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, 2022

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 **001-36112**

MACROGENICS, INC.

(Exact name of registrant)

Delaware	06-1591613
(State of organization)	*(I.R.S. Employer Identification Number)*

9704 Medical Center Drive, Rockville, Maryland 20850
(Address of principal executive offices and zip code)

(**301**) **251-5172**
(Registrant's telephone number)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	MGNX	Nasdaq Global Select Market

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

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

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

Indicate by check mark whether the registrant (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 during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes ☑ No ☐

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

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

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

The aggregate market value of the registrant's common stock, par value $0.01 per share, held by non-affiliates of the registrant on June 30, 2022, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $181.3 million based on the closing price of the registrant's common stock on the Nasdaq Global Select Market on that date. Exclusion of shares held by any person should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of management or policies of the registrant, or that such person is controlled by or under common control with the registrant.

The number of shares of the registrant's common stock outstanding on March 10, 2023 was 61,838,565.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of MacroGenics, Inc.'s definitive proxy statement for the 2023 annual meeting of stockholders are incorporated by reference into Part III of this Annual Report.

MACROGENICS, INC.
ANNUAL REPORT ON FORM 10-K
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FORWARD-LOOKING STATEMENTS

This report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements include statements that may relate to our plans, objectives, goals, strategies, future events, future revenues or performance, capital expenditures, financing needs and other information that is not historical information. Many of these statements appear, in particular, under the headings "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K. Forward-looking statements can often be identified by the use of terminology such as "subject to", "believe", "anticipate", "plan", "expect", "intend", "estimate", "project", "may", "will", "should", "would", "could", "can", the negatives thereof, variations thereon and similar expressions, or by discussions of strategy.

All forward-looking statements, including, without limitation, our examination of historical operating trends, are based upon our current expectations and various assumptions. We believe there is a reasonable basis for our expectations and beliefs, but they are inherently uncertain. We may not realize our expectations, and our beliefs may not prove correct. Actual results could differ materially from those described or implied by such forward-looking statements. The following uncertainties and factors, among others (including those set forth under "Risk Factors"), could affect future performance and cause actual results to differ materially from those matters expressed in or implied by forward-looking statements:

- our plans to develop and commercialize our product candidates;
- the outcomes of our ongoing and planned clinical trials and the timing of those outcomes, including when clinical trials will be initiated or completed, enrollment of trials, and when data will be reported or regulatory filings will be made;
- the timing of and our ability to obtain and maintain regulatory approvals for our product candidates and the labeling for any approved products;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to raise additional capital through the capital markets or through one or more corporate partnerships, equity offerings, debt financings, collaborations, licensing arrangements or asset sales;
- our expectations regarding product candidates currently being developed by our collaborators;
- our ability to enter into new collaborations or to identify additional products or product candidates with significant commercial potential that are consistent with our commercial objectives;
- the potential benefits and future operation of our existing collaborations;
- our ability to recover the investment in our manufacturing capabilities;
- the rate and degree of market acceptance and clinical utility of our products;
- our commercialization, marketing and manufacturing capabilities and strategy;
- significant competition in our industry;
- costs of litigation and the failure to successfully defend lawsuits and other claims against us and our expectations regarding the outcome of any regulatory or legal proceedings;
- economic, political and other risks associated with our international operations;
- our ability to receive research funding and achieve anticipated milestones under our collaborations;
- our ability to protect and enforce patents and other intellectual property;
- costs of compliance and our failure to comply with new and existing governmental regulations including, but not limited to, tax regulations;
- loss or retirement of key members of management;
- failure to successfully execute our growth strategy, including any delays in our planned future growth;
- our failure to maintain effective internal controls; and
- the severity and duration of the impact of a global pandemic on our business, operations, clinical programs, manufacturing, financial results and other aspects of our business.

Consequently, forward-looking statements speak only as of the date that they are made and should be regarded solely as our current plans, estimates and beliefs. You should not place undue reliance on forward-looking statements. We cannot guarantee future results, events, levels of activity, performance or achievements. Except as required by law, we do not undertake and specifically decline any obligation to update, republish or revise forward-looking statements to reflect future events or circumstances or to reflect the occurrences of unanticipated events.

PART I

ITEM 1. BUSINESS

Except as otherwise indicated herein or as the context otherwise requires, references in this annual report on Form 10-K to "MacroGenics," the "company," "we," "us" and "our" refer to MacroGenics, Inc. and its consolidated subsidiaries. "MacroGenics®, the MacroGenics logo, DART®, TRIDENT®, MARGENZA® and the phrases Breakthrough Biologics, Life-Changing Medicines® and Developing Breakthrough Biologics, Life-Changing Medicines® are our trademarks. The other trademarks, trade names and service marks appearing in this report are the property of their respective owners.

Overview

We are a biopharmaceutical company focused on developing and commercializing innovative antibody-based therapeutics for the treatment of cancer. We have a pipeline of product candidates being evaluated in clinical trials sponsored by us or our collaborators in addition to several molecules in preclinical development. Our clinical product candidates include multiple oncology programs, many of which were created using our proprietary, antibody-based technology platforms. We believe our product candidates have the potential, if approved for marketing by regulatory authorities, to have a meaningful effect on treating patients' unmet medical needs as monotherapy or, in some cases, in combination with other therapeutic agents. To date, two products originating from MacroGenics' pipeline of proprietary or partnered product candidates have received U.S. Food and Drug Administration (FDA) approval.

We are developing product candidates that target various tumor-associated antigens and immune checkpoint molecules. Our lead pipeline program is vobramitamab duocarmazine (vobra duo) (formerly MGC018), an antibody-drug conjugate (ADC) that targets B7-H3, a molecule in the B7 family of immune regulator proteins that is widely expressed by several different tumor types. We have historically pursued development of other molecules that target B7-H3, including enoblituzumab, an Fc-optimized monoclonal antibody (mAb). We are also developing molecules that target programmed cell death protein 1 (PD-1), a protein that is important in the regulation of the immune system's response to cancer. Our clinical pipeline includes two product candidates based on our proprietary, bispecific DART technology that co-engage both PD-1 and other checkpoint molecules. These candidates include lorigerlimab, which targets PD-1 and CTLA-4, or cytotoxic T-lymphocyte-associated protein 4, and tebotelimab, which targets PD-1 and LAG-3, or lymphocyte-activation gene 3. In addition, we are developing MGD024, a next-generation bispecific DART molecule that engages CD3 on immune effector cells to kill CD123-expressing cancer cells in certain hematological malignancies, including acute myeloid leukemia (AML).

We and our collaboration partners are developing or commercializing product candidates for which we retain certain economic rights. These molecules include IMGC936, a clinical-stage ADC that targets ADAM9, a cell surface protein over-expressed in several solid tumor types; retifanlimab, an anti-PD-1 mAb that we out-licensed and TZIELD™ (teplizumab-mzwv), an anti-CD3 monoclonal antibody that we sold to a partner.

In March 2021, we and our commercialization partner commenced U.S. marketing of MARGENZA (margetuximab-cmkb), a human epidermal growth factor receptor 2 (HER2) receptor antagonist mAb we developed that is indicated, in combination with chemotherapy, for the treatment of adult patients with metastatic HER2-positive breast cancer who have received two or more prior anti-HER2 regimens, at least one of which was for metastatic disease.

We have created our product candidates based on the following antibody-based technologies:

- ADC platforms, which we have licensed from collaboration partners to leverage third-party proprietary linker payloads, and which link monoclonal antibodies that specifically target cancer cells with cytotoxins that are designed to trigger cell death in the cancer cell;
- Multi-specific platforms, which enable us to design antibodies that can bind to two (in the case of our bispecific DART product candidates) or more distinct targets, each with antibody-like specificity, with the goal of creating a more significant biological effect than binding any one of the targets as with an antibody or two or more of them separately as a combination. We have specifically utilized our DART platform to generate product candidates for use in the following modalities:
    - *Bispecific checkpoints*. We leverage our proprietary DART platform to enable simultaneous targeting of multiple co-inhibitory receptors or checkpoints, such as those involved in inhibiting T-cell responses. Targeting two immunoregulatory pathways, such as two checkpoints in a single molecule, affords the clinical benefit of the combination together with the potential for improved efficacy and/or safety, as well as advantages in manufacturing, simplified clinical development and enhanced patient convenience.

- *Next-Generation T-Cell Engagers.* We have extensive experience applying our proprietary multi-specific DART and TRIDENT platforms to develop molecules that redirect T-cell activation and killing which: (1) recognize and bind to structures expressed on a cancer cell, (2) recruit all types of cytotoxic, or cell killing, T cells, irrespective of their ability to recognize cancer cells, and (3) trigger T-cell activation, expansion, and cell killing mechanisms to destroy a cancer cell.

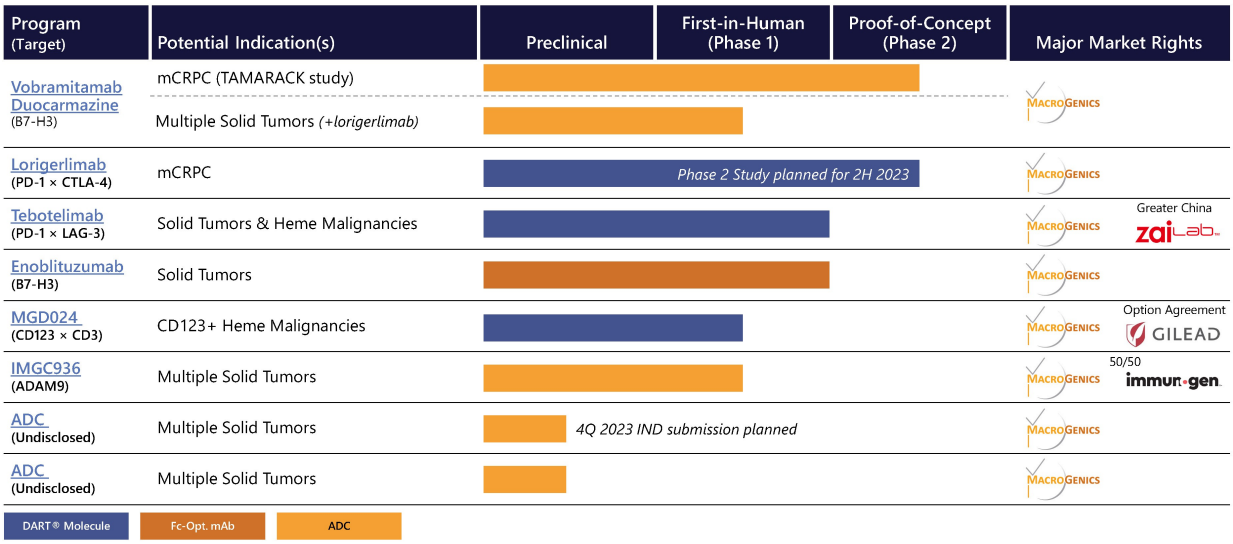
  MacroGenics' next-generation T-cell engagers incorporate a CD3 component that is designed to minimize cytokine-release syndrome (CRS), a potentially life-threatening toxicity, while increasing the magnitude of antitumor activity with a longer half-life to permit intermittent dosing; and

- Fc Optimization platform, which introduces certain mutations into the Fc domain of a mAb in order to modulate antibody interaction with immune effector cells to enhance the killing of cancer cells.

Our goal is to be a fully-integrated biotechnology company leading in the discovery, development, manufacturing and commercialization of breakthrough antibody-based biologics for the treatment of patients with cancer.

Our Pipeline of Oncology Clinical Product Candidates for Which We Retain Commercial Rights

The table below depicts the status of our oncology product candidates that are in clinical development and for which we retain all or some commercial rights:



The safety and efficacy of investigational agents and/or investigational uses of approved products have not been established. Pipeline reflects current status of each program or most recently completed phase of development. Neither enoblituzumab nor tebotelimab has actively-recruiting studies.

B7-H3 Programs

We have two clinical-stage programs, vobra duo and enoblituzumab, that target B7-H3 (CD276), an immune checkpoint molecule that is overexpressed in cancer tissues while showing limited expression in normal tissues. B7-H3 is a member of the B7 family of immune regulator proteins that is widely expressed by different tumor types and may play a key role in regulating the immune response to various cancers. Of the two programs, currently only vobra duo is in active clinical development. There are no currently approved therapeutic agents directed against B7-H3.

Vobramitamab Duocarmazine

Vobra duo is an investigational ADC with a cleavable peptide linker designed to deliver a DNA-alkylating duocarmycin payload to dividing and non-dividing cells on solid tumors that express B7-H3. The underlying ADC technology was licensed from Byondis B.V. (Byondis). After completing a dose escalation study in 2020, we initiated the Phase 1/2 dose expansion study of vobra duo in patients with metastatic castration-resistant prostate cancer (mCRPC), non-small cell lung cancer (NSCLC), melanoma, squamous cell carcinoma of the head and neck (SCCHN) and triple negative breast cancer (TNBC). The purpose of this fully-enrolled study was to evaluate the safety and tolerability, pharmacokinetics,

pharmacodynamics and preliminary antitumor activity of the molecule. In addition, in early 2022, we initiated a Phase 1/2 dose escalation study of vobra duo in combination with lorigerlimab (formerly MGD019), a bispecific DART molecule designed to block PD-1 and CTLA-4, in patients with solid tumors. This study is ongoing.

In late 2022, we initiated the Phase 2 portion of the TAMARACK Phase 2/3 study of vobra duo in patients with mCRPC who have had prior exposure to a taxane and at least one androgen receptor axis-targeted, or ARAT, agent (including abiraterone, enzalutamide or apalutimide), and a PARP (poly adenosine diphosphate-ribose polymerase) inhibitor, if appropriate. This study is designed to evaluate 100 patients across two experimental arms in which they receive vobra duo at either 2.0 mg/kg or 2.7 mg/kg once every four weeks (Q4W). This study initially included a control arm in which patients received a second ARAT agent. The treatment landscape for patients with mCRPC has evolved with declining acceptability regarding the use of a second ARAT agent in patients who progress on earlier therapies and the approval of a radiopharmaceutical medication. Given our objective to enroll TAMARACK and determine an optimal dose expeditiously, as of the first quarter of 2023, we have modified the trial by removing the ARAT control arm and the Phase 3 portion of the study, with regulatory approval for the modified protocol obtained to date in several countries. We believe that removal of the control arm should allow us to provide a clinical update in 2024 potentially in support of a subsequent Phase 3 study in mCRPC.

Dose Escalation Study Results (as of May 2020)

In May 2020, data from the dose escalation study of vobra duo was initially presented. At the May 6, 2020 data cut-off, 23 evaluable patients with advanced solid tumors had been enrolled in four dose escalation cohorts of 0.5 mg/kg to 3 mg/kg given intravenously every three weeks. Treatment was ongoing in an expanded fifth cohort of patients at 4 mg/kg every three weeks at the data cut-off date.

At the May 6, 2020 data cut off, preliminary evidence of anti-tumor activity by vobra duo was observed in the dose escalation portion of the study, particularly in patients with advanced mCRPC. Reductions in prostate-specific antigen (PSA) levels of ≥ 50% (PSA50) were observed in five of seven mCRPC patients treated, including one with substantial regression of bone disease. Six mCRPC patients had bone-only disease, and one patient with measurable peripheral disease had a 29% reduction in target lesions that did not qualify as a response per Response Evaluation Criteria in Solid Tumors v1.1 (RECIST). Four PSA responders remained on therapy as of the data cut-off. Patients with mCRPC had received a median of four therapies prior to vobra duo, including taxane chemotherapy (six patients) and next-generation hormonal agents (six patients were treated with both abiraterone and enzalutamide, and one with abiraterone only).

Through dose escalation, the safety profile of vobra duo, which had included hematologic and skin toxicities, was generally manageable as of the data cut-off. At least one treatment-related adverse event (TRAE) occurred in 22 of 23 patients (96%), including Grade ≥ 3 reported in 14 of 23 patients (61%). Three treatment-related serious adverse events occurred in one patient each: pneumonitis in a patient with concurrent bacterial pneumonia; non-infectious gastroenteritis; and stasis dermatitis in a patient with chronic venous insufficiency. One dose-limiting toxicity of Grade 4 neutropenia that resolved to baseline was reported. No febrile neutropenia was observed.

Phase 1/2 Dose Expansion Study Results (as of August 2021)

Preliminary clinical results from the ongoing Phase 1/2 study of vobra duo in patients with solid tumors was presented at the 2021 European Society for Medical Oncology (ESMO) Meeting. As of the August 16, 2021 data cut-off, a total of 86 patients with advanced solid tumors were enrolled in the cohort expansion of vobra duo at the recommended Phase 2 dose (RP2D) of 3.0 mg/kg, administered intravenously every three weeks. The enrollment included 40 patients with mCRPC, 21 patients with NSCLC, 16 patients with TNBC and nine patients with melanoma. In addition, enrollment of patients with SCCHN had been initiated. The safety analysis included all enrolled patients, whereas the efficacy analysis was limited to mCRPC and NSCLC patients; enrollment was ongoing in the other tumor cohorts. In the cohort expansion, tumor response by investigator per RECIST was evaluated every nine weeks for all patients and PSA was assessed every three weeks in mCRPC.

As of the August 16, 2021 data cut-off, all 40 patients in the mCRPC cohort expansion had been enrolled. Patients had previously received a median of three prior therapies for advanced disease, with all 40 patients having received both chemotherapy and next-generation hormonal therapy. Based on an immunohistochemistry assessment of patient tumor samples, the median B7-H3 H-score (a combined score of the intensity and the proportion of B7-H3 expression, comprising values between 0 and 300) for all mCRPC patients was 223. A total of 39 mCRPC patients were evaluable for PSA response. Reductions in PSA levels of ≥ 50% (PSA50) were observed in 21 of 39 patients (54%). Twenty-four of the 39 patients (62%) remained on treatment as of the data cut-off. Of the 40 patients in the mCRPC cohort, 16 of the 23 patients with measurable disease were evaluable for tumor response by RECIST as of the data cut-off. Ten of these 16 patients (63%) had reductions in

their target lesion sums from baseline. Four patients (25%) demonstrated a partial response (PR), consisting of two confirmed and two unconfirmed PRs. Treatment was ongoing in six of 16 patients with evaluable tumor response as of the data cut-off.

As of the August 16, 2021 data cut-off, the NSCLC cohort expansion had been fully enrolled with 21 patients. Patients had previously received a median of two prior therapies for advanced disease, with 15 (71%) having previously received anti-PD-1/PD-L1 therapy. The median B7-H3 H-score for these patients was 139. A total of 16 NSCLC patients were evaluable for tumor response by RECIST. Thirteen of 16 (81%) patients had reductions in their target lesion sums from baseline. Four of these 16 patients (25%) experienced unconfirmed partial responses. Another one of these 16 patients experienced a 30% reduction in target lesions; however, the patient's non-target lesions were not evaluated due to an obstruction of the bronchus and overall response was not evaluable. Treatment was ongoing in seven of 16 patients as of the data cut-off.

The safety analysis includes all 86 patients enrolled in the cohort expansion as of the August 16, 2021 data cut-off. The median number of doses received by mCRPC patients was 3.5 (range: 1-8); those with NSCLC received 3.0 (range: 1-7). Adverse events for the dose expansion cohorts of 3 mg/kg were generally consistent with those previously reported at ASCO 2021. TRAEs included hematologic and skin toxicities that have been clinically manageable to date. In the cohort expansion study overall, at least one TRAE of any grade was experienced by 78 of 86 patients (91%), with 43 of 86 patients (50%) experiencing a Grade ≥3 TRAE. There were two Grade 5 fatal events: one from an unknown cause and one due to SARS-CoV-2.

The most common TRAEs were fatigue (37% all grades; 1% Grade ≥3), neutropenia (34% all grades; 22% Grade ≥3), palmar plantar erythrodysesthesia syndrome (31% all grades; 4% Grade ≥3), pleural effusion (23% all grades; 1% Grade ≥3), nausea (22% all grades; 1% Grade ≥3), asthenia (20% all grades; 5% Grade ≥3) and thrombocytopenia (14% all grades; 7% Grade ≥3). The overall results demonstrated a manageable safety profile with a low rate of treatment discontinuation due to TRAEs: only six of 86 (7%) patients had discontinued therapy in the cohort expansion as of the data cut-off date due to TRAEs.

Enoblituzumab

Enoblituzumab is an investigational monoclonal antibody that targets B7-H3 that has been engineered using our Fc Optimization platform. A Phase 2 study evaluating enoblituzumab in combination with either retifanlimab (anti-PD-1 monoclonal antibody) or tebotelimab (PD-1 × LAG-3 bispecific DART molecule) in the first-line treatment of patients with recurrent or metastatic SCCHN was discontinued in July 2022.

We had initiated a Phase 2 study of this agent in the first-line treatment of patients with relapsed or metastatic SCCHN not curable by local therapy in the first quarter of 2021. This trial included enoblituzumab in a chemotherapy-free regimen in combination with either retifanlimab in patients who are programmed death-ligand 1 (PD-L1) positive or with tebotelimab in patients who are PD-L1 negative. In July 2022, we announced the closure of this study based on an internal review of safety data, which included the occurrence of seven fatalities potentially associated with hemorrhagic events in both arms of the study (of 62 total patients treated).

At the 2022 ASCO Annual Meeting, investigators presented data from an investigator-sponsored trial of a single-center, single arm, open-label Phase 2 study evaluating the safety, anti-tumor effect, and immunogenicity of neoadjuvant enoblituzumab given prior to radical prostatectomy in men with intermediate and high-risk localized prostate cancer. In this study, investigators reported that six weeks of treatment with enoblituzumab demonstrated favorable safety and encouraging clinical activity in high-risk prostate cancer patients with local disease prior to prostatectomy. These trial results, combined with demonstrated favorable safety profile observed by the investigators, provide the rationale for further development of enoblituzumab and other B7-H3 targeted agents in prostate cancer.

In July 2019, we licensed the right to develop and commercialize enoblituzumab in mainland China, Hong Kong, Macau and Taiwan to I-Mab Biopharma (I-Mab). In August 2022, I-Mab notified us of its intention to terminate the I-Mab License Agreement effective February 25, 2023.

Immune Checkpoint Inhibitors

Checkpoint inhibition has become an important staple of oncology. Our clinical pipeline includes three product candidates in clinical development that target checkpoint molecules for the potential treatment of a broad range of solid tumors. These candidates include two bispecific DART product candidates that co-engage PD-1 and other checkpoint molecules and an anti-PD-1 monoclonal antibody that we have out-licensed to a partner.

Lorigerlimab (formerly MGD019)

Approved monoclonal antibodies that target the immune checkpoints PD-1 and CTLA-4 have shown enhanced clinical antitumor activity when given in combination in various cancers, including renal cell carcinoma and NSCLC with high tumor mutational burden. Lorigerlimab is an investigational, bispecific tetravalent DART molecule designed to enable simultaneous and/or independent blockade of PD-1 and CTLA-4, with potentially enhanced CTLA-4 blockade on T cells co-expressing these immune checkpoint molecules.

Dose Escalation Study Results (as of July 21, 2020)

We conducted a Phase 1/2 clinical trial of lorigerlimab in patients with advanced solid tumors. The study was designed to enroll patients with histologically proven, unresectable, locally advanced or metastatic solid tumors for whom no approved therapy with demonstrated clinical benefit is available or patients who are intolerant to standard therapy. Forty-three patients were enrolled in the 3+3+3 dose escalation study within a dose range of 0.03 – 10.0 mg/kg, administered every three weeks initially, in a population of heavily pre-treated patients representing a broad range of different types (23) of solid tumors. A total of 28 patients were treated at doses ≥ 3.0 mg/kg administered every three weeks initially. Of the 18 evaluable patients who received doses ≥ 3.0 mg/kg as of the July 21, 2020 cut-off date, four objective responses were reported, including a confirmed complete response in mCRPC, confirmed PRs in microsatellite stable colorectal cancer (MSS CRC) and metastatic type AB thymoma, and an unconfirmed PR in serous fallopian tube carcinoma. Lorigerlimab was well-tolerated in patients who received less than 10 mg/kg. The most common TRAEs observed were pruritus (23.3%), arthralgia (18.6%), fatigue (18.6%), rash (18.6%), nausea (16.3%) and infusion-related reaction (16.3%) as of the data cut-off. Several Grade 3 adverse events were observed at the 10.0 mg/kg level; however, none were considered dose limiting.

In this study, full and sustained peripheral PD-1 blockade was evident at doses ≥ 1.0 mg/kg over a 3-week dosing interval. In addition, dose-dependent upregulation of the inducible costimulator (ICOS) molecule was evident in treated patients, including those who responded to lorigerlimab therapy. This is consistent with an observation previously reported in the literature that anti-CTLA-4 therapy increases the frequency of CD4 T cells expressing the ICOS molecule.

Dose Expansion Study Results (as of December 12, 2022)

We are evaluating lorigerlimab in an ongoing Phase 1/2 dose expansion study in patients with MSS CRC, mCRPC, melanoma and checkpoint-naive NSCLC, and reported on preliminary data at the ASCO Genitourinary Cancers Symposium in February 2023. As of the December 12, 2022 data cut-off, 118 patients were enrolled at the dose of 6.0 mg/kg, administered intravenously every three weeks (Q3W). Confirmed objective responses were observed across the histology-specific cohorts; preliminary efficacy results for mCRPC were presented in the poster.

Preliminary Safety Results. The safety analysis is based on 127 patients who received lorigerlimab at a dose of 6 mg/kg Q3W, including 118 enrolled in the four dose expansion cohorts plus nine patients from dose escalation. Median exposure was 14.4 weeks (range: 1.9 - 100.1 weeks) with a median of four infusions administered per patient. Twenty-four patients remained on lorigerlimab as of the December 12, 2022 data cut-off; 103 discontinued for the following reasons: progressive disease (PD) (n=66), adverse events (AE) (n=31), patient/physician decision (n=5), or death due to PD (n=1).

The results demonstrated a manageable overall safety profile. TRAEs occurred in 86.6% of patients, with the most common among them (≥15%) being fatigue, rash, pruritus, hypothyroidism, and pyrexia. Rates of grade ≥3 TRAEs and immune-related AEs were 35.4% and 7.9%, respectively. AEs resulted in treatment discontinuation in 25.2% of patients. There were no fatal AEs related to lorigerlimab.

Preliminary Anti-tumor Activity in mCRPC Cohort. As of the December 12, 2022 data cut-off, 42 patients had been enrolled in the mCRPC expansion cohort. Patients had previously received a median of two prior therapies (range: 1 – 9) for advanced disease, with 35 patients (83.3%) having received docetaxel and 34 patients (81.0%) having received androgen receptor antagonist therapy. The median exposure to lorigerlimab was 19.2 weeks (range: 3.3 - 55.1 weeks), with a median of five infusions administered per patient.

A total of 35 patients with mCRPC had measurable soft tissue disease per RECIST v1.1 at study entry. Nine of the 35 patients (25.7%) achieved confirmed partial responses (cPR). The median duration of response for these nine patients was 4.6 months (range: 2.8 – 8.6+ months), with four patients remaining on lorigerlimab as of data cut-off. Among the other five patients who had achieved cPR, four discontinued due to unrelated adverse events, and one patient discontinued due to physician decision.

Reductions in PSA levels of ≥ 50% were observed in 12 of 42 patients (28.6%), and 9 of the 12 maintained PSA50 response ≥ 3 months. Nine of 42 patients (21.4%), including the nine who achieved cPR, had reductions in their PSA levels of ≥ 90% as of the data cut-off.

Based on the above data, we plan to initiate a randomized Phase 2 study of lorigerlimab in combination with docetaxel vs. docetaxel in second-line, chemotherapy-naïve mCRPC patients in the second half of 2023. A total of 150 patients are planned to be randomized 2:1. The current study design includes a primary study endpoint of radiographic progression-free survival (rPFS).

Tebotelimab

Tebotelimab is an investigational, first-in-class bispecific, tetravalent DART molecule targeting PD-1 and LAG-3. We have engineered tebotelimab to concomitantly or independently bind to PD-1 and LAG-3 and disrupt these non-redundant inhibitory pathways to further restore exhausted T-cell function. Tebotelimab was evaluated in a Phase 1/2 dose expansion study in several tumor types and was studied in combination with enoblituzumab in SCCHN.

Dose Expansion Study Results (as of April 25, 2020)

In May 2020, initial data was presented from a Phase 1 monotherapy dose expansion study of tebotelimab in patients with advanced solid and hematologic neoplasms. At the April 25, 2020 data cut-off, 205 patients had been treated with tebotelimab, of which 152 were evaluable for response. Anti-tumor activity of tebotelimab, as assessed by RECIST, was observed in evaluable patients across several of the tumor types in the selected dose expansion cohorts. Response to tebotelimab monotherapy was associated with LAG-3 expression and an IFN-γ gene signature at baseline. The overall safety profile of tebotelimab in the Phase 1 study, including the incidence of immune-mediated adverse events, appeared generally consistent with anti-PD-1 antibody monotherapy with respect to event type and frequency.

Dose Expansion Results in Diffuse Large B-cell Lymphoma (as of October 23, 2020)

In December 2020, data was presented from the tebotelimab Phase 1/2 dose expansion study in patients with relapsed/refractory diffuse large B-cell lymphoma (DLBCL). In this study, 20 DLBCL patients were enrolled, half of whom were chimeric antigen receptor (CAR) T cell therapy experienced. As of the October 23, 2020 data cut-off, there were 13 response-evaluable patients. A preliminary ORR of 53.8% (7 of 13 patients) was observed, including responses in five of seven CAR T cell-naïve patients and in two of six CAR T cell experienced patients, the latter of whom both had complete responses. A preliminary duration of response of up to 168 days was observed, with six of seven ongoing responses as of the cut-off date. In the study, baseline LAG-3 expression appeared to associate with clinical response. Tebotelimab was generally well-tolerated among heavily pre-treated R/R DLBCL patients, with manageable infusion-related reactions and no evidence of tumor lysis syndrome. The most common TRAE was pyrexia, which occurred in three (15%) patients. A single Grade 3 TRAE of anemia was observed.

As part of our November 2018 license and collaboration agreement with Zai Lab Limited (Zai Lab), we licensed to them the right to develop and commercialize tebotelimab in mainland China, Hong Kong, Macau and Taiwan. Zai Lab has led regional studies evaluating tebotelimab in various indications in its territory. Zai lab discontinued development of tebotelimab for indications they were enrolling in their territory and is evaluating future development plans in other indications.

T-cell Redirected Bispecific DART Molecules

We are developing a bispecific DART molecule that can simultaneously target T-cells and tumor cell surface antigens to engage and promote redirected T-cell killing of cancer cells. CD123, the interleukin-3 receptor alpha chain, is widely overexpressed in various hematologic malignancies, including AML and myelodysplastic syndrome (MDS), making it an attractive therapeutic target. Various drugs have been developed to target CD123, but none have received FDA approval. We have created a bispecific DART molecule that engages CD3 expressed on immune effector cells, such as T cells, to kill CD123-expressing cancer cells for the potential treatment of certain hematologic malignancies, including AML.

MGD024

MGD024 is an investigational, next-generation, bispecific CD123 × CD3 DART molecule designed to minimize cytokine-release syndrome, while maintaining anti-tumor cytolytic activity, and permitting intermittent dosing through a longer half-life. In December 2021, we presented preclinical MGD024 data at the American Society of Hematology (ASH) Annual Meeting that showed the potential for anti-tumor activity from the combination of MGD024 with standard of care agents used to treat AML. We initiated a Phase 1 study of MG024 in patients with CD123-positive hematologic malignancies in July 2022, and this dose escalation study is ongoing.

On October 14, 2022, we and Gilead Sciences, Inc. (Gilead) entered into an exclusive option and collaboration agreement (Gilead Agreement) to develop and commercialize MGD024 and create bispecific cancer antibodies using our DART platform and undertake their early development under a maximum of two separate bispecific cancer target research programs. Under the Gilead Agreement, we will continue the ongoing phase 1 trial for MGD024 according to a development plan, during which Gilead will have the right to exercise an option granted to Gilead to obtain an exclusive license to develop and commercialize MGD024 and other bispecific antibodies of ours that bind CD123 and CD3 (CD123 Option). The agreement also grants Gilead the right, within its first two years, to nominate a bispecific cancer target set for up to two research programs conducted by us and to exercise separate options to obtain an exclusive license for the development, commercialization and exploitation of molecules created under each research program (Research Program Option). As part of the Gilead Agreement, Gilead paid us a non-refundable upfront payment of $60.0 million and we will be eligible to receive up to $1.7 billion in target nomination, option fees, and development, regulatory and commercial milestones, assuming Gilead exercises the CD123 Option and Research Program Option, successfully develops and commercializes MGD024 or other CD123 products developed under the agreement, and products result from the two additional research programs. Assuming exercise of the CD123 Option, we will also be eligible to receive tiered, low double-digit royalties on worldwide net sales of MGD024 (or other CD123 products developed under the agreement) and assuming exercise of the Research Program Option, a flat royalty on worldwide net sales of any products resulting from the two research programs.

Margetuximab

We and our commercial partner, Eversana Life Science Services, LLC (Eversana), are currently marketing MARGENZA (margetuximab-cmkb), in combination with chemotherapy, for the treatment of adult patients with metastatic HER2-positive breast cancer who have received two or more prior anti-HER2 regimens, at least one of which was for metastatic disease. Margetuximab is an Fc-engineered, mAb that targets the HER2 oncoprotein. HER2 is expressed by tumor cells in breast, gastroesophageal and other solid tumors.

As part of our November 2018 license and collaboration agreement, Zai Lab has the rights to develop margetuximab in mainland China, Hong Kong, Macau and Taiwan. On January 6, 2022, Zai Lab announced that the China NMPA had accepted the New Drug Application (NDA) for margetuximab for the treatment of adult patients with metastatic HER2-positive breast cancer who have received two or more prior anti-HER2 regimens, at least one of which was for metastatic disease, in combination with chemotherapy.

Adverse reactions occurring in greater than twenty percent of patients with MARGENZA in combination with chemotherapy were fatigue/asthenia (57%), nausea (33%), diarrhea (25%), and vomiting (21%). The MARGENZA U.S. Prescribing Information has a BOXED WARNING for left ventricular dysfunction and embryo-fetal toxicity. In addition, MARGENZA can cause infusion-related reactions (IRRs). IRRs occurred in 13% of patients treated with MARGENZA, with the majority reported as Grade 2 or less. Grade 3 IRRs occurred in 1.5% of patients.

Partnered Programs

Retifanlimab

Retifanlimab is an investigational mAb targeting PD-1. Marketed antibodies targeting this checkpoint molecule have shown clinical efficacy in the treatment of various tumors by releasing the "brakes" of the immune system and helping to restore the immune system's ability to detect and kill tumor cells. In 2017, we licensed retifanlimab to Incyte Corporation (Incyte) under a global collaboration and license agreement (Incyte Agreement), although we retain the right to develop the molecule in combination with product candidates from our pipeline.

Under the terms of the Incyte Agreement, we are eligible to receive up to $665 million in remaining development, regulatory and commercial milestones from Incyte. In addition, we are eligible to receive tiered royalties of 15% to 24% on any global net sales of the product.

Incyte has stated it is pursuing development of retifanlimab in potentially registration-enabling indications, including in patients with Merkel cell carcinoma, squamous carcinoma of the anal canal, microsatellite instability-high, or MSI-high, endometrial cancer and non-small cell lung cancer. Incyte is also pursuing development of retifanlimab in combination with multiple product candidates from its pipeline.

IMGC936

IMGC936 is an ADC that targets ADAM9, a cell surface protein over-expressed in several solid tumor types. IMGC936 is being advanced under a co-development agreement with ImmunoGen, Inc. (ImmunoGen). Under the 50/50 collaboration, ImmunoGen is leading clinical development and has completed Phase 1 dose escalation and initiated dose expansion in NSCLC and triple negative breast cancer. ImmunoGen has indicated they anticipate sharing initial data in the second quarter of 2023.

Teplizumab

In 2018, we entered into an asset purchase agreement (Asset Purchase Agreement) with Provention Bio, Inc. (Provention) pursuant to which they acquired our interest in teplizumab, a monoclonal antibody we had been developing for the treatment of type 1 diabetes. Teplizumab has been granted Breakthrough Therapy Designation by the FDA and PRIority MEdicines (PRIME) designation by the European Medicines Agency.

On November 17, 2022, the FDA approved TZIELD™ (teplizumab-mzwv) to delay the onset of Stage 3 type 1 diabetes (T1D) in adult and pediatric patients aged 8 years and older with Stage 2 T1D. Under the Asset Purchase Agreement, Provention is obligated to pay us contingent milestone payments totaling $170 million upon the achievement of certain regulatory approval milestones, including $60 million for the approval of a BLA for a first indication in the United States. In addition, Provention is obligated to make contingent milestone payments to us totaling $225 million upon the achievement of certain sales milestones as well as a single-digit royalty on net sales of the product. On November 30, 2022, we and Provention entered into Amendment No. 1 (APA Amendment) to the Asset Purchase Agreement. Pursuant to the APA Amendment, the $60.0 million milestone payment related to the achievement of FDA approval was revised to require the amount to be paid in four equal installments rather than within 90 days of approval. Under the Amendment, Provention paid us $15.0 million on each of November 30, 2022 and March 1, 2023, and is required to pay us $15.0 million on each of June 1, 2023 and September 1, 2023.

In March 2023, we sold our royalty interest in TZIELD to a wholly-owned subsidiary of DRI Healthcare Trust (DRI). We retain our other economic interests related to TZIELD, including future potential regulatory and commercial milestones. We received a $100.0 million upfront payment from DRI for the sale of our single-digit royalty on global net sales of TZIELD. We retain the right to receive a 50% share of the royalty on global net sales above a certain annual threshold. In addition, we are eligible to receive up to $50.0 million from DRI upon the occurrence of pre-specified events tied to the advancement of TZIELD for the treatment of newly diagnosed T1D and may also receive an additional $50.0 million if TZIELD achieves a certain level of net sales.

PRV-3279

In 2018, we also entered into a license agreement with Provention pursuant to which we granted them exclusive global rights for the purpose of developing and commercializing PRV-3279 (formerly MGD010), a CD32B × CD79B DART molecule being developed for the treatment of autoimmune indications. Provention is initially developing PRV-3279 for the interception of systemic lupus erythematosus (SLE), a chronic autoimmune disorder characterized by an abnormal overactivation of B cells and subsequent pathologic production of auto-antibodies. Provention has disclosed that it believes PRV-3279 also has the potential to prevent or reduce the immunogenicity of biotherapeutics, including but not limited to gene therapy vectors and transgenes.

