, and the remainder shall be retained by Vaxcyte; and (B) if Sutro is the enforcing Party: [***] shall be retained by Sutro, and [***] shall be paid to Vaxcyte; provided, that if another patent controlled by Vaxcyte or its licensee is also being enforced with respect to the same infringing party or product, then the portion retained by Sutro under the foregoing clauses (B) shall be [***] (and [***] shall be paid to Vaxcyte).

(b) Sutro Patents. As between the Parties, Sutro shall have the sole right, but not the obligation, itself or through a designee, at its cost to enforce (i.e., (x) initiating or prosecuting an infringement or other appropriate suit or action against a Third Party, and (y) defending any declaratory judgment action with respect thereto) [***].

(c) Cooperation. If a Party brings an Enforcement Action in accordance with Section 5.5(a), the other Party shall reasonably cooperate, including, if required to bring such action, joining as a named party. The Parties shall keep one another informed of the status of their respective activities regarding any Enforcement Action pursuant to Section 5.5(a) or settlement thereof, and the Parties shall assist one another and cooperate in any such action at the other's reasonable request. Neither Party shall have the right to settle any Enforcement Action under Section 5.5(a) in a manner that [***].

ARTICLE VI
CONFIDENTIALITY

Section 6.1 Confidentiality.

(a) In the course of performing the transactions contemplated by this Agreement, whether before or after the Effective Date, a Party may disclose, or may have disclosed, to the other Party confidential information owned or controlled by the disclosing Party ("**Discloser's Information**"). The receiving Party will maintain in confidence the Discloser's Information and will not use it for any purpose except for purposes authorized hereunder, and shall use Commercially Reasonable Efforts to safeguard such information against disclosure to Third Parties, including employees and persons working or consulting for such Party that do not have an established, current need to know such information for purposes authorized under this Agreement.

This obligation of confidentiality does not apply to restrict use or disclosure by the receiving Party of technology, information or material that meet one or more of the following criteria: (A) they were properly in the possession of the receiving Party, without any restriction on use or disclosure, prior to receipt from the other Party; (B) they are at the time of disclosure hereunder in the public domain by public use, publication, or general knowledge; (C) they become general or public knowledge through no fault of the receiving Party following disclosure hereunder; (D) they are properly obtained by the receiving Party from a Third Party not under a confidentiality obligation to the disclosing Party hereto; or (E) they are independently developed by or on behalf of the receiving Party without the assistance of the confidential information of the other Party. Subject to the exceptions in the foregoing clauses (A)-(C) above, and notwithstanding the definition of "Discloser's Information" above, (x) all data and results generated by or on behalf of Vaxcyte with respect to Vaccine Compositions (excluding Sutro Patents, Sutro Know-How, Sutro Core Know-How, Jointly-Owned IP and [***] IP) shall be deemed Discloser's Information of Vaxcyte, (y) confidential information comprising the Sutro Patents, Sutro Know-How, Sutro Core Know-How and [***] IP shall be deemed Discloser's Information of Sutro, and (z) confidential information comprising the Jointly-Owned IP, and the terms and conditions of this Agreement, shall be deemed Discloser's Information of both Parties.

(b) Each Party may use and disclose Discloser's Information of the other Party as follows:

(i) under appropriate confidentiality provisions substantially equivalent to those in this Agreement in connection with the performance of its obligations or exercise of rights granted to such Party in this Agreement;

(ii) in communication with, whether existing or potential, investors, acquirers, lenders, consultants, advisors (including financial advisors, lawyers and accountants), (sub) licensees, collaborators or service providers, in each case on a need to know basis under appropriate confidentiality provisions substantially equivalent to those of this Agreement; and

(iii) if a Party is required by judicial or administrative process to disclose the Discloser's Information of the other Party hereto; provided, that in such instance, such Party shall promptly inform such other Party of the anticipated disclosure in order to provide it an opportunity to challenge or limit the disclosure obligations. Discloser's Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Agreement, and, in disclosing the other Party's Discloser's Information pursuant to law or court order, each Party shall take reasonable steps to ensure the continued confidential treatment of such Discloser's Information.

(c) Notwithstanding Section 6.1(b)(iii) above, a receiving Party may disclose Discloser's Information of the other Party to Governmental Authorities as required by securities laws or rules of securities exchanges; provided, that the receiving Party shall provide reasonable advance notice to the other Party of such disclosure and use Commercially Reasonable Efforts, to oppose such disclosure or to request confidential treatment of such Discloser's Information and, in any event, shall only disclose the minimum information, as reasonably determined by the

receiving Party's legal counsel, that is necessary to comply with such requirements.

(d) Without limiting the generality of Section 6.1(a) (and subject to the foregoing subclauses in this Section 6.1), Vaxcyte (A) acknowledges and agrees that Sutro Know-How and Sutro Core Know-How constitutes Discloser's Information of Sutro that Vaxcyte shall maintain as confidential in accordance with Section 6.1, (B) shall take necessary and appropriate measures to maintain the trade secret status under applicable law of any Sutro Know-How or Sutro Core Know-How that Sutro reasonably indicates to Vaxcyte it regards as its trade secret, and (C) shall implement measures that are substantially similar to any commercially reasonable measures taken by Sutro as of the Effective Date to maintain the confidentiality of Sutro Know-How and Sutro Core Know-How, to the extent Sutro notifies Vaxcyte in writing of such measures.

Section 6.2 Restricted Systems. Vaxcyte (or its Affiliates or sublicensees, as applicable) shall establish [***] and safeguards that are designed to ensure that Sutro Core Know-How [***] to avoid use of such Sutro Core Know-How outside the scope of the Manufacturing Rights (or such other uses permitted under the Existing Agreements, [***] Letter Agreement or any subsequent written agreement between the Parties or their respective Affiliates), by ([***] (the "**Restricted System**"), [***].

ARTICLE VII
AUDITS

Section 7.1 Audits by Vaxcyte.

(a) Vaxcyte shall be responsible to audit, or have audited by an Approved Contractor in accordance with Section 7.1(c), any Third Party facility used by Vaxcyte, its Affiliates or an Approved CMO to manufacture Extract to ensure compliance with the terms of this Agreement and the terms of any written agreement between Vaxcyte (or its Affiliates) and such Approved CMO, as applicable, relating to [***].

(b) Vaxcyte shall use Commercially Reasonable Efforts to provide to, or obtain for, Sutro tag-along rights with respect to such audits by or on behalf of Vaxcyte of such Third Party facility (i.e., obtain for Sutro the right to participate in such audits conducted by or on behalf of Vaxcyte of such Third Party facility). [***].

(c) Vaxcyte shall be permitted (at its discretion), but shall not be required, to conduct an audit pursuant to Section 7.1(a) through an Approved Contractor; provided, that Vaxcyte's agreement with any such Approved Contractor shall (among other things) contain appropriate provisions with respect to safeguarding Sutro Know-How and Sutro Core Know-How to the extent the same will be accessed by such Approved Contractor pursuant to such audit, including, if and to the extent applicable, heightened protections for such Sutro Know-How and Sutro Core Know-How that Sutro reasonably indicates to Vaxcyte it regards as its trade secret.

Section 7.2 Manufacturing and Storage Facility Audits by Sutro.

(a) In the event that Vaxcyte or its Affiliates manufacture Extract in their facilities, or store any cell banks that constitute Sutro Core Know-How in their facilities, Sutro shall have the right to have such facilities where Extract is manufactured or such cell banks are located (and

related records) audited by an independent auditor (in accordance with Section 7.2(b)) to ensure compliance with the terms of this Agreement relating to [***] (each such audit, a "**Facility Audit**").

(b) Sutro shall not be permitted to conduct Facility Audits more frequently than [***], unless Sutro has reasonable cause to conduct a Facility Audit in respect of a suspected material violation by Vaxcyte or its Affiliate(s) of the relevant provisions of this Agreement referenced in Section 7.2(a). Prior to conducting any Facility Audit, Sutro shall provide reasonable advanced written notice to Vaxcyte, but in any event at least [***] (or at least [***] in the event of reasonable cause) prior to such Facility Audit. Each Facility Audit shall be: (A) limited to no more than [***] for on-site visits; (B) limited solely to the facilities where Extract is manufactured or cell banks are located; (C) conducted by an independent, reputable and established Third Party auditor to be mutually agreed-upon by the Parties acting reasonably and in good faith, and subject to each such auditor (x) entering into a written non-disclosure agreement (or similar agreement) with Vaxcyte, (y) being accompanied by Vaxcyte's representatives at all times during any on-site audit, and (z) complying with all applicable reasonable Vaxcyte policies and procedures; (D) conducted at mutually agreeable times during normal business hours; and (E) conducted in a manner intended to avoid and minimize any disruption to Vaxcyte's and such facilities' business operations.

Section 7.3 Research and Development Facility Audits by Sutro. In the event that Vaxcyte or its Affiliates use Extract for research and development purposes, Sutro shall have the right to audit such use of Extract as follows:

(a) Upon receipt of a written request from Sutro (such request to be made by Sutro no more frequently than [***]), Vaxcyte shall provide to Sutro a written report setting forth [***] (each such report, an "**Audit Report**"). Each Audit Report shall [***]. Sutro shall treat each Audit Report (and all information therein) as Discloser's Information of Vaxcyte.

(b) Following receipt of each Audit Report, in the event that Sutro has reasonable concerns based on such Audit Report that Vaxcyte (or its Affiliate) has used Extract for research and development activities outside the Vaccine Field (other than in a manner permitted in a subsequent written agreement between the Parties or their respective Affiliates), Vaxcyte and Sutro shall discuss (and use reasonable efforts to resolve) in good faith any such concerns. If, following such good faith discussions and the exercise of reasonable efforts by both Parties to resolve any such concerns of Sutro, Sutro still has a good faith and reasonable concern that Vaxcyte or its Affiliates are using Extract for research and development activities outside the Vaccine Field (other than in a manner otherwise permitted in a subsequent written agreement between the Parties or their respective Affiliates), Sutro shall have the right to have the facilities of Vaxcyte or its Affiliates where such research and development activities occur (and relevant records in such facilities related to such activities) audited by an independent auditor (in accordance with Section 7.3(c)) to ensure compliance with the terms of this Agreement relating to use of Extract by Vaxcyte or its Affiliates outside of the Vaccine Field (other than in a manner otherwise permitted in a written agreement between the Parties or their respective Affiliates) (each such audit, a "**Lab Audit**").

(c) Sutro shall not be permitted to conduct Lab Audits more frequently than [***]. Prior to conducting any Lab Audit, Sutro shall provide reasonable advanced written notice to

Vaxcyte, but in any event at least [***] prior to such Lab Audit. Each Lab Audit shall be: (A) limited to no more than [***] for on-site visits; (B) limited solely to the facilities (and solely to the particular areas within such facilities) where such Extract is used for such research and development activities; (C) limited to the documents necessary to confirm there is no use of Extract outside of the Vaccine Field, and be conducted in a manner that avoids access to Discloser's Information and other materials of Vaxcyte and its Affiliates that is not related to use of Extract, including through the use of reasonable measures by Vaxcyte or its Affiliates to protect such Discloser's Information and other materials; (D) conducted by an independent, reputable and established Third Party auditor to be mutually agreed-upon by the Parties acting reasonably and in good faith, and subject to each such auditor (x) entering into a written non-disclosure agreement (or similar agreement) with Vaxcyte, (y) being accompanied by Vaxcyte's representatives at all times during any on-site audit, and (z) complying with all applicable reasonable Vaxcyte policies and procedures; (E) conducted at mutually agreeable times during normal business hours; and (F) conducted in a manner intended to avoid and minimize any disruption to Vaxcyte's and such facilities' business operations.

(d) Sutro shall reimburse Vaxcyte for the following costs incurred by Vaxcyte and its Affiliates in connection with any Audit Report and each Lab Audit (including, for clarity, actions taken to generate the Audit Report): (A) [***]; and (B) [***].

Section 7.4 Restricted Systems Audits by Sutro. Sutro shall have the right to audit Vaxcyte's Restricted Systems to ensure compliance with Section 6.2 (each such audit, a "**Restricted Systems Audit**"). Sutro shall not be permitted to conduct Restricted Systems Audits more frequently than [***], unless Sutro has reasonable cause to conduct a Restricted Systems Audit in respect of a suspected material violation of Section 6.2 of this Agreement by Vaxcyte or its Affiliate(s). Prior to conducting any Restricted Systems Audit, Sutro shall provide reasonable advanced written notice to Vaxcyte, but in any event at least [***] (or at least [***] in the event of reasonable cause) prior to such Restricted Systems Audit. Each Restricted Systems Audit shall be conducted [***].

ARTICLE VIII
PAYMENTS

Section 8.1 Payment Procedures. Each Party shall submit an invoice to the other Party for any payments or reimbursements due to such first Party under this Agreement, and such other Party shall pay any amounts set forth on such invoice (that are not disputed in good faith) within [***] of receipt of such invoice (and reasonable documentation evidencing any such amounts due, including supporting documentation and information reasonably necessary to validate such amounts due). All such payments shall be made in U.S. dollars in immediately available funds by wire transfer from a bank account located in the U.S. to such bank account in the U.S. as may be designated in writing by the receiving Party from time to time.

Section 8.2 Taxes.

(a) Any consideration payable pursuant to this Agreement is exclusive of any value added tax ("**VAT**"). If any VAT is chargeable on any of the transactions contemplated under this Agreement and is payable to the respective tax authority by the Party making the supply or providing the service for VAT purposes, upon receipt of a valid invoice in accordance with the

applicable VAT law from the supplying or service providing Party, the other Party shall pay such VAT in addition to the consideration otherwise due pursuant to this Agreement.

(b) Each Party (in such capacity, "**Payor**") shall be entitled to deduct and withhold, or cause to be deducted and withheld, any amounts from any consideration payable pursuant to this Agreement as are required to be deducted and withheld under applicable law with respect to taxes and will secure and send to the other Party (in such capacity, "**Payee**") written evidence that such deducted and withheld amounts were paid over to the applicable taxing authority. The Parties shall reasonably cooperate, and shall cause their respective Affiliates to reasonably cooperate, in order to reduce or eliminate any amounts that would be required to be deducted and withheld on payments made pursuant to this Agreement under applicable law. To the extent such amounts are so deducted or withheld and paid over to the applicable taxing authority, such amounts will be treated for all purposes of this Agreement as having been paid to the person or entity to whom such amounts would otherwise have been paid. Notwithstanding the foregoing, if, directly as a result of any (A) assignment or transfer of this Agreement by Payor, (B) Change of Control of Payor, or (C) redomicile, change in tax residence or similar corporate restructuring by Payor, the tax withholdings hereunder exceed the tax withholdings that would have resulted in the absence of such action, then Payor shall pay to Payee such additional amounts as are necessary so that Payee receives the amounts that it would have received if there had been no such action.

ARTICLE IX
EMPLOYEE MATTERS

Section 9.1 Non-Solicitation. During the Term, each Party shall not knowingly solicit or hire any employee of the other Party who has access to Sutro Know-How or Sutro Core Know-How or is otherwise involved in any material respect with a Tech Transfer under this Agreement; provided, that notwithstanding the foregoing, nothing in this Section 9.1 shall prevent either Party from (A) making (or hiring or soliciting any employee of the other Party pursuant to) a general solicitation which is not directed specifically to such employee of the other Party, or (B) hiring or soliciting any former employee of the other Party who has not been employed by the other Party for at least [***] prior to such hiring or solicitation or whose employment has been terminated by the other Party.

ARTICLE X
REPRESENTATIONS AND WARRANTIES; CERTAIN COVENANTS

Section 10.1 Mutual Representations and Warranties. Each Party represents and warrants to the other Party, as of the Effective Date, that: (A) it is a corporation duly organized, validly existing and in good standing under the laws of its jurisdiction of formation; (B) it has full corporate power and authority to execute, deliver and perform this Agreement, and has taken all corporate action required by applicable law and its organizational documents to authorize the execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement; (C) this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms; (D) all consents, approvals and authorizations from all Governmental Authorities or other Third Parties required to be obtained by it in connection with this Agreement have been obtained; (E) the execution and delivery of this Agreement, and the consummation of the transactions contemplated hereby, do not and shall not (x) conflict with or result in a breach of

any provision of its organizational documents, (y) result in a breach of any other agreement to which it is a party, or (z) violate any appliable law; (F) it has and will at all times during the Term comply with all applicable laws in all material respects, including obtaining all necessary licenses, permits, and authorizations necessary to perform this Agreement and to exploit any license or rights granted to it hereunder, as now or hereafter required under any applicable statutes, laws, ordinances, rules and regulations; and (G) it has not prior to the Effective Date and shall not during the Term (x) have been debarred under Article 306 of the FDCA, 21 U.S.C. § 335a(a) or (b), or any equivalent foreign or local law, rule or regulation, or (y) use or employ in any capacity related to the subject matter of this Agreement or activities hereunder any individual, corporation, partnership, or association which has been debarred under Article 306 of the FDCA, 21 U.S.C. § 335a(a) or (b), or any equivalent foreign or local law, rule or regulation.

Section 10.2 Sutro Representations and Warranties. Sutro represents and warrants to Vaxcyte, as of the Effective Date, that: (A) except as disclosed (based on events that have arisen between the Execution Date and the Effective Date) by Sutro to Vaxcyte in writing within [***] of Vaxcyte's written notification to Sutro that Vaxcyte is considering exercising the Option (as defined in the Option Agreement) in accordance with Section 4 of the Option Agreement or within [***] of receipt of the Option Notice if Vaxcyte does not provide the foregoing notice, to its knowledge (after inquiring with Sutro's patent counsel regarding their actual knowledge gained through representation of Sutro in patent matters and without their conduct of any additional inquiry), the exercise of the Manufacturing Rights in accordance with the terms of this Agreement (and the performance by Sutro of the Tech Transfers contemplated hereunder) do not and shall not infringe on, misappropriate or otherwise violate any Patents or other intellectual property rights of any Third Party (and, as of the Effective Date, no Third Party has made any Claim alleging the same), (B) it has not granted prior to the Effective Date rights to any Third Party that are inconsistent with the rights granted to Vaxcyte under this Agreement, and (C) it has not amended or terminated the [***] In-License in any manner that would adversely affect Vaxcyte's rights under this Agreement.

Section 10.3 Covenants. Sutro covenants that it will not (A) grant any rights to any Third Party that are inconsistent with the rights granted to Vaxcyte under this Agreement, or (B) amend or terminate the [***] In-License in any manner that would adversely affect Vaxcyte's rights under this Agreement. To the extent the license granted under Section 2.1(a) includes a sublicense under Sutro's rights under the [***] In-License, then (i) the Parties acknowledge and agree that this Agreement shall be subject to, and limited by, the terms of the [***] ln-License, and (ii) Vaxcyte covenants to comply with the terms set forth in Exhibit E of the License Agreement in connection herewith.

ARTICLE XI
INDEMNIFICATION; DISCLAIMERS; LIMITATION OF LIABILITY

Section 11.1 Indemnification by Vaxcyte. Vaxcyte agrees to indemnify and hold harmless Sutro, its Affiliates and sublicensees, and their respective agents, directors, officers and employees and their respective successors and assigns (collectively, the "**Sutro Indemnitees**") from and against any Third Party claim, suit, demand, investigation or proceeding brought by any Third Party (each, a "**Claim**") based on (A) the Manufacture of any Extract (including [***]) by or on behalf of Vaxcyte, its Affiliates or Approved CMOs, including (i) any Claim alleging infringement of any

Third Party intellectual property rights by such Manufacture (excluding infringement arising from practice of any Sutro Know-How, Sutro Core Know-How or Sutro Patents that are not New IP) or (ii) the failure of Vaxcyte to Manufacture and use Extract in material compliance with all applicable laws, regulations and guidelines (including such applicable laws, regulations and guidelines governing handling and disposal of hazardous materials), but, for clarity, excluding any Claim covered by Sutro's indemnification obligation under Section 11.2(A), (B) breach of any representation, warranty, covenant or obligation of Vaxcyte in this Agreement, or (C) any gross negligence or willful misconduct of Vaxcyte or its Affiliates. This indemnification obligation shall not apply to the extent the relevant Claim is due to the negligence or willful misconduct of a Sutro Indemnitee or a breach of any of Sutro's representations, warranties, covenants or obligations under this Agreement.

Section 11.2 Indemnification by Sutro. Sutro agrees to indemnify and hold harmless Vaxcyte, its Affiliates and Sublicensees, and their respective agents, directors, officers and employees and their respective successors and assigns (the "**Vaxcyte Indemnitees**") from and against any Claim based on (A) misappropriation by Sutro of any Third Party trade secrets in connection with the Sutro Platform (other than New IP), (B) breach of any representation, warranty, covenant or obligation of Sutro in this Agreement, or (C) any gross negligence or willful misconduct of Sutro or its Affiliates. This indemnification shall not apply to the extent that the relevant Claim is due to the negligence or willful misconduct of a Vaxcyte Indemnitee or a breach of any of Vaxcyte's representations, warranties, covenants or obligations under this Agreement.