Provention disclosed in the first quarter of 2022 that they had initiated a Phase 2a trial in SLE of PRV-3279. The PREVAIL-2 study is a Phase 2a proof-of-concept (POC) study in moderate-to-severe SLE patients induced into response with a short course of corticosteroids, and then monitored for relapse, after randomization to either PRV-3279 or placebo treatment. Provention has indicated that it expects to report top-line results of the PREVAIL-2 study in the second half of 2024.

HIV DART Molecules

We are developing MGD014 and MGD020 under a contract awarded to us in September 2015 by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health. These bispecific DART molecules are designed to target the viral envelope (Env) protein of human immunodeficiency virus (HIV) infected cells and CD3 on T cells to redirect the immune system's T cells to kill HIV-infected cells. These molecules may become a key part of a strategy to reduce or eliminate latent HIV reservoirs in conjunction with latency-reversing agents. MGD014 and MGD020 target the gp120 and gp41 subunits of HIV Env, respectively. A Phase 1 study of MGD014 in persons with HIV maintained on antiretroviral therapy has been completed and a Phase 1 study of MGD020 alone and combined with MGD014 initiated in 2022.

Our Therapeutic Area Focus: Cancer

Cancer is a broad group of diseases in which cells divide and grow in an uncontrolled manner, forming malignancies that can invade other parts of the body. In normal tissues, the rates of new cell growth and cell death are tightly regulated and kept in balance. In cancerous tissues, this balance is disrupted as a result of mutations, causing unregulated cell division or proliferation that leads to tumor formation and growth. While tumors can grow slowly or rapidly, the dividing cells will nevertheless accumulate, and the normal organization of the tissue will become disrupted. Cancers subsequently can spread throughout the body by processes known as invasion and metastasis. Once cancer spreads to sites beyond the primary tumor, it generally becomes more difficult to treat and may be incurable. Cancer cells that arise in the lymphatic system and bone marrow are referred to as hematological malignancies. Cancer cells that arise in other tissues or organs are referred to as solid tumors. Cancer can arise in virtually any part of the body, with the most common types arising in the prostate gland, breast, lung, colon and skin. Cancer is the second leading cause of death in the United States, exceeded only by heart disease. An increasing number of people are also living longer with cancer.

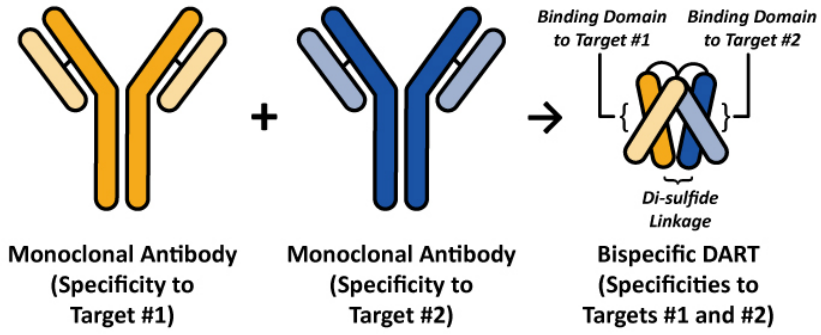
We believe that our platforms position us very well strategically to actively develop approaches for the treatment of both solid tumors and hematologic malignancies.

Our Platforms and Technology Expertise

We apply our understanding of disease biology, immune-mediated mechanisms and next generation antibody technologies to design specifically targeted antibody-based product candidates based on our DART, Fc Optimization and licensed ADC platforms. Through these platforms we have designed antibody-based product candidates that have the potential to improve on standard treatments by having one or more of the following attributes: (1) multiple specificities; (2) increased abilities to interact with the body's immune system to fight tumors; (3) capacity to bind more avidly to antigen targets: (4) increased potency; (5) reduced immunogenicity or (6) the ability to target and kill cancer cells that are resistant to standard treatments. Moreover, these technology platforms are complementary in certain cases and can be combined to address the complex biology of cancer.

DART and TRIDENT Platforms: Our Proprietary Approach to Engineer Multi-Specific Antibodies

We use our DART platform to create derivatives of antibodies with the ability to bind to two distinct targets instead of a single one found in traditional monoclonal antibodies. DART product candidates are therefore bispecific. An example of a bispecific molecule from our DART platform is illustrated below:

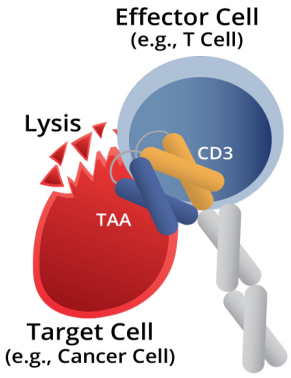


Because cancer cells have developed ways to escape the immune system, we have created DART molecules, which are alternative antibody-like structures with more potent immune properties than the parent antibody molecules from which they are derived. The two variable regions of an antibody are mono-specific and are able to target only a single type structural component of an antigen. For many years, researchers have sought to create recombinant molecules that are capable of targeting two antigens or epitopes (i.e., specific part of an antigen bound by the antibody) within the same molecule. The challenges in creating such molecules have been the instability of the resulting bispecific molecules and their inherently short half-lives, as well as the inefficiencies in manufacturing these compounds. We believe our DART platform has overcome these engineering challenges by incorporating proprietary covalent di-sulfide linkages and particular amino acid sequences that efficiently pair the chains of the DART molecule. This is designed to provide a structure with enhanced manufacturability, long-term structural stability and the ability to tailor the half-lives of the DART molecules to their clinical needs. This engineered antibody-like protein has a compact and stable structure and enables the targeting of two different antigens with a single recombinant molecule.

The DART platform has been specifically engineered to accommodate virtually any variable region sequence with predictable expression, folding and antigen recognition. We believe our multi-specific platforms may provide a significant advantage over current biological interventions in cancer, autoimmune disorders and infectious disease by enabling a range of modalities, including those described below.

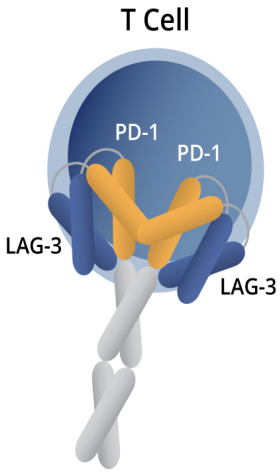
Our DART platform enables us to design multi-specific molecules that seek to exploit different mechanisms of action, including those set forth below.

- *Redirected T cell activation and killing.* In this version of the DART molecule, we are engaging the cancer-fighting properties of the immune effector cells, such as T lymphocytes to: (1) recognize and bind to proteins expressed on a cancer cell, or tumor associated antigens (e.g., CD123), (2) enable the recruitment of all types of cytotoxic, or cell killing, T cells, irrespective of their ability to recognize cancer cells (e.g., CD3, a common component of the T cell antigen receptor) and (3) trigger T cell activation, expansion, and cell killing mechanisms to destroy a cancer cell. The outcome is that any of the body's T cells, in theory, could be recruited to destroy a cancer cell and thus, are not limited to the small numbers of specific T cells that might have been generated in response to cancer to kill tumor cells. Furthermore, given the design of a DART molecule, since any T cell could be recruited for this killing process, relatively small amounts of a DART molecule may be required to trigger this potent immune response. Additionally, the compact structure of the DART protein makes it well suited for maintaining cell-to-cell contact, which we believe contributes to the high level of target cell killing. Our DART molecules that redirect T cells against cancer or other targets, including MGD024, are manufactured using a conventional antibody platform without the complexity of having to genetically modify T cells from individual patients, as would be required by approaches such as CAR T cells. We have continued to evolve our bispecific platform with the introduction of a next-generation CD3-engaging DART technology designed to recruit, engage and activate T cells to kill tumor target cells with reduced release of pro-inflammatory cytokines. This next-generation CD3 DART platform is aimed at addressing cytokine-release syndrome, the most frequent and often dose-limiting adverse event associated with CD3-engaging molecules. We believe the next-generation CD3 DART platform could expand the therapeutic window of CD3-engaing DART molecules and further increase their potential application in oncology.



Product Candidates:
MGD024 (CD123 × CD3)
MGD014 (HIV × CD3)

- *Targeting of multiple co-inhibitory receptors or checkpoints, such as those involved in inhibiting T cell responses.* The immune system generally prevents the development of autoimmune phenomena by regulating activated immune cells that have responded to non-self or foreign antigens. This negative feedback loop is triggered by the interactions of co-inhibitory receptors, or checkpoint molecules, expressed on the immune cells with ligands expressed by other cells, such as antigen-presenting cells. This phenomenon is exploited by cancer, whereby tumor cells express checkpoint ligands that block the development of an immune response against the tumor. Antibodies that block the interaction of checkpoint molecules with their ligands have been shown to significantly improve the clinical outcomes of patients with certain advanced cancers. Because of the diversity of immune checkpoint pathways, blockade of a single axis, while clinically significant, as shown in the case of the blockade of the PD-1/PD-L1 axis with pembrolizumab or nivolumab, will not benefit all patients. In fact, combinations of checkpoint inhibitors, such as nivolumab and ipilimumab, a CTLA-4 blocker, have resulted in significantly enhanced benefit compared to ipilimumab or nivolumab alone. We believe that DART molecules targeting two immunoregulatory pathways, such as two checkpoints in a single molecule, could afford the clinical benefit of the combination together with the potential for synergistic activity, as well as significant advantages in manufacturing, simplified clinical development, and enhanced patient convenience.



Product Candidates:
Tebotelimab (PD-1 × LAG-3)
Lorigerlimab (PD-1 × CTLA-4)

In addition to the ability to tailor a DART molecule's valency, we have the capacity to modify the strength by which the binding sites attach to their targets and the molecule's half-life in the blood circulation after delivery to a patient. Furthermore, when an Fc domain is coupled with a DART molecule, additional changes can be included that can modulate the DART molecule's engagement with different immune cells.

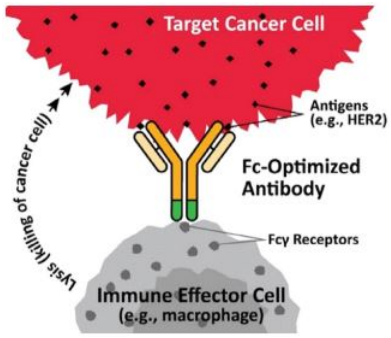
We are currently developing product candidates using this technology, including lorigerlimab, MGD024, tebotelimab, MGD014 and MGD020 in clinical trials, as well as others in preclinical development.

We have also advanced beyond our DART platform to establish a TRIDENT platform, which reflects the continuing evolution of our multi-specific antibody-based targeting expertise. Built on the DART module, the trivalent TRIDENT platform incorporates in an Ig-like format an additional domain capable of engaging an independent antigen. With the inclusion of a third targeting arm, TRIDENT molecules enable a broader range of mechanisms of action than bispecific targeting, allowing, for instance, the engagement of multiple antigens on a single or on different cells or enabling enhanced target selectivity by modulating the avidity of one of two antigens. Product candidates using this technology are currently in preclinical development.

Fc Optimization Platform: Our Proprietary Approach to Enhance Immune-Mediated Cancer Cell Killing

To enhance the body's immune ability, we developed our Fc Optimization platform which introduces certain mutations into the Fc region of an antibody and is able to modulate antibody interaction with immune effector cells. Such interaction enhances the body's immune ability to mediate the killing of cancer cells through antibody-dependent cellular cytotoxicity (ADCC).

ADCC



The Fc region mediates the function of IgG antibodies by binding to different activating and inhibitory receptors, referred to as FcγRs, on immune effector cells found within the innate immune system. By engineering Fc regions to bind with an increased affinity to the activating FcγRs and with a reduced affinity to the inhibitory FcγRs, we have been able to impart a more effective immune response and improve effector functions, such as ADCC. This is another example in which small changes in antibody structure can confer improvements on normal immune processes.

We have established a proprietary platform to engineer, screen, identify and test antibodies' Fc regions with customizable activity. In particular, we have licenses to use transgenic mice that express human FcγRs. These mice can be used for in vivo testing of antibodies that incorporate Fc domain variants, including those antibodies intended for cancer therapy.

To date, we have successfully incorporated our Fc variants in two of our antibody-based molecules, margetuximab and enoblituzumab. In vitro, the modified Fc region of margetuximab increases binding to the activating Fc receptor FCGR3A (CD16A) and decreases binding to the inhibitor Fc receptor FCGR2B (CD32B). These changes lead to greater in vitro ADCC and NK cell activation. The clinical significance of in vitro data is unknown.

Licensed ADC Platforms

We have licensed ADC platforms from collaboration partners to leverage their past investment in proprietary linker-toxin technology and know-how. While we don’t necessarily believe there is a single best linker-toxin technology capable of addressing all targets and indications, we have selected what we believe are best-in-class technologies for construction of each of our ADC product candidates. For example, to date we have utilized linker-toxin payloads developed by Byondis for vobra duo, by ImmunoGen for IMGC936 and by Synaffix B.V. (Synaffix) for multiple, non-disclosed preclinical molecules. Utilizing Synaffix’s ADC technology, we anticipate submitting an Investigational New Drug (IND) application for an undisclosed ADC product candidate in late 2023.

Our Collaborations

Throughout our company's history, we have entered into collaborations with other biopharmaceutical companies and plan to continue to do so. We enter into collaborations when there is a strategic advantage to us and when we believe the

financial terms of the collaboration are favorable for meeting our short-term and long-term strategic objectives. We are not dependent upon any one of these collaborations, but in many cases, we have rights to receive sales royalties and other significant financial payments if the partnered product candidates achieve certain development and sales milestones. We endeavor to establish collaborations that preserve our right to participate in future commercialization, for example by securing co-promotion or profit-sharing rights under certain circumstances.

We pursue a balanced approach between product candidates that we develop ourselves and those that we develop with our collaborators. Under our strategic collaborations to date, we have received significant non-dilutive funding and continue to have rights to additional funding upon completion of certain research, achievement of key product development milestones and royalties and other payments upon the commercial sale of products. Each of our collaborations has a unique set of terms and conditions.

Intellectual Property

We strive to protect the proprietary technologies that we believe are important to our business, including seeking and maintaining patents intended to protect, for example, the composition of matter of our product candidates, their methods of use, the technology platforms used to generate them, related technologies and/or other aspects of the inventions that are important to our business. We also rely on trade secrets, confidentiality and invention assignment agreements and careful monitoring of our proprietary information to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

Our success will depend significantly on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business. In addition, there is cost and risk to our business in defending and enforcing our patents, maintaining our licenses to use intellectual property owned by third parties and preserving the confidentiality of our trade secrets and operating without infringing the valid and enforceable patents and other proprietary rights of third parties. We also rely on know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen and maintain our proprietary positions. We currently use multiple industry-standard patent monitoring systems to monitor new United States Patent and Trademark Office (USPTO) filings for any applications by third parties that may infringe on our patents.

The patent positions of biopharmaceutical companies like us are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted by the courts after issuance. Consequently, we do not know whether any of our product candidates will be protectable or remain protected by enforceable patents. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold may be challenged, narrowed, circumvented or invalidated by third parties.

A third party may hold patents or other intellectual property rights that are important to or necessary for the development of our product candidates or use of our technology platforms. It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our product candidates, in which case we would be required to obtain a license from these third parties on commercially reasonable terms, or our business could be harmed, possibly materially. For example, certain patents held by third parties cover Fc engineering methods and mutations in Fc regions to enhance the binding of Fc regions to Fc receptors on immune cells. Although we believe that these patents are not infringed, invalid, and unenforceable, should a court find that they cover margetuximab or enoblituzumab and we are unable to invalidate them, or if licenses for them are not available on commercially reasonable terms, our business could be harmed, perhaps materially.

Because patent applications in the United States and certain other jurisdictions can be maintained in secrecy for 18 months or potentially even longer, and because publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain of the priority of inventions covered by pending patent applications. Moreover, we may have to participate in interference proceedings declared by the USPTO to determine priority of invention. In the ordinary course of business we participate in post-grant challenge proceedings, such as oppositions, that challenge the patentability of third party patents. Such proceedings could result in substantial cost, even if the eventual outcome is favorable to us.

Pipeline Patent Protection

As of December 31, 2022, we held 87 patents in the United States with 45 patent applications pending and 757 patents in other countries of the world with 487 patent applications pending. In addition to patents and patent applications generally providing protection for various aspects of our Fc Optimization, DART, and TRIDENT platforms, we have patent and patent applications for the composition of matter of each of our clinical pipeline product candidates and, in some cases, we also have

other patents and patent application related to various aspects of the technology underlying these product candidates or their methods of use.

Patent terms may be adjusted or extended, as described in greater detail below, in certain circumstances. However, assuming no adjustments or extensions, the primary composition of matter patent for each of our clinical pipeline product candidates is expected to expire in the following timeframes:

Product or Product Candidate	Expiration Date
margetuximab	2029
enoblituzumab	2031
retifanlimab	2036
tebotelimab	2036*
lorigerlimab	2036
vobramitamab duocarmazine	2037
MGD024	2039*

* *pending*

Patent Term Extension and Reference Product Exclusivity

The Hatch-Waxman Act permits a patent term extension for FDA-approved drugs, including biological products, 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. If and when our pharmaceutical product candidates receive FDA approval, we expect to apply, or have applied, for patent term extensions on patents covering those products. We intend to seek, and are seeking, patent term extensions to our issued patents in any jurisdiction where these are available. For example, we have submitted a request to obtain patent term extension of U.S. Patent No. 8,802,093, the primary composition of matter patent for margetuximab. However, there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions.

The Patient Protection and Affordable Care Act, as amended by the Healthcare and Education Affordability Reconciliation Act (collectively the ACA) created a regulatory scheme authorizing the FDA to approve biosimilars via an abbreviated licensure pathway. In many cases, this allows biosimilars to be brought to market without conducting the full suite of clinical trials typically required of originators. Under the ACA, a manufacturer may submit an application for licensure of a biologic product that is "biosimilar to" or "interchangeable with" a previously approved biological product or "reference product." The "biosimilar" application must include specific information demonstrating biosimilarity based on data derived from: (1) analytical studies, (2) animal studies, and (3) a clinical study or studies that are sufficient to demonstrate safety, purity, and potency in one or more appropriate conditions of use for which the reference product is licensed, except that FDA may waive some of these requirements for a given application. Under this new statutory scheme, an application for a biosimilar product may not be submitted to the FDA until four years after the date of first licensure. The FDA may not approve a biosimilar product until 12 years from the date on which the reference product was first licensed. The law does not change the duration of patents granted on biological products. Even if a product is considered to be a reference product eligible for exclusivity, another company could market a competing version of that product if the FDA approves a full BLA for such 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. There have been persistent proposals to repeal or modify the ACA and it is uncertain how any of those proposals, if in the future approved, would affect these provisions.

Trade Secrets

We also rely on trade secret protection for our confidential and proprietary information. Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. Thus, we may not be able to meaningfully protect our trade secrets. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to

execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. 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 the work or services they render under such agreements or grant us an option to negotiate a license to use such inventions.

In-Licensed Intellectual Property

We have entered into patent and know-how license agreements that grant us the rights to use certain technologies related to biological manufacturing for our commercial and clinical product candidates, such as but not limited to technology related to the conjugation of cytotoxic payloads to our antibody drugs. We anticipate using these technologies for future product candidates. These licensors have businesses dedicated to licensing this type of technology and we anticipate that licenses to use these technologies for our future products will be available. The licenses typically include yearly maintenance payments and sales royalties, and may also include upfront payments or milestone payments.

Manufacturing

We currently manufacture drug substance for most of our clinical trials at our manufacturing facility located in Rockville, Maryland. We also rely on contract manufacturers, including Byondis, Synaffix and Millipore Sigma, for producing components of our ADC candidates. We have supplemented our drug substance manufacturing capacity through an arrangement with AGC Biologics, Inc. (AGC, formerly CMC Biologics, Inc.), a contract manufacturing organization, and commercially produced initial margetuximab commercial supply and inventory at AGC. In October 2021, the FDA approved the BLA supplement to add our commercial manufacturing site at 9704 Medical Center Drive in Rockville, Maryland as a licensed manufacturing site for margetuximab drug substance. We commercially produce material for MARGENZA as well as intend to commercially produce our and partner’s product candidates when and if approved by the FDA. In addition, we currently rely on and will continue to rely on contract fill-finish service providers, primarily Ajinomoto Bio-Pharma Services and Baxter Healthcare Corporation, to fulfill our fill-finish needs for our current and future product candidates.

Most of the principal materials we use in our manufacturing operations are available from more than one source. However, we obtain certain raw materials principally from only one source. In the event one of these suppliers was unable to provide the materials or product, we generally seek to maintain sufficient inventory to supply the market until an alternative source of supply can be implemented. However, in the event of an extended failure of a supplier or general national supply chain disruption, it is possible that we could experience an interruption in supply until we established new sources or, in some cases, implemented alternative processes.

Production processes for biological therapeutic products are complex, highly regulated, and vary widely from product to product. Shifting or adding manufacturing capacity can be a very lengthy process requiring significant capital expenditures, process modifications, and regulatory approvals. Accordingly, if we were to experience extended plant shutdowns at our own facility, extended failure of a contract supplier or contract manufacturing organization, or extraordinary unplanned increases in demand, we could experience an interruption in supply of certain products or product shortages until production could be resumed or expanded.

Commercialization

MARGENZA is currently our only approved product in the U.S. In November 2020, we partnered with Eversana, a pioneer of next-generation commercial services to the global life sciences industry, to commercialize margetuximab in the U.S. by leveraging their integrated commercial services. Under the terms of the agreement, we maintain ownership of margetuximab, including all manufacturing, regulatory and development responsibilities for the product. Eversana received a co-exclusive right to conduct approved commercialization activities. Eversana utilizes its internal capabilities to support sales and marketing, market access, channel management services, data and analytics, medical affairs, and other patient access related services; we book MARGENZA sales. We and Eversana equally share in funding Eversana’s commercialization expenses. In exchange for co-funding these expenses, Eversana is eligible to earn future revenue share payments which shall be capped at 125% of Eversana’s cumulative service fees. The term of the agreement is five years following the date of FDA approval, subject to predefined termination provisions.

We cannot market or promote a new product in a country until a marketing application has been approved by the appropriate regulatory authority for that jurisdiction. Subject to receiving marketing authorization in a jurisdiction, we believe we will be able to commercialize in that market through arrangements with third-party commercial partners. Other than through our arrangement with Eversana for MARGENZA, we have not established a sales, marketing or distribution capabilities. If we are unable to enter into third-party commercial arrangements for other product candidates with respect to the United States, we believe that we could potentially put in place an appropriately sized organization to commercialize our approved product or products. Outside the United States, our strategy is to enter into arrangements with third-party commercial partners for any of our product candidates that obtain marketing approval.

Competition

There are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. These treatments consist both of small molecule drug products, as well as biologic therapeutics that work by using next-generation antibody technology platforms to address specific cancer targets. In particular, MARGENZA is directed against HER2 and many companies have cancer therapeutics directed against HER2 that are either currently approved and on the market or may be in development, such as F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc. (Roche), particularly through its affiliate, Genentech, Inc., as well as Puma Biotechnology, Inc., Daiichi Sankyo Company, Limited and AstraZeneca plc. (AstraZeneca), Seagen Inc., Zymeworks, Inc., Shanghai Hengrui Pharmaceutical, and Byondis, many of which have significantly greater resources than we do. Market competition has limited the utilization of MARGENZA as a therapeutic, and these competitors as well as biosimilar trastuzumab competition may limit such utilization in the future.

In addition, the immuno-oncology field is competitive, with treatments currently approved and, on the market, or in development for various tumor types and patient populations from a variety of different companies such as Merck & Co., Inc. (Merck), The Bristol-Myers Squibb Company (BMS), and Roche, all of which have significantly greater resources than we do. Many of our pipeline programs, if successful, will likely face significant competition both by therapeutics that are already being marketed as well as those that will be approved for marketing before our programs. In particular, we are developing PD-1-directed product candidates, including a monoclonal antibody that we have outlicensed and two DART molecules. Merck, BMS, Roche, AstraZeneca, Pfizer Inc., Merck KGaA, and Regeneron Pharmaceuticals, Inc. all have approved products that target either the PD-1 receptor or its ligand, PD-L1, and there are several other companies that have anti-PD-1 or anti-PD-L1 antibodies in clinical development, all of which would compete with our PD-1-directed programs. In addition, these and other companies are developing product candidates directed against other immuno-oncology targets that we are pursuing through our bispecific approaches.

Further, several companies are also developing therapeutics that work by targeting multiple specificities using a single recombinant molecule. Amgen Inc. has obtained marketing approval for one product that works by targeting antigens both on immune effector cell populations and those expressed on certain cancer cells, and has other product candidates in development that use this mechanism. In addition, other companies are developing new treatments for cancer that utilize multi-specific approaches, including Abbvie Inc., Affimed N.V., Eli Lilly and Company, Genmab A/S, Merus B.V., Regeneron, Roche, AstraZeneca, Xencor, Inc. and Zymeworks, Inc.

Finally, our competition in the contract development and manufacturing organization (CDMO) market includes a number of full-service contract manufacturers and large pharmaceutical companies offering third-party development and manufacturing services to fill their excess capacity. Large pharmaceutical companies have been seeking to divest portions of their manufacturing capacity, and any such divested businesses may compete with us in the future. In addition, most of our competitors have substantially greater financial, marketing, technical or other resources than we do.

Many of our competitors have significantly greater financial, manufacturing, marketing, drug development, technical and human resources than we do. Mergers and acquisitions in the pharmaceutical, biotechnology and diagnostic industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining top qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

The key competitive factors affecting the success of all of our therapeutic product candidates, if approved, are likely to be their efficacy, safety, dosing convenience, price, the effectiveness of companion diagnostics in guiding the use of related therapeutics, the level of generic or biosimilar competition and the availability of reimbursement from government and other third-party payors. In addition, the standard of medical care provided to cancer patients continues to evolve as more scientific and medical information becomes available. These changes in medical care relate to pharmaceutical products, but are also

affected by other factors, and such changes can positively or negatively affect the prospects of our product candidates as well as those of our competitors.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are more effective, have fewer or less severe effects, are more convenient or are less expensive than any products that we may develop, or the standards of care for cancer patients change while our clinical trials are ongoing. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of biosimilar products. Biosimilar products are expected to become available over the coming years. For example, trastuzumab biosimilars have been approved in the U.S. by the FDA.

The most common methods of treating patients with cancer are surgery, radiation and drug therapy. There are a variety of available drug therapies marketed for cancer. Many of these approved drugs are well established therapies and are widely accepted by physicians, patients and third-party payors. In many cases, these drugs are administered in combination to enhance efficacy. While our product candidates may compete with many existing drug and other therapies, to the extent an approved drug is ultimately used in combination with or as an adjunct to these therapies, our product candidates will not be competitive with the approved drug.

Government Regulation and Product Approval

Government authorities in the United States, at the federal, state and local level, and in other countries extensively regulate, among other things, the research, development, testing, manufacture, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, pricing, reimbursement, marketing, import and export of pharmaceutical products such as those we are developing. The processes for obtaining regulatory approvals in the United States and in foreign countries, along with subsequent compliance with applicable statutes and regulations, require the expenditure of substantial time and financial resources.

FDA Regulation

All of our current product candidates are subject to regulation in the United States by the FDA as biological products (biologics). The FDA subjects biologics to extensive pre- and post-market regulation. The Public Health Service Act, the Federal Food, Drug, and Cosmetic Act (FDCA) 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 biologics. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending BLAs, withdrawal of approvals, clinical holds, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties, or criminal penalties.

Preclinical Studies. Drug development in our industry is complex, challenging and risky; failure rates are high. Product development cycles are long - approximately 10 to 15 years from discovery to market. A potential new biological product must undergo many years of preclinical and clinical testing to establish it is pure, potent and safe.

Preclinical studies include laboratory evaluation of product chemistry, formulation and toxicity, pharmacology, 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 the FDA's good laboratory practice (GLP) regulations and the U.S. Department of Agriculture's regulations implementing the Animal Welfare Act. After laboratory analysis and preclinical testing in animals, we file an IND application with the FDA to begin human testing. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature, and a proposed clinical trial protocol, among other things, to the FDA as part of an IND application. Certain preclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue even after the IND application is submitted. An IND application automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the clinical trial on a clinical hold or agrees on an alternate approach with us. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the IND application is cleared and the clinical trial can begin. As a result, submission of an IND application may not result in the FDA allowing clinical trials to commence.

Clinical Development. Clinical trials involve the administration of the investigational drug to human subjects (healthy volunteers or patients) under the supervision of a qualified investigator. Clinical trials must be conducted: (i) in compliance with all applicable federal regulations and guidance, including those pertaining to good clinical practice (GCP) standards that are meant to protect the rights, safety, and welfare of human subjects and to define the roles of clinical trial sponsors,

investigators, and monitors; as well as (ii) under protocols detailing, among other things, the objectives of the trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. Each protocol involving testing of a new drug in the United States (whether in patients or healthy volunteers) must be included in the IND application submission, and the FDA must be notified of subsequent protocol amendments. In addition, the protocol must be reviewed and approved by an institutional review board (IRB) and all study subjects must provide informed consent prior to participating in the study. Typically, each institution participating in the clinical trial will require review of the protocol before any clinical trial commences at that institution. Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health (NIH) for public dissemination on their ClinicalTrials.gov website. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and there are additional, more frequent reporting requirements for suspected unexpected serious adverse events.

A study sponsor might choose to discontinue a clinical trial or a clinical development program for a variety of reasons. The FDA may impose a temporary or permanent clinical hold, or 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 subjects. 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 pre-approval phases, but the phases may overlap or be combined, particularly in testing for oncology indications. In Phase 1, testing is conducted in a small group of subjects who may be patients with the target disease or condition or healthy volunteers, to evaluate its safety, determine a safe dosage range, and identify side effects. In Phase 2, the drug is given to a larger group of subjects with the target condition to further evaluate its safety and gather preliminary evidence of efficacy. Phase 3 studies typically last multiple years for oncology indications. In Phase 3, the drug is given to a large group of subjects with the target disease or condition (several hundred to several thousand), often at multiple geographical sites, to confirm its effectiveness, monitor side effects, and collect data to support drug approval. In some cases, the FDA may require post-market studies, known as Phase 4 studies, to be conducted as a condition of approval in order to gather additional information on the drug's effect in various populations and any side effects associated with long-term use. Depending on the risks posed by the drugs, other post-market requirements may be imposed. Only a small percentage of investigational drugs complete all three phases and obtain marketing approval.

Product Approval. After completion of the required clinical testing, a BLA can be 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 preclinical, clinical and other testing and a compilation of data relating to the product's chemistry, manufacture and controls. The cost of preparing and submitting a BLA is substantial. Under federal law, the submission of most BLAs is additionally subject to a substantial application user fee, and annual program user fees also apply. These fees are typically increased annually.

The FDA has 60 days from its receipt of a BLA to determine whether the application will be accepted for filing based on the FDA's threshold determination that it is sufficiently complete to permit substantive review. Once the submission is accepted for filing, the FDA begins a substantive review, and the review period under the PDUFA begins. The standard for reviewing a BLA is whether the product is safe, pure and potent, which has been interpreted to include that the product is safe and effective and has a favorable benefit-risk profile. The FDA's current performance goals call for the FDA to complete review of 90 percent of standard (non-priority) BLAs within 10 months of filing and within six months for priority BLAs, which is 12 months and eight months, respectively, if the 60-day review of the initial application is included in the timeline. In addition, the FDA has developed approaches intended to make certain qualifying products available to patients rapidly - Priority Review, Breakthrough Therapy, Accelerated Approval, and Fast Track. While the timelines for approval under these pathways may be shorter, there are requirements and conditions associated with each pathway, and there can be no assurance that any of our investigational products will be able to meet the conditions or requirements necessary to receive any such designation or be able to receive the review or approval benefits associated with such designations.

The FDA may refer applications for novel products or products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes outside clinicians and other experts, for review, evaluation and a recommendation as to whether sufficient data exist in the application to support product approval. The FDA is not bound by the recommendation of an advisory committee, but it generally gives significant deference to such recommendations.

Before approving a BLA, the FDA will typically inspect one or more clinical sites and possibly the sponsor itself to assure compliance with GCP. Additionally, the FDA will typically inspect the facility or the facilities at which the drug is manufactured. The FDA will not approve the product unless compliance with current Good Manufacturing Practices (cGMPs) is satisfactory. The FDA also reviews the proposed labeling submitted with the BLA and typically requires changes in the labeling text.

After the FDA evaluates the BLA and the manufacturing and testing facilities, it issues either an approval letter or a complete response letter. Complete response letters generally outline the deficiencies in the submission and delineate the additional testing or information needed in order for the FDA to reconsider the application. If and when deficiencies outlined in a complete response letter 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 90 percent of resubmissions within two or six months from receipt depending on the type of information included.

An approval letter authorizes commercial marketing of the drug for the approved indication or indications and the other conditions of use set out in the approved prescribing information. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

As a condition of BLA approval, the FDA may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy and may impose other conditions, including labeling restrictions that can materially affect the potential market and profitability of the product. As a condition of approval, or after approval, the FDA also may require submission of a risk evaluation and mitigation strategy (REMS) to mitigate any identified or suspected serious risks. The REMS may include medication guides, physician communication plans, assessment plans, and elements to assure safe use, such as restricted distribution methods, patient registries, or other risk minimization tools.

Other U.S. Post-Marketing Regulatory Requirements. Once a BLA is approved, a product will be subject to certain post-approval requirements, including those relating to advertising, promotion, adverse event reporting, recordkeeping, and cGMPs, as well as registration, listing, and inspection. There also are continuing, annual program user fee requirements for marketed products, as well as new application fees for supplemental applications with clinical data.

The FDA regulates the content and format of prescription drug labeling, advertising, and promotion, including direct-to-consumer advertising and promotional Internet communications. The FDA also establishes parameters for permissible non-promotional communications between industry and the medical community, including industry-supported scientific and educational activities. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion for uses not consistent with the approved labeling, and a company that is found to have improperly promoted off-label uses or otherwise not to have met applicable promotion rules may be subject to significant liability under both the FDCA and other statutes, including the False Claims Act. See "Other Healthcare Laws and Compliance Requirements" below for more information.

All aspects of pharmaceutical manufacture must conform to cGMPs after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA during which the FDA inspects manufacturing facilities to assess compliance with cGMPs. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMPs and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the areas of production and quality control to maintain compliance with cGMPs.

Products may be marketed only for the approved indications and in accordance with the provisions of the approved labeling. Changes to some of the conditions established in an approved application, including changes in indications, labeling, product formulation or manufacturing processes or facilities, require submission and FDA approval of a new BLA or BLA supplement, in some cases before the change may 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.

Manufacturers are subject to requirements for adverse event reporting and submission of periodic reports following FDA approval of a BLA. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, or failure of Phase 4 studies to meet their specified endpoints, may result in revisions to the approved labeling to add new safety information, the need to conduct additional post-market studies or clinical trials to assess new safety risks, imposition of distribution or other restrictions under a REMS program, or recall of the product and withdrawal of the BLA.

Noncompliance with post-marketing requirements can result in one or more of the following consequences:

- Restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- Warning letters;

- Holds on post-approval clinical trials;
- Refusal of the FDA to approve pending BLAs or supplements to approved BLAs, or suspension or revocation of product license approvals;
- Product seizure or detention, or refusal to permit the import or export of products; or
- Injunctions or the imposition of civil or criminal penalties.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act (PDMA) which regulates the distribution of drugs and drug samples at the federal level and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

Approval of Biosimilars. The ACA authorized the FDA to approve biosimilars via a separate, abbreviated pathway. In many cases, this allows biosimilars to be brought to market without conducting the full suite of clinical trials typically required of originators. The law establishes a period of 12 years of exclusivity for reference products in order to preserve incentives for future innovation, and outlines statutory criteria for science-based biosimilar approval standards that take into account patient safety considerations. Under this framework, exclusivity protects innovator products by prohibiting others, for a period of 12 years, from being granted FDA approval based in part on reliance on or reference to the innovator's data in their application to the FDA. The law does not change the duration of patents granted on biological products. There are regular legislative proposals to rescind or reduce the biologics exclusivity provisions of the ACA and it is uncertain whether or if any of those proposals may be approved, and if approved, how exclusivity for biologics would be affected.

Other Healthcare Laws and Compliance Requirements

We are subject to various federal and state laws pertaining to health care “fraud and abuse,” including anti-kickback and false claims laws, as well as laws related to health care transparency and data protection.. Anti-kickback laws generally prohibit a prescription drug manufacturer from soliciting, offering, receiving, or paying any remuneration to generate business, including the purchase or prescription of a particular drug. Although the specific provisions of these laws vary, their scope is generally broad and there may not be regulations, guidance or court decisions that apply the laws to particular industry practices. There is therefore a possibility that our practices might be challenged under such anti-kickback laws. False claims laws prohibit anyone from knowingly and willingly presenting, or causing to be presented, any claims for payment for reimbursed drugs or services to third party payers (including Medicare and Medicaid) that are false or fraudulent. Violations of fraud and abuse laws may be punishable by criminal or civil sanctions, including fines and civil monetary penalties, and/or exclusion from federal health care programs (including Medicare and Medicaid).

Laws and regulations enacted by the federal government and various states to regulate the sales and marketing practices of pharmaceutical manufacturers with marketed products generally limit financial interactions between manufacturers and health care providers and/or require disclosure to the government and public of such interactions. State laws may also require disclosure of pharmaceutical pricing information and marketing expenditures. Many of these laws and regulations contain ambiguous requirements or require administrative guidance for implementation. We are subject to federal, state and foreign laws that govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways, thus complicating compliance efforts. Given the lack of clarity in laws and their implementation, our activities could be subject to the penalty provisions of the pertinent laws and regulations.

International Regulation

In addition to regulations in the United States, we and our collaborators, may be subject to a variety of foreign regulations governing clinical trials, drug registration, commercial sales and distribution of our product candidates outside the United States. These regulations can vary between jurisdictions and can be more onerous than regulations in the United States. Whether or not we obtain FDA approval for a product candidate, we must obtain approval from the comparable regulatory authorities of foreign countries or economic areas, such as the European Union (EU) before we may commence clinical trials or market products in those countries or areas. The approval process and requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from place to place, and the time to approval may be longer or shorter than that required for FDA approval.

Certain countries outside of the United States have a process that requires the submission of a clinical trial application (CTA) much like an IND prior to the commencement of human clinical trials. In Europe, for example, a CTA must be submitted to the competent national health authority and to independent ethics committees in each country in which a company intends to conduct clinical trials. Once the CTA is approved in accordance with a country’s requirements, clinical trial

development may proceed in that country. In all cases, the clinical trials must be conducted in accordance with GCP, and other applicable regulatory requirements. A separate CTA must be submitted for each clinical trial to be conducted.

In the EU, for example, to obtain regulatory approval of an investigational medicinal product, we must submit a marketing authorisation application (MAA). The content of the MAA is similar to that of a New Drug Application or BLA filed in the United States, with the exception of, among other things, EU-specific document requirements. Under the EU regulatory system, a company may submit marketing authorisation applications either under a centralised or decentralised procedure. Under the centralised procedure in the EU, a MAA is submitted to the European Medicines Agency (EMA) where it will be evaluated by the Committee for Medicinal Products for Human Use (CHMP). The maximum timeframe for a CHMP evaluation of an MAA that has been validated is 210 days, excluding time taken by an applicant to respond to questions. A favorable opinion on the application by the CHMP will typically result in the granting of the marketing authorisation by the European Commission within 67 days of receipt of the opinion. Generally, the entire review process takes approximately 13-14 months. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest, particularly from the point of view of therapeutic innovation. In this circumstance, the EMA ensures that the opinion of the CHMP is given within 150 days, excluding time taken by an applicant to respond to questions.

As in the United States, we or our collaborators may apply for designation of a product as an orphan drug for the treatment of a specific indication in the EU before the MAA is made. Orphan drugs in Europe enjoy certain benefits, including up to 10 years of exclusivity for the approved indication unless another applicant can show that its product is safer, more effective or otherwise clinically superior to the orphan designated product. The PRIME initiative was established by the EMA to help promote and foster the development of new medicines in the EU that demonstrate potential for a major therapeutic advantage in areas of unmet medical need. Benefits from the PRIME designation include early confirmation of potential for accelerated assessment, early dialogue and increased interaction with relevant regulatory committees to discuss development options, scientific advice at key development milestones, and proactive regulatory support from the EMA.

If we, or our collaborators, fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

BioPharmaceutical Coverage, Pricing, Reimbursement, and Health Care Reform

In the United States and other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of adequate reimbursement from third-party payors, including government health administrative authorities, managed care providers, private health insurers, and other organizations. Third-party payors are increasingly examining the medical necessity and cost effectiveness of medical products and services in addition to safety and efficacy and, accordingly, significant uncertainty exists as to the reimbursement status of newly approved therapeutics. Third-party reimbursement adequate to enable us to realize an appropriate return on our investment in research and product development may not be available or optimal for our products. Further, coverage policies and third-party payor reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. In addition, companion diagnostic tests require coverage and reimbursement separate and apart from the coverage and reimbursement for their companion pharmaceutical or biological products. Similar challenges to obtaining coverage and reimbursement, applicable to pharmaceutical or biological products, will apply to companion diagnostics.

Drug prices have become a subject of increased focus in recent years. Although there are currently no direct government price controls over private sector purchases in the U.S., federal law requires pharmaceutical manufacturers to pay prescribed rebates on certain government or Medicaid-reimbursed drugs to enable them to be eligible for reimbursement under certain public healthcare programs such as Medicaid and Medicare Part B. Various states have adopted further mechanisms that seek to control drug prices, including by disfavoring certain higher priced drugs or by seeking supplemental rebates from manufacturers. Managed care has also become a potent force in the marketplace that increases downward pressure on the prices of pharmaceutical products.

Public and private healthcare payers control costs and influence drug pricing through a variety of mechanisms, including through negotiating discounts with the manufacturers and through the use of tiered formularies and other mechanisms that provide preferential access to certain drugs over others within a therapeutic class. Payers also set other criteria to govern the uses of a drug that will be deemed medically appropriate and therefore reimbursed or otherwise covered.

Moreover, in the U.S., there have been 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 products.

Human Capital Management

As of December 31, 2022, we had 357 full-time employees, 292 of whom were primarily engaged in research, development and manufacturing activities, and 67 of whom had an M.D. and/or Ph.D. Our employees are critically important to the achievement of our company's mission and goals.

Our senior leadership oversees all human capital management matters and are committed to attracting, developing, engaging and retaining the best people. We strive to offer our employees an intellectually challenging and diverse work environment, opportunities to expand their knowledge and skills, to receive feedback on performance, and for career advancement. We believe management's relationships with our employees is very positive and they are not subject to a collective bargaining agreement or represented by a trade or labor union.

Compensation and Benefits

Our compensation programs are designed to align our employees' interests with our business goals and stockholder returns. We provide employee wages that are competitive within our industry, and we engage a outside compensation and benefits consulting firm to independently evaluate the effectiveness of our compensation and benefit programs and to provide benchmarking against our peers within the industry. We link annual changes in compensation to overall Company performance, as well as each individual's contribution to the results achieved. The emphasis on overall Company performance is intended to align the employee's financial interests with the interests of stockholders. MacroGenics is committed to providing our employees with a benefits program that is both comprehensive and competitive. Our benefits program offers health care, dental and vision coverage, along with benefits designed provide increased financial security to our employees and their families.

We maintain an Employee Stock Purchase Plan under which employees may purchase Company common stock through payroll deductions at a price equal to 85% of the fair market value of the stock as of the end of the offering periods.

Our Culture; Diversity Equity and Inclusion

Our Living Values are the backbone of our culture: *Patients First, Do It Right, Innovate, Pitch In, Take Action* and *Be Inclusive*.
In 2022, we kicked off a number of initiatives to reinforce the importance of a diverse workforce and culture of belonging to our Company's success. We added the Living Value, *Be Inclusive*, and completed company-wide training on Diversity, Equity and Inclusion. To further champion our DEI efforts, we formed a DEI Committee with strong advocacy from our senior leadership team and our board of directors. The Committee focused on raising awareness of DEI in 2022 and held a number of focus groups and company wide events.

All employees are required to observe high standards of business and personal ethics and must adhere to our Code of Business Conduct and Ethics, for which they receive training annually. The Code requires reporting any actual or suspected misconduct, illegal activities or fraud. To that end, we maintain a Speak Up Culture where all employees are encouraged to raise issues, report concerns, and ask questions. We also maintain an anonymous hotline that is available to all of our employees to report any matter of concern. Communications to the hotline (which is facilitated by an independent third party) are routed to our General Counsel (or, if the General Counsel is the subject of the communication, to the Chair of our Audit Committee) for investigation and resolution. We also maintain a policy of no retaliation, where employees who report any misconduct are to be free of any harassment, retaliation or adverse employment consequence.

We periodically conduct employee engagement surveys to understand our employees' perspectives and endeavor to listen, change and improve on how we work together in response to these perspectives. In 2022, 84% of our workforce participated.

Learning and Development

We continue to invest in our employees to achieve their goals and to lead our company through learning and development. We conduct regular performance reviews. We encourage all employees to take advantage of our leadership, management and technical skill trainings and resources. In addition, we provide focused development for managers and emerging leaders who are designated as "key talent" based on performance and leadership potential.

Community

We believe in giving back and supporting the local communities where we work as well as initiatives consistent with our areas of focus. Employees are encouraged to participate in charitable causes and receive eight hours of voluntary paid time off to participate in local opportunities to give back to the community.

Wellbeing and Safety

We are committed to the health and safety of our employees by providing a safe work environment.

We empowered a cross-functional team in the early days of the ongoing pandemic to recommend safety protocols, ensure timely communications, and make decisions related to the effect of COVID-19 on our employees and work environment.

Available Information

Our website address is www.macrogenics.com. We post links to our website to the following filings as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission (SEC): annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements, and any amendments to those reports filed or furnished pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended. All such filings are available through our website free of charge. In addition, the SEC makes available at its website (www.sec.gov), free of charge, reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

ITEM 1A. RISK FACTORS

The discussion below addresses material factors, of which we are currently aware, that could have a material and adverse effect on our business, results of operations and financial condition. These risk factors and other forward-looking statements that relate to future events, expectations, trends and operating periods involve certain factors that are subject to change, and important risks and uncertainties that could cause actual results to differ materially. These risks and uncertainties should not be considered a complete discussion of all the risks and uncertainties we may face and although the risks are organized by headings and each risk is discussed separately, many are interrelated.

Summary of Risk Factors Affecting Our Business

Our business is subject to numerous risks. The following summary highlights some of the risks you should consider with respect to our business and prospects. This summary is not complete and the risks summarized below are not the only risks we face. You should review and consider carefully the risks and uncertainties described in the "Risk Factors" section of this Annual Report on Form 10-K, which includes a more complete discussion of the risks summarized below as well as a discussion of other risks related to our business and an investment in our common stock, as well as our other SEC filings.

- We will require substantial additional funding, which may not be available to us on acceptable terms, or at all, and, if not available, may require us to delay, scale back, or cease our product development programs or operations.
- We depend substantially on the success of the clinical development of our products and product candidates, through our own efforts or those of our collaborators, including vobra duo and lorigerlimab. If we are unable to successfully complete clinical development, obtain additional regulatory approvals and commercialize our products and product candidates, or experience significant delays in doing so, our business will be materially harmed and we may not be able to generate sufficient revenues and cash flows to continue our operations.
- Clinical drug development involves a lengthy and expensive process, with a highly uncertain outcome. We expect to incur significant additional costs related to the development of vobra duo, lorigerlimab, and our other product candidates and may experience delays in completing, or ultimately be unable to complete, the development and commercialization of our other products and product candidates.
- Our existing therapeutic collaborations are important to our business, and future collaborations may also be important to us. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.
- Our product candidates may have undesirable side effects which may delay or prevent further clinical development or marketing approval, or, if approval is received, require them to be taken off the market, require them to include safety warnings or otherwise limit their sales.
- If clinical trials for our product candidates are prolonged, delayed or stopped for any reason, including for safety reasons or lack of efficacy, we may be unable to obtain regulatory approval and commercialize our product candidates on a timely basis, which would require us to incur additional costs and delay our receipt of any product revenue.
- The results of previous clinical trials may not be predictive of future results, and interim or top line data may be subject to change or qualification based the complete analysis of data. In addition, the results of our current or planned clinical trials may not satisfy the requirements of the FDA or non-U.S. regulatory authorities for product approval.
- We have incurred significant losses since inception and anticipate that we will continue to incur losses for the foreseeable future. Our first commercial product, MARGENZA, launched in March 2021 and to date has not resulted in revenues sufficient for us to reach profitability. Accordingly, we may never achieve or sustain profitability.
- We use or may use novel technologies in the development of our product candidates and the FDA and other regulatory authorities have not approved or may not approve products that utilize these technologies.
- We may not be successful in our efforts to use and expand our technology platforms to build a pipeline of product candidates. We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

- vobra duo, lorigerlimab, MARGENZA, or any other product candidate that we develop may fail to achieve or maintain market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.
- Our manufacturing facilities are subject to significant government regulations and approvals, which are often costly and could result in adverse consequences to our business if we fail to comply with the regulations or maintain the approvals.
- We face significant competition and if our competitors continue to develop and market products that are more effective, safer or less expensive than our product and our product candidates, our current or future commercial opportunities may be negatively impacted.
- The manufacture of vobra duo, lorigerlimab, MARGENZA and our product candidates, for ourselves and our collaborators, is complex, and we may encounter difficulties in production. There can be no assurance that we will be able to effectively manufacture clinical quantities of our product candidates in the future. Further, we have limited experience in large-scale or commercial manufacturing, and there can be no assurance that we will be able to effectively manufacture commercial quantities of MARGENZA, or other products or product candidates, if and when approved.
- COVID-19 (or any variant thereof) may have a negative impact on our clinical trials, nonclinical studies, development, manufacturing and commercialization of our product and product candidates and other aspects of our business, staff, and operations.
- We have limited experience in launching and marketing our internally developed products. If we are unable to further develop marketing and sales capabilities or enter into agreements with third parties to market and sell our products, or our existing arrangements are not successful, we may not be able to generate substantial product sales revenue.
- Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.
- Actual or anticipated changes to the laws and regulations governing the health care system may have a negative impact on cost and access to health insurance coverage and reimbursement of health care items and services.
- Reimbursement decisions by third-party payors, including government payors, may have an adverse effect on pricing and market acceptance.
- If any product liability lawsuits are successfully brought against us or any of our collaborators, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.
- Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish substantial rights.
- We contract with, and may in the future contract with, third parties for the distribution and commercialization of MARGENZA and our other product candidates. Failure of third-party contractors to successfully perform their obligations for commercialization, distribution, or other services could harm out ability to commercialize our product or product candidates.
- Our success depends significantly on our ability to operate without infringing the valid patents and other proprietary rights of third parties.
- If we are unable to obtain and enforce patent protection for our products and our product candidates and related technology, our business could be materially harmed.
- We are subject to the U.S. Foreign Corrupt Practices Act and other anti-corruption laws. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures, and legal expenses, which could adversely affect our business, results of operations and financial condition.
- We are subject to securities litigation, which is expensive and could divert management attention and adversely impact our business.

- Failure to successfully develop and commercialize companion diagnostics with third party contractors for use with our product candidates could harm our ability to commercialize our product candidates.
- If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Risks Related to Our Business and the Development and Commercialization of Our Products and Product Candidates

We depend substantially on the success of the clinical development of our products and product candidates, through our own efforts or those of our collaborators, including vobra duo and lorigerlimab. If we are unable to successfully complete clinical development, obtain additional regulatory approvals and commercialize our products and product candidates, or experience significant delays in doing so, our business will be materially harmed and we may not be able to generate sufficient revenues and cash flows to continue our operations.

Our business depends on the successful development, regulatory approval and commercialization of our products and product candidates, including vobra duo and lorigerlimab. We have invested and will continue to invest a significant portion of our efforts and financial resources in the development of our product candidates, including vobra duo and lorigerlimab. The success of our products and product candidates depends on many factors, including but not limited to:

- successful enrollment in, and completion of, clinical trials, as well as completion of nonclinical studies;
- safety and favorable efficacy and acceptable safety data from our clinical trials and other studies;
- the sufficiency of our financial resources and ability to obtain additional funding for the development of our products and product candidates;
- receipt of regulatory approvals;
- the performance by clinical research organizations (CROs) or other third parties we may retain of their duties to us in a manner that complies with our protocols and applicable laws and that protects the integrity of the resulting data;
- obtaining and maintaining patent, trade secret and other intellectual property protection and regulatory exclusivity;
- ensuring we do not infringe, misappropriate or otherwise violate the valid patent, trade secret or other intellectual property rights of third parties;
- successfully launching our product candidates, including vobra duo or lorigerlimab, if and when approved;
- maintaining commercial manufacturing capabilities, either by utilizing our current manufacturing facilities or making arrangements with third-party manufacturers;
- manufacturing or obtaining sufficient supplies of our products and product candidates that may be necessary for use in clinical trials for evaluation of our product candidates and commercialization of our products;
- obtaining favorable reimbursement from third-party payors for products and product candidates;
- competition with other products;
- post-marketing commitments to regulatory agencies following regulatory approval; and
- continued acceptable safety profile following regulatory approval.

Clinical drug development involves a lengthy and expensive process, with a highly uncertain outcome. We expect to incur significant additional costs related to the development of vobra duo, lorigerlimab, and our other product candidates and may experience delays in completing, or ultimately be unable to complete, the development and commercialization of our other products and product candidates.

The research, testing, manufacturing, labeling, approval, selling, marketing and distribution of drug products are subject to extensive regulation by the FDA and non-U.S. regulatory authorities, which regulations differ from country to country. We are not permitted to market our product candidates in the United States or in other countries until we receive approval of a Biologics License Application (BLA) from the FDA or marketing approval from applicable regulatory authorities outside the United States. Our product candidates are in various stages of development and are subject to the risks of failure

inherent in drug development. For example, in July 2022 we announced the closure of our Phase 2 study evaluating the investigational regimen of enoblituzumab in combination with either retifanlimab or tebotelimab in the first-line treatment of patients with recurrent or metastatic SCCHN. The decision to discontinue the study was based on an internal review of safety data. The approval of a BLA can be a lengthy, expensive and uncertain process. In addition, failure to comply with FDA and non-U.S. regulatory requirements may, either before or after product approval, subject our company or our collaborators to administrative or judicially imposed sanctions, including:

- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned trials;
- restrictions on the products, manufacturers, manufacturing facilities or manufacturing process;
- warning letters;
- civil and criminal penalties;
- injunctions;
- suspension or withdrawal of regulatory approvals;
- product seizures, detentions or import bans;
- voluntary or mandatory product recalls and publicity requirements;
- total or partial suspension of production;
- imposition of restrictions on operations, including costly new manufacturing requirements; and
- refusal to approve pending BLAs or supplements to approved BLAs or analogous marketing approvals outside the United States.

The FDA and foreign regulatory authorities also have substantial discretion in the drug approval process. The number of nonclinical studies and clinical trials that will be required for regulatory approval varies depending on the product candidate, the disease or condition that the product candidate is designed to address, and the regulations applicable to any particular drug candidate. Regulatory agencies can delay, limit or deny approval of a product candidate for many reasons, including:

- a product candidate may not be deemed safe or effective;
- the results may not confirm the positive results from earlier nonclinical studies or clinical trials;
- regulatory agencies may not find the data from nonclinical studies and clinical trials sufficient or meaningful;
- regulatory agencies might not approve or might require changes to our manufacturing processes or facilities; or
- regulatory agencies may change their approval policies or adopt new regulations.

Any delay in obtaining or failure to obtain required approvals could materially adversely affect our ability to generate revenue from the particular product candidate, which likely would result in significant harm to our financial position and adversely impact our stock price. Furthermore, any regulatory approval to market a product may be subject to limitations on the indicated uses for which we may market the product. These limitations may limit the size of the potential market for a product candidate, if approved.

If clinical trials for our product candidates are prolonged, delayed or stopped, for any reason, we may be unable to obtain regulatory approval and commercialize our product candidates on a timely basis, which would require us to incur additional costs and delay our receipt of any product revenue.

We, or our collaborators, are either currently enrolling patients in clinical trials or anticipate initiating, continuing, or designing, or supporting clinical trials for molecules that include vobra duo, lorigerlimab, retifanlimab, teplizumab, IMGC936 and MGD024 as monotherapies or in combination with other product candidates. For example, we have decided to modify the trial design for our TAMARACK study and it is unclear what impact this will have on costs. In addition, Incyte is currently enrolling patients in clinical trials for retifanlimab, and other collaborators outside the United States are developing our product candidates. We anticipate in the future collaborators will initiate or continue clinical trials of one or more our product

candidates. The continuation, modification, or commencement of existing or new clinical trials could be substantially delayed or prevented by several factors, including:

- further discussions with the FDA or other regulatory agencies regarding the scope or design of our clinical trials;
- the limited number of, and competition for, suitable sites to conduct our clinical trials, many of which may already be engaged in other clinical trial programs, including some that may be for the same indication as our product candidates;
- any delay or failure in patient recruitment or enrollment in our or our collaborators' trials for any reason, including as a result of public health crises;
- any delay or failure to obtain regulatory approval or agreement to commence a clinical trial in any of the countries where enrollment is planned;
- inability to obtain sufficient funds required for a clinical trial;
- clinical holds on, or other regulatory objections to, a new or ongoing clinical trial;
- delay or failure to manufacture sufficient supplies of the product candidate for our clinical trials;
- delay or failure to reach agreement on acceptable clinical trial terms or clinical trial protocols with prospective sites or CROs the terms of which can be subject to extensive negotiation and may vary significantly among different sites or CROs;
- delay or failure to obtain IRB approval to conduct a clinical trial at a prospective site;
- significant competition of product candidates that are expected to be more effective or have a more favorable safety profile; and
- approval of potential therapies by competitors.

The progress or completion of our, or our collaborators', clinical trials have been and could also be substantially delayed or prevented by many factors, including:

- unforeseen safety issues, including severe or unexpected drug-related adverse effects experienced by patients, including actual and possible deaths;
- delays in expected site initiation, patient recruitment and enrollment, for any reason;
- failure of patients to complete the clinical trial;
- lack of efficacy during clinical trials;
- termination of our clinical trials by one or more clinical trial sites;
- inability or unwillingness of patients or clinical investigators to follow our clinical trial protocols;
- economic and political instability in countries where our trial sites are located, including terrorist attacks, civil unrest and actual or threatened armed conflict;
- inability to monitor patients adequately during or after treatment by us, our collaboration partners and/or our CROs; and
- the need to repeat or terminate clinical trials as a result of inconclusive or negative results or unforeseen complications in testing.

Changes in regulatory requirements and guidance may also occur and we may need to significantly amend clinical trial protocols to reflect these changes with appropriate regulatory authorities. Amendments may require us to renegotiate terms with CROs or resubmit clinical trial protocols to IRBs for re-examination, which may impact the costs, timing or successful completion of a clinical trial. Our clinical trials may be suspended or terminated at any time by the FDA, other regulatory authorities, the IRB overseeing the clinical trial at issue, any of our clinical trial sites with respect to that site, or us, due to a number of factors, including:

- failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols;

- unforeseen safety issues or any determination that a clinical trial presents unacceptable health risks;
- lack of adequate funding to continue the clinical trial due to unforeseen costs or other business decisions; and
- upon a breach or pursuant to the terms of any agreement with, or for any other reason by, current or future collaborators that have responsibility for the clinical development of any of our product candidates.

Clinical trials of our product candidates are subject to partial or full clinical holds from time to time. A clinical hold received in the midst of conducting a trial may delay the progress of a clinical trial, or may require us to modify or discontinue such trial. Any failure or significant delay in completing clinical trials for our product candidates would adversely affect our ability to obtain regulatory approval and our commercial prospects and ability to generate product revenue will be diminished.

The results of previous clinical trials may not be predictive of future results, and interim or top line data may be subject to change or qualification, based on several factors, including a complete analysis of data, or in the case of interim analysis, the continued or ongoing accrual of data. In addition, the results of our current and planned clinical trials may not satisfy the requirements of the FDA or non-U.S. regulatory authorities for product approval.

Clinical failure can occur at any stage of clinical development. Clinical trials may produce negative or inconclusive results, and we or any of our current and future collaborators may decide, or regulators may require us, to conduct additional clinical or nonclinical testing. Success in early clinical trials does not mean that future larger registration clinical trials will be successful because product candidates in later-stage clinical trials may fail to demonstrate sufficient safety and efficacy to the satisfaction of the FDA and non-U.S. regulatory authorities despite having progressed through initial clinical trials. A number of companies in the pharmaceutical industry, including those with greater resources and experience than us, have suffered significant setbacks in advanced clinical trials, even after obtaining promising results in earlier clinical trials.

We may publicly disclose top line or interim data from time to time, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial or continued progress of the study or trial. The top line or interim results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top line and interim data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. In addition, the achievement of one primary endpoint for a trial does not guarantee that additional co-primary endpoints or secondary endpoints will be achieved, which may have an adverse effect on our ability to obtain or retain additional regulatory approval of products or product candidates in the U.S. or in other jurisdictions.

We use or may use novel technologies in the development of our product candidates and the FDA and other regulatory authorities have not approved products that utilize these technologies.

Our products in development are based on our technology platforms, including Fc Optimization, DART and TRIDENT technologies. Given the novelty of these technologies, we intend to work closely with the FDA and other regulatory authorities to perform the requisite scientific analyses and evaluation of our methods to obtain regulatory approval for our product candidates. Even though MARGENZA, which incorporates an Fc variation created using our Fc Optimization platform, was approved by the FDA, there is no assurance that the FDA will approve future product candidates using such technology. The validation process takes time and resources, may require independent third-party analyses, and may not be accepted by the FDA and other regulatory authorities. For some of our product candidates that are based on these technology platforms, the regulatory approval path and requirements may not be clear or evolve as more data becomes available for this product candidates, which could add significant delay and expense. Delays or failure to obtain regulatory approval of any of the product candidates that we develop would adversely affect our business.

We may not be successful in our efforts to use and expand our technology platforms to build a pipeline of product candidates. We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

A key element of our strategy is to use and expand our technology platforms to continue to build a pipeline of product candidates and progress several of these product candidates through clinical development for the treatment of a variety of different types of diseases. Although our research and development efforts to date have resulted in a pipeline of product candidates directed at various cancers, as well as autoimmune disorders and infectious diseases, we may not be able to develop product candidates that are safe and effective. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for initial or continued clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will

receive marketing approval and achieve market acceptance. If we do not continue to successfully develop and begin to commercialize product candidates, we will face difficulty in obtaining product revenues in future periods, which could result in significant harm to our financial position and adversely affect our stock price.

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

Vobra duo, lorigerlimab, MARGENZA, or any other product candidate that we develop may fail to achieve or maintain market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.

Vobra duo, lorigerlimab, MARGENZA, or any other product candidate that we develop may fail to achieve or maintain market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success. For example, revenues from MARGENZA are not anticipated to enable us to reach profitability.

If product candidates that we develop do not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of any product candidates that we develop will depend on a number of factors, including but not limited to:

- the efficacy and potential advantages compared to alternative treatments;
- the prevalence and severity of any side effects; any safety events that may have occurred in connection with the development of the product candidate;
- our ability to offer our products for sale at competitive prices;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of physicians to prescribe the product or other new therapies, and of the patient population to try the product or these therapies;
- the strength of marketing, sales, and distribution support;
- the availability of third-party coverage and adequate reimbursement; and
- any restrictions on the use of our products together with other medications.

A product's market acceptance depends significantly on the medical community's determination of clinical benefit and safety compared to alternative therapies available both now and in the future. For example, several new therapies for the treatment of HER2-positive breast cancer were approved and certain of these therapies have or may be perceived to have greater efficacy benefits than MARGENZA in clinical trials. Competition from these and other approved therapies has and may adversely impact the market acceptance of MARGENZA. In particular, final overall survival (OS) endpoint data from the SOPHIA trial analysis did not demonstrate a statistically significant advantage for MARGENZA over trastuzumab. This OS data may have adversely affected, or may continue to adversely affect, the market acceptance of MARGENZA

In addition, the potential market opportunities for our product candidates are difficult to precisely estimate. Our internal estimates of the potential market opportunities for vobra duo, lorigerlimab, and our other product candidates include several key assumptions based on a variety of factors, which may include our industry knowledge, industry publications, third-party research reports, assessment of competition, and other surveys. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions. If any of these assumptions proves to be inaccurate, then the actual market for vobra duo, lorigerlimab, or our other product candidates could be smaller than our estimates of our potential market opportunity.

Our product candidates may have undesirable side effects which may delay or prevent further clinical development or marketing approval, or, if approval is received, require them to be taken off the market, require them to include safety warnings or otherwise limit their sales.

Although all of our product candidates have undergone or will undergo safety testing, not all adverse effects of drugs can be predicted or anticipated. Unforeseen side effects from any of our product candidates could arise either during clinical development or after the approved product has been marketed. Ongoing or future trials of our product candidates may not support the conclusion that one or more of these product candidates have acceptable safety profiles. The results of future clinical or nonclinical trials may show undesirable or unacceptable side effects, which could interrupt, delay or halt clinical trials, and result in delay of, or failure to obtain, marketing approval from the FDA and other regulatory authorities, or result in marketing approval from the FDA and other regulatory authorities with restrictive label warnings, risk management measures, or potential product liability claims. For example, in July 2022 we announced the discontinuation of our Phase 2 trial of enoblituzumab in combination with either retifanlimab or tebotelimab in the treatment of patients with recurrent or metastatic SCCHN, based on an internal review of safety data.

If we or others later identify undesirable or unacceptable side effects potentially caused by such products:

- regulatory authorities may require us to take our approved product off the market;
- regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication or field alerts to physicians and pharmacies;
- we may be required to change the way the product is administered, impose other risk-management measures, conduct additional clinical trials or change the labeling of the product;
- we may be subject to limitations on how we may promote the product;
- sales of the product may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

For example, the prescribing information for MARGENZA include warnings and precautions for infusion-related reactions, as well as a boxed warning related to left ventricular dysfunction and embryo-fetal toxicity. Further, based on the identification of future adverse events, we may be required to further revise the prescribing information, including MARGENZA's boxed warning, which could negatively impact sales of MARGENZA or adversely affect MARGENZA's acceptance in the market.

Any of these events could prevent us, our collaborators or our potential future partners from achieving or maintaining market acceptance of the affected product or could substantially increase commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenue from the sale of our products.

Our manufacturing facilities are subject to significant government regulations and approvals, which are often costly and could result in adverse consequences to our business if we fail to comply with the regulations or maintain the approvals.

We have a limited operating history conducting commercial activities as a CDMO and our contract manufacturing business materially depends upon the regulatory approval of the product candidates we manufacture. We must comply with the FDA's cGMP requirements, as set out in statute, regulations and interpreted through guidance. We may encounter difficulties in achieving quality control and quality assurance and may experience shortages in qualified personnel. We are subject to inspections by the FDA and comparable agencies in other jurisdictions to confirm compliance with applicable regulatory requirements. See "Other U.S. Post-Marketing Regulatory Requirements" above for additional information. Any failure to follow cGMP or other regulatory requirements or delay, interruption or other issues that arise in the manufacture, fill-finish, packaging, or storage of our product or product candidates as a result of a failure of our facilities or the facilities or operations of third parties to comply with regulatory requirements or pass any regulatory authority inspection could significantly impair our ability to develop and commercialize our product or product candidates, including leading to significant delays in the availability of drug product for sale and our clinical trials or the termination or hold on a clinical trial, or the delay or prevention of a filing or approval of marketing applications for our product candidates. Significant noncompliance could also result in the imposition of sanctions, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approvals for our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which could damage our reputation or negatively impact a product's commercial success. If we are not able to maintain regulatory compliance, we may not be permitted to market our product candidates and/or may be subject to product recalls, seizures, injunctions, or criminal prosecution. Additionally, if the FDA or a comparable foreign regulatory authority does not approve of our facilities for the manufacture of a customer product or if it withdraws such approval in the future, our customers may choose to identify alternative manufacturing facilities and/or

relationships, which could significantly impact our ability to expand our CDMO capacity and capabilities and achieve profitability.

We face significant competition and if our competitors continue to develop and market products that are more effective, safer or less expensive than our product and our product candidates, our current or future commercial opportunities may be negatively impacted.

The life sciences industry is highly competitive and subject to rapid and significant technological change. We are currently developing therapeutics that will compete with other drugs and therapies that currently exist or are being developed. Products we may develop in the future are also likely to face competition from other drugs and therapies, some of which we may not currently be aware. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, universities and other research institutions. Many of our competitors have significantly greater financial, manufacturing, marketing, drug development, technical and human resources than we do. Large pharmaceutical companies, in particular, have extensive experience in clinical testing, obtaining regulatory approvals, recruiting patients and manufacturing pharmaceutical products. These companies also have significantly greater research and marketing capabilities than we do and may also have products that have been approved or are in late stages of development, and collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product candidates that we develop obsolete. As a result of all of these factors, our competitors may succeed, or may have succeeded, in obtaining patent protection and/or FDA approval or discovering, developing and commercializing products in our field before we do.

Specifically, there are a large number of companies developing or marketing potential treatments for cancer, including many major pharmaceutical and biotechnology companies. These treatments consist both of small molecule drug products, as well as biologic therapeutics that work by using next-generation antibody technology platforms to address specific cancer targets. In addition, several companies are developing therapeutics that work by targeting multiple specificities using a single recombinant molecule. See “Competition” above for additional information.

Our commercial opportunity for MARGENZA is very limited, and the commercial opportunity for future product candidates including vobra duo or lorigerlimab may be reduced or limited if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of biosimilar products.

Smaller and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. In addition, the biopharmaceutical industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our technologies, products or product candidates obsolete, less competitive or not economical.

The manufacture of vobra duo, lorigerlimab, MARGENZA and our other product candidates, for ourselves and our collaborators, is complex, and we may encounter difficulties in production. There can be no assurance that we will be able to effectively manufacture clinical quantities of our product candidates in the future. Further, we have limited experience in large-scale or commercial manufacturing, and there can be no assurance that we will be able to effectively manufacture commercial quantities of MARGENZA, or other products or product candidates, if and when approved.

We currently manufacture product and product candidates for ourselves and our collaborators in our in-house manufacturing facility, and we anticipate manufacturing both commercial product as well as product candidates in the future, including for example commercial manufacturing of MARGENZA. We have limited experience in manufacturing at commercial scale. The process of commercial or clinical biotechnology manufacturing for ourselves and our collaborators is highly susceptible to delays or product loss due to a variety of factors, including but not limited to contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, inconsistency in yields, variability in product characteristics, difficulties in scaling the production process, and vendor supply chain disruptions or fluctuations. Even minor deviations from manufacturing processes could result in reduced production yields, product defects and other supply disruptions. If microbial, viral or other contaminations are discovered in MARGENZA and our product candidates or in the manufacturing facilities in which MARGENZA and our product candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. Any adverse developments affecting

manufacturing operations for MARGENZA and our product candidates, if any are approved, may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our products. We may also have to take inventory write-offs and incur other charges and expenses for products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. In addition, if we fail to supply required quantities of MARGENZA or a product candidate for one of our collaborators, our collaborator may terminate our agreement.

Although we currently maintain insurance coverage against damage to our property and to cover business interruption and research and development restoration expenses, our insurance coverage may not reimburse us, or may not be sufficient to reimburse us, for any expenses or losses we may suffer. If there were to be a catastrophic event or failure of our manufacturing facilities or processes, we may be unable to meet our requirements for supply of MARGENZA and our product candidates.

COVID-19 (or any variant thereof) may have a significant negative impact on our clinical trials, nonclinical studies, development, manufacturing and commercialization of our product candidates and other aspects of our business, staff, and operations.

Public health crises such as pandemics or similar outbreaks may have a material impact our business. For instance, the COVID-19 pandemic impaired our ability to enroll patients in clinical trials, continue ongoing clinical trials or activate clinical trial sites, and MARGENZA commercialization, due to, for example, heightened exposure to COVID-19 if an outbreak occurs in a specific geography, the shifting of healthcare resources toward the pandemic or the closing of or limiting of access to clinical facilities, and reduced or eliminated in-person access to physicians and health care centers. Furthermore, patients may be unable or unwilling to enroll in our clinical trials or be unable to comply with clinical trial protocols if COVID-19 related restrictions impede patient movement or interrupt healthcare services. Public health crises may also negatively affect the operations of third-party CROs that we rely upon to carry out our clinical trials, or the operations of other service providers, which could result in delays or disruptions in the supply of our product candidates or other aspects of our business or that of our collaborators. Any negative impact public health crises could have, on patient enrollment or treatment or the timing and execution of our clinical trials could cause delays to our clinical trial activities, which could adversely affect our ability to seek and obtain regulatory approval for and to commercialize any approved product candidates, increase our operating expenses and have a material adverse effect on our business and financial results.

To date, we have seen limited business impact from COVID-19 related absences for our employees, but there can be no assurance that there will not be negative business impact in the future. We expect many employees to continue to work remotely or a hybrid of in-person and remote work, which presents risks, uncertainties and costs that could affect our performance, including operational and workplace culture challenges and uncertainty regarding office space needs.

We may also face increased cybersecurity risks due to the shifting of a majority of our corporate functions operating remotely in regions impacted the virus. Increased levels of remote access may create additional opportunities for cybercriminals to attempt to exploit vulnerabilities, and our employees may be more susceptible to phishing and social engineering attempts.

We have limited experience in launching and marketing products. If we are unable to further develop marketing and sales capabilities or enter into agreements with third parties to market and sell our products, or our existing arrangements are not successful, we may not be able to generate substantial product sales revenue.

In December 2020, the FDA approved MARGENZA, in combination with chemotherapy, for the treatment of adult patients with metastatic HER2-positive breast cancer who have received two or more prior anti-HER2 regimens, at least one of which was for metastatic disease. We launched MARGENZA in March 2021. In conjunction with Eversana, we continue to build commercialization support in United States to commercialize MARGENZA in a manner we believe to be appropriate in light of the modest size of the market opportunity. We have limited internal commercialization capabilities, and any additional products or product candidates that we may develop or in-license, will require significant capital expenditures, management resources and time.

We have limited experience in commercializing our products. For example, we have limited experience in building and managing a commercial team, conducting a comprehensive market analysis, and reimbursement, or managing distributors and a field force for our products. We compete with many companies that currently have extensive and well-funded sales and marketing operations.

For commercialization of any or all of our product candidates, we will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel. If we are unable to, or decide not to, further develop internal sales, marketing, and commercial distribution capabilities for any or all of our products, we will likely pursue additional collaborative arrangements regarding the sales and marketing of our products. However, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if we are able to do so, that they will

have effective sales forces. Any revenue we receive will depend upon the efforts of such third parties. We would have little or no control over the marketing and sales efforts of such third parties, and our revenue from product sales may be lower than if we had commercialized our products ourselves. We also face competition in our search for third parties to assist us with the sales and marketing efforts for our products.

There can be no assurance that we will be able to further develop or successfully maintain internal sales and commercial capabilities or establish or maintain relationships with third-party collaborators to successfully commercialize any product, and as a result, we may not be able to generate substantial product sales revenue.

Actual or anticipated changes to the laws and regulations governing the health care system may have a negative impact on cost and access to health insurance coverage and reimbursement of healthcare items and services.

The United States and several foreign jurisdictions are considering, or have already enacted, a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell any of our future approved products profitably. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs through lowering prescription drug prices, improving quality and/or expanding access to healthcare. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives, including the ACA, which became law in 2010. While it is difficult to assess the impact of the ACA in isolation, either in general or on our business specifically, it is widely thought that the ACA increases the likelihood of downward pressure on pharmaceutical reimbursement, which could negatively affect market acceptance of, and the price we may charge for, any products we develop that receive regulatory approval. Further, the United State and foreign governments regularly consider additional reform measures that affect healthcare coverage and costs. Such reforms may include changes to the coverage and reimbursement of healthcare services and products. In particular, there have been executive, judicial and Congressional challenges to the ACA, which could have an impact on coverage and reimbursement for healthcare services covered by plans authorized by the ACA.

While Congress has not passed comprehensive repeal legislation, several bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017 (Tax Act) included a provision which repealed, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the “individual mandate.” On June 17, 2021, the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the “individual mandate” was repealed by Congress. Prior to the U.S. Supreme Court ruling, on January 28, 2021, President Biden issued an executive order that initiated a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. In addition, on August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 (IRA) into law, which among other things, extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. The IRA also eliminates the “donut hole” under the Medicare Part D program beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost and creating a new manufacturer discount program. It is possible that the ACA will be subject to judicial or Congressional challenges in the future. It is unclear how such challenges and any healthcare reform measures of the Biden administration will impact the ACA and our business.