Section 11.3 Indemnification Procedures. The obligation to indemnify pursuant to Section 11.1 or Section 11.2 shall be contingent upon: timely notification by the Sutro Indemnitees or Vaxcyte Indemnitees, as applicable (the "**Indemnified Parties")** to the Party obligated to Indemnifying Party of any claims, suits or service of process (provided that the Indemnifying Party shall not be absolved of its indemnification obligation under Section 11.1 or Section 11.2 other than to the extent such delay or failure to notify the Indemnifying Party materially prejudices the Indemnifying Party's ability to defend against such Claim); the tender by the Indemnified Parties to the Indemnifying Party of full control over the conduct and disposition of any such claim, demand or suit; and reasonable cooperation by the Indemnified Parties in the defense of the claim, demand or suit. No Indemnifying Party will be bound by or liable with respect to any settlement or admission entered or made by any Indemnified Parties without the prior written consent of the Indemnifying Party (which shall not be unreasonably withheld, conditioned or delayed). The Indemnified Parties will have the right to retain their own counsel to participate in its defense in any Claim hereunder. In such event, the Indemnified Parties shall pay for their own counsel, except to the extent it is determined that (A) one or more legal defenses may be available to it which are different from or additional to those available to the Indemnifying Party, or (B) representation of two Parties by the same counsel in respect of such Claim would be inappropriate due to actual or potential differing interests between them. In any such case and to such extent, the Indemnifying Party shall be responsible to pay for the reasonable costs and expenses of the separate counsel retained to participate in the defense of the Indemnified Parties; provided, that such expenses are otherwise among those covered by the Indemnifying Party's indemnification obligations hereunder.

Section 11.4 Disclaimer. THE WARRANTIES AND INDEMNITIES STATED IN THIS AGREEMENT ARE IN LIEU OF, AND THE PARTIES EACH DISCLAIM, ALL OTHER

WARRANTIES, EXPRESS, IMPLIED OR ARISING BY LAW, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING THE FOREGOING, SUTRO MAKES NO REPRESENTATION THAT ANY TECH TRANSFER OR VAXCYTE'S MANUFACTURE OF EXTRACT OR THE USE THEREOF WILL BE SUCCESSFUL.

Section 11.5 Limitation of Liability. Neither Party shall be liable under this Agreement for any indirect, incidental, punitive, exemplary, special or consequential damages of any kind; provided, that this limitation will not (A) reduce or affect either Party's indemnification obligations under Section 11.1 or Section 11.2, (B) apply to willful or intentional breaches of this Agreement, (C) limit a Party's liability in respect of breaches of confidentiality obligations hereunder, or (D) limit Vaxcyte's liability in respect of breaches of Section 2.2 in respect of use of Extract, [***] or Sutro Core Know-How outside of the Vaccine Field. Without limiting the generality of the foregoing, Sutro shall have no liability to Vaxcyte with respect to any losses to the extent arising from (A) implementation of any [***] by Vaxcyte or an Approved CMO (including [***]) on behalf of Vaxcyte, or (B) any claims of failure to supply, product quality or product liability arising from Extract Manufactured by Vaxcyte, its Affiliates or any Approved CMO (including [***]) pursuant to a direct contract between such Approved CMO and Vaxcyte or its Affiliates.

ARTICLE XII
TERM; TERMINATION

Section 12.1 Term. Subject to Section 14.1, this Agreement shall commence as of the Effective Date and shall continue in full force and effect in perpetuity unless and until terminated in accordance with Section 12.2, Section 12.3 or Section 12.4 (the "**Term**").

Section 12.2 Mutual Termination. The Parties may terminate this Agreement after the Effective Date upon the mutual written agreement of both Parties.

Section 12.3 Termination by Vaxcyte. Vaxcyte may terminate this Agreement after the Effective Date for any or no reason upon at least [***] prior written notice to Sutro.

Section 12.4 Termination by Sutro.

(a) Sutro may terminate this Agreement after the Effective Date upon [***] written notice to Vaxcyte in the event that (A) Vaxcyte materially breaches Section 3.3 or Article VI in respect of confidentiality of Sutro Know-How or Sutro Core Know-How (except as otherwise permitted in a subsequent written agreement between the Parties or their respective Affiliates), in a manner that causes actual, material harm to Sutro's business, (B) such breach was intentional, and (C) Vaxcyte does not cure such breach within such [***]; provided, that such [***] shall be extended for up to [***] if Vaxcyte is using diligent efforts in good faith to cure such breach.

(b) Sutro may terminate this Agreement after the Effective Date upon [***] written notice to Vaxcyte in the event that (A) Vaxcyte materially breaches Section 2.2 in respect of use of the Sutro Core Know-How (including any Extract and [***]) outside of the Vaccine Field [***], except as otherwise permitted in a subsequent written agreement between the Parties or their respective Affiliates, (B) such breach was intentional, and (C) Vaxcyte does not cure such breach within such [***]; provided, that such [***] shall be extended for up to [***] if Vaxcyte is using

diligent efforts in good faith to cure such breach.

(c) Sutro may terminate this Agreement after the Effective Date upon [***] written notice to Vaxcyte in the event that (A) Vaxcyte materially breaches Section 2.2 in respect of use of the Sutro Core Know-How (including any Extract and [***]) outside of the Vaccine Field (except as otherwise permitted in a subsequent written agreement between the Parties or their respective Affiliates), (B) such breach was unintentional, and (C) Vaxcyte fails to use reasonable best efforts to cease and (to the extent reasonably curable) cure such breach in a timely fashion after written notice of such breach.

(d) Sutro may terminate this Agreement after the Effective Date upon [***] prior written notice to Vaxcyte in the event that (A) Vaxcyte fails to pay the Exercise Price (as defined and set forth in Section 4 of the Option Agreement) or any undisputed Milestone Payment (as defined and set forth in Section 5 of the Option Agreement) when due, and (B) does not cure such nonpayment within such [***].

Section 12.5 Cure of Unintentional Breach. Vaxcyte covenants that it shall use reasonable best efforts to cure any unintentional material breach by Vaxcyte or its Affiliates (or its or their employees) of Section 10 of the License Agreement (as amended by this Agreement) or Article VI of this Agreement, in each case of which it is notified in writing by Sutro. For clarity, Sutro shall have no right to terminate this Agreement for breach of this Section 12.5.

Section 12.6 Consequences of Termination; Survival.

(a) Consequences of Termination. In the event of any termination of this Agreement after the Effective Date in accordance with the terms of this Agreement:

(i) The Manufacturing Rights and all sublicenses thereto granted by Vaxcyte or its Affiliates, and all other rights granted by a Party to the other Party pursuant to this Agreement, shall immediately terminate, subject to Section 12.6(a)(ii).

(ii) Vaxcyte shall promptly, at its own cost and expense, wind-down its and its Affiliates' Manufacture of Extract (for clarity, including [***]); provided that in the event that the License Agreement remains in effect and has not been terminated, Vaxcyte, its Affiliates and Sublicensees shall have the right to use any inventory of such Extract existing or in-process as of the effective date of termination solely to manufacture Vaccine Compositions in accordance with the License Agreement for a period of [***] after the effective date of termination (the "**Winddown Period**"), and the Manufacturing Rights shall continue during the Winddown Period solely as necessary for Vaxcyte to conduct such activities during the Winddown Period (including, for clarity, to finish the manufacture of Extract in-process as of the effective date of the termination), and any such activities shall be subject to the terms and conditions of this Agreement. Within [***] after the end of the Winddown Period (or within [***] of the effective date of termination in the event that the License Agreement is not in effect or has been terminated as of the effective date or termination), Vaxcyte shall provide a written report to Sutro listing any remaining inventory of such Extract in the possession or control of Vaxcyte, its Affiliates, Sublicensees, Approved CMOs or Approved Contractors, if any, and the location thereof.

Within [***] of Sutro's receipt of such report, Sutro shall notify Vaxcyte in writing whether it (A) desires to purchase any or all of such inventory at Vaxcyte's manufacturing cost thereof (without markup), in which case the Parties shall effect such sale in good faith, or (b) desires Vaxcyte to destroy such inventory, in which case Vaxcyte shall destroy such inventory (or cause such inventory to be destroyed), at Vaxcyte's cost and in compliance with Applicable Laws. In the case of such destruction, Vaxcyte shall promptly provide Sutro with a written acknowledgement from the general counsel or a senior in-house attorney for Vaxcyte that, to the knowledge of such individual, such destruction has occurred.

(iii) At the disclosing Party's election, the receiving Party shall return or destroy all tangible materials to the extent comprising or containing any Discloser's Information of the disclosing Party that are in receiving Party's or its Affiliates' possession or control and provide written confirmation of such destruction to the disclosing Party; provided, that (A) the receiving Party shall not be obligated to return or destroy any such Discloser's Information of the disclosing Party necessary or useful to exercise any continuing rights that such Party has under this Agreement (including during the Winddown Period) or any other agreement in effect between the Parties (or to which the receiving Party has access, or related rights or obligations, under such other agreement), and (B) the receiving Party shall not be required to destroy electronic files containing such Discloser's Information of the disclosing Party that are made in the ordinary course of its business information back-up procedures pursuant to its electronic record retention and destruction practices that apply to its own general electronic files and information.

Section 12.7 Survival. In the event of any termination of this Agreement after the Effective Date in accordance with the terms of this Agreement, each of the Parties shall be released from all obligations under this Agreement, except for any obligations accrued prior to the effective date of the termination, during the Winddown Period or that survive pursuant to this Section 12.7. Notwithstanding the foregoing, the following provisions shall survive the termination of this Agreement after the Effective Date: Section 1.1, Section 2.3(b)(ii), Section 3.1(a) (solely in the event the License Agreement is in effect; provided, that Vaxcyte shall not have the right to file any new DMFs for Vaccine Compositions, or other regulatory filings containing Sutro Core Know-How, in its own name after the effective date of termination of this Agreement, except that, for clarity, Vaxcyte shall retain the right and authority to make filings and submissions in connection with its then-extant investigational new drug applications and biologic license applications (and foreign equivalents thereof), or other regulatory filings, relating to Extract, including annual reports, product or labeling supplements, and any filing that the FDA or other Governmental Authority requires in relation to such investigational new drug applications and biologic license applications (and foreign equivalents thereof), or other regulatory filings, even where such filing might implicate Sutro's Core Know-How, chemistry, manufacturing and control (CMC) data, or DMFs), Section 3.1(b)(A) (solely in the event the License Agreement is in effect), Section 3.3 (as applicable), Section 3.4, the last sentence of Section 4.5, Section 5.1, Section 5.2 (solely with respect to the Royalty Term under the License Agreement), Section 5.3, Section 5.4, Section

5.5(b), Section 6.1, Section 8.1, Section 8.2, Article XI, Section 12.6(a)(ii), Section 12.6(a)(iii), this Section 12.7, Section 13.3, Section 13.4, Section 13.5, Article XIV.

Section 12.8 Termination not Sole Remedy. The Parties acknowledge and agree that any termination pursuant to this Article XII shall be in addition to, and not in limitation or lieu of, any other remedy to which the Parties are entitled at law or in equity (which remedies shall remain available to the Parties), whether or not termination of this Agreement is effected.

ARTICLE XIII
COMMUNICATION AND DISPUTE RESOLUTION

Section 13.1 Each Party will appoint an individual employed by it to serve as its "**Principal Contact**" for purposes of this Agreement. Either Party may from time to time replace its Principal Contact with a different employee, but unless required due to the termination of the Principal Contact's employment or events beyond the applicable Party's control, neither Party will replace its Principal Contact without at least [***] prior notice to the other Party. The Principal Contacts shall communicate with each other regularly during the Term as the Parties may agree or as the Principal Contacts shall mutually determine to be useful.

Section 13.2 The Parties intend that, to the maximum extent practicable, they shall reach decisions hereunder cooperatively through discussions among the Principal Contacts and by mutual consent of the Parties. In situations in which that does not occur, any disputes, controversies, claims or differences arising out of or in connection with this Agreement or the breach, termination or validity thereof, and any question of the arbitral tribunal's jurisdiction or the existence, scope or validity of these arbitration provisions or the arbitrability of any claim (each a "**Dispute**") shall initially be referred for review by delivery of a written notice (a "**Dispute Notice**") by either Party's Principal Contact to each of the Parties' respective Senior Managements (as defined below). Such Senior Managements shall discuss the Dispute, and shall meet with respect thereto if either of them believes a meeting or meetings are likely to be useful. As used herein, Sutro's "**Senior Management**" means [***], and Vaxcyte's "**Senior Management**" means [***].

Section 13.3 If the Senior Managements are not able to resolve such Dispute referred to them under Section 13.2 within [***] from the date of delivery of the Dispute Notice, then subject to Section 13.4 and Section 13.5, such Dispute shall be resolved, at the request of any Party, by final and binding arbitration as follows:

(a) The arbitration shall be administered by JAMS pursuant to its Comprehensive Arbitration Rules and Procedures in effect at the time (the "**Rules**"), except as modified herein.

(b) The seat of arbitration shall be San Francisco, California.

(c) The Parties shall select a mutually agreeable arbitrator who has no affiliation or pre-existing relationship with either Party. If the Parties cannot agree on an arbitrator within [***] referred in Section 13.3, either Party may request JAMS to appoint an arbitrator on behalf of the Parties in accordance with the Rules.

(d) The arbitrator may decide any issue as to whether, or as to the extent to which, any Dispute is subject to the arbitration and other dispute resolution provisions in this Agreement.

(e) The arbitrator must base the award on the provisions of this Agreement and applicable law and must render the award in a writing which must include an explanation of the reasons for such award.

(f) Judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction over any Party or any of its assets.

(g) The arbitrator's fees and expenses shall be shared equally by the Parties, unless the arbitrator in the award assesses such fees and expenses against one of the Parties or allocates such fees and expenses other than equally between the Parties. Each Party shall bear and pay its own expenses incurred in connection with any Dispute resolution under this Section 13.3.

(h) Notwithstanding the foregoing, either Party shall have the right, without waiving any right or remedy available to such Party under this Agreement or otherwise, to seek and obtain from any court of competent jurisdiction any interim or provisional relief that is necessary or desirable to protect the rights or property of such Party, pending the selection of the arbitrator hereunder or pending the arbitrator's decision of the dispute subject to arbitration. Without prejudice to such provisional remedies that may be granted by a court, the arbitrator shall have full authority to grant provisional remedies, to order a Party to request that a court modify or vacate any temporary or preliminary relief issued by such court, and to award damages for the failure of any party to respect orders to that effect.

(i) In addition to monetary damages, the arbitrator shall be empowered to award equitable relief, including, but not limited to an injunction and specific performance of any obligation under this Agreement.

(j) The arbitration and this arbitration agreement shall be governed by the Federal Arbitration Act (9 U.S.C. § 1 et seq.).

(k) Any arbitration hereunder shall be confidential and, except as may be required by law or to pursue a legal right, the Parties agree not to disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both Parties.

Section 13.4 Notwithstanding Section 13.3, any dispute, controversy or claim relating to the scope, validity, enforceability or infringement of any Patent or trademark may be brought in any court of competent jurisdiction.

Section 13.5 In the event a Party disputes in good faith whether it is in breach of this Agreement and so notifies the other Party in writing prior to the expiration of the applicable cure period set forth in Section 12.4 above, the cure period shall be tolled from the date of such notice. Promptly following the initiation of a proceeding under Section 13.3 above with respect to such dispute, the arbitrator shall make a determination as to whether there is a good faith dispute as to the existence of a material breach of this Agreement. If the arbitrator determines that there is no good faith dispute by the breaching Party as to the existence of a material breach of this Agreement, then the Agreement shall be deemed terminated, unless the breach is cured within the remainder (if any) of

the cure period set forth in Section 12.4 (after giving effect to the tolling of such cure period up to the date of such determination). If the arbitrator determines that there is a good faith dispute as to the existence of a material breach of this Agreement, the non-breaching Party shall not have the right to terminate this Agreement unless and until it has been finally determined in accordance with Section 13.3 above that a breach actually occurred, and the breaching Party fails to cure such breach within [***] after such final determination (or such longer period as the arbitrator may specify).

ARTICLE XIV
MISCELLANEOUS

Section 14.1 Effective Date.

(a) Notwithstanding anything in this Agreement to the contrary, this Agreement shall not become effective until the Effective Date, and upon the Effective Date, the full Agreement and all its terms and provisions shall be automatically effective and binding on both Parties.

(b) Termination Prior to Effective Date. For clarity, prior to the Effective Date, the transactions contemplated by this Agreement shall terminate (and, for clarity this Agreement shall no longer become effective at any time) (i) upon expiration of the Option Period (as defined in the Option Agreement), in the event that Vaxcyte does not exercise the Option, (ii) if Sutro terminates the Option pursuant to and in accordance with Section 7(b) of the Option Agreement (and, for clarity, Vaxcyte does not exercise the Option during the Termination Notice Period (as defined in the Option Agreement) pursuant to and in accordance with Section 7(b) of the Option Agreement), (iii) if the Option Agreement is terminated pursuant to Section 11(i) of the Option Agreement prior to Vaxcyte's exercise of the Option, or (iv) if the Option Agreement is terminated pursuant to Section 11(ii) of the Option Agreement. In the event the transactions contemplated by this Agreement terminate as set forth in this Section 14.1(b), neither Party hereto shall have any obligation hereunder to the other Party in connection with such termination.

Section 14.2 Treatment of Existing Agreements. The Existing Agreements are hereby, as of the Effective Date, amended and modified, and shall be deemed so amended and modified, to the extent necessary to remove any restrictions on Vaxcyte's rights to exercise the Manufacturing Rights (and to otherwise permit the transactions contemplated by this Agreement, afford each Party the rights and benefits provided for in this Agreement, and make the Existing Agreements consistent with the transactions contemplated by the Option Agreement and this Agreement). Without limiting the generality of the foregoing, (A) the License Agreement is hereby, as of the Effective Date, amended and modified as set forth in **Schedule 2**, (B) the Supply Agreement is hereby, as of the Effective Date, amended and modified as set forth in **Schedule 3**, (C) the [***] Term Sheet is hereby, as of the Effective Date, amended and modified as set forth in **Schedule 4**, and (D) Vaxcyte is not required to purchase any or all of its requirements of Extract from Sutro during the Term of this Agreement. Except to the extent modified or amended by this Agreement, the terms and conditions of the Existing Agreements shall continue in full force and effect.

Section 14.3 Entire Agreement. This Agreement, including the Schedules hereto (which are hereby incorporated herein), together with the Existing Agreements (as amended or modified by this Agreement), the Option Agreement, the [***] Letter Agreement and the [***] Letter of Intent,

as amended, constitute the entire agreement and understanding among the Parties with respect to the subject matter hereof and supersedes all prior agreements and understandings, both oral and written, relating to such subject matter. In the event of any conflict between the terms and conditions of this Agreement and the terms and conditions of the Existing Agreements, the [***] Letter Agreement, the [***] Letter of Intent or the Option Agreement, the terms and conditions of this Agreement shall prevail (except that the terms of the Option Agreement shall prevail with respect to Vaxcyte's right to exercise the Option or any payment obligations by Vaxcyte under the Option Agreement). Neither Party shall be liable or bound to the other Party in any manner by any representations, warranties or covenants relating to such subject matter except as specifically set forth herein and none shall be deemed to exist or be inferred with respect to the subject matter hereof.

Section 14.4 Counterparts. This Agreement may be executed (including by electronic signature) in two or more counterparts, all of which shall be considered an original, with the same effect as if the signatures thereto and hereto were upon the same instrument, and shall become effective when one or more such counterparts have been signed by each Party and delivered (by facsimile, email or otherwise) to the other Party.

Section 14.5 Notices. All notices, requests, claims, demands and other communications under this Agreement, as between the Parties, shall be in writing and shall be given or made (and shall be deemed to have been duly given or made upon receipt unless the day of receipt is not a business day, in which case it shall be deemed to have been duly given or made on the next business day) by delivery in person, by overnight courier service, by electronic e-mail with receipt confirmed (followed by delivery of an original via overnight courier service) or by registered or certified mail (postage prepaid, return receipt requested) to the respective Parties at the following addresses (or at such other address for a Party as shall be specified in a notice given in accordance with this Section 14.5); provided, that any such notice relating to termination of this Agreement shall prominently state that failure to take the actions identified in such notice shall result in termination of this Agreement (and shall identify the applicable time periods therefor):

If to Vaxcyte:

Vaxcyte, Inc.
825 Industrial Road, Suite 300
San Carlos, California 94070
Attn: Grant Pickering, Chief Executive Officer
(with a copy to Mikhail Eydelman, General Counsel)
Email: [***]
(with a copy to [***])

If to Sutro:

Sutro Biopharma, Inc.
111 Oyster Point Boulevard
South San Francisco, California 94080
Attn: General Counsel
Email: [***]

Section 14.6 Amendment and Waivers. Any provision of this Agreement may be amended or waived if, but only if, such amendment or waiver is in writing and is signed, in the case of an amendment, by each Party to this Agreement or, in the case of a waiver, by each Party against whom the waiver is to be effective. The waiver by either Party of any right hereunder, any failure or delay of the other Party to perform, or any breach by the other Party, shall not be deemed a waiver of any other right of such Party hereunder or of any other failure, delay or breach by such other Party whether of a similar nature or otherwise. The rights and remedies provided in this Agreement shall be cumulative and not exclusive of any rights or remedies provided by applicable law.