Further, there has been heightened governmental scrutiny in the United States of pharmaceutical pricing practices in light of the rising cost of prescription drugs. Such scrutiny has resulted in several recent 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 products. For example ,in July 2021, the Biden administration released an executive order, “Promoting Competition in the American Economy,” with multiple provisions aimed at prescription drugs. In response to Biden’s executive order, on September 9, 2021, the U.S. Department of Health and Human Services (HHS) released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue as well as potential administrative actions HHS can take to advance these principles. In addition, the IRA, among other things, (i) directs HHS to negotiate the price of certain high-expenditure, single-source drugs and biologics covered under Medicare, and subject drug manufacturers to civil monetary penalties and a potential excise tax by offering a price that is not equal to or less than the negotiated “maximum fair price” for such drugs and biologics under the law, and (ii) imposes rebates with respect to certain drugs and biologics covered under Medicare Part B or Medicare Part D to penalize price increases that outpace inflation. The IRA permits HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. These provisions will take effect progressively starting in fiscal year 2023, although they may be subject to legal challenges. It is currently unclear how the IRA will be implemented but is likely to have a

significant impact on the pharmaceutical industry. Further, the Biden administration released an additional executive order on October 14, 2022, directing HHS to submit a report on how the Center for Medicare and Medicaid Innovation can be further leveraged to test new models for lowering drug costs for Medicare and Medicaid beneficiaries. It is unclear whether this executive order or similar policy initiatives will be implemented in the future. However, it is unclear whether these or similar policy initiatives will be implemented in the future.

We cannot predict what healthcare initiatives, if any, will be implemented at the federal or state level, however, government and other regulatory oversight and future regulatory and government interference with the healthcare systems could adversely impact our business and results of operations.

We expect to experience pricing pressures in connection with the sale of any products that we develop, due to the trend toward managed healthcare, the increasing influence of various and evolving payor models and additional legislative proposals.

Reimbursement decisions by third-party payors may have an adverse effect on pricing and market acceptance. If there is not sufficient reimbursement for our products, it is less likely that our products will be widely used.

Market acceptance and sales of our products and product candidates, if approved for sale by the appropriate regulatory authorities, may depend on reimbursement policies and may be affected by future healthcare reform measures. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drugs they will reimburse and establish payment levels and, in some cases, utilization management strategies, such as tiered formularies and prior authorization. We cannot be certain that reimbursement will be available for our products or any products that we develop. Also, we cannot be certain that reimbursement policies will not reduce the demand for, or the price paid for, our products. Our ability to commercialize our products may depend, in part, on the extent to which reimbursement for the products will be available from government authorities and third-party payors. If reimbursement for our products is not available or is available on a limited basis, or if the reimbursement amount for our products is inadequate to support a product's price, we may not be able to successfully commercialize any of our approved products.

There is uncertainty related to third-party payor coverage and reimbursement of newly approved products. In the United States, for example, principal decisions about reimbursement for new products are typically made by CMS, an agency within HHS. CMS decides whether and to what extent a new product will be covered and reimbursed under Medicare, and private third-party payors often follow CMS's decisions regarding coverage and reimbursement to a substantial degree. However, one third-party payor's determination to provide coverage for a product candidate does not assure that other payors will also provide coverage for the product candidate. Further, no uniform policy for coverage and reimbursement exists in the United States, and coverage and reimbursement can differ significantly from payor to payor. As a result, the coverage and reimbursement determination process is often time-consuming and costly. This process may require us to provide scientific and clinical information to support the coverage or reimbursement of our products to each third-party payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

As federal and state governments implement additional health care cost containment measures, including measures to lower prescription drug pricing, we cannot be sure that MARGENZA and our product candidates, if approved, will be covered, or remain covered, by private or public payors, and if covered, whether the reimbursement will be perceived by product purchasers as adequate. Health reform actions by federal and state governments and health plans may put additional downward pressure on pharmaceutical pricing and health care costs, which could negatively impact coverage and reimbursement for MARGENZA and our product candidates, if approved, our revenue, and our ability to compete with other marketed products and to recoup the costs of our research and development.

Increasingly, third-party payors are requiring that biopharmaceutical manufacturers provide them with discounts from list prices and are challenging the prices charged for medical products. Further, such payors are increasingly challenging the price, examining the medical necessity and reviewing the cost effectiveness of medical products. There may be especially significant delays in obtaining coverage and reimbursement for newly approved drugs. Third-party payors may limit coverage to specific products and product candidates on an approved list, known as a formulary, which might not include all FDA-approved drugs for a particular indication. We may need to conduct expensive pharmaco-economic studies to demonstrate the medical necessity and cost effectiveness of our products. Nonetheless, our products may not be considered medically necessary or cost effective. We cannot be sure that coverage and reimbursement will be available for any approved product that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Further, coverage policies and third-party payor reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained, less favorable coverage policies and reimbursement rates may be implemented in the future. Additionally, we or our collaborators may develop companion diagnostic tests for use with our product candidates where appropriate. We or our collaborators will be required to obtain coverage and reimbursement for these tests separate and apart from the coverage and reimbursement we may seek for our product candidates. While we have not yet developed any companion diagnostic tests for our product candidates, if

we do, there is significant uncertainty regarding our ability to obtain coverage and adequate reimbursement for the same reasons applicable to our product candidates.

If any product liability lawsuits are successfully brought against us or any of our collaborators, we may incur substantial liabilities and may be required to limit commercialization of our products or product candidates.

We face an inherent risk of product liability lawsuits related to the sale of our products to, use of our products by, and testing of our product candidates in, seriously ill patients. Product liability claims may be brought against us or our collaborators by participants enrolled in our clinical trials, patients, health care providers or others using, administering or selling any of our approved products. If we cannot successfully defend ourselves against any such claims, we may incur substantial liabilities. Regardless of their merit or eventual outcome, liability claims may result in:

- decreased demand for our future approved products;
- injury to our reputation;
- withdrawal of clinical trial participants;
- termination of clinical trial sites or entire trial programs;
- increased regulatory scrutiny;
- significant litigation costs;
- substantial monetary awards to or costly settlement with patients or other claimants;
- product recalls or a change in the indications for which they may be used;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize our product candidates.

With respect to vobra duo, lorigerlimab, MARGENZA and any of our other product candidates that are approved for commercial sale, we are, and will be, highly dependent upon physician and patient perceptions of us and the safety and quality of our products. We could be adversely affected if we are subject to negative publicity. We could also be adversely affected if any of our products or any similar products distributed by other companies prove to be, or are asserted to be, harmful to patients. Because of our dependence upon consumer perceptions, any adverse publicity associated with illness or other adverse effects resulting from patients' use or misuse of our products or any similar products distributed by other companies could have a material adverse impact on our financial condition or results of operations.

As of December 31, 2022, we hold $20 million in product liability insurance coverage in the aggregate, with a per incident limit of $20 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage when we begin the commercialization of additional product candidates. Insurance coverage is becoming increasingly expensive. As a result, we may be unable to maintain or obtain sufficient insurance at a reasonable cost to protect us against losses that could have a material adverse effect on our business. A successful product liability claim or series of claims brought against us, particularly if judgments exceed any insurance coverage we may have, could decrease our cash resources and adversely affect our business, financial condition and results of operation.

Even if we and our collaborators obtain regulatory approvals to market our current and any future approved products, we and our collaborators will remain subject to extensive ongoing regulatory obligations and oversight, including post-approval requirements, that could result in significant additional expense and could negatively impact our and our collaborators' ability to commercialize our current and any future approved products.

We and our collaborators are subject to extensive ongoing obligations and continued regulatory review from applicable regulatory agencies with respect to any product obtaining regulatory approval, including vobra duo, lorigerlimab, and MARGENZA, such as continued adverse event reporting requirements and post-marketing commitments, all of which may result in significant expense and limit our and our collaborators' ability to commercialize our current and any future approved products. For example, the FDA's approval of MARGENZA included a requirement that we provide to the FDA the data from the final overall survival endpoint from our SOPHIA study, which we reported in September 2021. Moreover, in connection with MARGENZA's approval, the labeling and advertising and promotion of MARGENZA are subject to additional regulatory requirements, which could entail significant expense and could negatively impact the potential commercialization of

MARGENZA. To the extent other product candidates or those of our partners are approved by the FDA, we or our collaborators may be subject to similar post-marketing obligations.

We and the manufacturers of our current and any future approved products are also required, or will be required, to comply with cGMP regulations, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Further, regulatory agencies must approve these manufacturing facilities before they can be used to manufacture our products and product candidates, and these facilities are subject to ongoing regulatory inspections. In addition, regulatory agencies subject an approved product, its manufacturer and the manufacturer's facilities to continual review and inspections, including periodic unannounced inspections. The subsequent discovery of previously unknown problems with our current or any future approved products, including adverse events of unanticipated severity or frequency, or problems with the facilities where our current or any future approved products are manufactured, may result in restrictions on the marketing of our current or any such future approved products, up to and including withdrawal of the affected product from the market. If our manufacturing facilities, our collaborators' manufacturing facilities, or those of our respective suppliers, fail to comply with applicable regulatory requirements, such noncompliance could result in regulatory action and additional costs to us.

Failure to comply with applicable FDA and other regulatory requirements may subject us to administrative or judicially imposed sanctions, including:

- issuance of Form FDA 483 notices or Warning Letters by the FDA or other regulatory agencies;
- imposition of fines and other civil penalties;
- criminal prosecutions;
- injunctions, suspensions or revocations of regulatory approvals;
- suspension of any ongoing clinical trials;
- total or partial suspension of manufacturing;
- delays in commercialization;
- refusal by the FDA to approve pending applications or supplements to approved applications submitted by us;
- refusals to permit drugs to be imported into or exported from the United States;
- restrictions on operations, including costly new manufacturing requirements; and
- product recalls or seizures.

The policies of the FDA and other regulatory agencies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of vobra duo, our other product candidates or of MARGENZA in any additional indications or territories, or further restrict or regulate post-approval activities. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we or our collaborators might not be permitted to market our current or any future approved products and our business would suffer.

We and/or our collaboration partners may never obtain approval or commercialize our products outside of the United States, which would limit our ability to realize their full market potential.

In order to market any products outside of the United States, we and our current and potential collaboration partners must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and may require additional nonclinical studies or clinical trials or additional administrative review periods, which could result in significant delays, difficulties and costs for us. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. Although we obtained FDA approval of MARGENZA in December 2020, we do not have any product candidates approved for sale in any international market. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, our target market will be reduced and our ability to realize the full market potential of our products will be harmed.

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

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

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA, and other government employees and pause or stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Our contract with the National Institute of Allergy and Infectious Diseases (NIAID) makes us a government contractor. Laws and regulations affecting government contracts may make it more costly and difficult for us to successfully conduct our business.

We must comply with numerous laws and regulations relating to the procurement, formation, administration and performance of government contracts. Failure to comply with these laws could result in significant civil and criminal penalties. Among the most significant government contracting regulations that may affect our business are: the Federal Acquisition Regulation (FAR) and NIH-NIAID-specific regulations supplemental to the FAR, which comprehensively regulate the procurement, formation, administration and performance of government contracts; business ethics and public integrity obligations, which govern conflicts of interest and the hiring of former government employees, restrict the granting of gratuities and funding of lobbying activities and incorporate other requirements such as the Anti-Kickback Act, the Procurement Integrity Act, and the False Claims Act; export and import control laws and regulations; and laws, regulations and executive orders restricting the use and dissemination of sensitive information we may receive pursuant to our performance of the government contract. U.S. government agencies routinely audit and investigate government contractors for compliance with applicable laws and standards. If we are audited, such audit could result in disallowance of expected cost reimbursement, or if such audit were to uncover improper or illegal activities, we could be subject to civil and criminal penalties, administrative sanctions, including suspension or debarment from government contracting and significant reputational harm.

Changes in U.S. tax law may have a material adverse effect on our business, financial condition and results of operations, and changes in international trade relations may have a material adverse effect on the commercialization of some or all of our product candidates.

Changes in laws and policy relating to taxes may have an adverse effect on our business, financial condition and results of operations. Recent tax reforms in the United States have resulted in significant changes to preexisting U.S. tax rules and regulations. These changes may trigger an adverse effect on our business, financial conditions and results of operations.

Additionally, the U.S. government may seek to implement more protective trade measures with countries in which we plan to conduct business in, with great deal of uncertainty regarding trade policies, tariffs and government regulations, which if altered could have the potential to create a significant adverse effect on trade between the United States and other countries. Overall, changes in international trade relations, such as the imposition of or increase in tariffs or other trade barriers, could materially and adversely impact our costs, the ability to make sales of our product candidates to any of our significant customers in other countries, and reduce the competitiveness of our product candidates.

Risks Related to Our Financial Position and Need for Additional Capital

We will require substantial additional funding, which may not be available to us on acceptable terms, or at all, and, if not available, may require us to delay, scale back, or cease our product development programs or operations.

We are advancing our product candidates through clinical development and have commercialized MARGENZA in collaboration with Eversana. Developing and commercializing pharmaceutical products, including conducting nonclinical studies and clinical trials, is expensive. In order to obtain such regulatory approval of product candidates, we will be required to conduct clinical trials for each indication for each of our product candidates. We will continue to require additional funding beyond what was raised in our public offerings and through our collaborations and license agreements to complete the

development and commercialization of our product candidates and to continue to advance the development of our other product candidates. Due to worsening global economic conditions, including decades-high inflation and concerns of a recession in the United States or other major markets, and the recent disruptions to and volatility in the credit and financial markets in the United States and worldwide, including resulting from the ongoing COVID-19 pandemic, such funding may not be available on acceptable terms or at all. Although it is difficult to predict our funding requirements, based upon our current operating plan, we anticipate that our cash, cash equivalents and marketable securities as of December 31, 2022, combined with anticipated and potential collaboration payments and product revenues, will enable us to fund our operations through 2025. Such guidance does not reflect anticipated expenditures related to the potential late-stage development of vobra duo in mCRPC or further expansion of studies currently ongoing. Because development of our product candidates is uncertain, we are unable to estimate accurately the actual funds we will require to complete research, development and clinical testing to commercialize our product candidates.

Our future funding requirements will depend on many factors, including but not limited to:

- the number and characteristics of other product candidates and indications that we pursue;
- the scope, progress, timing, cost and results of research, nonclinical development, and clinical trials, in particular, our planned potential registrational path trial for MCG018;
- the costs, timing and outcome of seeking and obtaining FDA and non-U.S. regulatory approvals;
- the costs associated with manufacturing our product candidates;
- the costs of establishing sales, marketing, and distribution capabilities;
- our ability to maintain, expand, and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make in connection with the licensing, filing, defense and enforcement of any patents or other intellectual property rights;
- our need and ability to hire additional management, scientific, and medical personnel;
- the effect of competing products that may limit market penetration of our product candidates;
- our need to implement additional internal systems and infrastructure, including financial and reporting systems; and
- the economic and other terms, timing of and success of our existing collaborations, and any collaboration, licensing, or other arrangements into which we may enter in the future, including the timing of receipt of any milestone or royalty payments under these agreements.

Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to finance future cash needs primarily through a combination of public or private equity offerings, debt financings, strategic collaborations, and grant funding. If sufficient funds on acceptable terms are not available when needed, or at all, we could be forced to significantly reduce operating expenses and delay, scale back or eliminate one or more of our development programs or our business operations.

We have incurred significant losses since inception and anticipate that we will continue to incur losses for the foreseeable future. Our first commercial product, MARGENZA, launched in March 2021 and to date has not resulted in revenues sufficient for us to reach profitability. Accordingly, we may never achieve or sustain profitability.

We have incurred significant losses since our inception. As of December 31, 2022, our accumulated deficit was approximately $1.1 billion. We expect to continue to incur losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek regulatory approvals for, our product candidates, manufacture product and product candidate inventory, prepare for and begin to commercialize any future approved products, and add infrastructure and personnel if needed to support our product development efforts and operations as a public company. The net losses and negative cash flows incurred to date, together with expected future losses, have had, and likely will continue to have, an adverse effect on our stockholders' deficit and working capital. The amount of future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue.

Because of the numerous risks and uncertainties associated with pharmaceutical product development and commercialization, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. For example, our expenses could increase if we are required by the FDA to perform trials in addition to those that we currently expect to perform, or if there are any delays in completing our currently planned clinical

trials or in the development of any of our product candidates. Our expenses would significantly increase to the extent we build out a sales force and other commercially relevant functions to support the commercialization of any of our product candidates.

To become and remain profitable, we must succeed in developing and commercializing products with significant market potential. For example, revenues from MARGENZA are unlikely to be sufficient to enable us to reach profitability. In order to commercialize any additional product candidates, we will need to be successful in a range of challenging activities for which we are only in the preliminary stages, including developing product candidates, obtaining regulatory approval for them, and manufacturing, marketing and selling approved products and product candidates for which we may obtain regulatory approval. We may never succeed in these activities and may never generate revenue from product sales that is significant enough to achieve profitability. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to become or remain profitable would depress our market value and could impair our ability to raise capital, expand our business, develop other product candidates, or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

Our business could be adversely affected by economic downturns, inflation, increases in interest rates, natural disasters, public health crises, political crises, geopolitical events, such as the ongoing military conflict in Ukraine, or other macroeconomic conditions, which have in the past and may in the future negatively impact our business and financial performance.

The global economy, including credit and financial markets, has experienced extreme volatility and disruptions, including, among other things, severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, supply chain shortages, increases in inflation rates, higher interest rates and uncertainty about economic stability. The Federal Reserve recently raised interest rates multiple times in response to concerns about inflation and it may raise them again. Higher interest rates, coupled with reduced government spending and volatility in financial markets may increase economic uncertainty and affect consumer spending. Similarly, the ongoing military conflict between Russia and Ukraine has created extreme volatility in the global capital markets and is expected to have further global economic consequences, including disruptions of the global supply chain and energy markets. Any such volatility and disruptions may adversely affect our business or the third parties on whom we rely. If the equity and credit markets deteriorate, including as a result of political unrest or war, it may make any necessary debt or equity financing more costly or more dilutive or more difficult to obtain in a timely manner or on favorable terms, if at all. Increased inflation rates can adversely affect us by increasing our costs, including labor and employee benefit costs.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish substantial rights.

To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these new securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available at all, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures, or declaring dividends. If we raise additional funds through collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, MARGENZA, product candidates, or future revenue streams, or grant licenses on terms that are not favorable to us. We cannot assure you that we will be able to obtain additional funding if and when necessary. If we are unable to obtain adequate financing on a timely basis, we could be required to delay, scale back or eliminate one or more of our development programs or grant rights to develop and market MARGENZA or product candidates that we would otherwise prefer to develop and market ourselves.

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

Our ability to utilize our federal net operating losses (NOLs) and federal tax credits is currently limited, and may be limited further, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended. The limitations apply if an ownership change, as defined by Section 382, occurs. Generally, an ownership change occurs when certain shareholders increase their aggregate ownership by more than 50 percentage points over their lowest ownership percentage in a testing period, which is typically three years or since the last ownership change. We are already subject to Section 382 limitations due to acquisitions we made in 2002 and 2008. As of December 31, 2022, we had federal and state NOL carryforwards of approximately $777 million and federal research and development tax credits of approximately $94 million available. Future changes in stock ownership may also trigger an ownership change and, consequently, another Section 382 limitation. Any limitation may result in expiration of a portion of the net operating loss or tax credit carryforwards before utilization which would reduce our gross deferred income tax assets and corresponding valuation allowance. As a result, if we earn net taxable income, our ability to use our pre-change NOL carryforwards and tax credit carryforwards to reduce United States federal income tax may be subject to limitations, which could potentially result in increased future cash tax liability to us.

Risks Related to Our Dependence on Third Parties

Our existing therapeutic collaborations are important to our business, and future collaborations may also be important to us. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.

We have limited capabilities for drug development and have little to no internal capability for sales, marketing or distribution. We have entered into collaborations with other companies that we believe can provide such capabilities, including our agreements with, for example, Gilead Sciences, Inc., Incyte Corporation, Zai Lab Limited and Janssen Biotech, Inc. These current collaborations also have provided us with important funding for our development programs and technology platforms and we expect to receive additional funding under these collaborations in the future. Our existing therapeutic collaborations, and any future collaborations we enter into, may pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create 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 products or 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;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays in payment, or non-payment, of royalties, milestones or other monies owed, delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- 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 potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates. For example, each of our collaboration and license agreements may be terminated for convenience upon the completion of a specified notice period.

If our therapeutic collaborations do not result in the successful development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. All of the risks relating to product development, regulatory approval and commercialization described in this Annual Report on Form 10-K also apply to the activities of our program collaborators.

Additionally, subject to its contractual obligations to us, if one of our collaborators is involved in a business combination, the collaborator might de-emphasize or terminate the development or commercialization of MARGENZA or any product candidate licensed to it by us. If one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators.

For vobra duo, lorigerlimab, and our other product candidates, we may in the future determine to collaborate with additional pharmaceutical and biotechnology companies for development and potential commercialization. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator'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. The collaborator may also consider alternative products, product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate.

Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of vobra duo, lorigerlimab, or our other product candidates, reduce or delay one or more of our other development programs, delay the commercialization of a product candidate or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop vobra duo, lorigerlimab, or our other product candidates or bring them to market or continue to develop our technology platforms and our business may be materially and adversely affected.

We may also be restricted under collaboration agreements from entering into additional agreements on certain terms with potential collaborators. Most of our existing therapeutic collaborations contain a restriction on our engaging in activities that are the subject of the collaboration with third parties for specified periods of time.

We contract with, and may in the future contract with, third parties for components of the manufacturing of MARGENZA and our other product candidates. Failure of third-party contractors to successfully perform their obligations could harm our ability to develop or commercialize our product or product candidates.

We currently have one cGMP manufacturing facility located in Rockville, Maryland in compliance with cGMP to support future clinical and commercial production of our and our collaborators' product candidates. We manufacture drug substance lots at this facility that we use for clinical trials of our and our collaborators' product candidates. We also have the capability to manufacture commercial supply of MARGENZA. Although we believe we currently have capacity to produce most of the material required for our and our collaborators' clinical trials and for the commercial supply of MARGENZA, we may not be able to do so in the future, and may continue to rely on arrangements with third parties. We will continue to rely on third parties for bioconjugation to produce ADCs and for fill finish activities, neither of which our cGMP manufacturing facility can currently accommodate.

We have entered into agreements with contract manufacturing organizations in the past to supplement our clinical supply and internal capacity as we commercialize MARGENZA and advance vobra duo, lorigerlimab and other product candidates in our pipeline. In addition, in the future, we may use third parties for the manufacture of some or all components of our product candidates for clinical testing, including anti-body drug conjugates, as well as for commercial manufacture of some of our product candidates that receive marketing approval and that are not manufactured by us or one of our third party collaborators. We may be unable to reach agreement with any of these contract manufacturers, or to identify and reach arrangements on satisfactory terms with other contract manufacturers, to manufacture any of our product candidates. Additionally, the facilities used by any contract manufacturer to manufacture any of our product candidates must be the subject of a satisfactory inspection before the FDA and other regulatory authorities approve a BLA or marketing authorization for the product candidate manufactured at that facility. We will depend on these third-party manufacturing partners for compliance with the FDA's requirements for the manufacture of our finished products. If our manufacturers cannot successfully manufacture material that conforms to our specifications and the FDA and other regulatory authorities' cGMP requirements, our product candidates will not be approved or, if already approved, may be subject to recalls.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured MARGENZA or the product candidates ourselves, including:

- the possibility of a breach of the manufacturing agreements by the third parties because of factors beyond our control;
- the possibility of termination or nonrenewal of the agreements by the third parties before we are able to arrange for a qualified replacement third-party manufacturer; and
- the possibility that we may not be able to secure a manufacturer or manufacturing capacity in a timely manner and on satisfactory terms in order to meet our manufacturing needs.

Any of these factors could adversely impact the commercialization of MARGENZA and the delay of approval or commercialization of our product candidates, cause us to incur higher costs or prevent us from commercializing our product candidates successfully. Furthermore, if contract manufacturers fail to deliver the required commercial quantities of finished product on a timely basis and at commercially reasonable prices, and we are unable to find one or more replacement manufacturers capable of production at a substantially equivalent cost, in substantially equivalent volumes and quality and on a timely basis, we would likely be unable to meet demand for our products and could lose potential revenue. It may take several years to establish an alternative source of supply for MARGENZA or our product candidates and to have any such new source approved by the FDA or any other relevant regulatory authorities.

Failure to successfully develop and commercialize companion diagnostics with third party contractors for use with our product candidates could harm our ability to commercialize our product candidates.

We plan to develop, or engage third parties to develop, companion diagnostics for our product candidates where appropriate. At least in some cases, the FDA and similar regulatory authorities outside the United States may request or require the development and regulatory approval of a companion diagnostic as a condition to approving one or more of our product candidates. We do not have experience or capabilities in developing or commercializing diagnostics and are relying, and in the future plan to continue to rely, in large part on third parties to perform these functions.

In most cases, we will likely outsource the development, production and commercialization of companion diagnostics to third parties. By outsourcing these companion diagnostics to third parties, we become dependent on the efforts of our third party contractors to successfully develop and commercialize these companion diagnostics. Our contractors:

- may not perform their obligations as expected;
- may encounter production difficulties that could constrain the supply of the companion diagnostic;
- may have difficulties gaining acceptance of the use of the companion diagnostic in the clinical community;
- may not commit sufficient resources to the marketing and distribution of such product; and
- may terminate their relationship with us.

If any companion diagnostic for use with one of our product candidates fails to gain market acceptance, our ability to derive revenues from sales of such product candidate could be harmed. If our third party contractors fail to commercialize such companion diagnostic, we may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with such product candidate or do so on commercially reasonable terms, which could adversely affect and delay the development or commercialization of such product candidate.

Independent clinical investigators and CROs that we engage to conduct our clinical trials may not devote sufficient time or attention to our clinical trials or be able to repeat their past success.

We expect to continue to depend on independent clinical investigators and CROs to conduct our clinical trials, including future trials for vobra duo, lorigerlimab and other product candidates. CROs may also assist us in the collection and analysis of data. There is a limited number of third-party service providers that specialize or have the expertise required to achieve our business objectives. Identifying, qualifying and managing performance of third-party service providers can be difficult, time consuming and cause delays in our development programs. These investigators and CROs will not be our employees and we will not be able to control, other than by contract, the amount of resources, including time, which they devote to our product candidates and clinical trials. If independent investigators or CROs fail to devote sufficient resources to the development of our product candidates, or if their performance is substandard, it may delay or compromise the prospects for approval and commercialization of any product candidates that we develop. In addition, the use of third-party service providers

requires us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated. Further, the FDA requires that we comply with standards, commonly referred to as current Good Clinical Practice (GCP) for conducting, recording and reporting clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial subjects are protected. Failure of clinical investigators or CROs to meet their obligations to us or comply with GCP procedures could adversely affect the clinical development of our product candidates and harm our business.

Commercialization collaborations will be important to our business. If we are unable to maintain commercialization collaborations, or if commercialization collaborations are not successful, our business could be adversely affected.

We have limited capabilities for drug commercialization, with little to no internal capability for sales, marketing or distribution. For example, we have entered into a collaboration with Eversana for the commercialization of MARGENZA in the United States that we believe can provide such capabilities, and may enter into commercial collaborations in the future for MARGENZA or our product candidates. Our existing commercialization collaboration, and any future commercialization collaborations we enter into, may pose a number of risks, including the following:

- collaborators may have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue commercialization of MARGENZA or any product candidates that achieve regulatory approval or may elect not to continue commercialization based on clinical trial results, changes in the collaborators' strategic focus or other factors that divert resources or create competing priorities;
- collaborators could independently commercialize products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully commercialized under terms that are more economically attractive than ours;
- collaborators with marketing and distribution rights to MARGENZA or our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements on contract interpretation, commercialization strategy or tactics, might cause delays or termination of the commercialization of MARGENZA or product candidates, might lead to additional responsibilities for us with respect to MARGENZA or product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly utilize 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 potential litigation;
- collaborators may violate, or be investigated for potentially violating, health care compliance and related laws and regulations, which may expose us to litigation, enforcement actions or inquiries, or other potential liability; and
- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further commercialization of MARGNEZA or applicable product candidates.

All of the risks relating to commercialization, and health care legal compliance described in this Annual Report on Form 10-K also apply to the commercialization activities of our collaborators.

Additionally, subject to its contractual obligations to us, if one of our collaborators is involved in a business combination, the collaborator might de-emphasize or terminate the development or commercialization of MARGENZA or any product candidate licensed to it by us. If one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators. We may also be restricted under commercialization collaboration agreements from entering into future agreements on certain terms with potential collaborators. For example, our collaboration with Eversana contains a restriction on our engaging in activities that are the subject of the collaboration with third parties for specified periods of time among other conditions.

Commercialization collaborations are complex and time-consuming to negotiate and document. 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 collaborators. If we are unable to reach agreements with suitable collaborators on a timely

basis, on acceptable terms, or at all, we may have to curtail the commercialization of MARGENZA or a product candidate, reduce the scope of any sales or marketing activities, or increase our expenditures and undertake or commercialization activities at our own expense. If in the future we elect to fund and undertake commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations to commercialize our product candidates and do not have sufficient funds or expertise to undertake the necessary commercialization activities, we may not be able to commercialize our product candidates or bring them to market or continue and our business may be materially and adversely affected.

Risks Related to Cybersecurity

A disruption in our computer networks, including those related to cybersecurity, could adversely affect our financial performance as well as our research, development and commercialization efforts.

Security breaches, including physical or electronic break-ins, computer viruses, attacks by hackers and similar breaches continue to increase generally and can create system disruptions or shutdowns or the unauthorized disclosure of confidential information. In addition, due to the COVID-19 pandemic a portion of our employees have been working remotely, either from home or elsewhere. If personal information or protected health information is improperly accessed, tampered with or disclosed as a result of a security breach, we may incur significant costs to notify and mitigate potential harm to the affected individuals, and we may be subject to sanctions and civil or criminal penalties if we are found to be in violation of federal, state, or other laws protecting confidential personal information. In addition, a cybersecurity breach could hurt our reputation, subject us to liability claims or regulatory penalties for compromised personal information and could have a material adverse effect on our business, financial condition and results of operations. In order to reduce such risks, our information security program employs a policy-driven information systems security architecture based on National Institute of Standards and Technology (NIST) Cybersecurity Framework and references the NIST 800-53 guidelines for risk-based assessments and implementation of information security controls, which are assessed annually by independent third party auditors. An information security training program is also in place to educate employees and contractors on information security and data protection measures. The cybersecurity program is managed by dedicated Information Security personnel with the primary mission to implement, maintain, and improve the capabilities and practices to ensure the confidentiality, integrity, and availability of the sensitive information it maintains.

Risks Related to Our Intellectual Property

Our success depends significantly on our ability to operate without infringing the valid patents and other proprietary rights of third parties.

Our success will depend in part on our ability to operate without infringing the proprietary rights of third parties. Third parties may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import our future approved products or impair our competitive position. For example, certain patents held by third parties cover Fc engineering methods and mutations in Fc regions to enhance the binding of Fc regions to Fc receptors on immune cells. Although we believe that these patents are not infringed, and/or are invalid and/or unenforceable, if a court should find that they cover our products, such as MARGENZA or enoblituzumab, and we are unable to invalidate such patents, or if licenses for them are not available on commercially reasonable terms, our business could be harmed, perhaps materially.

Third parties could possess patents that we may ultimately be found to infringe, or such third party patents could issue in the future. Third parties may have or obtain valid and enforceable patents or proprietary rights that could block us from developing product candidates using our technology. Our failure to obtain a license to any technology that we require may materially harm our business, financial condition and results of operations. Moreover, our failure to maintain a license to any technology that we require may also materially harm our business, financial condition, and results of operations. Furthermore, we would be exposed to a threat of litigation.

In the pharmaceutical industry, significant litigation and other proceedings regarding patents, patent applications, trademarks and other intellectual property rights have become commonplace. The types of situations in which we may become a party to such litigation or proceedings include:

- we or our collaborators may initiate litigation or other proceedings against third parties seeking to invalidate the patents held by those third parties or to obtain a judgment that our products or processes do not infringe those third parties' patents;
- if our competitors file patent applications that claim technology also claimed by us or our licensors, we or our licensors may be required to participate in interference, opposition or other proceedings to determine the priority

of invention, which could jeopardize our patent rights and potentially provide a third party with a dominant patent position;

- if third parties initiate litigation claiming that our processes or products infringe their patent or other intellectual property rights, we and our collaborators will need to defend against such proceedings; and
- if a license to necessary technology is terminated, the licensor may initiate litigation claiming that our processes or products infringe or misappropriate their patent or other intellectual property rights and/or that we breached our obligations under the license agreement, and we and our collaborators would need to defend against such proceedings.

These lawsuits would be costly and could affect our results of operations and divert the attention of our management and scientific personnel. There is a risk that a court would decide that we or our collaborators are infringing the third party's patents and would order us or our collaborators to stop the activities covered by the patents. In that event, we or our collaborators may not have a viable alternative to the technology protected by the patent and may need to halt work on the affected product candidate or cease commercialization of an approved product. In addition, there is a risk that a court will order us or our collaborators to pay the other party damages. An adverse outcome in any litigation or other proceeding could subject us to significant liabilities to third parties and require us to cease using the technology that is at issue or to license the technology from third parties. We may not be able to obtain any required licenses on commercially acceptable terms or at all. Any of these outcomes could have a material adverse effect on our business.

The pharmaceutical and biotechnology industries have produced a significant number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products, methods of use, or processes. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform or predictable. If we are sued for patent infringement, we would need to demonstrate that our products, methods, or processes either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. Proving invalidity is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and divert management's time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court. Patent litigation is costly and time consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, fail to defend an infringement action successfully or have infringed patents declared invalid, we may incur substantial monetary damages, encounter significant delays in bringing our product candidates to market and be precluded from manufacturing or selling our product candidates.

The cost of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the cost of such litigation and proceedings more effectively than we can because of their substantially greater resources. 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. Patent litigation and other proceedings may also absorb significant management time.

If we are unable to obtain and enforce patent protection for our products and our product candidates and related technology, our business could be materially harmed.

Issued patents may be challenged, narrowed, invalidated or circumvented. In addition, court decisions may introduce uncertainty in the enforceability or scope of patents owned by biotechnology companies. The legal systems of certain countries do not favor the aggressive enforcement of patents, and the laws of foreign countries may not allow us to protect our inventions with patents to the same extent as the laws of the United States. Because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publications of discoveries in scientific literature lag behind actual discoveries, we cannot be certain that we were the first to make the inventions claimed in our issued patents or pending patent applications, or that we were the first to file for protection of the inventions set forth in our patents or patent applications. As a result, we may not be able to obtain or maintain protection for certain inventions. Therefore, the enforceability and scope of our patents in the United States and in foreign countries cannot be predicted with certainty and, as a result, any patents that we own or license may not provide sufficient protection against competitors. We may not be able to obtain or maintain patent protection from our pending patent applications, from those we may file in the future, or from those we may license from third parties. Moreover, even if we are able to obtain patent protection, such patent protection may be of insufficient scope to achieve our business objectives.

Our strategy depends on our ability to identify and seek patent protection for our discoveries. This process is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable

cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. Despite our efforts to protect our proprietary rights, unauthorized parties may be able to obtain and use information that we regard as proprietary.

The issuance of a patent does not ensure that a court or agency finds or will find the patent valid or enforceable, so even if we obtain patents, they may not be valid or enforceable against third parties. In addition, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that could prevent us from marketing our own patented product and practicing our own patented technology. Third parties may also seek to market biosimilar versions of any approved products. Alternatively, third parties may seek approval to market their own products similar to or otherwise competitive with our products. In these circumstances, we may need to defend and/or assert our patents, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or agency with jurisdiction may find our patents invalid and/or unenforceable. Even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives.

The patent position of pharmaceutical or biotechnology companies, including ours, is generally uncertain and involves complex legal and factual considerations. The standards which the United States Patent and Trademark Office (USPTO) and its foreign counterparts use to grant patents are not always applied predictably or uniformly and can change. There is also no uniform, worldwide policy regarding the subject matter and scope of claims granted or allowable in pharmaceutical or biotechnology patents. The laws of some foreign countries do not protect proprietary information to the same extent as the laws of the United States, and many companies have encountered significant problems and costs in protecting their proprietary information in these foreign countries. Outside the United States, patent protection must be sought in individual jurisdictions, further adding to the cost and uncertainty of obtaining adequate patent protection outside of the United States. Accordingly, we cannot predict whether additional patents protecting our technology will issue in the United States or in foreign jurisdictions, or whether any patents that do issue will have claims of adequate scope to provide competitive advantage. Moreover, we cannot predict whether third parties will be able to successfully obtain claims or the breadth of such claims. The allowance of broader claims may increase the incidence and cost of patent interference proceedings, opposition proceedings, and/or reexamination proceedings, the risk of infringement litigation, and the vulnerability of the claims to challenge. On the other hand, the allowance of narrower claims does not eliminate the potential for adversarial proceedings, and may fail to provide a competitive advantage. Our issued patents may not contain claims sufficiently broad to protect us against third parties with similar technologies or products, or provide us with any competitive advantage.

We may become involved in lawsuits to protect or enforce our patents, which could be expensive, time consuming and unsuccessful.

Even after they have been issued, our patents and any patents which we license may be challenged, narrowed, invalidated or circumvented. If our patents are invalidated or otherwise limited or will expire prior to the commercialization of our approved products and product candidates, other companies may be better able to develop products that compete with ours, which could adversely affect our competitive business position, business prospects and financial condition.

The following are examples of litigation and other adversarial proceedings or disputes that we could become a party to involving our patents or patents licensed to us:

- we or our collaborators may initiate litigation or other proceedings against third parties to enforce our patent rights;
- third parties may initiate litigation or other proceedings seeking to invalidate patents owned by or licensed to us or to obtain a declaratory judgment that their product or technology does not infringe our patents or patents licensed to us;
- third parties may initiate opposition, reexamination or inter partes review proceedings challenging the validity or scope of our patent rights, requiring us or our collaborators and/or licensors to participate in such proceedings to defend the validity and scope of our patents;
- there may be a challenge or dispute regarding inventorship or ownership of patents currently identified as being owned by or licensed to us;
- the USPTO may initiate an interference between patents or patent applications owned by or licensed to us and those of our competitors, requiring us or our collaborators and/or licensors to participate in an interference proceeding to determine the priority of invention, which could jeopardize our patent rights; or

- third parties may seek approval to market biosimilar versions of our future approved products prior to expiration of relevant patents owned by or licensed to us, requiring us to defend our patents, including by filing lawsuits alleging patent infringement.

These lawsuits and proceedings would be costly and could affect our results of operations and divert the attention of our managerial and scientific personnel. There is a risk that a court or administrative body would decide that our patents are invalid or not infringed by a third party's activities, or that the scope of certain issued claims must be further limited. An adverse outcome in a litigation or proceeding involving our own patents could limit our ability to assert our patents against these or other competitors, affect our ability to receive royalties or other licensing consideration from our licensees, and may curtail or preclude our ability to exclude third parties from making, using and selling similar or competitive products. Any of these occurrences could adversely affect our competitive business position, business prospects and financial condition.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- others may be able to develop a platform that is similar to, or better than, ours in a way that is not covered by the claims of our patents;
- others may be able to make compounds that are similar to our product candidates but that are not covered by the claims of our patents;
- we might not have been the first to make the inventions covered by patents or pending patent applications;
- we might not have been the first to file patent applications for these inventions;
- any patents that we obtain may not provide us with any competitive advantages or may ultimately be found invalid or unenforceable; or
- we may not develop additional proprietary technologies that are patentable.

If we fail to comply with our obligations under our intellectual property licenses with third parties, we could lose license rights that are important to our business.

We are currently party to various intellectual property license agreements. These license agreements impose, and we expect that future license agreements may impose, various diligence, milestone payment, royalty, insurance and other obligations on us. For example, we have entered into patent and know-how license agreements that grant us the right to use certain technologies related to biological manufacturing to manufacture our clinical product candidates. These licenses typically include an obligation to pay yearly maintenance payments and royalties on sales, and may also include upfront and milestone payments. If we fail to comply with our obligations under the licenses, the licensors may have the right to terminate their respective license agreements, in which event we might not be able to market any product that is covered by the agreements. Termination of the license agreements or reduction or elimination of our licensed rights may result in our having to negotiate new or reinstated licenses with less favorable terms, which could adversely affect our competitive business position and harm our business.

If we are unable to protect the confidentiality of our proprietary information, the value of our technology and products could be adversely affected.

In addition to patent protection, we also rely on other proprietary rights, including protection of trade secrets, and other proprietary information. To maintain the confidentiality of trade secrets and proprietary information, we enter into confidentiality agreements with our employees, consultants, collaborators and others upon the commencement of their relationships with us. These agreements require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. Our agreements with employees and our personnel policies also provide that any inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. However, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. Thus, despite such agreement, such inventions may become assigned to third parties. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information. To the extent that our employees, consultants or contractors use technology or know-how owned by third parties in their work for us, disputes may arise between us and those third parties as to the rights in related inventions. To the extent that an individual who is not obligated to assign rights in intellectual property to us is rightfully an inventor of intellectual property, we may need to obtain an assignment or a license to that intellectual property

from that individual, or a third party or from that individual's assignee. Such assignment or license may not be available on commercially reasonable terms or at all.

Adequate remedies may not exist in the event of unauthorized use or disclosure of our proprietary information. The disclosure of our trade secrets would impair our competitive position and may materially harm our business, financial condition and results of operations. Costly and time consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to maintain trade secret protection could adversely affect our competitive business position. In addition, others may independently discover or develop our trade secrets and proprietary information, and the existence of our own trade secrets affords no protection against such independent discovery.

As is common in the biotechnology and pharmaceutical industries, we employ individuals who were previously or concurrently employed at research institutions and/or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. 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, or that patents and applications we have filed to protect inventions of these employees, even those related to one or more of our product candidates, are rightfully owned by their former or concurrent employer. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Obtaining and maintaining our patent protection depends on compliance with various procedural, documentary, 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 the USPTO and various foreign patent offices at various points over the lifetime of our patents and/or applications. We have systems in place to remind us to pay these fees, and we rely on our outside counsel or our agents to pay these fees when due. Additionally, the USPTO and various foreign patent offices 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 rules applicable to the particular jurisdiction. However, there are situations in which noncompliance 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. If such an event were to occur, it could have a material adverse effect on our business. In addition, we may be responsible for the payment of patent fees for patent rights that we license from other parties. If any licensor of these patents does not itself elect to make these payments, and we fail to do so, we may be liable to the licensor for any costs and consequences of any resulting loss of patent rights.

If we do not obtain protection under the Hatch-Waxman Amendments and similar foreign legislation for extending the term of patents covering each of our product candidates, our business may be materially harmed.

Depending upon the timing, duration and conditions of 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. 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 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. 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 that product 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, possibly materially.

Risks Related to Legal Compliance Matters

We are subject to the U.S. Foreign Corrupt Practices Act and other anti-corruption laws. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures, and legal expenses, which could adversely affect our business, results of operations and financial condition.

Our operations are subject to anti-corruption laws, including the U.S. Foreign Corrupt Practices Act, (FCPA) and other anti-corruption laws that apply in countries where we do business. The FCPA and these other laws generally prohibit us and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. We and our commercial partners operate in a number of jurisdictions that pose a risk of potential FCPA violations, and we participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the FCPA or other anti-corruption laws. There is no

assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws. If we violate provisions of the FCPA or other anti-corruption laws or are subject to an investigation or audit pursuant to these laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures and legal expenses, which could have an adverse impact on our business, financial condition and results of operations.

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

Our research and development involves, and may in the future involve, the use of potentially hazardous materials and chemicals. Our operations may produce hazardous waste products. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by local, state and federal laws and regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations and fire and building codes, including those governing laboratory procedures, exposure to blood-borne pathogens, use and storage of flammable agents and the handling of biohazardous materials. Although we maintain workers' compensation insurance as prescribed by the States of Maryland and California to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

We and our collaborators are subject to various healthcare laws, and our failure, or the failure of our collaborators, to comply with those laws could result in significant penalties and adversely affect our business, operations and financial condition.

In the United States, our operations, and those of our collaborators, are subject to regulation by various local, state, federal authorities in addition to the FDA, including but not limited to, CMS, other divisions of HHS (such as the Office of Inspector General, Office for Civil Rights and the Health Resources and Service Administration), the U.S. Department of Justice (DOJ) and individual U.S. Attorney offices within the DOJ, and state and local governments. We and our collaborators are or may be subject to broadly applicable "fraud and abuse" laws, such as false claims, anti-kickback laws, transparency laws, and privacy and security laws. Federal false claims laws, including the federal civil False Claims Act, prohibit, among other things, 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 get a claim paid.

The federal healthcare program 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. 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 several statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the federal anti-kickback statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Our practices, or those of our collaborators, may not in all cases meet all of the criteria for protection under a statutory exception or regulatory safe harbor.

Additionally, the intent standard under the federal anti-kickback statute and the criminal healthcare fraud statutes (discussed below) was amended by the ACA to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the ACA codified case law that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the federal civil false claims act.

The federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) which prohibits, among other things, knowingly and willfully executing, or attempting to execute, a scheme or artifice to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private), willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false, fictitious or fraudulent statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. 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.

In addition, under the Sunshine Act provisions of the ACA, covered manufacturers of drugs, devices, biological and medical supplies for which payment is available under a federal health care program (with certain exceptions) are subject to annual federal reporting and disclosure requirements with regard to payments or other transfers of value made to physicians defined to include doctors, dentists, optometrists, podiatrists and chiropractors), other healthcare professionals (such as physician assistants and nurse practitioners), and teaching hospitals as well as information regarding certain ownership and investment interests held by physicians and their immediate family members.

Most states also have statutes or regulations similar to the federal anti-kickback law and federal false claims laws, which may apply to items such as pharmaceutical products and services reimbursed by private insurers. Some state laws also prohibit certain gifts to healthcare providers, require pharmaceutical companies to report payments to healthcare professionals, and/or require companies to adopt compliance programs or codes of conduct.

Over the past few years, a number of pharmaceutical and other healthcare companies have been prosecuted under these laws for a variety of promotional and marketing activities, such as: providing free trips, free goods, improper consulting fees and grants and other monetary benefits to prescribers; reporting to pricing services inflated average wholesale prices that were then used by federal programs to set reimbursement rates; engaging in off-label promotion; and submitting inflated best price information to the Medicaid Rebate Program to reduce liability for Medicaid rebates. At such time as we or our collaborators market MARGENZA or any of our future approved products and these products are paid for by governmental programs, it is possible that some of our business activities could also be subject to challenge under one or more of these “fraud and abuse” laws.

We and our collaborators may also be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business, as well as foreign jurisdictions. In the United States, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH) and its implementing regulations, impose requirements on “covered entities,” including certain healthcare providers, health plans, and healthcare clearinghouses, and their respective “business associates” that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity as well as their covered subcontractors relating to the privacy, security and transmission of individually identifiable health information. We are subject to other state and foreign laws that govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. For example, the General Data Protection Regulation (EU) 2016/679 (GDPR) which went into effect on May 25, 2018, imposes privacy and security obligations on any entity that collects and/or processes health data from individuals located in the European Union. Under the GDPR, fines of up to 20 million Euros or up to 4% of the annual global turnover of the infringer, whichever is greater, could be imposed for significant non-compliance. In addition, on June 28, 2018, California enacted the California Consumer Privacy Act (CCPA), which took effect on January 1, 2020. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Some observers have noted that the CCPA could mark the beginning of a trend toward more stringent state privacy legislation in the United States, which could increase our potential liability and adversely affect our business. As well as complicating our compliance efforts, non-compliance with these laws could result in penalties or significant legal liability.

Further, in order to distribute products commercially in the United States, we or our collaborators must also comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in certain states, manufacturers, and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, track, and report gifts, compensation and other remuneration made to physicians and other healthcare providers, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and to prohibit certain other sales and marketing practices.

If our operations, or those of our collaborators marketing, distributing or commercializing any of our products on our behalf, are found to be in violation of any of the federal and state healthcare laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including without limitation, significant civil, criminal and/or

administrative penalties, damages, fines, disgorgement, exclusion from participation in government programs, such as Medicare and Medicaid, injunctions, private "qui tam" actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into government contracts, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

In addition, our operations and those of our collaborators may be subject to analogous foreign health care laws in the jurisdictions in which we operate.

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

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional failures to comply with FDA regulations, to provide accurate information to the FDA or other agencies, to comply with federal and state health care fraud and abuse laws and regulations, to report financial information or data accurately or to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the health care industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. 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. We have adopted a code of conduct, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these 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 significant impact on our business, including the imposition of significant fines or other sanctions.

Risks Relating to Employee Matters and Human Capital Management

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the research and development, clinical and business development expertise of Scott Koenig, M.D., Ph.D., our President and Chief Executive Officer, as well as the other members of our senior management team. Although we have entered into employment agreements with our executive officers, each of them may terminate their employment with us at any time. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development, manufacturing and commercialization objectives and seriously harm our ability to successfully implement our business strategy.

Recruiting and retaining qualified scientific, clinical, manufacturing and other personnel will also be critical to our success. For example, we have experienced increased employee turnover, consistent with high numbers of employee resignations across the broader American economy, and we may continue to experience employee turnover in the future that may have an adverse effect on our business strategy. New hires require significant training and, in most cases, take significant time before they achieve full productivity. New employees may not become as productive as we expect, and we may be unable to hire or retain sufficient numbers of qualified individuals. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Such competition may increase due to the recent move by companies to offer a remote or hybrid work environment. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, motivate existing employees, or maintain our corporate culture in a hybrid or remote work environment and in the midst of higher turnover, our ability to pursue our growth strategy will be limited.

Additionally, in January 2023, the U.S. Federal Trade Commission published a proposed rule that would generally prohibit post-employment non-compete clauses (or other clauses with comparable effect) in agreements between employers and their employees. If this rule goes into effect, or if we fail to adequately address any of the issues referred to above, it could adversely impact our ability to recruit and retain our skilled employees which may result in a material adverse effect on our business, operating results and financial condition.

Our restructuring and the associated workforce reduction announced in August 2022 may not result in anticipated cost savings, could result in total costs and expenses that are greater than expected and could disrupt our business.

In August 2022, we announced a reduction in workforce by approximately 15% in connection with the restructuring of our business to prioritize and focus on our lead assets. We may not realize, in full or in part, the anticipated benefits, savings and improvements in our operating structure from our restructuring efforts due to unforeseen difficulties, delays or unexpected costs. If we are unable to realize the expected operational efficiencies and cost savings from the restructuring, our results of operation and financial condition would be adversely affected. We expect to incur additional costs as we recognize one-time employee termination-related charges. We also cannot guarantee that we will not have to undertake additional workforce reductions or restructuring activities in the future. Furthermore, our strategic restructuring plan may be disruptive to our operations. For example, our workforce reductions could yield unanticipated consequences, such as attrition beyond planned staff reductions, increased difficulties in our day-to-day operations and reduced employee morale. If employees who were not affected by the reduction in force seek alternate employment, this could result in us seeking contract support which may result in unplanned additional expense or harm our productivity. Our workforce reductions could also harm our ability to attract and retain qualified management, scientific, clinical, and manufacturing personnel who are critical to our business. Any failure to attract or retain qualified personnel could prevent us from successfully developing our product candidates in the future.

If we are unable to provide meaningful equity incentives to our key employees, it could adversely affect our ability to retain these key employees, which in turn could affect our ability to implement our business strategies.

We are dependent upon the members of our senior management team and other key employees. In our industry, it is common to attract and retain executive and other key employees with compensation packages that include a significant equity component. As a result, we may have difficulty retaining key personnel, which would have a material adverse effect on our ability to execute our business strategy.

We may need to grow or contract our organization, and we may experience difficulties in managing this growth or contraction, which could disrupt our operations.

As of December 31, 2022, we had 357 full-time employees, with the announced intention of a workforce reduction totaling 15% from August 2022. In addition to the risks associated with a reduction in force, as our finances, development and commercialization plans and strategies evolve, we may choose to expand or contract our employee base for managerial, operational, manufacturing, financial and other resources. Future growth or additional contraction would impose significant added responsibilities on members of management, including the need to identify, recruit, maintain, motivate and integrate additional employees. Also, our management may need to divert a disproportionate amount of their attention away from our day-to-day activities and devote a substantial amount of time to managing either growth or contraction activities. We may not be able to effectively manage our operations which may result in weaknesses in our infrastructure, give rise to operational errors, loss of business opportunities, loss of employees and reduced productivity among remaining employees.

Growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of existing and additional product candidates. If our management is unable to effectively manage such growth, our expenses may increase more than expected, our ability to generate and/or grow revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize MARGENZA, our product candidates and compete effectively with others in our industry will depend, in part, on our ability to effectively manage any such growth.

Risks Relating to Our Common Stock

We are subject to securities litigation, which is expensive and could divert management attention and adversely impact our business.

The market price of our common stock has been and may continue to be volatile. Companies that have experienced volatility in the market price of their common stock are often subject to securities class action litigation. For example, on September 13, 2019, a securities class action complaint was filed against us, and certain of our officers and/or directors in the U.S. District Court for the District of Maryland. On September 29, 2021, the District Court issued an Order dismissing the case, with prejudice, and on March 2, 2023 the Fourth Circuit affirmed the District Court’s dismissal.

This or any future securities litigation brought by private parties or government enforcement agencies could result in substantial costs and diversion of management’s attention and resources, which could adversely impact our business. Any adverse determination in litigation could also subject us to significant liabilities.

The market price of our stock may fluctuate unpredictably in response to factors unrelated to our operating performance. The stock market has recently experienced significant volatility, particularly with respect to pharmaceutical, biotechnology, and other life sciences company stocks. The volatility of pharmaceutical, biotechnology, and other life sciences company stocks often does not relate to the operating performance of the companies represented by the stock. Some of the factors that may cause the market price of our common stock to fluctuate include:

- results and timing of our clinical trials and clinical trials of our competitors' products;
- failure or discontinuation of any of our development programs;
- issues in manufacturing our product candidates or future approved products;
- regulatory developments or enforcement in the United States and foreign countries with respect to our product candidates or our competitors' products;
- competition from existing products or new products that may emerge;
- developments or disputes concerning patents or other proprietary rights;
- introduction of technological innovations or new commercial products by us or our competitors;
- announcements by us, our collaborators or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- changes in estimates or recommendations by securities analysts, if any cover our common stock;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- public concern over our product candidates or any future approved products;
- threatened or actual litigation;
- future or anticipated sales of our common stock;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- additions or departures of key personnel;
- changes in the structure of health care payment systems in the United States or overseas;
- failure of any of MARGENZA or our product candidates, if approved, to achieve commercial success;
- economic and other external factors or other disasters or crises;
- period-to-period fluctuations in our financial condition and results of operations, including the timing of receipt of any milestone or other payments under commercialization or licensing agreements;
- general market conditions and market conditions for biopharmaceutical stocks; and
- overall fluctuations in U.S. equity markets.

In addition, in the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the company that issued the stock. For example, one such securities class action lawsuit was brought against us. We could incur substantial costs defending this or similar lawsuits, as well as diversion of the time and attention of our management, any or all of which could seriously harm our business.

Provisions of our charter, bylaws, third-party agreements and Delaware law may make an acquisition of us or a change in our management more difficult.

Certain provisions of our restated certificate of incorporation and amended and restated bylaws could discourage, delay, or prevent a merger, acquisition, or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. Furthermore, since our board of directors is responsible for appointing the members of our management team, these provisions could prevent

or frustrate attempts by our stockholders to replace or remove our management by making it more difficult for stockholders to replace members of our board of directors. These provisions:

- allow the authorized number of directors to be changed only by resolution of our board of directors;
- establish a classified board of directors, providing that not all members of the board of directors be elected at one time;
- authorize our board of directors to issue without stockholder approval blank check preferred stock that, if issued, could operate as a "poison pill" to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit stockholder action by written consent;
- establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings;
- limit who may call stockholder meetings; and
- require the approval of the holders of 75% of the outstanding shares of our capital stock entitled to vote in order to amend certain provisions of our restated certificate of incorporation and restated bylaws.

Furthermore, in the ordinary course of our business, from time to time we discuss and enter into collaborations, licenses and other transactions with various third parties, including other pharmaceutical companies and biotechnology companies. When we deem it appropriate, our agreements with such third parties may include standstill provisions. These standstill provisions, several of which may be in force from time-to-time, typically prohibit such parties from acquiring our securities for a period of time, which may discourage such parties from acquiring MacroGenics even if doing so would be beneficial to our stockholders.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a prescribed period of time. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to our stockholders.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease a total of approximately 235,000 square feet of manufacturing, office, laboratory and warehouse space in Maryland and California. Our headquarters building in Rockville, Maryland currently houses laboratory, office and manufacturing operations to support clinical and commercial quantities and scale. This location is occupied under a lease that was modified in December 2022 and now expires in 2035. The California facility and the smaller-scale, non-commercial GMP manufacturing site in Maryland will be closed under our restructuring plan announced in August 2022, therefore the leases for those sites will not be renewed when they expire. Our continuing leases each have one or more five-year options to renew. We believe that our properties are generally in good condition, well maintained, suitable and adequate to carry on our business. We believe our capital resources are sufficient to lease any additional facilities required to meet our expected growth needs.

ITEM 3. LEGAL PROCEEDINGS

In the ordinary course of business, we are or may be involved in various legal or regulatory proceedings, claims or class actions related to alleged patent infringements and other intellectual property rights, or alleged violation of commercial, corporate, securities, labor and employment, and other matters incidental to our business. We do not, however, expect such legal proceedings to have a material adverse effect on our business, financial condition or results of operations. However, depending on the nature and timing of a given dispute, an eventual unfavorable resolution could materially affect our current or future results of operations or cash flows.

See note 6, Commitments and Contingencies, to the consolidated financial statements for more information.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

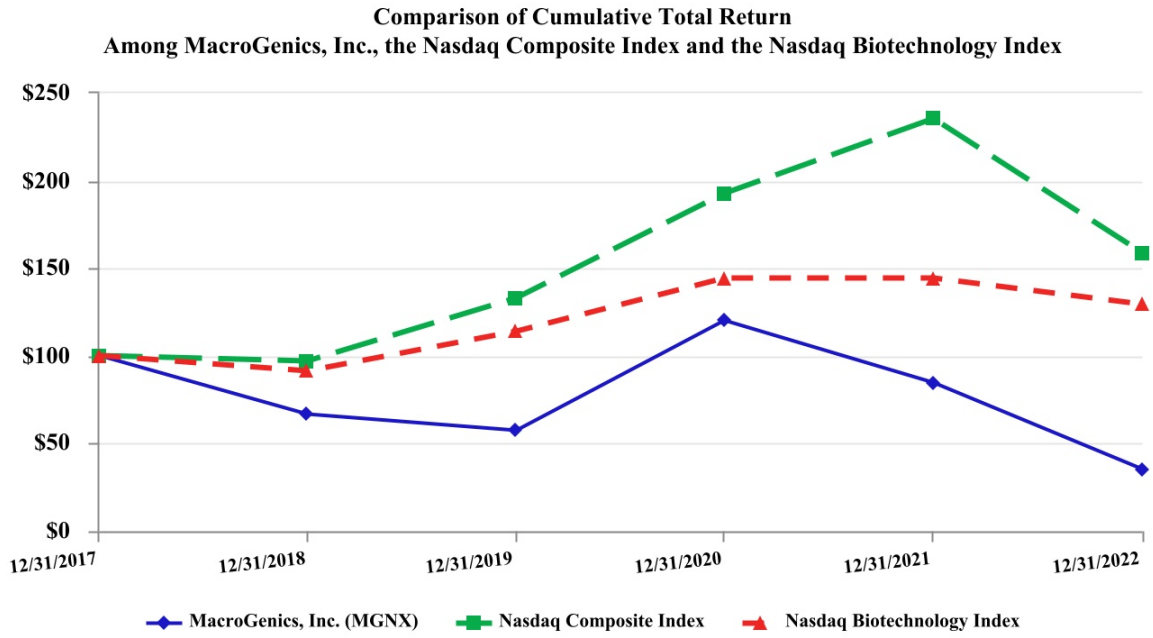
ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock is listed on the Nasdaq Global Select Market under the symbol "MGNX". As of March 10, 2023, we had 61,838,565 shares of common stock outstanding held by approximately 58 holders of record, which include shares held by a broker, bank or other nominee. We have never declared or paid any cash dividends. We do not anticipate declaring or paying cash dividends for the foreseeable future. Instead, we will retain our earnings, if any, for the future operation and expansion of our business.

Performance Graph

The following graph compares the five-year cumulative total return of our common stock with the Nasdaq Composite Index (U.S.) and the Nasdaq Biotechnology Index. The comparison assumes a $100 investment on December 31, 2017 in our common stock, the stocks comprising the Nasdaq Composite Index, and the stocks comprising the Nasdaq Biotechnology Index, and assumes reinvestment of the full amount of all dividends, if any. Historical stockholder return is not necessarily indicative of the performance to be expected for any future periods.



The information set forth under the heading "Performance Graph" shall not be deemed to be "soliciting material" or to be "filed" with the SEC or subject to liabilities of Section 18 of the Exchange Act, except to the extent that we specifically request that such information be treated as soliciting material or specifically be incorporated by reference into a filing under the Securities Act of 1933, as amended, or the Exchange Act.

ITEM 6. RESERVED

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read together with our selected consolidated financial data and the consolidated financial statements and related notes included elsewhere herein. This discussion contains forward-looking statements that involve risks and uncertainties. As a result of many factors including, but not limited to, those set forth under the sections entitled "Risk Factors" and "Forward-Looking Statements", our actual results may differ materially from those anticipated in such forward-looking statements.

For the discussion of our financial condition and results of operations for the year ended December 31, 2021 compared to the year ended December 31, 2020, please refer to Part II, Item 7, "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, 2021 filed with the SEC on February 24, 2022.

Overview

We are a biopharmaceutical company focused on developing and commercializing innovative antibody-based therapeutics for the treatment of cancer. We have a pipeline of product candidates being evaluated in clinical trials sponsored by us or our collaborators in addition to several molecules in preclinical development. Our clinical product candidates include multiple oncology programs, many of which were created using our proprietary, antibody-based technology platforms. We believe our product candidates have the potential, if approved for marketing by regulatory authorities, to have a meaningful effect on treating patients' unmet medical needs as monotherapy or, in some cases, in combination with other therapeutic agents. To date, two products originating from our pipeline of proprietary or partnered product candidates have received U,S. Food and Drug Administration (FDA) approval. In March 2021, we and our commercialization partner commenced U.S. marketing of MARGENZA (margetuximab-cmkb), a human epidermal growth factor receptor 2 (HER2) receptor antagonist indicated, in combination with chemotherapy, for the treatment of adult patients with metastatic HER2-positive breast cancer who have received two or more prior anti-HER2 regimens, at least one of which was for metastatic disease. In November 2022, the FDA approved TZIELD™ (teplizumab-mzwv) to delay the onset of Stage 3 Type 1 Diabetes (T1D) in adult and pediatric patients aged 8 years and older with Stage 2 T1D. Teplizumab was acquired from us by Provention Bio, Inc. (Provention) in 2018, pursuant to an asset purchase agreement.

Our operations to date have concentrated on staffing our company, developing our technology platforms, identifying potential product candidates, undertaking preclinical studies, conducting clinical trials, developing collaborations, business planning and raising capital. We only began generating revenues from the sale of products in 2021. We have financed our operations primarily through the public and private offerings of our securities, collaborations with other biopharmaceutical companies, and government grants and contracts. Although it is difficult to predict our funding requirements, we anticipate that our cash, cash equivalents and marketable securities as of December 31, 2022, combined with anticipated and potential collaboration payments and product revenues, and $100 million proceeds received in March 2023 pursuant to the sale of our single-digit royalty on future global net sales of TZIELD, should enable us to fund our operations through 2025. Our expected funding requirements reflect anticipated expenditures related to the Phase 2 TAMARACK clinical trial of vobramitamab duocarmazine (vobra duo) in metastatic castration-resistant prostate cancer (mCRPC), our planned Phase 2 study of lorigerlimab in mCRPC as well as our other clinical and preclinical studies currently ongoing.

Through December 31, 2022, we had an accumulated deficit of $1.1 billion. We expect that over the next several years this deficit will increase as we increase our expenditures in research and development in connection with our ongoing activities with several clinical trials.

Macroeconomic Conditions

The global economy, credit markets and financial markets have and may continue to experience significant volatility as a result of significant worldwide events, including public health crises, such as the COVID-19 pandemic, and geopolitical upheaval, such as Russia’s incursion into Ukraine (collectively, the Macroeconomic Conditions). These Macroeconomic Conditions have and may continue to create supply chain disruptions, inventory disruptions, and fluctuations in economic growth, including fluctuations in employment rates, inflation, energy prices and consumer sentiment. In particular, the COVID-19 pandemic (or any variant thereof) may have a negative impact on our clinical trials, preclinical nonclinical studies, development, manufacturing and commercialization of our product and product candidates and other aspects of our business, staff, and operations. It remains difficult to assess or predict the ultimate duration and economic impact of the Macroeconomic Conditions including, the path of the COVID-19 pandemic, the evolution of COVID-19 variants or the emergence of other public health crises. In response to the COVID-19 pandemic, we have taken precautionary measures intended to help protect our employees, including enabling our employees to partially work remotely. Prolonged uncertainty with respect to

Macroeconomic Conditions could cause further economic slowdown or cause other unpredictable events, each of which could adversely affect our business, results of operations or financial condition.

Collaborations

We pursue a balanced approach between product candidates that we develop ourselves and those that we develop with our collaborators. Under our strategic collaborations to date, we have received significant non-dilutive funding and continue to have rights to additional funding upon completion of certain research, achievement of key product development milestones and royalties and other payments upon the commercial sale of products. Our current collaborations include the following:

- *Incyte*. We have an exclusive global collaboration and license agreement with Incyte Corporation (Incyte) for retifanlimab, an investigational monoclonal antibody that inhibits programmed cell death protein 1 (PD-1) (Incyte License Agreement). Under this agreement, as amended, Incyte has obtained exclusive worldwide rights for the development and commercialization of retifanlimab in all indications, while we retain the right to develop our pipeline assets in combination with retifanlimab. In addition to the upfront payment of $150.0 million and milestone payments totaling $100.0 million received from Incyte through December 31, 2022, we are eligible to receive an additional $335.0 million in development and regulatory milestones and $330.0 million in commercial milestones, assuming successful development and commercialization of retifanlimab by Incyte. If retifanlimab is approved and commercialized, we would be eligible to receive tiered royalties of 15% to 24% on any global net sales and we have the option to co-promote retifanlimab with Incyte. We retain the right to develop our pipeline assets in combination with retifanlimab, with Incyte commercializing retifanlimab and us commercializing our asset(s), if any such potential combinations are approved. We also have an agreement with Incyte under which we are to perform development and manufacturing services for Incyte's clinical needs of retifanlimab (Incyte Clinical Supply Agreement) and another agreement under which we are entitled to manufacture a portion of Incyte’s global commercial supply of retifanlimab (Incyte Commercial Supply Agreement).

- *Gilead*. In October 2022, we and Gilead Sciences, Inc. (Gilead) entered into an exclusive option and collaboration agreement (Gilead Agreement) to develop and commercialize MGD024 and create bispecific cancer antibodies using our DART platform and undertake their early development under a maximum of two separate bispecific cancer target research programs. Under the Gilead Agreement, we will continue the ongoing phase 1 trial for MGD024 according to a development plan, during which Gilead will have the right to exercise an option granted to Gilead to obtain an exclusive license to develop and commercialize MGD024 and other bispecific antibodies of ours that bind CD123 and CD3 (CD123 Option). The agreement also grants Gilead the right, within its first two years, to nominate a bispecific cancer target set for up to two research programs conducted by us and to exercise separate options to obtain an exclusive license for the development, commercialization and exploitation of molecules created under each research program (Research Program Option). As part of the Gilead Agreement, Gilead paid us a non-refundable upfront payment of $60.0 million and we will be eligible to receive up to $1.7 billion in target nomination, option fees, and development, regulatory and commercial milestones, assuming Gilead exercises the CD123 Option and Research Program Option,successfully develops and commercializes MGD024 or other CD123 products developed under the agreement, and products result from the two additional research programs. Assuming exercise of the CD123 Option, we will also be eligible to receive tiered, low double-digit royalties on worldwide net sales of MGD024 (or other CD123 products developed under the agreement) and assuming exercise of the Research Program Option, a flat royalty on worldwide net sales of any products resulting from the two research programs.

- *Zai Lab*. In 2018, we entered into a collaboration and license agreement with Zai Lab Limited (Zai Lab) under which Zai Lab obtained regional development and commercialization rights in mainland China, Hong Kong, Macau and Taiwan (Zai Lab’s territory) for (i) margetuximab, an immune-optimized anti-HER2 monoclonal antibody, (ii) tebotelimab, a bispecific DART molecule designed to provide coordinate blockade of PD-1 and LAG-3 for the potential treatment of a range of solid tumors and hematological malignancies, and (iii) an undisclosed multi-specific TRIDENT molecule in preclinical development (2018 Zai Lab Agreement). Zai Lab will lead clinical development in its territory. Zai Lab has informed us that they have decided to discontinue development of tebotelimab for indications they were enrolling in their territory and is evaluating future development plans in other indications.

  Under the terms of the 2018 Zai Lab Agreement, Zai Lab paid us an upfront payment of $25.0 million less foreign withholding tax of $2.5 million. Assuming successful development and commercialization of margetuximab, tebotelimab and the TRIDENT molecule, we could receive up to $140.0 million in development and regulatory milestones, of which we have earned $9.0 million through December 31, 2022. In addition, Zai Lab would pay us tiered royalties at percentage rates of mid-teens to 20% for net sales of margetuximab in Zai Lab’s territory, mid-

teens for net sales of tebotelimab in Zai Lab's territory and 10% for net sales of the TRIDENT molecule in Zai Lab's territory, which may be subject to adjustment in specified circumstances.

In 2019, we entered into two agreements under which we are to perform manufacturing services for Zai Lab's clinical needs of margetuximab and tebotelimab (Zai Lab Clinical Supply Agreements).

In 2021, we entered into a collaboration and license agreement with Zai Lab US LLC (collectively with Zai Lab Limited referred herein as Zai Lab) involving collaboration programs and license-only programs (collectively, the Programs) encompassing four separate immuno-oncology molecules (2021 Zai Lab Agreement). The first program covers a lead research molecule that incorporates our DART platform and binds CD3 and an undisclosed target that is expressed in multiple solid tumors (Lead Program). The second program covers a target to be designated by us. For these programs, Zai Lab receives commercial rights in Greater China, Japan, and Korea while we receive commercial rights in all other territories. Zai Lab also obtained exclusive, global licenses from us to develop, manufacture and commercialize two additional molecules (license-only programs). Zai Lab granted us a worldwide, royalty-free, co-exclusive license to conduct the development activities allocated to us. In August 2022, we and Zai Lab agreed to discontinue research and development of the Lead Program.

Under the terms of the 2021 Zai Lab Agreement, the Lead Program included joint research and development services by both us and Zai Lab. For the other programs, Zai Lab can separately negotiate and agree with us to perform research and development services in the future.

In connection with the execution of the 2021 Zai Lab Agreement, Zai Lab paid us an upfront payment of $25.0 million. Additionally, as part of the consideration for the rights granted to Zai Lab under the 2021 Zai Lab Agreement, we and Zai Lab entered into a separate stock purchase agreement (Stock Purchase Agreement) whereby Zai Lab paid us approximately $30.0 million to purchase 958,467 newly issued shares of our common stock, par value $0.01, at a fixed price of $31.30 which represented a $10.4 million premium over the share price on the Stock Purchase Agreement date.

Assuming successful development and commercialization of the remaining Programs under the 2021 Zai Lab Agreement, we could receive up to $1.3 billion in development, regulatory and commercial milestones. In addition, Zai Lab would pay us tiered royalties at percentage rates of mid-single digits to low double-digit teens on annual net sales of products in Zai's territory, subject to specified royalty reduction pursuant to the 2021 Zai Lab Agreement. Per the terms of the 2021 Zai Lab Agreement, we may also receive reimbursements from Zai Lab for certain research and development costs incurred by us.

- *Janssen.* In 2020, we entered into a research collaboration and global license agreement to develop a preclinical bispecific molecule with Janssen Biotech, Inc. (Janssen). The research collaboration will incorporate our proprietary DART platform to enable simultaneous targeting of two undisclosed targets in a therapeutic area outside oncology. Under the terms of the agreement, Janssen paid us an upfront payment of $20.0 million and will be responsible for funding all expenses. We will also be eligible to receive up to $312.0 million in potential milestone payments and tiered royalties of up to 10% on worldwide product sales.

- *Provention*. In 2018, we entered into an asset purchase agreement (APA) with Provention pursuant to which Provention acquired our interest in teplizumab. Under the APA, if Provention successfully develops, obtains regulatory approval for, and commercializes teplizumab, we will be eligible to receive up to $170.0 million in regulatory milestones, and up to $225.0 million in commercial milestones. In November 2022, the FDA approved TZIELD (teplizumab-mzwv) to delay the onset of Stage 3 T1D in adult and pediatric patients aged 8 years and older with Stage 2 T1D, and we recognized $60.0 million in milestone revenue during the year ended December 31, 2022. In November 2022 we and Provention amended the APA. Under the amended APA, the $60.0 million milestone for a first approval was split into four $15 million payments. The first two payments were received in November 2022 and March 2023 and the two remaining payments are due June 1, 2023 and September 1, 2023. We are also eligible to receive single-digit royalties on net sales of TZIELD. Provention has also agreed to pay third-party obligations, including low single-digit royalties, a portion of which is creditable against royalties payable to us, aggregate milestone payments of up to approximately $1.3 million and other consideration, for certain third-party intellectual property under agreements Provention assumed pursuant to the APA. Further, Provention is required to pay us a low double-digit percentage of certain consideration to the extent it is received in connection with a grant of rights by Provention to a third party.
  In March 2023, we sold our royalty interest in TZIELD to a wholly-owned subsidiary of DRI Healthcare Trust (DRI). We retain our other economic interests related to TZIELD, including future potential regulatory and

commercial milestones. We received a $100.0 million upfront payment from DRI for the sale of our single-digit royalty on global net sales of TZIELD. We retain the right to receive a 50% share of the royalty on global net sales above a certain annual threshold. In addition, we are eligible to receive up to $50.0 million from DRI upon the occurrence of pre-specified events tied to the advancement of TZIELD for the treatment of newly diagnosed T1D and may also receive an additional $50.0 million if TZIELD achieves a certain level of net sales.

- *I-Mab Biopharma.* In 2019, we entered into a collaboration and license agreement with I-Mab Biopharma (I-Mab) to develop and commercialize enoblituzumab, an immune-optimized, anti-B7-H3 monoclonal antibody that incorporates our proprietary Fc Optimization technology platform (I-Mab License Agreement). I-Mab obtained regional development and commercialization rights in mainland China, Hong Kong, Macau and Taiwan (I-Mab's territory), will lead clinical development of enoblituzumab in its territories, and will participate in global studies conducted by us. In August 2022, I-Mab notified us of its intention to terminate the I-Mab License Agreement effective February 25, 2023.

  Under the terms of the agreement, I-Mab paid us an upfront payment of $15.0 million and $5.0 million in milestone revenue has been earned from the inception of the I-Mab License Agreement through December 31, 2022.

  In 2021, we entered into an agreement under which we are to perform development and manufacturing services for I-Mab’s clinical needs of enoblituzumab. which agreement will co-terminate with the I-Mab license agreement.

Financial Operations Overview

Revenue

Our revenue consists of the following:

- revenue from collaborative and other agreements which includes amounts recognized relating to upfront nonrefundable payments for licenses or options to obtain future licenses, amounts earned by performing development and manufacturing services, research and development funding and milestone payments earned under our collaboration and license agreements with our strategic collaborators;
- product sales, net which reflects sales of MARGENZA which was launched in 2021. Product revenue is recorded net of applicable reserves for variable consideration, including discounts and other allowances;
- contract manufacturing revenue which is earned from manufacturing third parties’ drug substance; and
- government agreements revenue which reflects amounts earned through grants and/or contracts with the U.S. government and other research institutions on behalf of the U.S. government, primarily with respect to research and development activities related to infectious disease product candidates.