Section 14.7 Assignment. This Agreement shall not be assigned or transferred, in whole or in part, by operation of law or otherwise, by either Party, without the prior written consent of the other Party (which consent shall not be unreasonably withheld, conditioned or delayed); provided, that such first Party, without the other Party's consent, shall be permitted to assign or transfer this Agreement (and any rights or licenses granted hereunder), in whole or in part, by operation of law or otherwise to: (A) one or more of its Affiliates, or (B) the successor to all or substantially all of the business or assets of such first Party to which this Agreement relates (whether by sale, merger, operation of law or otherwise). Any attempted assignment or transfer in violation of this Section 14.7 (without the written consent of the other Party) shall be null and void.

Section 14.8 Change of Control.

(a) Notwithstanding anything to the contrary in this Agreement, nothing in this Agreement shall prohibit (and this Agreement does not include any termination or consent right for either Party in respect of) a Change of Control of the other Party ("**Change of Control Party**"), nor will it impose any obligations on the Change of Control Party as a result of such Change of Control other than as set forth herein. As used herein, "**Acquirer**" means the Third Party involved in such Change of Control, and any Affiliate of such Third Party that was not an Affiliate of the acquired Party immediately prior to such Change of Control.

(b) In the event of a Change of Control of Sutro, (A) Patents, know-how and other intellectual property that were controlled by the Acquirer prior to such Change of Control shall not, for purposes of this Agreement (including the grant of the Manufacturing Rights and any Tech Transfer), be included within the Sutro Patents, Sutro Know-How or Sutro Core Know-How (including, for clarity, information to be provided to Vaxcyte pursuant to a Tech Transfer), and (B) Patents, know-how and other intellectual property that, following such Change of Control, are developed, made or otherwise acquired or controlled by the Acquirer without material use of proprietary know-how of Sutro or its Affiliates (including Sutro Know-How and Sutro Core Know-How), or Vaxcyte's Discloser's Information, shall not, for purposes of this Agreement (including the grant of the Manufacturing Rights and any Tech Transfer), be included within the Sutro Patents, Sutro Know-How or Sutro Core Know-How (including, for clarity, information to be provided to Vaxcyte pursuant to a Tech Transfer).

(c) In the event of a Change of Control of Vaxcyte, (A) Patents, know-how and other intellectual property that were controlled by the Acquirer prior to such Change of Control shall not, for purposes of this Agreement, be included within the Jointly-Owned IP or the [***] IP, and (B) Patents, know-how and other intellectual property that, following such Change of Control, are

developed, made or otherwise acquired or controlled by the Acquirer without material use of proprietary know-how of Vaxcyte, or Sutro's Discloser's Information, shall not, for purposes of this Agreement, be included within the Jointly-Owned IP or the [***] IP. To the extent the Acquirer does not use or exploit Segregated Technology pertaining to Extracts or rights licensed to Vaxcyte under this Agreement, Section 2.2 shall not apply to such Acquirer. For clarity, Section 2.2 shall apply to an Acquirer of Vaxcyte only with respect to activities of the Acquirer involving the use of Segregated Technology of Vaxcyte or rights licensed to Vaxcyte under this Agreement.

(d) Notwithstanding anything to the contrary in this Section 14.8, if rights to Segregated Technology were granted to the Acquirer prior to the Change of Control, then the use of such Segregated Technology in accordance with such grant (and consistent with the licenses granted under this Agreement) shall not be deemed use of Segregated Technology in violation of this Section 14.8. "**Segregated Technology**" means, with respect to Section 14.8(b)(B) and Section 14.8(c)(B), such proprietary know-how of the Acquired Party and confidential Discloser's Information of the other Party, respectively.

Section 14.9 Successors and Assigns. The provisions of this Agreement and the obligations and rights hereunder shall be binding upon, inure to the benefit of and be enforceable by (and against) the Parties and their respective successors and permitted transferees and assigns.

Section 14.10 Title and Headings; Interpretation. Titles and headings to sections herein are inserted for the convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement. Except where expressly stated otherwise in this Agreement, the following rules of interpretation apply to this Agreement: (a) "include," "includes" and "including" are not limiting and mean include, includes and including, without limitation; (b) definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms; (c) references to an agreement, statute or instrument mean such agreement, statute or instrument as from time to time amended, modified or supplemented; (d) references to a person or entity are also to its permitted successors and assigns; (e) references to a "Section" or "Schedule" refer to a Section of, or a Schedule to, this Agreement unless otherwise indicated; (f) the word "will" shall be construed to have the same meaning and effect as the word "shall"; (g) the word "any" shall mean "any and all" unless otherwise indicated by context; (h) a reference to a particular law or regulation is a reference to it as amended, extended or re-enacted from time to time and includes any subordinate legislation made from time to time under that legislation or legislative provision; and (i) nothing in this Agreement shall in any way restrict or limit any obligation of either Party to mitigate any loss or damage they may suffer in consequence of any breach by the other Party of the terms of this Agreement, in consequence of any matter giving rise to a claim against the other Party or otherwise in connection with this agreement.

Section 14.11 Governing Law; Dispute Resolution; Waiver of Jury Trial. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Delaware. EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE EACH SUCH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, AND SHALL

NOT SEEK, TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR THE OTHER TRANSACTIONS CONTEMPLATED HEREIN.

Section 14.12 Severability. If any term or provision of this Agreement is held to be illegal, invalid or unenforceable under any present or future law, such provision shall be enforced to the maximum extent permitted under applicable law and the Parties' fundamental intentions hereunder, and the remaining provisions of this Agreement, will remain in full force and effect and will not be affected or impaired by the illegal, invalid or unenforceable provision or by its severance from this Agreement.

Section 14.13 No Duplication; No Double Recovery. Nothing in this Agreement is intended to confer to or impose upon any Party a duplicative right, entitlement, obligation or recovery (whether under any other agreement or applicable law) with respect to any matter arising out of the same facts and circumstances.

Section 14.14 Independent Parties. Nothing in this Agreement is intended (or shall be deemed) to constitute a joint venture agreement and, except as expressly set forth herein, nothing herein shall constitute any Party as a partner, principal or agent of any other, this being an Agreement between independent contracting entities. Except as expressly set forth herein, no Party shall have the authority to bind any other in any respect whatsoever to Third Parties. Except as provided herein, nothing contained in this Agreement shall be construed as conferring any right on any Party to use any name, trade name, trademark or other designation of any other Party hereto, unless the express, written permission of such other Party has been obtained.

Section 14.15 Negotiated Agreement. This Agreement has been submitted to the scrutiny of, and has been negotiated by, both Parties and their counsel, and shall be given a fair and reasonable interpretation in accordance with its terms, without consideration or weight being given to any such term's having been drafted by any Party or its counsel.

Section 14.16 Further Assurances. Each Party shall take any and all additional actions (and execute and deliver such additional documents and instruments) as may be reasonably requested by the other Party to more fully effect and implement the transactions contemplated by this Agreement.

Section 14.17 Bankruptcy. The Parties acknowledge and agree that all rights and licenses now or hereafter granted under or pursuant to any provision of this Agreement are rights to "intellectual property" as defined in Section 101(35A) of Title 11 of the United States Code. In the event that a case under Title 11 is commenced by or against either Party, the other Party may elect to retain and may fully exercise all of its rights and elections under Section 365(n) of Title 11 of the United States Code.

Section 14.18 Publications. In the event that either Party (the "**Announcing Party**") proposes to make any public announcement or press release regarding this Agreement or the transactions contemplated hereby, such Announcing Party shall first provide the other Party with an advance copy of each proposed publication or press release at least [***] prior to its proposed date of

publication. The Announcing Party shall reasonably consider in good faith any modifications to the publication or press release requested by the other Party. Subject to the foregoing, each Party shall not issue any press release or other public statement, whether oral or written, disclosing the existence of this Agreement, the terms hereof or any other information relating to this Agreement without the prior written consent of the other Party (such consent not to be unreasonably withheld, conditioned or delayed); provided, that neither Party shall be required to obtain the consent of the other Party prior to issuing any press release or other public statement to the extent such press release or other public statement contains information that has already been publicly disclosed by either Party in compliance with this Section 14.18. Notwithstanding anything to the contrary in this Section 14.18, neither Party shall be required to obtain the consent of the other Party to make any disclosures required of it to comply with any duty of disclosure it may have pursuant to applicable law, governmental regulation or the rules of any recognized stock exchange; provided, that the Party to make such required disclosure (A) shall reasonably cooperate with the other Party with respect to the timing, form and content of such required disclosure (including any reasonably requested redactions thereto), and (B) if requested by such other Party, shall use Commercially Reasonable Efforts to obtain an order protecting to the maximum extent reasonably possible the confidentiality of the provisions of this Agreement.

* * * * *

[End of page left intentionally blank]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the day and year first written above.

VAXCYTE, INC.

By: /s/ Grant E. Pickering
Name: Grant E. Pickering
Title: Chief Executive Officer

SUTRO BIOPHARMA, INC.

By: /s/ William J. Newell
Name: William J. Newell
Title: Chief Executive Officer

Schedule 1
Tech Transfer Information

[***]

Schedule 2
Amendments to the License Agreement

The Parties acknowledge and agree that the License Agreement is hereby, as of the Effective Date of the Manufacturing Rights Agreement, amended as follows:

1. Section 1.5 of the License Agreement is hereby restated in its entirety as follows:

   1.5 "**Extract**" means any extract derived from strains of E. coli and (i) supplied to Vaxcyte or its Affiliates by or on behalf of Sutro pursuant to this Agreement, the Supply Agreement, the [***] Letter Agreement or any subsequent written agreement between the Parties or their respective Affiliates, or (ii) made by or on behalf of Vaxcyte or its Affiliates pursuant to the Manufacturing Rights Agreement. For clarity, Extract includes [***] (as defined in the Manufacturing Rights Agreement).

2. The following shall be inserted as Section 1.3A of the License Agreement:

   1.3A "**CMO**" means any Third Party contract manufacturing organization.

3. Section 1.22 of the License Agreement is hereby restated in its entirety as follows:

   1.22 "**Sutro Know-How**" means all information and materials pertaining to the Extracts or Vaccine Compositions, or the manufacture, use or, in the case of Vaccine Compositions, development thereof, as the case may be, that are owned or controlled by Sutro or (subject to Section 15.2) its Affiliates at any time during the Term of this Agreement, including (i) practices, protocols, methods, techniques, specifications, formulae, standard operating procedures, analytical methods, material and vendor lists, (ii) analytical, quality control and stability data, batch records, and other chemistry, manufacturing and control (CMC) data, (iii) regulatory documentation, and (iv) tangible materials and reagents; in each case as and to the extent reasonably necessary or useful for Vaxcyte to exercise the rights granted to it under this Agreement, the Manufacturing Rights Agreement (during the Term thereof) or any other written agreement between the Parties or their respective Affiliates (during the Term thereof). Notwithstanding the foregoing, in no event shall Sutro Know-How include any information or materials of Sutro's Third Party collaborators or sublicensees, except for such information or materials pertaining to the Sutro Platform which Sutro has the right to provide to Vaxcyte in accordance with this Agreement.