Cost of Product Sales

Cost of product sales relates to sales of MARGENZA. These costs include materials and manufacturing costs, as well as royalties payable on net sales of MARGENZA and inventory reserves. All product costs incurred prior to FDA approval of MARGENZA in December 2020 were expensed as research and development expense. We expect cost of product sales to continue to be positively impacted as we sell through inventory that was expensed prior to FDA approval of MARGENZA. We are currently unable to estimate how long it will be until we begin selling product manufactured post FDA approval.

Cost of Manufacturing Services

Cost of manufacturing services consists of the costs to provide manufacturing services to produce certain bulk drug substance under manufacturing and clinical supply agreements with third parties, including labor, materials overhead and other related costs.

Research and Development Expense

Research and development expense consists of expenses incurred in performing research and development activities. These expenses include conducting preclinical experiments and studies, clinical trials, manufacturing efforts and regulatory filings for all product candidates, and other indirect expenses in support of our research and development activities. We capture

research and development expense on a program-by-program basis for our product candidates and recognize these expenses as they are incurred. The following are items we include in research and development expense:

- employee-related expenses, such as salaries and benefits;
- employee-related overhead expenses, such as facilities and other allocated items;
- stock-based compensation expense to employees engaged in research and development activities;
- depreciation of laboratory and manufacturing equipment, computers and leasehold improvements;
- fees paid to consultants, subcontractors, clinical research organizations (CROs) and other third party vendors for work performed under our preclinical and clinical trials including, but not limited to, investigator grants, laboratory work and analysis, database management, statistical analysis, and other items;
- amounts paid to vendors and suppliers for laboratory supplies;
- internal and third party costs related to manufacturing clinical trial materials, including vialing, packaging and testing;
- license fees and other third party vendor payments related to in-licensed product candidates and technology; and
- costs related to compliance with regulatory requirements.

It is difficult to determine with certainty the duration and completion costs of our current or future preclinical programs and clinical trials of our product candidates, or if, when or to what extent we will generate revenues from the commercialization and sale of any of our product candidates that obtain regulatory approval. The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors, including the uncertainties of future clinical trials and preclinical studies, uncertainties in clinical trial enrollment rates and significant and changing government regulation. In addition, the probability of success for each product candidate will depend on numerous factors, including competition, manufacturing capability and commercial viability. We will determine which programs to pursue and how much to fund each program in response to the scientific and clinical success of each product candidate, as well as an assessment of each product candidate's commercial potential.

Selling, General and Administrative Expense

Selling, general and administrative expense consists of salaries and related benefit costs for employees in our executive, finance, legal and intellectual property, business development, human resources, information technology and other support functions. Selling, general and administrative expense also includes costs incurred under the arrangement with our commercialization partner, Eversana Life Science Services, LLC, and other legal and professional fees.

Other Income

Other income consists of realized gains and losses on marketable securities and interest income earned on our cash, cash equivalents and marketable securities.

Critical Accounting Estimates

Our management's discussion and analysis of financial conditions and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The preparation of these consolidated financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the balance sheets and the reported amount of the revenue and expenses recorded during the reporting period. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable. We review and evaluate these estimates on an on-going basis. These assumptions and estimates form the basis for making judgments about the carrying values of assets and liabilities and amounts that have been recorded as revenues and expenses. Actual results and experiences may differ from these estimates. We did not make any material changes to these assumptions during the year ended December 31, 2022, and do not expect any material changes in the near term to the underlying assumptions. If we were to adjust our assumptions, the results of any material revisions would be reflected in the consolidated financial statements prospectively from the date of the change in estimate. Management considers an accounting estimate to be critical if:

- it requires a significant level of estimation uncertainty; and
- changes in the estimate are reasonably likely to have a material effect on our financial condition or results of operations.

While a summary of significant accounting policies is described fully in Note 2 in our consolidated financial statements, we believe that the following accounting policies are the most critical to assist you in fully understanding and evaluating our financial results and the effect of the estimates and judgments we used in preparing our consolidated financial statements.

Inventory

When we believe regulatory approval is probable and expect future economic benefit from the sales of a product candidate to be realized, we capitalize manufacturing costs (whether internally produced or through third-party contract manufacturing organizations) as inventory. Prior to receiving our first approval from the FDA in December 2020, we expensed all costs incurred related to the manufacture of MARGENZA as research and development expense because of the inherent risks associated with the development of a product candidate, the uncertainty about the regulatory approval process and the lack of history for us of regulatory approval of drug candidates. Subsequent to FDA approval in December 2020, we began capitalizing our third-party contract manufacturing MARGENZA inventory costs.

Revenue Recognition

We recognize revenue under Accounting Standards Codification (ASC) Topic 606, *Revenue from Contracts with Customer*s, (ASC 606) when our customer obtains control of promised goods or services, in an amount that reflects the consideration which we expect to receive in exchange for those goods or services. To determine revenue recognition for arrangements that we determine are within the scope of ASC 606, management 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) we satisfy a performance obligation. We recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Collaborative and other agreements

We enter into licensing agreements that are within the scope of ASC 606, under which we may license rights to research, develop, manufacture and commercialize our product candidates to third parties. The terms of these arrangements typically include payment to us of one or more of the following: non-refundable, upfront license fees; reimbursement of certain costs; customer option exercise fees; development, regulatory and commercial milestone payments; and royalties on net sales of licensed products. We may also enter into development and manufacturing service agreements with our collaborators.

For each arrangement that results in revenues, we identify all performance obligations, which may include a license to intellectual property and know-how, research and development activities, transition activities and/or manufacturing services. In order to determine the transaction price, in addition to any upfront payment, management estimates the amount of variable consideration at the outset of the contract either utilizing the expected value or most likely amount method, depending on the facts and circumstances relative to the contract. We constrain (reduce) the estimates of variable consideration such that it is probable that a significant reversal of previously recognized revenue will not occur. When determining if variable consideration should be constrained, management considers whether there are factors outside our control that could result in a significant reversal of revenue. In making these assessments, management considers the likelihood and magnitude of a potential reversal of revenue. These estimates are re-assessed each reporting period as required.

Once the estimated transaction price is established, amounts are allocated to the performance obligations that have been identified. The transaction price is generally allocated to each separate performance obligation on a relative standalone selling price basis. We must develop assumptions that require judgment to determine the standalone selling price in order to account for these agreements. To determine the standalone selling price, management's assumptions may include (i) the probability of obtaining marketing approval for the product candidate, (ii) estimates regarding the timing and the expected costs to develop and commercialize the product candidate, and (iii) estimates of future cash flows from potential product sales with respect to the product candidate. Standalone selling prices used to perform the initial allocation are not updated after contract inception. We do not include a financing component to its estimated transaction price at contract inception unless we estimate that certain performance obligations will not be satisfied within one year.

Amounts received prior to revenue recognition are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified as current portion of deferred revenue in the

accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion.

Licenses. When we grant a license to our intellectual property, we determine whether the nature of the intellectual property to which the customer will have rights is functional intellectual property (functional IP), which has significant standalone functionality, or symbolic intellectual property (symbolic IP) which does not have significant standalone functionality. Revenue from functional IP is recognized at the point in time when control of the distinct license is transferred to the customer. Revenue from symbolic IP is recognized over the access period to our intellectual property. If the license to our intellectual property is determined to be distinct from the other promises or performance obligations identified in the arrangement, we recognize revenue from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and when (or as) the customer is able to use and benefit from the license. In assessing whether a promise or performance obligation is distinct from the other promises, we consider factors such as the research, development, manufacturing and commercialization capabilities of the licensee and the availability of the associated expertise in the general marketplace. In addition, we consider whether the licensee can benefit from a promise for its intended purpose without the receipt of the remaining promise, whether the value of the promise is dependent on the unsatisfied promise, whether there are other vendors that could provide the remaining promise, and whether it is separately identifiable from the remaining promise. For licenses that are combined with other promises, management utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition. The measure of progress, and thereby periods over which revenue should be recognized, are subject to estimates by management and may change over the course of the research and development and licensing agreement. Such a change could have a material impact on the amount of revenue we record in future periods.

Research, Development and/or Manufacturing Services. The promises under our agreements may include research and development or manufacturing services to be performed by us on behalf of the counterparty. If these services are determined to be distinct from the other promises or performance obligations identified in the arrangement, we recognize the transaction price allocated to these services as revenue over time based on an appropriate measure of progress when the performance by us does not create an asset with an alternative use and we have an enforceable right to payment for the performance completed to date. If these services are determined not to be distinct from the other promises or performance obligations identified in the arrangement, we recognize the transaction price allocated to the combined performance obligation as the related performance obligations are satisfied.

Customer Options. If an arrangement contains customer options, we evaluate whether the options are material rights because they allow the customer to acquire additional goods or services for free or at a discount. If the customer options are determined to represent a material right, the material right is recognized as a separate performance obligation at the outset of the arrangement. We allocate the transaction price to material rights based on the relative standalone selling price, which is determined using assumptions regarding estimated costs, discount rates, post-option development timeline, the probability of technical and regulatory success and the probability that the customer will exercise the option. Amounts allocated to a material right are not recognized as revenue until, at the earliest, the option is exercised or expires. If the options are deemed not to be a material right, they are excluded as performance obligations at the outset of the arrangement.

Milestone Payments. At the inception of each arrangement that includes development milestone payments, management evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our control or the licensee's control, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. We evaluate factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. At the end of each subsequent reporting period, management reevaluates the probability of achievement of all milestones subject to constraint and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Royalties. For arrangements that include sales-based royalties which are the result of a customer-vendor relationship and for which the license is deemed to be the predominant item to which the royalties relate, we recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied or partially satisfied. To date, we have not recognized any royalty revenue resulting from any of our licensing arrangements.

We analyze our collaboration arrangements to assess whether such arrangements involve joint operating activities performed by parties who are both active participants in the activities and are both exposed to significant risks and rewards dependent on the commercial success of such activities. Such arrangements generally are within the scope of ASC 808, *Collaborative Arrangements* (ASC 808). While ASC 808 defines collaborative arrangements and provides guidance on income statement presentation, classification, and disclosures related to such arrangements, it does not address recognition and measurement matters, such as (1) determining the appropriate unit of accounting or (2) when the recognition criteria are met. Therefore, the accounting for these arrangements is either based on an analogy to other accounting literature or an accounting policy election by management. We account for certain components of the collaboration agreement that are reflective of a vendor-customer relationship (e.g., licensing arrangement) based on ASC 606. We account for other components based on a reasonable, rational and consistently applied accounting policy election. Reimbursements from the counter-party that are the result of a collaborative relationship with the counter-party, instead of a customer relationship, such as co-development activities, are recorded as a reduction to research and development expense as the services are performed.

Product Sales, Net

We entered into a limited number of arrangements with specialty distributors in the United States to distribute MARGENZA. The delivery of our product represents a single performance obligation for these transactions and we record net product revenue when control is transferred to the customer, generally upon receipt by the customer. The transaction price for net product revenue represents the amount we expect to receive, which is net of estimated government-mandated rebates and chargebacks, distribution fees, estimated product returns, and other deductions. Accruals are established for these deductions, and actual amounts incurred are offset against applicable accruals. Customer discounts are recorded as reductions of accounts receivable on the consolidated balance sheets. Allowance for product returns, provider chargebacks, government and other rebates and service fees are recorded as a component of accrued expenses and other current liabilities on the consolidated balance sheets. Sales deductions are based on management's estimates that consider payor mix in target markets and experience to-date. These estimates involve a substantial degree of judgment, in particular, for government-mandated rebates and chargebacks, such as for the Medicaid and 340B programs.

Contract manufacturing revenue

We enter into agreements with third parties to manufacture their drug substance at our GMP facility. The terms of these arrangements typically include an upfront payment to us to reserve manufacturing capacity, scheduled payments during the manufacturing process and reimbursement for materials used to manufacture product. We recognize revenue over time on a straight-line basis as the manufacturing services are performed, as we believe that our efforts in providing the manufacturing services are incurred evenly throughout the performance period and therefore straight-line revenue recognition closely approximates the level of effort for the manufacturing services. Variable consideration relating to the reimbursed materials and other reimbursed costs incurred to manufacture product are allocated to the related manufacturing activities and are recognized as revenue as those activities occur.

Cost of product sales

Cost of product sales relates to sales of MARGENZA. These costs include materials and manufacturing costs, as well as royalties payable on net sales of MARGENZA and inventory reserves. All product costs incurred prior to FDA approval of MARGENZA in December 2020 were expensed as research and development expense. We expect cost of product sales to continue to be positively impacted as we sell through inventory that was expensed prior to FDA approval of MARGENZA. We are currently unable to estimate how long it will be until we begin selling product manufactured post FDA approval.

Cost of Manufacturing Services

Cost of manufacturing services consists of the costs to provide manufacturing services to produce certain bulk drug substance under manufacturing and clinical supply agreements with third parties, including labor, materials overhead and other related costs.

Research and Development Expense, Including Clinical Trial Accruals/Expenses

Research and development expense consists of costs we incur for our own research and development activities and costs incurred by our collaborators under cost sharing arrangements. Research and development costs consist of salaries and benefits, including related stock-based compensation, laboratory supplies and facility costs, as well as fees paid to other entities that conduct certain research and development activities on our behalf, such as CROs, and the cost of acquiring and manufacturing clinical trial materials, including costs incurred under agreements with contract manufacturing organizations (CMOs). Research and development costs are expensed as incurred. We receive estimates from our collaborators when we are

sharing development expenses, and use these estimates to record an increase or decrease in research and development expense, depending on how much we have each spent during the period.

Clinical trial expenses are a significant component of research and development expense, and we outsource a significant portion of these costs to third parties. Third party clinical trial expenses include investigator fees, site and patient costs, CRO costs, costs for central laboratory testing, data management and CMO costs. The accrual for site and patient costs includes inputs such as estimates of patient enrollment, patient cycles incurred, clinical site activations, and other pass-through costs. These inputs are required to be estimated due to a lag in receiving the actual clinical information from third parties. Payments for these activities are based on the terms of the individual arrangements, which may differ from the pattern of costs incurred, and are reflected on the consolidated balance sheets as a prepaid asset or accrued expenses. These third party agreements are generally cancelable, and related costs are recorded as research and development expense as incurred. Non-refundable advance clinical payments for goods or services that will be used or rendered for future research and development activities are recorded as a prepaid asset and recognized as expense as the related goods are delivered or the related services are performed. When evaluating the adequacy of the accrued expenses, we analyze progress of the studies, including the phase or completion of events, invoices received and contracted costs. Significant judgments and estimates may be made in determining the accrued balances at the end of any reporting period. Actual results could differ from the estimates made. The historical clinical accrual estimates have not been materially different from the actual costs.

Recent Accounting Pronouncements

See Note 2, Summary of Significant Accounting Policies, to the consolidated financial statements for information under the caption "Recent Accounting Pronouncements."

Results of Operations

Revenue

The following represents a comparison of our revenue for the years ended December 31, 2022 and 2021 (dollars in millions):

	Year Ended December 31,		Increase/(Decrease)	
	2022	2021		
Collaborative and other agreements	$ 119.3	$ 63.3	$ 56.0	88 %
Product sales, net	16.7	12.3	4.4	36 %
Contract manufacturing	14.0	—	14.0	N/A
Government agreements	1.9	1.8	0.1	6 %
Total revenue	**$ 151.9**	**$ 77.4**	**$ 74.5**	**96 %**

The increase of $56.0 million in revenue from collaborative and other agreements for the year ended December 31, 2022 compared to the year ended December 31, 2021 was primarily due to:

- recognition of $60.0 million in milestone revenue under the asset purchase agreement with Provention; and
- an increase of $15.0 million in milestone revenue recognized under the Incyte License Agreement.

These increases were partially offset by:

- a decrease of $7.4 million in revenue recognized under the Incyte Commercial Supply Agreement;
- a decrease of $6.9 million in revenue recognized under the I-Mab License Agreement; and
- a decrease of $3.6 million in revenue under the 2021 Zai Lab Agreement.

Revenue from collaborative and other agreements may vary substantially from period to period depending on the progress made by our collaborators with their product candidates and the timing of milestones achieved under current agreements, and whether we enter into additional collaboration agreements.

The increase in product sales, net is due to an increase in volume. Revenue from product sales is recorded net of applicable provisions for rebates, chargebacks and discounts, distribution-related fees and other sales-related deductions. The table below includes a reconciliation of the accounts associated with these deductions (in millions):

	Rebates and chargebacks	Distribution fees, product returns and other	Total
Balance as of December 31, 2020	$ —	$ —	$ —
Provision related to current year sales	1.7	0.8	2.5
Payments/credits for current year sales	(1.3)	(0.4)	(1.7)
Balance as of December 31, 2021	0.4	0.4	0.8
Provision related to current year sales	2.5	1.1	3.6
Payments/credits for current year sales	(2.5)	(0.2)	(2.7)
Balance as of December 31, 2022	$ 0.4	$ 1.3	$ 1.7

Revenue recognized under the agreements we entered into during 2022 to provide manufacturing services to produce certain bulk drug substance for Incyte and Provention is recorded as contract manufacturing revenue. No such revenue was recognized during the year ended December 31, 2021.

Cost of Product Sales

Cost of product sales for the year ended December 31, 2022 consisted primarily of reserves for unsaleable inventory, as well as product royalties. Product sold during the year ended December 31, 2022 consisted of drug product that was previously charged to research and development expense prior to FDA approval of MARGENZA, which favorably impacted our gross margin for the year ended December 31, 2022. We expect cost of product sales to continue to be positively impacted as we sell through this drug product.

Cost of Manufacturing Services

Cost of manufacturing services consists of the costs to provide manufacturing services to produce certain bulk drug substance under the Incyte and Provention Manufacturing and Clinical Supply Agreements. We entered into these agreements in 2022, therefore there are no such costs during the year ended December 31, 2021.

Research and Development Expense

The following represents a comparison of our research and development expense for the years ended December 31, 2022 and 2021 (dollars in millions):

	Year Ended December 31,		Increase/(Decrease)	
	2022	2021		
Vobramitamab duocarmazine (formerly MGC018)	$ 55.4	$ 31.3	$ 24.1	77 %
Margetuximab	26.9	41.5	(14.6)	(35) %
Lorigerlimab	21.6	13.4	8.2	61 %
ADCs (a)	18.2	3.8	14.4	379 %
Enoblituzumab	14.7	19.1	(4.4)	(23) %
Next-generation T-cell engagers (a)	13.3	18.4	(5.1)	(28) %
Flotetuzumab	12.9	28.8	(15.9)	(55) %
Tebotelimab	11.4	19.5	(8.1)	(42) %
IMGC936	7.9	5.7	2.2	39 %
MGD024	7.9	3.7	4.2	114 %
DART molecules under HIV government contract	4.7	5.1	(0.4)	(8) %
Retifanlimab	2.2	14.5	(12.3)	(85) %
Other programs (a)	9.9	9.8	0.1	1 %
Total research and development expense	**$ 207.0**	**$ 214.6**	**$ (7.6)**	**(4) %**

(a) Includes research and discovery projects, as well as early preclinical molecules and molecules not advanced to clinical development.

Research and development expense for the year ended December 31, 2022 decreased by $7.6 million compared to the year ended December 31, 2021. This decrease was primarily attributable to:

- decreased development, manufacturing and clinical trial costs related to flotetuzumab (due to discontinuance of our company-sponsored trial);
- decreased retifanlimab manufacturing costs related to the Incyte Commercial Supply Agreement;
- decreased development, manufacturing and clinical trial costs related to tebotelimab; and
- decreased margetuximab manufacturing costs related to the Zai Lab Clinical Supply Agreement.

These decreases were partially offset by:

- increased vobra duo development, manufacturing and clinical trial costs;
- increased development of a non-disclosed ADC Investigational New Drug candidate; and
- increased clinical trial enrollment costs related to lorigerlimab.

There are uncertainties associated with our research and development expenses for future periods which are impacted by multiple variables, including timing of wind down activities for recently closed studies and current and expected expenditures associated with our vobra duo TAMARACK study.

Selling, General and Administrative Expense

The following represents a comparison of our general and administrative expenses for the years ended December 31, 2022 and 2021 (dollars in millions):

	Year Ended December 31,		Increase/(Decrease)	
	2022	2021		
Selling, general and administrative expenses	$ 58.9	$ 63.0	$ (4.1)	(7)%

Selling, general and administrative expenses decreased for the year ended December 31, 2022 by $4.1 million compared to 2021 primarily due to decreased selling costs for MARGENZA as well as decreased legal, consulting and stock-based compensation expenses.

Other Income

The increase of $1.0 million in other income for the year ended December 31, 2022 compared to the year ended December 31, 2021 is primarily due to increased investment income.

Liquidity and Capital Resources

Cash Flows

The following table represents a summary of our cash flows for the years ended December 31, 2022 and 2021 (dollars in millions):

	Year Ended December 31,		Increase/(Decrease)	
	2022	2021		
Net cash provided by (used in):				
Operating activities	$ (87.0)	$ (143.8)	$ 56.8	39 %
Investing activities	70.7	(36.6)	107.3	293 %
Financing activities	1.7	122.8	(121.1)	(99) %
Net increase (decrease) in cash and cash equivalents	**$ (14.6)**	**$ (57.6)**	**$ 43.0**	**75 %**

Operating Activities

Net cash used in operating activities reflects, among other things, the amounts used to advance our clinical trials and preclinical activities. The principal use of cash in operating activities for all periods presented was primarily the result of our net loss, adjusted for non-cash items, with the year ended December 31, 2022 benefiting from the $60.0 million upfront payment under the Gilead Agreement, $30.0 million milestone payment received from Incyte, and $15.0 million received from Provention related to the achievement of a milestone. The year ended December 31, 2021 benefited from the $25.0 million

upfront payment under the 2021 Zai Lab Agreement, $15.0 million milestone payment received from Incyte, and $4.5 million milestone payment from I-Mab.

Investing Activities

Net cash provided by investing activities during the year ended December 31, 2022 is primarily due to maturities of marketable securities, partially offset by purchases of marketable securities. Net cash used in investing activities during the year ended December 31, 2021 is primarily due to purchases of marketable securities, partially offset by maturities of marketable securities.

Financing Activities

Net cash provided by financing activities for the years ended December 31, 2022 and 2021 reflects net cash proceeds from our securities offerings of approximately $1.1 million and $117.8 million, respectively, and cash from stock option exercises and the purchase of shares under our employee stock purchase plan.

Our multiple product candidates currently under development will require significant additional research and development efforts that include extensive preclinical studies and clinical testing, and regulatory approval prior to commercial use. As a biotechnology company, we have primarily funded our operations with proceeds from the sale of our common stock in equity offerings, revenue from our multiple collaboration agreements, and contracts and grants from NIAID. Management regularly reviews our available liquidity relative to our operating budget and forecast to monitor the sufficiency of our working capital, and anticipates continuing to draw upon available sources of capital, including equity and debt instruments, to support our product development activities. There can be no assurances that new sources of capital will be available to us on commercially acceptable terms, if at all. Also, any future collaborations, strategic alliances and marketing, distribution or licensing arrangements may require us to give up some or all rights to a product or technology at less than its full potential value. If we are unable to enter into new arrangements or to perform under current or future agreements or obtain additional capital, we will assess our capital resources and may be required to delay, reduce the scope of, or eliminate one or more of our product research and development programs or clinical studies, and/or downsize our organization. Although it is difficult to predict our funding requirements, we anticipate that our cash, cash equivalents and marketable securities as of December 31, 2022, as well as anticipated and potential collaboration payments and product revenues, and $100.0 million proceeds received in March 2023 pursuant to the sale of an interest in a specified portion of royalty payments based on future net sales of TZIELD, should enable us to fund our operations through 2025. Our expected funding requirements reflect anticipated expenditures related to the Phase 2 TAMARACK clinical trial of vobra duo in metastatic castration-resistant prostate cancer (mCRPC), planned Phase 2 study of lorigerlimab in mCRPC as well as our other clinical and preclinical studies currently ongoing.

Material Cash Requirements

Our short-term and long-term material cash requirements consist of operational and capital expenditures, some of which contain contractual obligations. Our primary uses of cash relate to paying salaries and benefits, administering clinical trials, marketing our product, and providing the technology and facilities necessary to support our operations. The most significant contractual obligations are the operating leases at our facilities in Maryland and California. Our future minimum lease payments as of December 31, 2022 totaled $5.0 million related to short-term lease liabilities, and $70.3 million related to long-term lease liabilities. See Note 6, Commitments and Contingencies, in the Notes to the Financial Statements in this Annual Report on Form 10-K for additional information about our lease liabilities. We expect to fund these requirements with current cash, cash equivalents and marketable securities as well as anticipated and potential collaboration payments, and product revenues.

We do not have any off-balance sheet arrangements, as defined under the rules and regulations of the Securities and Exchange Commission.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary objective when considering our investment activities is to preserve capital in order to fund our operations. We also seek to maximize income from our investments without assuming significant risk. Our current investment policy is to invest principally in deposits and securities issued by the U.S. government and its agencies, Government Sponsored Enterprise agency debt obligations, corporate debt obligations and money market instruments. As of December 31, 2022, we had cash, cash equivalents and marketable securities of $154.3 million. Our primary exposure to market risk is related to changes in interest rates. Due to the short-term maturities of our cash equivalents and marketable securities and the low risk profile of our marketable securities, an immediate 100 basis point change in interest rates would not have a material effect on

the fair market value of our cash equivalents and marketable securities. We have the ability to hold our marketable securities until maturity, and we therefore do not expect a change in market interest rates to affect our operating results or cash flows to any significant degree.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this item is set forth beginning on page F-1 in this Annual Report on Form 10-K.

ITEM 9. CHANGES AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, including our principal executive and principal financial officers, has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2022. Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be disclosed in this Annual Report on Form 10-K has been appropriately recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive and principal financial officers, to allow timely decisions regarding required disclosure. Based on that evaluation, our principal executive and principal financial officers have concluded that our disclosure controls and procedures are effective at the reasonable assurance level.

Changes in Internal Control

Our management, including our principal executive and principal financial officers, has evaluated any changes in our internal control over financial reporting that occurred during the quarterly period ended December 31, 2022, and has concluded that there was no change that occurred during the quarterly period ended December 31, 2022 that have materially affected, or are reasonably likely to materially effect, the Company's internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended, as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- pertain to the management of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2022. In making this assessment, the Company's management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (COSO) in Internal Control-Integrated Framework. Based on our assessment, management believes that, as of December 31, 2022, the Company's internal control over financial reporting is effective based on those criteria.

The effectiveness of our internal control over financial reporting as of December 31, 2022 has been audited by Ernst & Young, LLP, an independent registered public accounting firm, as stated in their report which is included herein on the following page.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of MacroGenics, Inc.

Opinion on Internal Control over Financial Reporting

We have audited MacroGenics, Inc.'s internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, MacroGenics, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and our report dated March 15, 2023, expressed an unqualified opinion thereon.

Basis for Opinion

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

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Tysons, Virginia
March 15, 2023

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

We incorporate herein by reference the relevant information concerning directors, executive officers and corporate governance to be included in our definitive proxy statement for the 2023 annual meeting of stockholders (the 2023 Proxy Statement).

We have adopted a Code of Business Conduct and Ethics (the "Code") that applies to all of our employees, officers and directors. The Code is available under the Corporate Governance section of our website at http://ir.macrogenics.com/governance. We expect that any amendments to the Code, or any waivers of its requirements, will be disclosed on our website.

ITEM 11. EXECUTIVE COMPENSATION

We incorporate herein by reference the relevant information concerning executive compensation to be included in the 2023 Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

We incorporate herein by reference the relevant information concerning security ownership of certain beneficial owners and management to be included in the 2023 Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

We incorporate herein by reference the relevant information concerning certain other relationships and related transactions to be included in the 2023 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

We incorporate herein by reference the relevant information concerning principal accountant fees and services to be included in the 2023 Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. Consolidated Financial Statements:

2. Financial Statement Schedules:

All financial statement schedules have been omitted because they are not applicable, not required or the information required is shown in the financial statements or the notes thereto.

3. Exhibits

The exhibits filed as part of this Annual Report on Form 10-K are set forth on the Exhibit Index immediately following our consolidated financial statements. The Exhibit Index is incorporated herein by reference.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized:

MacroGenics, Inc.

By: /s/ Scott Koenig
Scott Koenig, M.D., Ph.D.
President and CEO and Director

Pursuant to the requirements of the Securities Act of 1934, as amended, this Report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Scott Koenig Scott Koenig, M.D., Ph.D.	President and CEO and Director (Principal Executive Officer)	March 15, 2023
/s/ James Karrels James Karrels	Senior Vice President, Chief Financial Officer and Secretary (Principal Financial Officer)	March 15, 2023
/s/ Lynn Cilinski Lynn Cilinski	Vice President, Controller and Treasurer (Principal Accounting Officer)	March 15, 2023
/s/ Karen Ferrante, M.D. Karen Ferrante, M.D.	Director	March 15, 2023
/s/ William Heiden William Heiden	Director	March 15, 2023
/s/ Edward Hurwitz Edward Hurwitz	Director	March 15, 2023
/s/ Scott Jackson Scott Jackson	Director	March 15, 2023
/s/ Meenu Chhabra Karson Meenu Chhabra Karson	Director	March 15, 2023
/s/ Margaret A. Liu, M.D., D.Sc.hc, M.D.hc Margaret A. Liu, M.D., D.Sc.hc, M.D.hc	Director	March 15, 2023
/s/ Federica O'Brien Federica O'Brien	Director	March 15, 2023
/s/ Jay Siegel, M.D. Jay Siegel, M.D.	Director	March 15, 2023
/s/ David Stump, M.D. David Stump, M.D.	Director	March 15, 2023

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of MacroGenics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of MacroGenics, Inc. (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 15, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated 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 consolidated 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.

Accounting for the Option and Collaboration Agreement with Gilead Sciences, Inc.

Description of the Matter

As discussed in Note 8 of the consolidated financial statements, in October 2022, the Company entered into an exclusive option and collaboration agreement with Gilead Sciences, Inc. (the "Gilead Agreement"). The Gilead Agreement resulted in the recognition of $0.2 million of revenue from collaborative and other agreements for the year ended December 31, 2022 and $59.8 million of deferred revenue as of December 31, 2022. The Company evaluated the Gilead Agreement under Accounting Standards Codification 606, Revenue from Contracts with Customers ("ASC 606") and identified two performance obligations within the arrangement: 1) a combined development term license and development activities ("Development Activities"); and 2) a material right relating to the CD123 option to obtain an exclusive license under the Company's intellectual property ("CD123 Option"). The transaction price of $60.0 million was allocated to each performance obligation based on their relative standalone selling prices. The standalone selling price of the Development Activities was determined using an expected cost-plus margin approach for the pre-option development timeline. The standalone selling price of the CD123 Option was determined using an income-based approach which included assumptions over the post-option development timeline and costs, forecasted revenues, discount rates and probabilities of technical and regulatory success. The transaction price allocated to the Development Activities was recognized over time using an input method. The Company will defer revenue recognition related to the CD123 Option until the period when the CD123 Option is exercised or expired.

Accounting for the Gilead Agreement required the Company to make significant judgments, including but not limited to the identification of performance obligations and the estimation of the standalone selling price of each identified performance obligation. The standalone selling price of the performance obligations was not directly observable; therefore, the Company estimated the standalone selling price for each performance obligation. The estimates of the standalone selling price for the performance obligations relating to the Development Activities and the CD123 Option reflect management's assumptions described above. Changes to these assumptions could have a material effect on the allocation of the transaction price to the performance obligations as well as the amount and timing of revenue recognized. As a result, auditing the identification of performance obligations and estimates of standalone selling price for performance obligations required especially complex auditor judgment.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls addressing the risks of material misstatement relating to the accounting for the Gilead Agreement. For example, we tested controls over management's process over the identification of the performance obligations, the determination of the significant assumptions described above with respect to the estimation of the standalone selling price of each performance obligation.

To audit the Company's accounting related to the Gilead Agreement, we performed audit procedures that included, among others, inspecting the executed agreement and accounting assessment and evaluating the completeness of the performance obligations identified. In addition, we evaluated management's estimates of the standalone selling price of the identified performance obligations. For example, we tested the significant assumptions and the completeness and accuracy of the underlying data used by the Company in developing the expected cost plus a margin for the Development Activities, the post-option development timeline and costs, forecasted revenues, discount rates and probabilities of technical and regulatory success for the CD123 Option. We compared these significant assumptions to industry, business and market data, and information available from third-party sources. We involved our internal valuation specialists to assist in the assessment of the discount rate used and certain other valuation assumptions used in the determination of the estimated standalone selling prices. We also performed a sensitivity analysis of the significant assumptions to evaluate the impact that the change in the estimated standalone selling price of certain performance obligations resulting from changes in the significant assumptions would have on the allocation of transaction price to each performance obligation, as well as revenue recognized during the period and deferred as of December 31, 2022.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2006.

Tysons, Virginia
March 15, 2023

MACROGENICS, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share data)

	December 31,	
	2022	**2021**
Assets		
Current assets:		
Cash and cash equivalents	$ 108,884	$ 123,469
Marketable securities	45,462	120,147
Accounts receivable	56,222	10,386
Inventory, net	1,451	4,388
Prepaid expenses and other current assets	10,161	21,170
Total current assets	222,180	279,560
Property, equipment and software, net	29,575	37,676
Operating lease right-of-use assets	27,335	16,614
Other non current assets	1,378	1,395
Total assets	$ 280,468	$ 335,245
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 4,899	$ 15,500
Accrued expenses and other current liabilities	28,998	33,755
Deferred revenue	9,988	20,646
Lease liabilities	4,726	4,677
Total current liabilities	48,611	74,578
Deferred revenue, net of current portion	59,480	—
Lease liabilities, net of current portion	30,106	20,791
Other non current liabilities	258	258
Total liabilities	138,455	95,627
Stockholders' equity:		
Common stock, 0.01 par value -- 125,000,000 shares authorized, 61,701,467 and 61,307,428 shares outstanding at December 31, 2022 and December 31, 2021, respectively	617	613
Additional paid-in capital	1,235,095	1,213,002
Accumulated other comprehensive loss	(5)	(61)
Accumulated deficit	(1,093,694)	(973,936)
Total stockholders' equity	142,013	239,618
Total liabilities and stockholders' equity	$ 280,468	$ 335,245

See accompanying notes.

MACROGENICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except share and per share data)

	Year Ended December 31,		
	2022	**2021**	**2020**
Revenues:			
Collaborative and other agreements	$ 119,303	$ 63,294	$ 97,764
Product sales, net	16,727	12,349	—
Contract manufacturing	13,988	—	—
Government agreements	1,923	1,804	7,119
Total revenues	151,941	77,447	104,883
Costs and expenses:			
Cost of product sales	3,351	2,651	—
Cost of manufacturing services	4,033	—	—
Research and development	207,026	214,577	193,201
Selling, general and administrative	58,949	63,014	42,742
Total costs and expenses	273,359	280,242	235,943
Loss from operations	(121,418)	(202,795)	(131,060)
Other income	1,660	680	1,321
Net loss	(119,758)	(202,115)	(129,739)
Other comprehensive income (loss):			
Unrealized gain (loss) on investments	56	(54)	(23)
Comprehensive loss	$ (119,702)	$ (202,169)	$ (129,762)
Basic and diluted net loss per common share	$ (1.95)	$ (3.37)	$ (2.47)
Basic and diluted weighted average common shares outstanding	61,433,124	59,944,717	52,442,389

See accompanying notes.

MACROGENICS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands, except share amounts)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount				
Balance, December 31, 2019	48,958,763	$ 490	$ 872,204	$ (642,082)	$ 16	$ 230,628
Share-based compensation	—	—	20,676	—	—	20,676
Issuance of common stock, net of offering costs	6,612,815	66	170,390	—	—	170,456
Stock plan related activity	673,193	6	3,880	—	—	3,886
Unrealized loss on investments	—	—	—	—	(23)	(23)
Net loss	—	—	—	(129,739)	—	(129,739)
Balance, December 31, 2020	56,244,771	562	1,067,150	(771,821)	(7)	295,884
Share-based compensation	—	—	23,126	—	—	23,126
Issuance of common stock, net of offering costs	4,580,653	46	117,772	—	—	117,818
Stock plan related activity	482,004	5	4,954	—	—	4,959
Unrealized loss on investments	—	—	—	—	(54)	(54)
Net loss	—	—	—	(202,115)	—	(202,115)
Balance, December 31, 2021	61,307,428	613	1,213,002	(973,936)	(61)	239,618
Share-based compensation	—	—	20,438	—	—	20,438
Issuance of common stock, net of offering costs	160,480	2	1,083	—	—	1,085
Stock plan related activity	233,559	2	572	—	—	574
Unrealized gain on investments	—	—	—	—	56	56
Net loss	—	—	—	(119,758)	—	(119,758)
Balance, December 31, 2022	61,701,467	$ 617	$ 1,235,095	$ (1,093,694)	$ (5)	$ 142,013

See accompanying notes.

MACROGENICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2022	**2021**	**2020**
Operating activities			
Net loss	$ (119,758)	$ (202,115)	$ (129,739)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	11,865	11,258	11,957
Amortization of premiums and discounts on marketable securities	403	1,607	(260)
Share-based compensation	20,438	23,126	20,676
Other non-cash items	2,882	2,035	—
Changes in operating assets and liabilities:			
Accounts receivable	(45,836)	12,696	(10,337)
Inventory	55	(6,424)	—
Prepaid expenses and other current assets	11,009	(4,188)	(5,697)
Other non current assets	(10,704)	5,915	581
Accounts payable	(10,860)	7,125	3,723
Accrued expenses and other current liabilities	(4,638)	(607)	6,994
Lease liabilities	9,364	(3,780)	(1,324)
Deferred revenue	48,821	9,264	(8,472)
Other non current liabilities	—	258	—
Net cash used in operating activities	(86,959)	(143,830)	(111,898)
Cash flows from investing activities			
Purchases of marketable securities	(120,602)	(231,208)	(223,745)
Proceeds from sales and maturities of marketable securities	194,940	200,800	221,866
Purchases of property, equipment and software	(3,623)	(6,201)	(5,906)
Net cash provided by (used in) investing activities	70,715	(36,609)	(7,785)
Cash flows from financing activities			
Proceeds from issuance of common stock, net of offering costs	1,085	117,818	170,456
Proceeds from stock option exercises and ESPP purchases	574	4,959	3,886
Net cash provided by financing activities	1,659	122,777	174,342
Net change in cash and cash equivalents	(14,585)	(57,662)	54,659
Cash and cash equivalents at beginning of period	123,469	181,131	126,472
Cash and cash equivalents at end of period	$ 108,884	$ 123,469	$ 181,131
Non-cash operating and investing activities			
Property and equipment included in accounts payable or accruals	$ 118	$ 508	$ 66

See accompanying notes.