4. Section 3.1(d) of the License Agreement is hereby restated in its entirety as follows:

   (d) In the event Sutro engages one or more CMOs to manufacture one or more Extract(s) for Sutro, its Affiliates or others (each such Extract, an "**Available Extract**"), Sutro shall promptly notify Vaxcyte.

5. Section 3.3 of the License Agreement is hereby restated in its entirety as follows:

   3.3 **[Intentionally left blank]**

6. Section 4.1(a) of the License Agreement is hereby restated in its entirety as follows:

(a) Subject to the terms of this Agreement, Sutro hereby grants to Vaxcyte an exclusive, royalty-bearing license (subject to Section 6), under the Sutro Patents, [***] IP, Sutro Know-How and Sutro's ownership interest in and to any Jointly-Owned IP, with the right to grant and authorize sublicenses in accordance with Section 4.3 (only with respect to the rights granted under the following sub-clause (i)), solely to (i) research, develop, use, sell, offer for sale, export, import or otherwise exploit Vaccine Compositions, and (ii) to manufacture, itself or through any CMO established or approved by Sutro pursuant to Section 3.2, both cGMP grade and non-cGMP grade Vaccine Compositions from Extracts (x) obtained from Sutro or any CMO established or approved by Sutro as described in Section 3.1, or (y) manufactured by or for Vaxcyte pursuant to Section 15.3(a) or pursuant to the Manufacturing Rights Agreement, in each case in the Territory during the Term in accordance with the terms of the Agreement. For clarity, to the extent a CMO established in accordance with Section 3.2 above utilizes Sutro Patents or Sutro Know-how solely to supply Vaccine Composition to Vaxcyte in accordance with Section 3.2, such arrangement shall not be deemed a sublicense by Vaxcyte. In addition, it is understood and agreed that:

(A) If components of a Vaccine Composition (such as an adjuvant) can be used for purposes other than a Vaccine Composition, the exclusive license under this Section 4.1 shall not be deemed to restrict Sutro from using, licensing or otherwise exploiting such components for such other purposes (i.e., purposes other than to induce an immune response specific to a Vaccine Antigen to treat or prevent the disease against which such Vaccine Antigen is directed by means of such specific immune response); and

(B) If a Vaccine Composition or component thereof can be used for purposes other than those permitted under Section 1.32, such use shall not be deemed licensed under this Section 4.1, but a third party's use or administration of a composition for such an unpermitted use shall not cause such composition to cease being a Vaccine Composition, provided that Vaxcyte uses diligent efforts to prevent such unpermitted use.

7. Section 4.1(b) of the License Agreement is hereby restated in its entirety as follows:

(b) For clarity, without limiting the license granted in Section 15.3, the license granted in Section 4.1(a) does not include the right to manufacture Extracts, and Vaxcyte shall use the Extracts supplied to it by Sutro or a CMO authorized by Sutro, or manufactured by Vaxcyte or an Approved CMO pursuant to the Manufacturing Rights Agreement, solely to express Vaccine Compositions in the Territory solely for use in conjunction with the exercise, and within the scope, of the license granted in Section 4.1(a) (or as otherwise permitted pursuant to the Manufacturing Rights Agreement or any subsequent written agreement between the Parties).

8. Section 4.2 of the License Agreement is hereby restated in its entirety as follows:

4.2 **No Other Uses**. Vaxcyte covenants not to use the Extract except for use in conjunction with the exercise, and within the scope, of the license granted in Section 4.1(a) (or as otherwise permitted pursuant to the Manufacturing Rights Agreement or any other subsequent written agreement between the Parties). Without limiting the foregoing, Vaxcyte shall not [***].

9. Section 8.2 of the License Agreement is hereby restated in its entirety as follows:

8.2 **Mutual Termination for Breach**. If either Party materially breaches any of the material terms, conditions or agreements contained in this Agreement to be kept, observed or performed by it, the other Party may terminate this Agreement, at its option and without prejudice to any of its other legal or equitable rights or remedies, by giving the Party who committed the breach [***] prior written notice, unless the notified Party shall have cured the breach within such [***] period, subject to Section 14.5; provided, that notwithstanding the foregoing, if the Manufacturing Rights Agreement is in effect, Sutro shall not have the right to terminate this Agreement pursuant to this Section 8.2 or otherwise with respect to any provisions of this Agreement, or any breach by Vaxcyte thereof, relating to (a) confidentiality (including Section 10), (b) use of Extract, [***], Sutro Core Know-How or other materials or intellectual property outside of the Vaccine Field, or (c) Section 4.1(b), except, in each case of the foregoing clauses (a)-(c), in the event that [***].

10. Section 8.4(b) of the License Agreement is hereby restated in its entirety as follows:

(b) **[Intentionally left blank]**

11. Article 14 (Communication and Dispute Resolution) of the License Agreement is hereby restated in its entirety as follows:

14.1 Each Party will appoint an individual employed by it to serve as its "**Principal Contact**" for purposes of this Agreement. Either Party may from time to time replace its Principal Contact with a different employee, but unless required due to the termination of the Principal Contact's employment or events beyond the applicable Party's control, neither Party will replace its Principal Contact without at least [***] prior notice to the other Party. The Principal Contacts shall communicate with each other regularly during the Term as the Parties may agree or as the Principal Contacts shall mutually determine to be useful.

14.2 The Parties intend that, to the maximum extent practicable, they shall reach decisions hereunder cooperatively through discussions among the Principal Contacts and by mutual consent of the Parties. In situations in which that does not occur, any disputes, controversies, claims or differences arising out of or in connection with this Agreement or the breach, termination or validity thereof, and any question of the arbitral tribunal's jurisdiction or the existence, scope or validity of these arbitration provisions or the arbitrability of any claim (each a "Dispute") shall initially be referred for review by delivery of a written notice (a "Dispute

Notice") by either Party's Principal Contact to each of the Parties' respective Senior Managements (as defined below). Such Senior Managements shall discuss the Dispute, and shall meet with respect thereto if either of them believes a meeting or meetings are likely to be useful. As used herein, Sutro's "Senior Management" means [***], and Vaxcyte's "Senior Management" means [***].

14.3 If the Senior Managements are not able to resolve such Dispute referred to them under Section 14.2 within [***] from the date of delivery of the Dispute Notice, then subject to Section 14.4 and Section 14.5, such Dispute shall be resolved, at the request of any Party, by final and binding arbitration as follows:

(a) The arbitration shall be administered by JAMS pursuant to its Comprehensive Arbitration Rules and Procedures in effect at the time (the "**Rules**"), except as modified herein.

(b) The seat of arbitration shall be San Francisco, California.

(c) The Parties shall select a mutually agreeable arbitrator who has no affiliation or pre-existing relationship with either Party. If the Parties cannot agree on an arbitrator within [***] referred in Section 14.3, either Party may request JAMS to appoint an arbitrator on behalf of the Parties in accordance with the Rules.

(d) The arbitrator may decide any issue as to whether, or as to the extent to which, any Dispute is subject to the arbitration and other dispute resolution provisions in this Agreement.

(e) The arbitrator must base the award on the provisions of this Agreement and applicable law and must render the award in a writing which must include an explanation of the reasons for such award.

(f) Judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction over any Party or any of its assets.

(g) The arbitrator's fees and expenses shall be shared equally by the Parties, unless the arbitrator in the award assesses such fees and expenses against one of the Parties or allocates such fees and expenses other than equally between the Parties. Each Party shall bear and pay its own expenses incurred in connection with any Dispute resolution under this Section 14.3.

(h) Notwithstanding the foregoing, either Party shall have the right, without waiving any right or remedy available to such Party under this Agreement or otherwise, to seek and obtain from any court of competent jurisdiction any interim or provisional relief that is necessary or desirable to protect the rights or property of such Party, pending the selection of the arbitrator hereunder or pending the arbitrator's decision of the dispute subject to arbitration. Without prejudice to such provisional remedies that may be granted by a court, the arbitrator shall have full authority to grant

provisional remedies, to order a Party to request that a court modify or vacate any temporary or preliminary relief issued by such court, and to award damages for the failure of any party to respect orders to that effect.

(i) In addition to monetary damages, the arbitrator shall be empowered to award equitable relief, including, but not limited to an injunction and specific performance of any obligation under this Agreement.

(j) The arbitration and this arbitration agreement shall be governed by the Federal Arbitration Act (9 U.S.C. § 1 et seq.).

(k) Any arbitration hereunder shall be confidential and, except as may be required by law or to pursue a legal right, the Parties agree not to disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both Parties.

14.4 Notwithstanding Section 14.3, any dispute, controversy or claim relating to the scope, validity, enforceability or infringement of any Patent or trademark may be brought in any court of competent jurisdiction.

14.5 In the event a Party disputes in good faith whether it is in breach of this Agreement and so notifies the other Party in writing prior to the expiration of the applicable cure period set forth in Section 8.4 above, the cure period shall be tolled from the date of such notice. Promptly following the initiation of a proceeding under Section 14.3 above with respect to such dispute, the arbitrator shall make a determination as to whether there is a good faith dispute as to the existence of a material breach of this Agreement. If the arbitrator determines that there is no good faith dispute by the breaching Party as to the existence of a material breach of this Agreement, then the Agreement shall be deemed terminated, unless the breach is cured within the remainder (if any) of the cure period set forth in Section 8.4 (after giving effect to the tolling of such cure period up to the date of such determination). If the arbitrator determines that there is a good faith dispute as to the existence of a material breach of this Agreement, the non-breaching Party shall not have the right to terminate this Agreement unless and until it has been finally determined in accordance with Section 14.3 above that a breach actually occurred, and the breaching Party fails to cure such breach within [***] after such final determination (or such longer period as the arbitrator may specify).

Schedule 3
Amendments to the Supply Agreement

Subject to the terms and conditions of the Agreement, the Supply Agreement is hereby, as of the Effective Date of the Manufacturing Rights Agreement, amended as follows:

12. All references in the Supply Agreement to "SutroVax" are replaced with "Vaxcyte."

13. Section 2.18 of the Supply Agreement is hereby restated in its entirety as follows:

> 2.18 **Sutro Core Know-How**. Notwithstanding anything herein to the contrary, except as set forth in Section 15.3 of the License Agreement, the [***] Letter Agreement, the Manufacturing Rights Agreement or any other subsequent written agreement between the Parties or their Affiliates, in no event shall Vaxcyte, its Affiliates or Sublicensees have the right to access any Sutro Core Know-How (as defined in the License Agreement), whether directly from Sutro or its Affiliates or through a CMO or otherwise. Without limiting the foregoing, in the event any item of Sutro Core Know-How is delivered to Vaxcyte, its Affiliates and/or its Sublicensees (except as set forth in, or in connection with, Section 15.3 of the License Agreement, the [***] Letter Agreement, the Manufacturing Rights Agreement or any other subsequent written agreement between the Parties or their Affiliates), Vaxcyte, its Affiliates and Sublicensees shall immediately return such item to Sutro. For purposes of this Agreement, (a) the "**[***] Letter Agreement**" [***], and (b) the "**Manufacturing Rights Agreement**" means that certain Manufacturing Rights Agreement, entered into by and between Vaxcyte and Sutro.

14. Section 2.20 of the Supply Agreement is hereby restated in its entirety as follows:

> 2.20 Vaxcyte agrees to purchase all its requirements of Extract from Sutro in accordance with this Agreement, except to the extent Vaxcyte is allowed to (1) purchase Extract from (a) Alternate Suppliers engaged by Sutro in accordance with Section 2.15 of this Agreement; (b) a CMO engaged or established and authorized by Sutro under Section 3.1(d) of the License Agreement; (c) a CMO authorized by Sutro under Section 3.1(e) of the License Agreement; or (d) [***] pursuant to the [***] Letter Agreement, or (2) manufacture and supply (itself or through an Approved CMO (as defined in the Manufacturing Rights Agreement)) Extract in accordance with the Manufacturing Rights Agreement. Manufacturing of Extracts in breach of this Section 2.20 shall be deemed a material breach of this Agreement and the License Agreement by Vaxcyte.

Schedule 4
Amendments to the [***] Term Sheet

[***]

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

1. Registration Statement on Form S-3 (No. 333-255014),
2. Registration Statement on Form S-3 (No. 333-275525),
3. Registration Statement on Form S-8 (No. 333-227551) pertaining to the 2018 Equity Incentive Plan, 2018 Employee Stock Purchase Plan, and 2004 Stock Plan of Sutro Biopharma, Inc.,
4. Registration Statement on Form S-8 (No. 333-230641) pertaining to the 2018 Equity Incentive Plan and 2018 Employee Stock Purchase Plan of Sutro Biopharma, Inc.,
5. Registration Statement on Form S-8 (No. 333-237202) pertaining to the 2018 Equity Incentive Plan and 2018 Employee Stock Purchase Plan of Sutro Biopharma, Inc.,
6. Registration Statement on Form S-8 (No. 333-254456) pertaining to the 2018 Equity Incentive Plan and 2018 Employee Stock Purchase Plan of Sutro Biopharma, Inc.,
7. Registration Statement on Form S-8 (No. 333-258603) pertaining to the 2021 Equity Inducement Plan of Sutro Biopharma, Inc.,
8. Registration Statement on Form S-8 (No. 333-263113) pertaining to the 2018 Equity Incentive Plan and 2018 Employee Stock Purchase Plan of Sutro Biopharma, Inc.,
9. Registration Statement on Form S-8 (No. 333-267194) pertaining to the Amended and Restated 2021 Equity Inducement Plan of Sutro Biopharma, Inc.,
10. Registration Statement on Form S-8 (No. 333-270055) pertaining to the 2018 Equity Incentive Plan, 2018 Employee Stock Purchase Plan and Amended and Restated 2021 Equity Inducement Plan of Sutro Biopharma, Inc., and
11. Registration Statement on Form S-8 (No. 333-277404) pertaining to the 2018 Equity Incentive Plan and 2018 Employee Stock Purchase Plan of Sutro Biopharma, Inc.

of our report dated March 25, 2024, with respect to the financial statements of Sutro Biopharma, Inc. included in this Annual Report (Form 10-K) of Sutro Biopharma, Inc. for the year ended December 31, 2023.

/s/ Ernst & Young LLP

San Mateo, California
March 25, 2024

Exhibit 31.1

CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, William J. Newell certify that:

1. I have reviewed this Annual Report on Form 10-K of Sutro Biopharma, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
   c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 25, 2024

/s/ William J. Newell

William J. Newell

Chief Executive Officer

(Principal Executive Officer)

Exhibit 31.C

RETI FOHRAI ENP USTLS API I N TSa E 13-41()-5NT 1dH41()-5NO
I XE LERS THI HEL EGRXAP9 E ARI NO1, 3(D
AL A0 NUI E0 USTLS API I N LERI ENP 32CNOI XE LATBAPEL4NGa EY ARI NOC22C

I, Edward C. Albini, certify that:

1. I have reviewed this Annual Report on Form 10-K of Sutro Biopharma, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
   c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 25, 2024

/s/ Edward C. Albini
Edward C. Albini
Chief Financial Officer
(Principal Accounting Officer and Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, William J. Newell, Chief Executive Officer of Sutro Biopharma, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. the Annual Report on Form 10-K of the Company for the fiscal year ended December 31, 2023 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 25, 2024

/s/ William J. Newell
William J. Newell
Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

1 ECRTI TI ARTF O NP CUP AOR RF
S8 P .U.1 . UE1 RTF O S350, AU ADF NRED NP CUP AOR RF
UE1 RTF O 906 F I RHE UACBAOEU-F XLEY A1 R F I 2002

I, Edward C. Albini, Chief Financial Officer of Sutro Biopharma, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. the Annual Report on Form 10-K of the Company for the fiscal year ended December 31, 2023 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 25, 2024

/s/ Edward C. Albini
Edward C. Albini
Chief Financial Officer
(Principal Financial Officer ano Principal Accut ngind Officer)

EXHIBIT 97.1

SUTRO BIOPHARMA, INC.

COMPENSATION RECOVERY POLICY

(Adopted November 12, 2023)

The Board has determined that it is in the best interests of the Company and its stockholders to adopt this Policy enabling the Company to recover from specified current and former Company executives certain incentive-based compensation in the event of an accounting restatement resulting from material noncompliance with any financial reporting requirements under the federal securities laws. Capitalized terms are defined in Section 14.

This Policy is designed to comply with Rule 10D-1 of the Exchange Act and shall become effective on the Effective Date and shall apply to Incentive-Based Compensation Received by Covered Persons on or after the Listing Rule Effective Date.

1. Administration

This Policy shall be administered by the Administrator. The Administrator is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate, or advisable for the administration of this Policy. The Administrator may retain, at the Company's expense, outside legal counsel and such compensation, tax or other consultants as it may determine are advisable for purpose of administering this Policy.

2. Covered Persons and Applicable Compensation

This Policy applies to any Incentive-Based Compensation Received by a person (a) after beginning service as a Covered Person; (b) who served as a Covered Person at any time during the performance period for that Incentive-Based Compensation; and (c) was a Covered Person during the Clawback Period.

However, recovery is not required with respect to:

i. Incentive-Based Compensation Received prior to an individual becoming a Covered Person, even if the individual served as a Covered Person during the Clawback Period.

ii. Incentive-Based Compensation Received prior to the Listing Rule Effective Date.

iii. Incentive-Based Compensation Received prior to the Clawback Period.

iv. Incentive-Based Compensation Received while the Company did not have a class of listed securities on a national securities exchange or a national securities association, including the Exchange.

The Administrator will not consider the Covered Person's responsibility or fault or lack thereof in enforcing this Policy with respect to recoupment under the Final Rules.

3. Triggering Event

Subject to and in accordance with the provisions of this Policy, if there is a Triggering Event, the Administrator shall require a Covered Person to reimburse or forfeit to the Company the Recoupment Amount applicable to such Covered Person. A Company's obligation to recover the Recoupment Amount is not dependent on if or when the restated financial statements are filed.

4. Calculation of Recoupment Amount

The Recoupment Amount will be calculated in accordance with the Final Rules, as provided in the Calculation Guidelines attached hereto as Exhibit B.

5. Method of Recoupment

Subject to compliance with the Final Rules and applicable law, the Administrator will determine, in its sole discretion, the method for recouping the Recoupment Amount hereunder which may include, without limitation:

i. Requiring reimbursement or forfeiture of the pre-tax amount cash Incentive-Based Compensation previously paid;

ii. Offsetting the Recoupment Amount from any compensation otherwise owed by the Company to the Covered Person, including without limitation, any prior cash incentive payments, executive retirement benefits, wages, equity grants or other amounts payable by the Company to Covered Person in the future;

iii. Seeking recovery of any gain realized on the vesting, exercise, settlement, cash sale, transfer, or other disposition of any equity-based awards; and/or

iv. Taking any other remedial and recovery action permitted by law, as determined by the Administrator.

6. Arbitration

To the fullest extent permitted by law, any disputes under this Policy shall be submitted to mandatory binding arbitration (the "***Arbitrable Claims***"), governed by the Federal Arbitration Act (the "***FAA***"). Further, to the fullest extent permitted by law, no class or collective actions can be asserted in arbitration or otherwise. All claims, whether in arbitration or otherwise, must be brought solely in Covered Person's individual capacity, and not as a plaintiff or class member in any purported class or collective proceeding.

SUBJECT TO THE ABOVE PROVISO, ANY RIGHTS THAT COVERED PERSON MAY HAVE TO TRIAL BY JURY IN REGARD TO ARBITRABLE CLAIMS ARE WAIVED. FURTHER, ANY RIGHTS THAT COVERED PERSON MAY HAVE TO PURSUE OR PARTICIPATE IN A CLASS OR COLLECTIVE ACTION PERTAINING TO ANY CLAIMS BETWEEN COVERED PERSON AND THE COMPANY ARE WAIVED.

Covered Person is not restricted from filing administrative claims that may be brought before any government agency where, as a matter of law, Covered Person's ability to file such claims may not be restricted. However, to the fullest extent permitted by law, arbitration shall be the exclusive remedy for the subject matter of such administrative claims. The arbitration shall be conducted in San Francisco, CA through JAMS before a single neutral arbitrator, in accordance with the JAMS Comprehensive Arbitration Rules and Procedures then in effect, provided however, that the FAA, including its procedural provisions for compelling arbitration, shall govern and apply to this Arbitration provision. The arbitrator shall issue a written decision that contains the essential findings and conclusions on which the decision is based. If, for any reason, any term of this Arbitration provision is held to be invalid or unenforceable, all other valid terms and conditions herein shall be severable in nature and remain fully enforceable.

7. Recovery Process; Impracticability

Actions by the Administrator to recover the Recoupment Amount will be reasonably prompt.