1. Organization and Nature of Operations

MacroGenics, Inc. (the Company) is incorporated in the state of Delaware. The Company is a biopharmaceutical company focused on developing and commercializing innovative antibody-based therapeutics designed to modulate the human immune response for the treatment of cancer. The Company has a pipeline of product candidates being evaluated in clinical trials sponsored by MacroGenics or its collaborators. These product candidates include multiple oncology programs, some of which were created primarily using the Company's proprietary, antibody-based technology platforms. The Company believes our product candidates have the potential, if approved for marketing by regulatory authorities, to have a meaningful effect on treating patients' unmet medical needs as monotherapy or, in some cases, in combination with other therapeutic agents. In March 2021, the Company and its commercialization partner commenced U.S. marketing of MARGENZA (margetuximab-cmkb), a human epidermal growth factor receptor 2 (HER2) receptor antagonist indicated, in combination with chemotherapy, for the treatment of adult patients with metastatic HER2-positive breast cancer who have received two or more prior anti-HER2 regimens, at least one of which was for metastatic disease.

Liquidity

The Company's multiple product candidates currently under development will require significant additional research and development efforts that include extensive preclinical studies and clinical testing, and regulatory approval prior to commercial use.

The future success of the Company is dependent on its ability to identify and develop its product candidates, and ultimately upon its ability to attain profitable operations. The Company has devoted substantially all of its financial resources and efforts to research and development and general and administrative expense to support such research and development. Net losses and negative cash flows have had, and will continue to have, an adverse effect on the Company's stockholders' equity and working capital, and accordingly, its ability to execute its future operating plans.

As a biotechnology company, the Company has primarily funded its operations with proceeds from the sale of its common stock in equity offerings, revenue from its multiple collaboration agreements, and contracts and grants from the National Institute of Allergy and Infectious Diseases (NIAID). Management regularly reviews the Company's available liquidity relative to its operating budget and forecast to monitor the sufficiency of the Company's working capital. The Company plans to meet its future operating requirements by generating revenue from current and future strategic collaborations or other arrangements, and product sales. The Company anticipates continuing to draw upon available sources of capital, including equity and debt instruments, to support its product development activities. If the Company is unable to enter into new arrangements or to perform under current or future agreements or obtain additional capital, the Company will assess its capital resources and may be required to delay, reduce the scope of, or eliminate one or more of its product research and development programs or clinical studies, reduce other operating expenses, and/or downsize its organization. It is considered probable that the Company can successfully implement efforts to manage uncommitted spending and carry out necessary cost saving measures, including from the Company's corporate restructuring plan announced in August 2022. Based on the Company's most recent cash flow forecast, the Company believes its current resources are sufficient to fund its operating plans for a minimum of twelve months from the date that this Annual Report on Form 10-K was filed.

Similar to the other risk factors pertinent to the Company's business, the COVID-19 pandemic and geopolitical tensions, including the ongoing military conflict between Russia and Ukraine and the related sanctions imposed against Russia, and related global slowdown of economic activity, decades-high inflation, rising interest rates and a potential recession in the United States might unfavorably impact the Company's ability to generate such additional funding. Given the uncertainty in the rapidly changing market and economic conditions related to these uncertainties, the Company will continue to evaluate the nature and extent of the impact of these uncertainties on its business and financial position.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries, MacroGenics UK Limited and MacroGenics Limited. All intercompany accounts and transactions have been eliminated in consolidation. The Company currently operates in one operating segment. Operating segments are defined as components of an enterprise about which separate discrete information is available for the chief operating decision maker, or decision making

group, in deciding how to allocate resources and assessing performance. The Company views its operations and manages its business in one segment, which is developing and commercializing monoclonal antibody-based therapeutics.

Use of Estimates

The preparation of the financial statements in accordance with generally accepted accounting principles (GAAP) requires the Company to make estimates and judgments in certain circumstances that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. In preparing these consolidated financial statements, management has made its best estimates and judgments of certain amounts included in the financial statements, giving due consideration to materiality. On an ongoing basis, the Company evaluates its estimates, including those related to revenue recognition, fair values of assets, inventory, preclinical study and clinical trial accruals and other contingencies. Management bases its estimates on historical experience or on various other assumptions that it believes to be reasonable under the circumstances. Although actual results could differ from these estimates, management does not believe that such differences would be material.

Reclassifications

Certain amounts in the prior period financial statements have been reclassified to conform to the presentation of current period financial statements. These reclassifications had no effect on the previously reported net loss.

Cash, Cash Equivalents and Marketable Securities

The Company considers all investments in highly liquid financial instruments with a maturity of 90 days or less at the date of purchase to be cash equivalents. Cash and cash equivalents includes investments in money market funds with commercial banks and financial institutions, securities issued by the U.S. government and its agencies, Government Sponsored Enterprise agency debt obligations and corporate debt obligations. Cash equivalents are stated at amortized cost, plus accrued interest, which approximates fair value.

The Company carries marketable securities classified as available-for-sale at fair value as determined by prices for identical or similar securities at the balance sheet date. Classification of marketable securities between current and non-current is dependent upon the maturity date at the balance sheet date taking into consideration the Company's ability and intent to hold the investment to maturity. Marketable securities consist of Level 2 financial instruments in the fair-value hierarchy. The Company records unrealized gains and losses as a component of other comprehensive loss within the statements of operations and comprehensive loss and as a separate component of stockholders' equity. Realized gains or losses on available-for-sale securities are determined using the specific identification method and the Company includes net realized gains and losses in other income, along with interest income and amortization of premiums and discounts.

Accounts Receivable

Accounts receivable arise from product sales, amounts due from the Company's collaborative partners and contract manufacturing work performed by the Company. The amount from product sales represents amounts due from specialty distributors. Accounts receivable that management has the intent and ability to collect are reported in the consolidated balance sheets at outstanding amounts, less an allowance for doubtful accounts. The Company writes off uncollectible receivables when the likelihood of collection is remote.

The Company evaluates the collectability of accounts receivable on a regular basis. The allowance, if any, is based upon various factors including the financial condition and payment history of customers, an overall review of collections experience on other accounts and economic factors or events expected to affect future collections experience. No allowance was recorded as of December 31, 2022 or 2021, as the Company has a history of collecting on all outstanding accounts.

Fair Value of Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, marketable securities, accounts receivable, accounts payable and accrued expenses. The carrying amount of accounts receivable, accounts payable and accrued expenses are generally considered to be representative of their respective fair values because of their short-term nature. The Company accounts for recurring and non-recurring fair value measurements in accordance with the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 820, *Fair Value Measurements and Disclosures* (ASC 820). ASC 820 defines fair value, establishes a fair value hierarchy for assets and liabilities measured at fair value, and requires expanded disclosures about fair value measurements. The ASC 820 hierarchy ranks the quality of reliability of inputs, or assumptions, used in the determination of fair value and requires assets and liabilities carried at fair value to be classified and disclosed in one of the following three categories:

- Level 1 – Fair value is determined by using unadjusted quoted prices that are available in active markets for identical assets and liabilities.
- Level 2 – Fair value is determined by using inputs other than Level 1 quoted prices that are directly or indirectly observable. Inputs can include quoted prices for similar assets and liabilities in active markets or quoted prices for identical assets and liabilities in inactive markets. Related inputs can also include those used in valuation or other pricing models, such as interest rates and yield curves that can be corroborated by observable market data.
- Level 3 – Fair value is determined by inputs that are unobservable and not corroborated by market data. Use of these inputs involves significant and subjective judgments to be made by a reporting entity – e.g., determining an appropriate adjustment to a discount factor for illiquidity associated with a given security.

The Company evaluates financial assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level at which to classify them each reporting period. This determination requires the Company to make subjective judgments as to the significance of inputs used in determining fair value and where such inputs lie within the ASC 820 hierarchy. There were no transfers between levels during the periods presented.

Financial assets measured at fair value on a recurring basis were as follows (in thousands):

	Fair Value Measurement at December 31, 2022		
	Total	**Level 1**	**Level 2**
Assets:			
Money market funds	$ 41,564	$ 41,564	$ —
Government-sponsored enterprises	32,811	—	32,811
Corporate debt securities	17,626	—	17,626
Total assets measured at fair value [(a)]	$ 92,001	$ 41,564	$ 50,437

	Fair Value Measurement at December 31, 2021		
	Total	**Level 1**	**Level 2**
Assets:			
Money market funds	$ 17,202	$ 17,202	$ —
U.S Treasury securities	81,132	81,132	—
Government-sponsored enterprise	7,734	—	7,734
Corporate debt securities	37,280	—	37,280
Total assets measured at fair value [(b)]	$ 143,348	$ 98,334	$ 45,014

(a) Total assets measured at fair value at December 31, 2022 includes approximately $46.5 million reported as cash and cash equivalents and $45.5 million reported as marketable securities on the balance sheet.

(b) Total assets measured at fair value at December 31, 2021 includes approximately $23.2 million reported as cash and cash equivalents and $120.1 million reported as marketable securities on the balance sheet.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash, cash equivalents, marketable securities and accounts receivable. The Company maintains its cash and money market funds with financial institutions that are federally insured. While balances deposited in these institutions often exceed Federal Deposit Insurance Corporation limits, the Company has not experienced any losses on related accounts to date. The Company's investment policy limits investments to certain types of debt securities issued by the U.S. government, its agencies and institutions with investment-grade credit ratings and places restrictions on maturities and concentration by type and issuer. The counterparties are various corporations, financial institutions and government agencies of high credit standing.

The Company's revenue relates to agreements with various collaborators, MARGENZA net product sales and contracts and research grants received from U.S. government agencies. The following table includes those counterparties

that represent more than 10% of total revenue earned in the periods indicated:

	Year Ended December 31,		
	2022	2021	2020
Incyte Corporation (Incyte)	26%	31%	47%
Janssen Biotech, Inc. (Janssen)	*	*	19%
Zai Lab Limited (Zai Lab)	15%	30%	11%
Provention Bio, Inc (Provention)	43%	*	*
I-Mab Biopharma (I-Mab)	*	16%	*

* Amount is less than 10% for the period indicated.

The following table includes those counterparties that represent more than 10% of accounts receivable at the date indicated:

	December 31,	
	2022	2021
Provention	84%	*
Zai Lab	*	23%
I-Mab	*	12%
McKesson Plasma & Biologics and McKesson Specialty Care Distribution LLC	*	18%
ASD Healthcare and Oncology Supply	*	18%

* Balance is less than 10% as of the date indicated.

Inventory

When the Company believes regulatory approval is probable and expects future economic benefit from the sales of a product candidate to be realized, the Company capitalizes manufacturing costs (whether internally produced or through third-party contract manufacturing organizations) as inventory. Prior to receiving its first approval from the U.S. Food and Drug Administration (FDA) in December 2020, the Company expensed all costs incurred related to the manufacture of MARGENZA as research and development expense because of the inherent risks associated with the development of a product candidate, the uncertainty about the regulatory approval process and the lack of history for the Company of regulatory approval of drug candidates. Subsequent to FDA approval in December 2020, the Company began capitalizing its MARGENZA third-party contract manufacturing inventory costs.

Inventory is composed of raw materials, work-in-process, and finished goods, which are goods that are available for sale. The Company values its inventories at the lower of cost or estimated net realizable value. The Company determines the cost of its inventories, which includes amounts related to materials and third-party contract manufacturing costs, on a first-in, first-out basis. The Company performs an assessment of the recoverability of capitalized inventory during each reporting period, and it writes down any excess, obsolete or unsaleable inventories to their estimated realizable value in the period in which the impairment is first identified. Such write downs, should they occur, are recorded within the cost of product sales in the statement of operations.

Property, Equipment and Software

Property, equipment and software are stated at cost. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation or amortization are removed from the accounts and any resulting gain or loss is credited or charged to operations. Repairs and maintenance costs are expensed as incurred. Depreciation and amortization are computed using the straight-line method over the following estimated useful lives:

Computer equipment	3 years
Software	3 years
Furniture	10 years
Laboratory and office equipment	5 years
Leasehold improvements	Shorter of lease term or useful life

Impairment of Long-Lived Assets

The Company assesses the recoverability of its long-lived assets in accordance with the provisions of ASC 360, *Property, Plant and Equipment* (ASC 360). ASC 360 requires that long-lived assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of the long-lived asset is measured by a comparison of the carrying amount of the asset to future undiscounted net cash flows expected to be generated by the asset or asset group. If carrying value exceeds the sum of undiscounted cash flows, the Company then determines the fair value of the underlying asset group. Any impairment to be recognized is measured by the amount by which the carrying amount of the asset group exceeds the estimated fair value of the asset group. Assets to be disposed of are reported at the lower of the carrying amount or fair value, less costs to sell. For the years ended December 31, 2022, and 2021, the Company determined that there were no impaired assets.

Revenue recognition

The Company recognizes revenue under ASC Topic 606, *Revenue from Contracts with Customer*s (ASC 606) when its customer obtains control of promised goods or services, in an amount that reflects the consideration which 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. The Company recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Collaborative and other agreements

The Company enters into licensing agreements that are within the scope of ASC 606, under which it may license rights to research, develop, manufacture and commercialize its product candidates to third parties. The terms of these arrangements typically include payment to the Company of one or more of the following: non-refundable, upfront license fees; reimbursement of certain costs; customer option exercise fees; development, regulatory and commercial milestone payments; and royalties on net sales of licensed products. The Company may also enter into development and manufacturing service agreements with its collaborators.

For each arrangement that results in revenues, the Company identifies all performance obligations, which may include a license to intellectual property and know-how, research and development activities, transition activities and/or manufacturing services. In order to determine the transaction price, in addition to any upfront payment, the Company estimates the amount of variable consideration at the outset of the contract either utilizing the expected value or most likely amount method, depending on the facts and circumstances relative to the contract. The Company constrains (reduces) the estimates of variable consideration such that it is probable that a significant reversal of previously recognized revenue will not occur. When determining if variable consideration should be constrained, management considers whether there are factors outside the Company's control that could result in a significant reversal of revenue. In making these assessments, the Company considers the likelihood and magnitude of a potential reversal of revenue. These estimates are re-assessed each reporting period as required.

Once the estimated transaction price is established, amounts are allocated to the performance obligations that have been identified. The transaction price is generally allocated to each separate performance obligation on a relative standalone selling price basis. The Company must develop assumptions that require judgment to determine the standalone selling price in order to account for these agreements. To determine the standalone selling price, the Company's assumptions may include (i) the probability of obtaining marketing approval for the product candidate, (ii) estimates regarding the timing and the expected costs to develop and commercialize the product candidate, and (iii) estimates of future cash flows from potential product sales with respect to the product candidate. Standalone selling prices used to perform the initial allocation are not updated after contract inception. The Company does not include a financing component to its estimated transaction price at contract inception unless it estimates that certain performance obligations will not be satisfied within one year.

Amounts received prior to revenue recognition are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified as current portion of deferred revenue in the accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion.

Licenses. When the Company grants a license to its intellectual property, it determines whether the nature of the intellectual property to which the customer will have rights is functional intellectual property (functional IP), which has significant standalone functionality, or symbolic intellectual property (symbolic IP) which does not have significant standalone

functionality. Revenue from functional IP is recognized at the point in time when control of the distinct license is transferred to the customer. Revenue from symbolic IP is recognized over the access period to the Company's intellectual property. If the license to the Company's intellectual property is determined to be distinct from the other promises or performance obligations identified in the arrangement, the Company recognizes revenue from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and when (or as) the customer is able to use and benefit from the license. In assessing whether a promise or performance obligation is distinct from the other promises, the Company considers factors such as the research, development, manufacturing and commercialization capabilities of the licensee and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the licensee can benefit from a promise for its intended purpose without the receipt of the remaining promise, whether the value of the promise is dependent on the unsatisfied promise, whether there are other vendors that could provide the remaining promise, and whether it is separately identifiable from the remaining promise. For licenses that are combined with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition. The measure of progress, and thereby periods over which revenue should be recognized, are subject to estimates by management and may change over the course of the research and development and licensing agreement. Such a change could have a material impact on the amount of revenue the Company records in future periods.

Research, Development and/or Manufacturing Services. The promises under the Company's agreements may include research and development or manufacturing services to be performed by the Company on behalf of the counterparty. If these services are determined to be distinct from the other promises or performance obligations identified in the arrangement, the Company recognizes the transaction price allocated to these services as revenue over time based on an appropriate measure of progress when the performance by the Company does not create an asset with an alternative use and the Company has an enforceable right to payment for the performance completed to date. If these services are determined not to be distinct from the other promises or performance obligations identified in the arrangement, the Company recognizes the transaction price allocated to the combined performance obligation as the related performance obligations are satisfied.

Customer Options. If an arrangement contains customer options, the Company evaluates whether the options are material rights because they allow the customer to acquire additional goods or services for free or at a discount. If the customer options are determined to represent a material right, the material right is recognized as a separate performance obligation at the outset of the arrangement. The Company allocates the transaction price to material rights based on the relative standalone selling price, which is determined using assumptions regarding estimated costs, discount rates, post-option development timeline, the probability of technical and regulatory success and the probability that the customer will exercise the option. Amounts allocated to a material right are not recognized as revenue until, at the earliest, the option is exercised. If the options are deemed not to be a material right, they are excluded as performance obligations at the outset of the arrangement.

Milestone Payments. At the inception of each arrangement that includes development milestone payments, the Company evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The Company evaluates factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. At the end of each subsequent reporting period, the Company reevaluates the probability of achievement of all milestones subject to constraint and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Royalties. For arrangements that include sales-based royalties which are the result of a customer-vendor relationship and for which the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied or partially satisfied. To date, the Company has not recognized any royalty revenue resulting from any of its licensing arrangements.

The Company analyzes its collaboration arrangements to assess whether such arrangements involve joint operating activities performed by parties who are both active participants in the activities and are both exposed to significant risks and rewards dependent on the commercial success of such activities. Such arrangements generally are within the scope of ASC 808, *Collaborative Arrangements* (ASC 808). While ASC 808 defines collaborative arrangements and provides guidance on income statement presentation, classification, and disclosures related to such arrangements, it does not address recognition and

measurement matters, such as (1) determining the appropriate unit of accounting or (2) when the recognition criteria are met. Therefore, the accounting for these arrangements is either based on an analogy to other accounting literature or an accounting policy election by the Company. The Company accounts for certain components of the collaboration agreement that are reflective of a vendor-customer relationship (e.g., licensing arrangement) based on ASC 606. The Company accounts for other components based on a reasonable, rational and consistently applied accounting policy election. Reimbursements from the counter-party that are the result of a collaborative relationship with the counter-party, instead of a customer relationship, such as co-development activities, are recorded as a reduction to research and development expense as the services are performed.

For a complete discussion of accounting for revenue from collaborative and other agreements, see Note 8, Revenue.

Product sales, net

The Company entered into a limited number of arrangements with specialty distributors in the United States to distribute MARGENZA. These arrangements are considered to be contracts with customers and are in the scope of ASC 606. The Company has written contracts with each of its customers that have a single performance obligation - to deliver products upon receipt of a customer order - and these obligations are satisfied when delivery occurs and the customer receives the product. The specialty distributors subsequently resell the Company's product to healthcare providers. Product revenue is recorded net of applicable reserves for variable consideration, including discounts and other allowances. Shipping and handling costs for product shipments occur prior to the customer obtaining control of the goods and are recorded in cost of sales. For the years ended December 31, 2022 and 2021, the shipping costs incurred were immaterial.

Reserves for Variable Consideration. Revenue from product sales is recorded at the net sales price, which includes estimates of variable consideration. Components of variable consideration typically include discounts, product returns, provider chargebacks and discounts and government rebates. Variable consideration is estimated following the expected value method in accordance with ASC 606 and includes such factors as current contractual and statutory requirements, specific known market events and trends, industry data, and forecasted customer buying and payment patterns. The amount of variable consideration that is included in the transaction price may be constrained and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue recognized under the contract will not occur in a future period. Estimates of the variable consideration were not deemed constrained during the year ended December 31, 2022.

Customer Discounts and Service Fees. The Company may provide customers with discounts which are explicitly stated in the contracts. These discounts are recorded as a reduction of revenue in the period the related product revenue is recognized. In addition, these contracts may include written service arrangements whereby the Company pays fees to customers who provide services such as sales order management, data, contract administration and distribution services, at rates which the Company believes to be consistent with fair market value. The Company has determined such services received to date are not distinct from the Company's sale of products to its customers and, therefore, these payments have been recorded as a reduction of revenue within the statement of operations.

Product Returns. Consistent with industry practice, the Company offers the specialty distributors product return rights pursuant to written contracts and/or Company returned goods policies. The Company estimates the amount of its product sales that may be returned by its customers and records an estimated liability and a reduction of revenue in the period the related product revenue is recognized. The Company currently estimates product returns using industry benchmarking as well as other information available, such as visibility into the inventory remaining in the distribution channel, since the Company does not have its own returns experience. The Company's estimates of product returns may be adjusted in the future based on actual returns experience, known or expected changes in the marketplace, or other factors.

Provider Chargebacks and Discounts. Chargebacks for fees and discounts to healthcare providers represent the estimated obligations resulting from contractual commitments to sell products to qualified healthcare providers at prices lower than the list prices charged to customers who directly purchase the product from the Company. In such cases, customers charge the Company for the difference between what they pay for the product and the ultimate selling price to the qualified healthcare providers. The reserve for chargebacks is established in the same period that the related revenue is recognized, resulting in a reduction of product revenue. Chargeback amounts are generally determined at the time of resale to the qualified healthcare provider by customers, and the Company generally issues credits for such amounts within a few weeks of the customer's notification to the Company of the resale. Chargebacks consist of credits the Company expects to issue for units that remain in the distribution channel at each reporting period end that the Company expects will be sold to qualified healthcare providers and chargebacks that customers have claimed, but for which the Company has not yet issued a credit.

Government Rebates. The Company is subject to discount and/or rebate obligations under state Medicaid programs, Medicare and contractual agreements with and statutory obligations to certain Federal and State entities. These reserves are recorded in the same period the related revenue is recognized, resulting in a reduction of product revenue. The Company's

liability for these rebates consists of invoices received for claims from prior quarters that have not been paid or for which an invoice has not yet been received, estimates of claims for the current quarter, and estimates of future claims that will be made for product that has been recognized as revenue, but which remains in the distribution channel at the end of each reporting period.

Customer discounts are recorded as a reduction of accounts receivable on the consolidated balance sheets. Allowance for product returns, provider chargebacks, government and other rebates and service fees are recorded as a component of accrued expenses and other current liabilities on the consolidated balance sheets.

Contract manufacturing revenue

The Company enters into agreements with third parties to manufacture their drug substance at its GMP facility. The terms of these arrangements typically include an upfront payment to the Company to reserve manufacturing capacity, scheduled payments during the manufacturing process and reimbursement for materials used to manufacture product. The Company recognizes revenue over time on a straight-line basis as the manufacturing services are performed, as the Company believes that its efforts in providing the manufacturing services are incurred evenly throughout the performance period and therefore straight-line revenue recognition closely approximates the level of effort for the manufacturing services. Variable consideration relating to the reimbursed materials and other reimbursed costs incurred to manufacture product are allocated to the related manufacturing activities and are recognized as revenue as those activities occur.

Cost of Product Sales

Cost of product sales relates to sales of MARGENZA. These costs include material, manufacturing and shipping costs, as well as royalties payable on net sales of MARGENZA and inventory reserves. All product costs incurred prior to FDA approval of MARGENZA in December 2020 were expensed as research and development expense. The Company expects cost of product sales to continue to be positively impacted as the Company sells through inventory that was expensed prior to FDA approval of MARGENZA. The Company is currently unable to estimate how long it will be until it begins selling product manufactured post FDA approval.

Cost of Manufacturing Services

Cost of manufacturing services consists of the costs to provide manufacturing services to produce certain bulk drug substance under manufacturing and clinical supply agreements with third parties, including labor, materials overhead and other related costs.

Research and Development Expense, Including Clinical Trial Accruals/Expenses

Research and development expenditures are expensed as incurred. Research and development costs primarily consist of employee related expenses, including salaries and benefits, expenses incurred under agreements with contract research organizations (CROs), investigative sites and consultants that conduct the Company's clinical trials, the cost of acquiring and manufacturing clinical trial materials, including costs incurred under agreements with contract manufacturing organizations (CMOs), and other allocated expenses, license fees for and milestone payments related to in-licensed products and technologies, stock-based compensation expense, and costs associated with non-clinical activities and regulatory approvals.

Right-to-develop agreements may contain cost-sharing provisions whereby the Company and the collaborator share the cost of research and development activities. Reimbursement of research and development expenses received in connection with these agreements is recorded as a reduction of such expenses.

Clinical trial expenses are a significant component of research and development expense, and the Company outsources a significant portion of these costs to third parties. Third party clinical trial expenses include investigator fees, site and patient costs, CRO costs, costs for central laboratory testing, data management and CMO costs. The accrual for site and patient costs includes inputs such as estimates of patient enrollment, patient cycles incurred, clinical site activations, and other pass-through costs. These inputs are required to be estimated due to a lag in receiving the actual clinical information from third parties. Payments for these activities are based on the terms of the individual arrangements, which may differ from the pattern of costs incurred, and are reflected on the consolidated balance sheets as a prepaid asset or accrued expenses. These third party agreements are generally cancellable, and related costs are recorded as research and development expenses as incurred. Non-refundable advance clinical payments for goods or services that will be used or rendered for future research and development activities are recorded as a prepaid asset and recognized as expense as the related goods are delivered or the related services are performed. When evaluating the adequacy of the accrued expenses, management analyzes progress of the studies, including the phase or completion of events, invoices received and contracted costs. Significant judgments and estimates may be made in

determining the accrued balances at the end of any reporting period. Actual results could differ from the estimates made. The historical clinical accrual estimates have not been materially different from the actual costs.

Leases

The Company determines whether an arrangement is or contains a lease at the inception of an arrangement under ASC 842, *Leases*. For leases where the Company is the lessee, right-of-use (ROU) assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent an obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. The interest rate implicit in lease contracts is typically not readily determinable. As such, the Company utilizes the appropriate incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term of the lease for which the rate is estimated. Certain adjustments to the ROU asset may be required for items such as initial direct costs paid or incentives received. The lease terms used to calculate the ROU asset and related lease liabilities include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for operating leases is recognized on a straight-line basis over the lease term as an operating expense while the expense for finance leases is recognized as depreciation expense and interest expense using the accelerated interest method of recognition.

Comprehensive Loss

Comprehensive loss represents net loss adjusted for the change during the periods attributed to unrealized gains and losses on available-for-sale debt securities.

Net Loss Per Share

Basic and diluted loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the period. All stock options and restricted stock units (RSUs) are excluded from the per share calculations as such securities were anti-dilutive for all periods presented. The following table presents the number of stock options and RSUs that were excluded from the calculation of net loss per share:

	Year Ended December 31,		
	2022	**2021**	**2020**
Stock options and RSUs	10,514,013	8,395,421	7,467,603

Recent Accounting Pronouncements

The Company has implemented all applicable accounting pronouncements that are in effect. These pronouncements did not have any material impact on the financial statements unless otherwise disclosed, and the Company does not believe that there are any other new accounting pronouncements that have been issued that might have a material impact on its financial position or results of operations.

3. Marketable Securities

Available-for-sale marketable securities as of December 31, 2022 and 2021 were as follows (in thousands):

	December 31, 2022			
	Amortized Cost	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**
Government-sponsored enterprises	$ 32,812	$ 5	$ (7)	$ 32,810
Corporate debt securities	12,655	1	(4)	12,652
Total	$ 45,467	$ 6	$ (11)	$ 45,462

	December 31, 2021			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury securities	$ 81,184	$ —	$ (52)	$ 81,132
Government-sponsored enterprises	7,739	—	(5)	7,734
Corporate debt securities	31,285	—	(4)	31,281
Total	$ 120,208	$ —	$ (61)	$ 120,147

All of the Company's available-for-sale securities held at December 31, 2022 and 2021 had contractual maturities of less than one year. All of the Company's available-for-sale marketable debt securities in an unrealized loss position as of December 31, 2022 and 2021 were in a loss position for less than twelve months. Unrealized losses on available-for-sale debt securities as of December 31, 2022 and 2021 were not significant and were primarily due to changes in interest rates, including market credit spreads, and not due to increased credit risks associated with specific securities. Accordingly, no allowance for credit losses related to the Company's available-for-sale debt securities was recorded for the years ended December 31, 2022 and 2021. The Company does not intend to sell these investments and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost bases, which may be at maturity. The Company recorded interest income of $1.7 million, $2.0 million and $0.8 million during the years ended December 31, 2022, 2021 and 2020, respectively, which is included in other income on the consolidated statements of operations and comprehensive loss.

4. Inventory, Net

All of the Company's inventory relates to the manufacturing of MARGENZA. The following table sets forth the Company's inventory, net of reserves (in thousands):

	December 31,	
	2022	2021
Work in process	$ 409	$ 3,929
Finished goods	1,042	459
Total inventory, net	$ 1,451	$ 4,388

Prior to FDA approval of MARGENZA in December 2020, the cost of materials and expenses associated with the manufacturing of MARGENZA were recorded as research and development expense. Subsequent to FDA approval, the Company began capitalizing inventory costs related to the manufacture of MARGENZA. The inventory balance as of December 31, 2022 and December 31, 2021 is net of a reserve of $4.9 million and $2.0 million, respectively, for unsaleable inventory. These reserves are reflected in cost of product sales during the period they are recorded.

	Inventory Reserves (in thousands)			
	Balance at Beginning of Year	Additions Charged to Expenses	Deductions	Balance at End of Year
Year Ended December 31, 2022	$ 2,035	$ 2,882	$ —	$ 4,917

5. Property, Equipment and Software

Property, equipment and software consists of the following (in thousands):

	December 31,	
	2022	2021
Computer equipment	$ 3,489	$ 2,890
Software	9,604	9,453
Furniture and office equipment	713	713
Motor vehicles	50	50
Lab equipment	46,474	45,693
Leasehold improvements	52,974	51,056
Construction in progress	356	630
Property, equipment and software	113,660	110,485
Less accumulated depreciation and amortization	(84,085)	(72,809)
Property, equipment and software, net	$ 29,575	$ 37,676

Depreciation and amortization expense related to property, equipment and software for the years ended December 31, 2022, 2021 and 2020 was $11.9 million, $11.3 million and $12.0 million, respectively.

6. Commitments and Contingencies

Leases

The Company has non-cancelable operating leases for manufacturing, laboratory, office and warehouse space in Maryland and a non-cancelable operating lease for laboratory and office space in California. A portion of the space under one of these leases is subleased to a third party. The California facility and the smaller-scale, non-commercial GMP manufacturing site in Maryland will be closed under the Company's restructuring plan announced in August 2022, therefore the leases for those sites will not be renewed when they expire. The Company's continuing leases each have one or more five-year options to renew. In December 2022, the Company amended the existing lease on its headquarters space to extend the lease term through 2035 in exchange for certain concessions from the lessor. This amendment was accounted for as a lease modification, and the right-of-use asset and lease liability were remeasured at the modification date, resulting in an increase to both balances of approximately $14.0 million.

The table below presents supplemental balance sheet information related to operating leases:

	December 31,	
	2022	2021
Weighted-average remaining lease term (in years)	11.1	5.1
Weighted-average discount rate	12.0 %	9.7 %

During the years ended December 31, 2022 and 2021, the Company made cash payments for operating leases of $6.9 million and $6.7 million, respectively. As of December 31, 2022 and 2021, the Company's ROU assets were valued at $27.3 million and $16.6 million, respectively.

The components of lease cost for the years ended December 31, 2022 and 2021 were as follows (in thousands):

	December 31,	
	2022	2021
Operating lease cost	$ 5,597	$ 5,613
Variable lease cost	1,451	960
Sublease income	(1,076)	(814)
Net lease cost	$ 5,972	$ 5,759

As of December 31, 2022, the maturities of the Company's operating lease liabilities were as follows (in thousands):

2023	$	4,999
2024		4,004
2025		5,084
2026		4,209
2027		4,927
Thereafter		52,053
Total lease payments		75,276
Less: imputed interest		(40,444)
Total lease liabilities	$	34,832

In-licensing arrangement

In January 2022, the Company entered into a non-exclusive license agreement with Synaffix B.V. (Synaffix) to develop, manufacture and commercialize up to three antibody-drug conjugate targets using Synaffix's proprietary technology. The Company made an upfront payment to Synaffix upon contract execution. Assuming all three targets are successfully developed and commercialized, the Company would be obligated to pay up to $585.0 million for development, regulatory and sales milestones. Finally, pursuant to the terms of this license agreement, upon commencement of commercial sales of any products developed from these targets, the Company would be required to pay Synaffix tiered royalties in the low-single digit percentages on net sales of the respective products. The Company may terminate this agreement at any time with 30 days' notice to Synaffix. Amounts paid to Synaffix under this agreement are recorded as research and development expense in the consolidated statement of operations. During the year ended December 31, 2022, the Company incurred $1.0 million under this agreement.

Securities Litigation

On September 13, 2019, a securities class action complaint was filed in the U.S. District Court for the District of Maryland (District Court) by Todd Hill naming the Company, its Chief Executive Officer, Dr. Koenig, and its Chief Financial Officer, Mr. Karrels, as defendants for allegedly making false and materially misleading statements regarding the Company's SOPHIA trial. On August 17, 2020, the Employees' Retirement System of the City of Baton Rouge and Parish of East Baton Rouge was appointed as Lead Plaintiff, and on October 16, 2020, the Lead Plaintiff filed an amended complaint. The amended complaint asserted a putative class period stemming from February 6, 2019 to June 4, 2019. The Company filed a Motion to Dismiss on November 30, 2020. On September 29, 2021, the District Court issued an Order dismissing the case, with prejudice. On October 28, 2021 the Lead Plaintiff filed a Notice of Appeal in the Fourth Circuit. The Company did not accrue any liability associated with this action as of December 31, 2022. The 4th Circuit affirmed the District Court's dismissal in a decision published on March 2, 2023.

7. Stockholders' Equity

The Company's amended and restated certificate of incorporation authorizes 125,000,000 shares of common stock, and 5,000,000 shares of undesignated preferred stock, both with a par value of $0.01 per share. There were no shares of undesignated preferred stock issued or outstanding as of December 31, 2022 or 2021.

In November 2020, the Company entered into a sales agreement (Sales Agreement) with an agent to sell, from time to time, shares of its common stock having an aggregate sales price of up to $100.0 million through an "at the market offering" (ATM Offering) as defined in Rule 415 under the Securities Act of 1933, as amended. The shares that were sold under the Sales Agreement were issued and sold pursuant to the Company's shelf registration statement on Form S-3 that was filed with the SEC on November 4, 2020. During the year ended December 31, 2021, the Company sold 3,622,186 shares of common stock at a weighted average price per share of $27.60, resulting in net proceeds of approximately $98.2 million, net of underwriting discounts and commissions and other offering expenses.

In April 2021, the Company entered into Amendment No. 1 to the Sales Agreement which increases the amount of the Company's common stock that can be sold by the Company through its agent under the ATM Offering, from an aggregate offering price of up to $100.0 million to an aggregate offering price of up to $300.0 million. During the year ended December 31, 2022, the Company sold 160,480 shares of common stock at a weighted average price per share of $6.87, resulting in net proceeds of approximately $1.1 million, net of underwriting discounts and commissions and other offering expenses.

As part of the consideration for the rights granted to Zai Lab US LLC under the collaboration and license agreement described more fully in Note 8, Revenue, the Company and Zai Lab US LLC entered into a separate stock purchase agreement (Stock Purchase Agreement). Under this Stock Purchase Agreement in 2021, Zai Lab US LLC paid the Company approximately $30.0 million to purchase 958,467 newly issued shares of the Company's common stock, par value $0.01, at a fixed price of $31.30 which represented a $10.4 million premium over the share price on the Stock Purchase Agreement date.

8. Revenue

Collaborative Agreements

Incyte Corporation

Incyte License Agreement

In 2017, the Company entered into an exclusive global collaboration and license agreement with Incyte, which was amended in March 2018, April 2022 and July 2022, for retifanlimab, an investigational monoclonal antibody that inhibits programmed cell death protein 1 (PD-1) (Incyte License Agreement). Incyte has obtained exclusive worldwide rights for the development and commercialization of retifanlimab in all indications, while the Company retains the right to develop its pipeline assets in combination with retifanlimab. Under the terms of the Incyte License Agreement, Incyte paid the Company an upfront payment of $150.0 million in 2017. MacroGenics will manufacture a portion of Incyte’s global commercial supply of retifanlimab. Incyte has stated it is pursuing development of retifanlimab in potentially registration-enabling studies, including in patients with Merkel cell carcinoma, squamous cell carcinoma of the anal canal, MSI-high endometrial cancer and non-small cell lung cancer. Incyte is also pursuing development of retifanlimab in combination with multiple product candidates from its pipeline. In April 2022, the Company and Incyte executed an amendment to the Incyte License Agreement to add a milestone for U.S. approval of retifanlimab in a specific indication and to exclude certain other regulatory and development achievements with retifanlimab in this same indication from the milestone events of the Incyte License Agreement. In July 2022, the Company and Incyte further amended the Incyte License Agreement to reflect changes related to the payment of certain milestones and Incyte paid the Company $30.0 million in milestone payments, which the Company recognized as revenue during the year ended December 31, 2022.

Under the terms of the Incyte License Agreement, as amended, Incyte will lead global development of retifanlimab. Assuming successful development and commercialization by Incyte, the Company could receive up to approximately $435.0 million in development and regulatory milestones, and up to $330.0 million in commercial milestones. From the inception of the Incyte License Agreement through December 31, 2022, the Company has recognized $100.0 million in development milestones under Incyte License Agreement. If retifanlimab is approved and commercialized, the Company would be eligible to receive tiered royalties of 15% to 24% on any global net sales. The Company retains the right to develop its pipeline assets in combination with retifanlimab, with Incyte commercializing retifanlimab and the Company commercializing its asset(s), if any such potential combinations are approved. In addition, the Company retains the right to manufacture a portion of both companies' global commercial supply needs of retifanlimab, subject to the separate commercial supply agreement.