The Administrator shall cause the Company to recover the Recoupment Amount unless the Administrator determines that recovery is impracticable and one of the following conditions is met:

i. The direct expense paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered; before concluding that it would be impracticable to recover any amount of erroneously awarded Incentive-Based Compensation based on expense of enforcement, the Company must make a reasonable attempt to recover such erroneously awarded Incentive-Based Compensation, document such reasonable attempt(s) to recover, and provide that documentation to the Exchange;

ii. Recovery would violate home country law where that law was adopted prior to November 28, 2022; before concluding that it would be impracticable to recover any amount of erroneously awarded Incentive-Based Compensation based on violation of home country law, the Company must obtain an opinion of home country counsel, acceptable to the Exchange, that recovery would result in such a violation, and must provide such opinion to the Exchange; or

iii. Recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and regulations thereunder.

8. Non-Exclusivity

The Administrator intends that this Policy will be applied to the fullest extent of the law. Without limitation to any broader or alternate clawback authorized in any written document with a Covered Person, (i) the Administrator may require that any employment agreement, equity award agreement, or similar agreement entered into on or after the Effective Date shall, as a condition to the grant of any benefit thereunder, require a Covered Person to agree to abide by the terms of this Policy, and (ii) this Policy will nonetheless apply to Incentive-Based Compensation as required by the Final Rules, whether or not specifically referenced in those arrangements. Any right of recoupment under this Policy is in addition to, and not in lieu of, any other remedies or rights of recoupment that may be available to the Company pursuant to the terms of any similar policy in any employment agreement, equity award agreement, or similar agreement and any other legal remedies or regulations available or applicable to the Company (including SOX 304). If recovery is required under both SOX 304 and this Policy, any amounts recovered pursuant to SOX 304 may be credited toward the amount recovered under this Policy, or vice versa.

9. No Indemnification

The Company shall not indemnify any Covered Persons against (i) the loss of erroneously awarded Incentive-Based Compensation or any adverse tax consequences associated with any incorrectly awarded Incentive-Based Compensation or any recoupment hereunder, or (ii) any claims relating to the Company enforcement of its rights under this Policy. For the avoidance of doubt, this prohibition on indemnification will also prohibit the Company from reimbursing or paying any premium or payment of any third-party insurance policy to fund potential recovery obligations obtained by the Covered Person directly. No Covered Person will seek or retain any such prohibited indemnification or reimbursement.

Further, the Company shall not enter into any agreement that exempts any Incentive-Based Compensation from the application of this Policy or that waives the Company's right to recovery of any erroneously awarded Incentive-Based Compensation and this Policy shall supersede any such agreement (whether entered into before, on or after the Effective Date).

10. Covered Person Acknowledgement and Agreement

All Covered Persons subject to this Policy must acknowledge their understanding of, and agreement to comply with, the Policy by executing the certification attached hereto as Exhibit A. **Notwithstanding the foregoing, this Policy will apply to Covered Persons whether or not they execute such certification.**

11. Successors

This Policy shall be binding and enforceable against all Covered Persons and their beneficiaries, heirs, executors, administrators or other legal representatives and shall inure to the benefit of any successor to the Company.

12. Interpretation of Policy

To the extent there is any ambiguity between this Policy and the Final Rules, this Policy shall be interpreted so that it complies with the Final Rules. If any provision of this Policy, or the application of such provision to any Covered Person or circumstance, shall be held invalid, the remainder of this Policy, or the application of such provision to Covered Persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

In the event any provision of this Policy is inconsistent with any requirement of any Final Rules, the Administrator, in its sole discretion, shall amend and administer this Policy and bring it into compliance with such rules.

Any determination under this Policy by the Administrator shall be conclusive and binding on the applicable Covered Person. Determinations of the Administrator need not be uniform with respect to Covered Persons or from one payment or grant to another.

13. Amendments; Termination

The Administrator may make any amendments to this Policy as required under applicable law, rules and regulations, or as otherwise determined by the Administrator in its sole discretion.

The Administrator may terminate this Policy at any time.

14. Definitions

"***Administrator***" means the Compensation Committee of the Board, or in the absence of a committee of independent directors responsible for executive compensation decisions, a majority of the independent directors serving on the Board.

"***Board***" means the Board of Directors of the Company.

"***Clawback Measurement Date***" is the earlier to occur of:

i. The date the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare an accounting restatement as described in this Policy; or

ii. The date a court, regulator, or other legally authorized body directs the Company to prepare an accounting restatement as described in this Policy.

"***Clawback Period***" means the three (3) completed fiscal years immediately prior to the Clawback Measurement Date and any transition period between the last day of the Company's previous fiscal year end and the first day of its new fiscal year (that results from a change in the Company's fiscal year) within or immediately following such three (3)-year period; provided that any transition period between the last day of the Company's previous fiscal year end and the first day of its new fiscal year that comprises a period of 9 to 12 months will be deemed a completed fiscal year.

"***Company***" means Sutro Biopharma, Inc., a Delaware corporation, or any successor corporation.

"***Covered Person***" means any Executive Officer (as defined in the Final Rules), including, but not limited to, those persons who are or have been determined to be "officers" of the Company within the meaning of Section 16 of Rule 16a-1(f) of the rules promulgated under the Exchange Act, and "executive officers" of the Company within the meaning of Item 401(b) of Regulation S-K, Rule 3b-7 promulgated under the Exchange Act, and Rule 405 promulgated under the Securities Act of 1933, as amended; provided that the Administrator may identify additional employees who shall be treated as Covered Persons for the purposes of this Policy with prospective effect, in accordance with the Final Rules.

"***Effective Date***" means November 12, 2023, the date the Policy was adopted by the Board.

"***Exchange***" means the Nasdaq Global Market or any other national securities exchange or national securities association in the United States on which the Company has listed its securities for trading.

"***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

"***Final Rules***" means the final rules promulgated by the SEC under Section 954 of the Dodd-Frank Act, Rule 10D-1 and Exchange listing standards, as may be amended from time to time.

"***Financial Reporting Measure***" are measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. Stock price and total stockholder return ("TSR") are also financial reporting measures. A financial reporting measure need not be presented within the financial statements or included in a filing with the SEC.

"***Incentive-Based Compensation***" means compensation that is granted, earned or vested based wholly or in part on the attainment of any Financial Reporting Measure. Examples of "Incentive-Based Compensation" include, but are not limited to: non-equity incentive plan awards that are earned based wholly or in part on satisfying a Financial Reporting Measure performance goal; bonuses paid from a "bonus pool," the size of which is determined based wholly or in part on satisfying a Financial Reporting Measure performance goal; other cash awards based on satisfaction of a Financial Reporting Measure performance goal; restricted stock, restricted stock units, performance share units, stock options, and SARs that are granted or become vested based wholly or in part on satisfying a Financial Reporting Measure goal; and proceeds received upon the sale of shares acquired through an incentive plan that were granted or vested based wholly or in part on satisfying a Financial Reporting Measure goal. "Incentive-Based Compensation" excludes, for example, time-based awards such as stock options or restricted stock units that are granted or vest *solely* upon completion of a service period; awards based on non-financial strategic

or operating metrics such as the consummation of a merger or achievement of non-financial business goals; service-based retention bonuses; discretionary compensation; and salary.

"***Listing Rule Effective Date***" means October 2, 2023.

"***Policy***" means this Compensation Recovery Policy.

Incentive-Based Compensation is deemed "***Received***" in the Company's fiscal period during which the relevant Financial Reporting Measure specified in the Incentive-Based Compensation award is attained, irrespective of whether the payment or grant occurs on a later date or if there are additional vesting or payment requirements, such as time-based vesting or certification or approval by the Compensation Committee or Board, that have not yet been satisfied.

"***Recoupment Amount***" means the amount of Incentive-Based Compensation Received by the Covered Person based on the financial statements prior to the restatement that exceeds the amount such Covered Person would have received had the Incentive-Based Compensation been determined based on the financial restatement, computed without regard to any taxes paid (*i.e.*, gross of taxes withheld).

"***SARs***" means stock appreciation rights.

"***SEC***" means the U.S. Securities and Exchange Commission.

"***SOX 304***" means Section 304 of the Sarbanes-Oxley Act of 2002.

"***Triggering Event***" means any event in which the Company is required to prepare an accounting restatement due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

EXHIBIT A

Certification

I certify that:

1. I have read and understand the Company's Compensation Recovery Policy (the "***Policy***"). I understand that the Company's General Counsel (or if the Company does not currently have a General Counsel, the Company's most senior legal employee) is available to answer any questions I have regarding the Policy.

2. I understand that the Policy applies to all of my existing and future compensation-related agreements with the Company, whether or not explicitly stated therein.

3. I agree that notwithstanding the Company's certificate of incorporation, bylaws, and any agreement I have with the Company, including any indemnity agreement I have with the Company, I will not be entitled to, and will not seek indemnification from the Company for, any amounts recovered or recoverable by the Company in accordance with the Policy.

4. I understand and agree that in the event of a conflict between the Policy and the foregoing agreements and understandings on the one hand, and any prior, existing or future agreement, arrangement or understanding, whether oral or written, with respect to the subject matter of the Policy and this Certification, on the other hand, the terms of the Policy and this Certification shall control, and the terms of this Certification shall supersede any provision of such an agreement, arrangement or understanding to the extent of such conflict with respect to the subject matter of the Policy and this Certification.

5. I agree to abide by the terms of the Policy, including, without limitation, by returning any erroneously awarded Incentive-Based Compensation to the Company to the extent required by, and in a manner permitted by, the Policy.

Signature: _____

Name: _____

Title: _____

Date: _____

EXHIBIT B

Calculation Guidelines

Unless determined otherwise by the Administrator and in accordance with the Final Rules, for purposes of calculating the Recoupment Amount:

i. For cash awards, the erroneously awarded compensation is the difference between the amount of the cash award (whether payable as a lump sum or over time) that was received and the amount that should have been received applying the restated Financial Reporting Measure.

ii. For cash awards paid from bonus pools, the erroneously awarded compensation is the pro rata portion of any deficiency that results from the aggregate bonus pool that is reduced based on applying the restated Financial Reporting Measure.

iii. For equity awards, if the shares, options, restricted stock units, or SARs are still held at the time of recovery, the erroneously awarded compensation is the number of such securities received in excess of the number that should have been received applying the restated Financial Reporting Measure (or the value of that excess number). If the options or SARs have been exercised, but the underlying shares have not been sold, the erroneously awarded compensation is the number of shares underlying the excess options or SARs (or the value thereof). If the underlying shares have been sold, the Company may recoup proceeds received from the sale of shares.

iv. For Incentive-Based Compensation based on stock price or TSR, where the amount of erroneously awarded compensation is not subject to mathematical recalculation directly from the information in an accounting restatement:

a. The amount must be based on a reasonable estimate of the effect of the accounting restatement on the stock price or TSR upon which the Incentive-Based Compensation was Received; and

b. The Company must maintain documentation of the determination of that reasonable estimate and the Company must provide such documentation to the Exchange in all cases.