The Company evaluated the Incyte License Agreement under the provisions of ASC 606 at inception and identified the following two performance obligations under the agreement: (i) the license of retifanlimab and (ii) the performance of certain clinical activities through a brief technology transfer period. The Company determined that the license and clinical activities are separate performance obligations because they are capable of being distinct, and are distinct in the context of the contract. The license has standalone functionality as it is sublicensable, Incyte has significant capabilities in performing clinical trials, and Incyte is capable of performing these activities without the Company's involvement; the Company performed the activities during the transfer period as a matter of convenience. The Company determined that the transaction price of the Incyte License Agreement at inception was $154.0 million, consisting of the consideration to which the Company was entitled in exchange for the license and an estimate of the consideration for clinical activities to be performed. The transaction price was allocated to each performance obligation based on their relative standalone selling price. The standalone selling price of the license was determined using the adjusted market assessment approach considering similar collaboration and license agreements. The standalone selling price for agreed-upon clinical activities to be performed was determined using the expected cost approach based on similar arrangements the Company has with other parties. The potential development and regulatory milestone payments are fully constrained until the Company concludes that achievement of the milestone is probable and that recognition of revenue related to the milestone will not result in a significant reversal in amounts recognized in future periods, and as such have been excluded from the transaction price. Any consideration related to sales-based milestones and royalties will be recognized when the related sales occur, as they were determined to relate predominantly to the license granted to Incyte and, therefore, have also been excluded from the transaction price. The Company re-assesses the transaction price in each reporting period and when events whose outcomes are resolved or other changes in circumstances occur. From 2018 through

December 31, 2022, it became probable that a significant reversal of cumulative revenue would not occur for development milestones totaling $100.0 million related to clinical and regulatory activities related to the further advancement of retifanlimab, including Incyte's initiation of a Phase 3 clinical trial. Therefore the associated consideration was added to the estimated transaction price and was recognized as revenue.

The Company recognized the $150.0 million allocated to the license when it satisfied its performance obligation and transferred the license to Incyte in 2017. The $4.0 million allocated to the clinical activities was recognized ratably as services were performed during 2017 and 2018. The Company recognized revenue of $30.0 million, $15.0 million and $40.0 million under the Incyte License Agreement during the years ended December 31, 2022, 2021 and 2020, respectively. All of the revenue recognized during the years ended December 31, 2022 and 2021 was related to development milestones.

Incyte Clinical Supply Agreement

In 2018, the Company entered into an agreement with Incyte under which the Company is to perform development and manufacturing services for Incyte's clinical needs of retifanlimab (Incyte Clinical Supply Agreement). The Company evaluated this agreement under ASC 606 and identified one performance obligation under the agreement: to perform services related to the development and manufacturing of the clinical supply of retifanlimab. The transaction price is based on the costs incurred to develop and manufacture drug product and drug substance, and is recognized over time as the services are provided, as the performance by the Company does not create an asset with an alternative use and the Company has an enforceable right to payment for the performance completed to date. The transaction price is being recognized using the input method reflecting the costs incurred (including resources consumed and labor hours expended) related to the manufacturing services. During the years ended December 31, 2022, 2021 and 2020, the Company recognized revenue of $0.7 million, $1.5 million and $8.6 million, respectively, for services performed under this agreement.

Incyte Commercial Supply Agreement

In 2020, the Company entered into an agreement with Incyte pursuant to which the Company is entitled to manufacture a portion of the global commercial supply needs for retifanlimab (Incyte Commercial Supply Agreement). Unless terminated earlier, the term of the Incyte Commercial Supply Agreement will expire upon the expiration of Incyte's obligation to pay royalties under the Incyte License Agreement. The Company evaluated this agreement under ASC 606 and identified one performance obligation under the agreement: to perform services related to manufacturing the commercial supply of retifanlimab. The transaction price is based on a fixed price per batch of bulk drug substance to be manufactured and is recognized over time as the services are provided, as the performance by the Company does not create an asset with an alternative use and the Company has an enforceable right to payment for the performance completed to date. The transaction price is being recognized using the input method reflecting the costs incurred (including resources consumed and labor costs incurred) related to the manufacturing services. During the years ended December 31, 2022, 2021, and 2020 the Company recognized revenue of $0.3 million, $7.8 million and $1.4 million, respectively, for services performed under this agreement.

Gilead Sciences, Inc

In October 2022, the Company and Gilead Sciences, Inc. (Gilead) entered into an exclusive option and collaboration agreement (Gilead Agreement) to develop and commercialize MGD024, an investigational, bispecific antibody that binds CD123 and CD3, and create bispecific cancer antibodies using the Company's DART platform and undertake their early development under a maximum of two separate bispecific cancer target research programs. Under the agreement, the Company will continue the ongoing phase 1 trial for MGD024 according to a development plan, during which Gilead will have the right to exercise an option granted to Gilead to obtain an exclusive license under the Company's intellectual property to develop and commercialize MGD024 and other bispecific antibodies of MacroGenics that bind CD123 and CD3 (CD123 Option). The agreement also grants Gilead the right, within its first two years, to nominate a bispecific cancer target set for up to two research programs conducted by the Company and to exercise separate options to obtain an exclusive license for the development, commercialization and exploitation of molecules created under each research program (Research Program Option).

Under the terms of the Gilead Agreement, in October 2022 Gilead paid the Company an upfront payment of $60.0 million. Assuming Gilead exercises the CD123 Option and Research Program Option and successfully develops and commercializes MGD024, or other CD123 products developed under the agreement, and products result from the two additional research programs, the Company would be eligible to receive up to $1.7 billion in target nomination, option fees, and development, regulatory and commercial milestones. Assuming exercise of the CD123 Option, the Company will also be eligible to receive tiered, low double-digit royalties on worldwide net sales of MGD024 (or other CD123 products developed under the agreement) and assuming exercise of the Research Program Option, a flat royalty on worldwide net sales of any products resulting from the two research programs.

The Company evaluated the Gilead Agreement under the provisions of ASC 606 and identified the following material promises under the agreement: (i) a license to perform any activities allocated to Gilead under the MGD024 development plan; (ii) development activities regarding MGD024, including manufacturing, research and early clinical development activities, necessary to deliver an informational package of development and clinical data, information and materials specified in the Gilead Agreement during the period in which Gilead can exercise the CD123 Option; (iii) the CD123 Option and (iv) the Research Program Option.

The Company concluded that the license under the MGD024 development plan and development activities are not distinct from one another, as the license has limited value without the Company's performance of the development activities. Therefore, the Company determined that the development term license and development activities should be combined into a single performance obligation (Development Activities). The CD123 Option is considered a material right as the value of the exclusive license exceeds the payment to be made by Gilead if they exercise their option to obtain an exclusive license to develop and commercialize MGD024 or an alternative CD123 product, and is therefore a distinct performance obligation. The Company determined that the Research Program Option does not provide a material right, as there is no discount on its standalone selling price.

In accordance with ASC 606, the Company determined that the initial transaction price under the Gilead Agreement was $60.0 million, consisting of the upfront, non-refundable payment paid by Gilead. The CD123 Option and Research Program Option payments are excluded from the initial transaction price at contract inception along with any future development, regulatory, and commercial milestone payments (including royalties) following the CD123 Option and Research Program Option exercise. The Company will reassess the amount of variable consideration included in the transaction price every reporting period. The Company allocated the $60.0 million upfront payment in the transaction price to the Development Activities and the CD123 Option based on each performance obligation's relative standalone selling price. The standalone selling price for the Development Activities was calculated using an expected cost-plus margin approach for the pre-option development timeline. For the standalone selling price of the CD123 Option, the Company utilized an income-based approach which included the following key assumptions: post-option development timeline and costs, forecasted revenues, discount rates and probabilities of technical and regulatory success.

The Company is recognizing revenue related to the Development Activities performance obligation over the estimated period to complete the Development Activities using an input method reflecting the costs incurred (including resources consumed and labor hours expended) related to the Development Activities. The Company will defer revenue recognition related to the CD123 Option. If Gilead exercises the CD123 Option and obtains an exclusive license, the Company will recognize revenue as it fulfills its obligations under the Gilead Agreement. If the CD123 Option is not exercised, the Company will recognize the entirety of the revenue in the period when the CD123 Option expires.

During the year ended December 31, 2022, the Company recorded revenue of $0.2 million related to the Gilead Agreement. As of December 31, 2022, $59.8 million in revenue was deferred under this agreement, $1.8 million of which was current and $58.0 million of which was non-current.

Zai Lab Limited

2018 Zai Lab Agreement

In 2018, the Company entered into a collaboration and license agreement with Zai Lab Limited (Zai Lab) under which Zai Lab obtained regional development and commercialization rights in mainland China, Hong Kong, Macau and Taiwan (Zai Lab's territory) for (i) margetuximab, an immune-optimized anti-HER2 monoclonal antibody, (ii) tebotelimab, a bispecific DART molecule designed to provide coordinate blockade of PD-1 and LAG-3 for the potential treatment of a range of solid tumors and hematological malignancies, and (iii) an undisclosed multi-specific TRIDENT molecule in preclinical development (2018 Zai Lab Agreement). Zai Lab will lead clinical development of these molecules in its territory. Zai Lab has informed the Company that they have decided to discontinue development of tebotelimab for indications they were enrolling in their territory and is evaluating future development plans in other indications.

Under the terms of the 2018 Zai Lab Agreement, Zai Lab paid the Company an upfront payment of $25.0 million ($22.5 million after netting value-added tax withholdings of $2.5 million). Assuming successful development and commercialization of margetuximab, tebotelimab and the TRIDENT molecule, the Company could receive up to $140.0 million in development and regulatory milestones, of which the Company has earned $9.0 million through December 31, 2022. In addition, Zai Lab would pay the Company tiered royalties at percentage rates of mid-teens to 20% for net sales of margetuximab in Zai Lab's territory, mid-teens for net sales of tebotelimab in Zai Lab's territory and 10% for net sales of the TRIDENT molecule in Zai Lab's territory, which may be subject to adjustment in specified circumstances.

The Company evaluated the 2018 Zai Lab Agreement under the provisions of ASC 606 and identified the following material promises under the arrangement for each of the two product candidates, margetuximab and tebotelimab: (i) an exclusive license to develop and commercialize the product candidate in Zai Lab's territory and (ii) certain research and development activities. The Company determined that each license and the related research and development activities were not distinct from one another, as the license has limited value without the performance of the research and development activities. As such, the Company determined that these promises should be combined into a single performance obligation for each product candidate. Activities related to margetuximab and tebotelimab are separate performance obligations from each other because they are capable of being distinct, and are distinct in the context of the contract. The Company evaluated the promises related to the TRIDENT molecule and determined they were immaterial in context of the contract, therefore there is no performance obligation related to that molecule. The Company determined that the net $22.5 million upfront payment from Zai Lab constituted the entirety of the consideration to be included in the transaction price as of the outset of the arrangement, and the transaction price was allocated to the two performance obligations based on their relative standalone selling price. The standalone selling price of the performance obligations was determined using the adjusted market assessment approach considering similar collaboration and license agreements. The potential development and regulatory milestone payments are fully constrained until the Company concludes that achievement of the milestone is probable, and that recognition of revenue related to the milestone will not result in a significant reversal in amounts recognized in future periods, and as such have been excluded from the transaction price. Any consideration related to royalties will be recognized if and when the related sales occur, as they were determined to relate predominantly to the license granted to Zai Lab and, therefore, have also been excluded from the transaction price.

The Company re-assesses the transaction price in each reporting period and when events whose outcomes are resolved or other changes in circumstances occur. From 2020 through December 31, 2022, it became probable that a significant reversal of cumulative revenue would not occur for development and regulatory milestones totaling $9.0 million. Therefore, the associated consideration, $8.1 million net of value-added tax withholdings, was added to the estimated transaction price and was recognized as revenue. During the year ended December 31, 2022, the Company recognized $4.9 million under the 2018 Zai Lab Agreement and no revenue was recognized during the year ended December 31, 2021 under this agreement. During the year ended December 31, 2020, the Company recognized revenue of $8.6 million under the 2018 Zai Lab Agreement, $3.6 million of which was net milestone revenue and $5.0 million of which was recognition of variable consideration related to certain regulatory achievements during 2020.

Zai Lab Clinical Supply Agreements

During 2019, the Company entered into two agreements under which the Company is to perform manufacturing services for Zai Lab's clinical needs of margetuximab and tebotelimab (Zai Lab Clinical Supply Agreements). The Company evaluated the agreements under ASC 606 and determined that they should be accounted for as a single contract and identified two performance obligations within the contract: to perform services related to manufacturing the clinical supply of each of margetuximab and tebotelimab. The transaction price is based on the costs incurred to manufacture drug product and drug substance, and is recognized over time as the services are provided, as the performance by the Company does not create an asset with an alternative use and the Company has an enforceable right to payment for the performance completed to date. The transaction price is being recognized using the input method reflecting the costs incurred (including resources consumed and labor hours expended) related to the manufacturing service. During the years ended December 31, 2022, 2021, and 2020, the Company recognized revenue of $0.4 million, $2.8 million, and $2.7 million, respectively, related to the Zai Lab Clinical Supply Agreements.

2021 Zai Lab Agreement

In June 2021, the Company entered into a collaboration and license agreement with Zai Lab US LLC (collectively with Zai Lab Limited referred herein as Zai Lab) involving collaboration programs and license-only programs (collectively, the Programs) encompassing four separate immuno-oncology molecules (2021 Zai Lab Agreement). The first program covers a lead research molecule that incorporates the Company's DART platform and binds CD3 and an undisclosed target that is expressed in multiple solid tumors (Lead Program). The second program covers a target to be designated by the Company. For these programs, Zai Lab receives commercial rights in Greater China, Japan, and Korea while the Company receives commercial rights in all other territories. Zai Lab also obtained exclusive, global licenses from the Company to develop, manufacture and commercialize two additional molecules. Zai Lab granted the Company a worldwide, royalty-free, co-exclusive license to conduct the development activities allocated to the Company. During 2022, the Company and Zai Lab agreed to discontinue research and development of the Lead Program.

Under the terms of the 2021 Zai Lab Agreement, the Lead Program included joint research and development services by both the Company and Zai Lab. For the other programs, Zai Lab can separately negotiate and agree with the Company to perform research and development services in the future.

In connection with the execution of the 2021 Zai Lab Agreement, Zai Lab paid the Company an upfront payment of $25.0 million. Additionally, as part of the consideration for the rights granted to Zai Lab under the 2021 Zai Lab Agreement, the Company and Zai Lab entered into the Stock Purchase Agreement whereby Zai Lab paid the Company approximately $30.0 million to purchase shares of the Company's common stock at a fixed price of $31.30 which represented a $10.4 million premium over the share price on the Stock Purchase Agreement date.

Assuming successful development and commercialization of the remaining Programs, the Company could receive up to approximately $680.0 million in development and regulatory milestones and $600.0 million in commercial milestones. In addition, Zai Lab would pay the Company tiered royalties at percentage rates of mid-single digits to low double digit teens on annual net sales of products in Zai Lab's territory, which may be subject to specified royalty reduction pursuant to the 2021 Zai Lab Agreement. Per the terms of the 2021 Zai Lab Agreement, the Company may also receive reimbursements from Zai Lab for certain research and development costs incurred by the Company.

The Company evaluated the 2021 Zai Lab Agreement under the provisions of ASC 606 and identified the following material promises: (i) exclusive licenses to develop, manufacture and commercialize the products in Zai Lab's territory for each Program and (ii) certain research and development activities for the Lead Program. The Company determined that for the Lead Program, the license is not distinct from the related research and development activities, considering the early stage of development of the molecule and the Company's significant expertise in this area and as such, the research and development services are expected to significantly modify and customize the license. Therefore, for the Lead Program, the license and the services were combined into a single performance obligation. Since the other programs each represent distinct intellectual property and there are no other services included in the 2021 Zai Lab Agreement related to these licenses, each license is considered to be a distinct performance obligation. As such, there are four performance obligations included in the 2021 Zai Lab Agreement.

The Company concluded that the estimated transaction price is $40.4 million, consisting of the $25.0 million upfront payment, the $10.4 million premium related to the purchase of the Company's common stock, and the $5.0 million estimated reimbursement by Zai Lab for research and development activities for the Lead Program. The potential milestone payments were deemed to be fully constrained until the Company concludes that achievement of the milestone is probable, and that recognition of revenue related to the milestone will not result in a significant reversal in amounts recognized in future periods, and as such have been excluded from the transaction price. Any consideration related to royalties will be recognized if and when the related sales occur, as they were determined to relate predominantly to the license granted to Zai Lab and, therefore, have also been excluded from the transaction price. The Company will re-assess the transaction price in each reporting period and when events whose outcomes are resolved or other changes in circumstances occur.

The transaction price of $40.4 million was then allocated to the four performance obligations based on their relative standalone selling price. The standalone selling price of the performance obligations was not directly observable; therefore, the Company estimated the standalone selling price using an adjusted market assessment approach, representing the amount that the Company believes a market participant is willing to pay for the product or service. The estimate was based on consideration of observable inputs, such as, values of other preclinical collaboration arrangements adjusted for the Company's estimate of the probability of success for each Program.

Revenue related to the Lead Program license and related research and development services performance obligation was recognized over time as the research and development activities were performed. The Company utilized a cost-based input method according to costs incurred to date compared to estimated total costs. The transfer of control occurs over this time period and, in management's judgment, is the best measure of progress towards satisfying the performance obligations. The Company recognized revenue allocated to the other programs at a point in time upon transfer of the licenses to Zai Lab in June 2021. During the years ended December 31, 2022, and 2021 the Company recognized revenue of $16.8 million and $20.3 million, respectively, under the 2021 Zai Lab Agreement. As of December 31, 2022, there was no revenue deferred under the 2021 Zai Lab Agreement. As of December 31, 2021, $16.1 million in revenue was deferred under this agreement, all of which was current.

Janssen Biotech, Inc.

In December 2020, the Company entered into a research collaboration and license agreement with Janssen to develop a novel DART molecule (Janssen Agreement). The research collaboration will incorporate the Company's proprietary DART platform to enable simultaneous targeting of two undisclosed targets in a therapeutic area outside oncology. Under the terms of the Janssen Agreement, Janssen paid the Company an upfront payment of $20.0 million and will be responsible for funding all research and development expenses. The Company will also be eligible to receive up to $312.0 million in potential milestone payments and tiered royalties of up to 10% on worldwide product sales.

Subject to the terms of this agreement, the Company granted Janssen an exclusive, royalty-bearing license to develop, manufacture and commercialize the preclinical bispecific molecule and the Company will perform certain research and development activities during a specified research term. The Company evaluated the Janssen Agreement under the provisions of ASC 606 and identified the following material promises under the arrangement: (i) a license to develop the preclinical bispecific molecule and (ii) performing certain research and development activities during the research term. The Company determined that the license and research and development activities are separate performance obligations because they are capable of being distinct, and are distinct in the context of the contract. The license has standalone functionality as Janssen could benefit from the license on its own without the Company's involvement during the research term. The Company determined that the transaction price of the Janssen Agreement at inception was $22.2 million, consisting of the consideration to which the Company was entitled in exchange for the license and an estimate of the consideration for research and development activities to be performed. The transaction price was allocated to each performance obligation based on their relative standalone selling price. The standalone selling price of the license was determined using the adjusted market assessment approach considering similar collaboration and license agreements as well as current market conditions. The standalone selling price for agreed-upon research and development activities to be performed was determined using the expected cost approach based on similar arrangements the Company has with other parties. This variable consideration was fully constrained until the Company began its work under the performance obligation. The potential milestone payments are fully constrained until the Company concludes that achievement of the milestone is probable and that recognition of revenue related to the milestone will not result in a significant reversal in amounts recognized in future periods, and as such have been excluded from the transaction price. Any consideration related to sales-based milestones and royalties will be recognized when the related sales occur, as they were determined to relate predominantly to the license granted to Janssen and, therefore, have also been excluded from the transaction price. The Company re-assesses the transaction price in each reporting period and when events whose outcomes are resolved or other changes in circumstances occur.

The Company recognized the $20.0 million allocated to the license when it satisfied its performance obligation and transferred the license to Janssen in 2020. The $2.2 million allocated to the research and development activities is being recognized over the Company's involvement in the research term, which is estimated to be less than two years. During the years ended December 31, 2022, and 2021 the Company recognized revenue of $0.8 million and $1.5 million, respectively, for research and development activities performed under the Janssen Agreement.

Provention Bio, Inc.

In 2018, the Company entered into a license agreement with Provention pursuant to which the Company granted Provention exclusive global rights for the purpose of developing and commercializing MGD010 (renamed PRV-3279), a CD32B x CD79B DART molecule being developed for the treatment of autoimmune indications (Provention License Agreement). As partial consideration for the Provention License Agreement, Provention granted the Company a warrant to purchase shares of Provention's common stock at an exercise price of $2.50 per share. If Provention successfully develops, obtains regulatory approval for, and commercializes PRV-3279, the Company will be eligible to receive up to $65.0 million in development and regulatory milestones and up to $225.0 million in commercial milestones. As of December 31, 2022, the Company has not recognized any milestone revenue under this agreement. If commercialized, the Company would be eligible to receive single-digit royalties on net sales of the product. The license agreement may be terminated by either party upon a material breach or bankruptcy of the other party, by Provention without cause upon prior notice to the Company, and by the Company in the event that Provention challenges the validity of any licensed patent under the agreement, but only with respect to the challenged patent.

Also, in 2018, the Company entered into an asset purchase agreement with Provention pursuant to which Provention acquired the Company's interest in teplizumab (renamed PRV-031), a monoclonal antibody being developed for the treatment of type 1 diabetes (Asset Purchase Agreement). As partial consideration for the Asset Purchase Agreement, Provention granted the Company a warrant to purchase shares of Provention's common stock at an exercise price of $2.50 per share. Under the Asset Purchase Agreement, Provention is obligated to pay the Company contingent milestone payments totaling $170.0 million upon the achievement of certain regulatory milestones. In addition, Provention is obligated to make contingent milestone payments to the Company totaling $225.0 million upon the achievement of certain commercial milestones as well as single-digit royalties on net sales of the product. The FDA approved the BLA for teplizumab in November 2022, and the Company recognized $60.0 million in revenue related to this regulatory milestone during the year ended December 31, 2022. In November 2022, the Company and Provention amended the Asset Purchase Agreement. Under this amendment, the milestone for first approval was split into four equal payments, the first of which was received in November 2022. The remaining payments are due on March 1, 2023, June 1, 2023 and September 1, 2023. Provention has also agreed to pay third-party obligations, including low single-digit royalties, a portion of which is creditable against royalties payable to the Company, aggregate milestone payments of up to approximately $1.3 million and other consideration, for certain third-party intellectual property under agreements Provention assumed pursuant to the Asset Purchase Agreement. Further, Provention is required to

pay the Company a low double-digit percentage of certain consideration to the extent it is received in connection with a future grant of rights to PRV-031 by Provention to a third party.

The Company evaluated the Provention License Agreement and Asset Purchase Agreement under the provisions of ASC 606 and determined that they should be accounted for as a single contract and identified two performance obligations within that contract: (i) the license of MGD010 and (ii) the title to teplizumab. The Company determined that the transaction price of the Provention agreements was $6.1 million, based on the Black-Scholes valuation of the warrants to purchase a total of 2,432,688 shares of Provention's common stock. The transaction price was allocated to each performance obligation based on the number of shares of common stock the Company is entitled to purchase under each warrant. The potential development and regulatory milestone payments are fully constrained until the Company concludes that achievement of the milestone is probable and that recognition of revenue related to the milestone will not result in a significant reversal in amounts recognized in future periods, and as such were excluded from the initial transaction price. Any consideration related to sales-based milestones and royalties will be recognized when the related sales occur, therefore they have also been excluded from the transaction price. The Company re-assesses the transaction price in each reporting period and when events whose outcomes are resolved or other changes in circumstances occur. The Company recognized revenue of $6.1 million when it satisfied its performance obligations under the agreements and transferred the MGD010 license and teplizumab assets to Provention in 2018. In 2019, the Company exercised the warrants on a cashless basis, and subsequently sold all the shares of Provention common stock acquired through the exercise. No shares of Provention stock were held subsequent to the sale of stock in 2019. During the year ended December 31, 2022, it became probable that a significant reversal of cumulative revenue would not occur for a regulatory milestone of $60.0 million, therefore the associated consideration was added to the estimated transaction price and was recognized as revenue. During the years ended December 31, 2022, 2021 and 2020, the Company recognized revenue of $60.0 million, $1.3 million and $0.6 million, respectively, under these agreements. As of December 31, 2022, Provention owes the Company $45.0 million related to the achieved milestone, which is included in accounts receivable on the consolidated balance sheet.

I-Mab Biopharma

I-Mab License Agreement

In 2019, the Company entered into a collaboration and license agreement with I-Mab to develop and commercialize enoblituzumab, an immune-optimized, anti-B7-H3 monoclonal antibody that incorporates the Company's proprietary Fc Optimization technology platform (I-Mab License Agreement). I-Mab obtained regional development and commercialization rights in mainland China, Hong Kong, Macau and Taiwan (I-Mab's territory), will lead clinical development of enoblituzumab in its territories, and will participate in global studies conducted by the Company. In August 2022, I-Mab notified the Company of its intention to terminate the I-Mab License Agreement effective February 25, 2023.

Under the terms of the I-Mab License Agreement, I-Mab paid the Company an upfront payment of $15.0 million, and $5.0 million of milestone revenue has been earned from the inception of the I-Mab License Agreement through December 31, 2022.

The Company evaluated the I-Mab License Agreement under the provisions of ASC 606 and identified the following material promises under the arrangement: (i) an exclusive license to develop and commercialize enoblituzumab in I-Mab’s territories, (ii) perform certain research and development activities and (iii) conduct a chronic toxicology study. The Company determined that the license and the related research and development activities were not distinct from one another, as the license has limited value without the performance of the research and development activities. As such, the Company determined that the license and related research and development activities should be combined into a single performance obligation. The Company determined that the $15.0 million upfront payment from I-Mab constituted the entirety of the consideration to be included in the transaction price as of the outset of the arrangement for the license and related research and development activities. The Company has also determined that the chronic toxicology study is distinct from the other promises and has estimated the variable consideration of that performance obligation to be approximately $1.0 million. I-Mab paid the Company for the cost of this study as the costs were incurred and I-Mab received a one-time credit of eighty percent of the total amount of such costs against the milestone achieved during 2021. The Company reassessed the transaction price as it became probable that a significant reversal of cumulative revenue would not occur for a $5.0 million milestone ($4.5 million after netting a one-time credit as described above) related to development progress of enoblituzumab, therefore the associated consideration was added to the estimated transaction price and was recognized as revenue during 2021.

Revenue under the I-Mab License Agreement was recognized using a cost-based input method according to costs incurred to date compared to estimated total costs. The transfer of control occurs over this time period and, in management’s judgment, was the best measure of progress towards satisfying the performance obligations. During the years ended December 31, 2022, 2021 and 2020, the Company recognized revenue of $4.5 million, $11.5 million and $2.2 million,

respectively, related to the I-Mab License Agreement. At December 31, 2022, no revenue was deferred under the I-Mab License Agreement. At December 31, 2021, $4.5 million in revenue was deferred under the I-Mab License Agreement, all of which was current.

I-Mab Clinical Supply Agreement

In October 2021, the Company entered into an agreement under which the Company was to perform development and manufacturing services for I-Mab's clinical needs of enoblituzumab (I-Mab Clinical Supply Agreement). The Company evaluated this agreement under ASC 606 and identified one performance obligation under the agreement: to perform services related to the development and manufacturing of the clinical supply of enoblituzumab. The transaction price was based on the costs incurred to develop and manufacture drug product and drug substance, and was recognized over time as the services were provided, as the performance by the Company does not create an asset with an alternative use and the Company has an enforceable right to payment for the performance completed to date. The transaction price was recognized using the input method reflecting the costs incurred (including resources consumed and labor hours expended) related to the manufacturing services. During the years ended December 31, 2022, and 2021, the Company recognized revenue of $0.6 million and $1.3 million, respectively, for research and development activities performed under the I-Mab Clinical Supply Agreement. The Company and I-Mab mutually agreed to terminate this agreement in November 2022.

Boehringer Ingelheim International GmbH

In 2010, the Company entered into a collaboration and license agreement with Boehringer Ingelheim International GmbH (BII) to discover, develop and commercialize multiple DART molecules that were to be evaluated during a five-year period that ended in 2015 (Boehringer Agreement). Under the terms of the agreement, the Company granted BII an exclusive, worldwide, royalty-bearing, license under its intellectual property to research, develop, and market DART molecules generated under the agreement. During the evaluation period, BII selected two product candidates to develop (BII DARTs). Under the terms of the Boehringer Agreement, BII paid the Company an upfront payment of $15.0 million which was fully recognized prior to December 31, 2015. The variable consideration under this agreement included potential future development and sales milestones and royalties on net sales in the event that the BII DARTs are commercialized.

In June 2020, BII agreed to a payment of $12.0 million in order to retain rights to develop the BII DARTs under the Boehringer Agreement. As a result, the Company received and recognized as revenue $12.0 million during the year ended December 31, 2020. The remaining potential development milestone payments are fully constrained until the Company concludes that achievement of the milestone is probable, and that recognition of revenue related to the milestone will not result in a significant reversal in amounts recognized in future periods, and as such have been excluded from the transaction price. Any consideration related to royalties will be recognized when the related sales occur and therefore, have also been excluded from the transaction price. The Company re-assesses the transaction price in each reporting period and when events whose outcomes are resolved or other changes in circumstances occur.

Manufacturing Services Agreements

Incyte

In January 2022, the Company entered into a Manufacturing and Clinical Supply Agreement with Incyte (Incyte Manufacturing and Clinical Supply Agreement) to provide manufacturing services to produce certain Incyte bulk drug substance over a three-year period at one of the Company's manufacturing facilities. Under the terms of the Incyte Manufacturing and Clinical Supply Agreement, the Company received an upfront payment of $10.0 million and is eligible to receive annual fixed payments paid quarterly over the term of the contract totaling $14.4 million. The Company will also be reimbursed for materials used to manufacture product as well as other costs incurred to provide manufacturing services. In July 2022, the Company and Incyte executed an amendment to the Incyte Manufacturing and Clinical Supply Agreement which extended the term for one year and provided for an additional annual fixed payment of $5.1 million (July 2022 Incyte Amendment).

The Company evaluated the Incyte Manufacturing and Clinical Supply Agreement and the July 2022 Incyte Amendment under the provisions of ASC 606 and identified one performance obligation to provide manufacturing runs to Incyte, as and when requested by Incyte, over the term of the contract that is part of a series of goods and services. The Company determined that the transaction price consists of the upfront payment received of $10.0 million and the annual fixed payments totaling $19.5 million. The Company will recognize revenue over time on a straight-line basis as the manufacturing services are provided to Incyte, as the Company determined that its efforts in providing the manufacturing services will be incurred evenly throughout the performance period and therefore straight-line revenue recognition closely approximates the level of effort for the manufacturing services. Variable consideration relating to the reimbursed materials and other reimbursed costs incurred to manufacture product for Incyte will be allocated to the related manufacturing activities and will be recognized

as revenue as those activities occur. Materials purchased by the Company to manufacture the product for Incyte are considered costs to fulfill a contract and will be capitalized and expensed as the materials are used to provide the manufacturing services.

The Company recognized revenue of $8.7 million under the Incyte Manufacturing and Clinical Supply Agreement during the year ended December 31, 2022. As of December 31, 2022, $9.6 million in revenue was deferred under this agreement, $8.1 million of which was current and $1.5 million of which was non-current.

Provention Bio, Inc.

In June 2022, the Company entered into a Manufacturing and Clinical Supply Agreement with Provention (Provention Manufacturing and Clinical Supply Agreement) to provide manufacturing services to produce certain Provention bulk drug substance. Under the terms of the Provention Manufacturing and Clinical Supply Agreement, the Company received an upfront payment and payments in accordance with the manufacturing schedule. The Company was also reimbursed for materials used to manufacture product as well as other costs incurred to provide manufacturing services.

The Company evaluated the Provention Manufacturing and Clinical Supply Agreement under the provisions of ASC 606 and identified one performance obligation to provide manufacturing services to Provention. The Company determined that the transaction price consisted of the upfront and other fixed payments totaling $4.6 million. The Company will recognize revenue over time on a straight-line basis as the manufacturing services are provided to Provention, as the Company determined that its efforts in providing the manufacturing services will be incurred evenly throughout the performance period and therefore straight-line revenue recognition closely approximates the level of effort for the manufacturing services. Variable consideration relating to the reimbursed materials and other reimbursed costs incurred to manufacture product for Provention will be allocated to the related manufacturing activities and will be recognized as revenue as those activities occur. Materials purchased by the Company to manufacture the product for Provention are considered costs to fulfill a contract and will be capitalized and expensed as the materials are used to provide the manufacturing services.

The Company recognized revenue of $5.3 million under the Provention Manufacturing and Clinical Supply Agreement during the year ended December 31, 2022.

Government Agreement

NIAID Contract

The Company entered into a contract with NIAID, effective as of September 15, 2015, to perform product development and to advance up to two DART molecules, MGD014 and MGD020 (NIAID Contract). Under the NIAID Contract, the Company will develop these product candidates for Phase 1/2 clinical trials as therapeutic agents, in combination with latency reversing treatments, to deplete cells infected with human immunodeficiency virus (HIV) infection. NIAID does not receive goods or services from the Company under this contract, therefore the Company does not consider NIAID to be a customer and concluded this contract is outside the scope of ASC 606.

Since the inception of the NIAID Contract, NIAID has exercised the two options contemplated in the original contract and executed modifications such that the total funded contract value as of December 31, 2022 is $25.1 million. In addition, the most recent modification changed the period of performance under the NIAID Contract to end in July 2023. The Company recognized revenue of $1.9 million, $1.8 million and $7.1 million under the NIAID contract during the years ended December 31, 2022, 2021 and 2020, respectively.

9. Stock-based Compensation

Employee Stock Purchase Plan

In May 2017, the Company's stockholders approved the 2016 Employee Stock Purchase Plan (the 2016 ESPP). The 2016 ESPP is structured as a qualified employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended, and is not subject to the provisions of the Employee Retirement Income Security Act of 1974. The Company reserved 800,000 shares of common stock for issuance under the 2016 ESPP. The 2016 ESPP allows eligible employees to purchase shares of the Company's common stock at a discount through payroll deductions of up to 10% of their eligible compensation, subject to any plan limitations. The 2016 ESPP provides for six-month offering periods ending on May 31 and November 30 of each year. At the end of each offering period, employees are able to purchase shares at 85% of the fair market value of the Company's common stock on the last day of the offering period. During the year ended December 31, 2022, employees purchased 105,986 shares of common stock under the 2016 ESPP for net proceeds to the Company of approximately $0.4 million.

Employee Stock Incentive Plans

Effective February 2003, the Company implemented the 2003 Equity Incentive Plan (2003 Plan), and it was amended and approved by the Company's stockholders in 2005. Stock options granted under the 2003 Plan may be either incentive stock options as defined by the Internal Revenue Code (IRC), or non-qualified stock options. In 2013, the 2003 Plan was terminated, and no further awards may be issued under the plan. Any shares of common stock subject to awards under the 2003 Plan that expire, terminate, or are otherwise surrendered, canceled, forfeited or repurchased without having been fully exercised, or resulting in any common stock being issued, will become available for issuance under the 2013 Stock Incentive Plan (2013 Plan), up to a specified number of shares. As of December 31, 2022, under the 2003 Plan, there were options to purchase an aggregate of 65,103 shares of common stock outstanding at a weighted average exercise price of $5.90 per share.

In October 2013, the Company implemented the 2013 Plan. The 2013 Plan provides for the grant of stock options and other stock-based awards, as well as cash-based performance awards. The aggregate number of shares of common stock initially available for issuance pursuant to awards under the 2013 Plan was 1,960,168 shares. The number of shares of common stock reserved for issuance will automatically increase on January 1 of each year from January 1, 2014 through and including January 1, 2023, by the lesser of (a) 1,960,168 shares, (b) 4.0% of the total number of shares of common stock outstanding on December 31 of the preceding calendar year, or (c) the number of shares of common stock determined by the Board of Directors. During the year ended December 31, 2022, the maximum number of shares of common stock authorized to be issued by the Company under the 2013 Plan was increased to 15,816,949. If an option expires or terminates for any reason without having been fully exercised, if any shares of restricted stock are forfeited, or if any award terminates, expires or is settled without all or a portion of the shares of common stock covered by the award being issued, such shares are available for the grant of additional awards. However, any shares that are withheld (or delivered) to pay withholding taxes or to pay the exercise price of an option are not available for the grant of additional awards. As of December 31, 2022, under the 2013 Plan, there were options to purchase an aggregate of 10,033,826 shares of common stock outstanding at a weighted average exercise price of $18.66 per share.

The following stock-based compensation amounts were recognized for the periods indicated (in thousands):

	Year Ended December 31,		
	2022	**2021**	**2020**
Research and development	$ 10,094	$ 11,337	$ 10,833
Selling, general and administrative	10,343	11,789	9,843
Total stock-based compensation expense	$ 20,437	$ 23,126	$ 20,676

Employee Stock Options

The Company accounts for stock-based compensation to employees and non-employee directors in accordance with ASC Topic 718, *Compensation – Stock Compensation*. The Company estimates the fair value of stock option awards using the Black-Scholes option pricing model on the date of grant using the assumptions in the table below. Stock options granted to employees generally vest over four years and have a term of ten years. Stock-based compensation expense for stock options is recognized as expense over the requisite service period, which is the vesting period. As the Company has not paid dividends since inception, nor does it expect to pay any dividends for the foreseeable future, the expected dividend yield assumption is zero. The expected volatility is based on the historical stock volatility of the Company’s own common stock over a period equal to the expected term of the options. The risk-free rate of the stock options is based on the U.S. Treasury rate in effect at the time of grant for the expected term of the stock options. The Company used the simplified method to calculate expected term during 2020 and 2021. Beginning in 2022, the computation of expected term was determined based on the historical experience with similar awards, giving consideration to the contractual terms of the share-based awards, vesting schedules and expectations of future employee behavior. In addition, the Company estimates the expected forfeiture rate and only recognizes expense for those shares expected to vest. The Company estimates the forfeiture rate based on historical experience and its expectations regarding future pre-vesting termination behavior of employees. The Company reviews its estimate of the expected forfeiture rate annually, and stock-based compensation expense is adjusted accordingly.

	Year Ended December 31,		
	2022	2021	2020
Expected dividend yield	0%	0%	0%
Expected volatility	88% -92%	86% - 87%	67% - 109%
Risk-free interest rate	1.4% - 4.0%	0.6% - 1.6%	0.4% - 1.8%
Expected term	5.95 years	6.25 years	6.25 years

The following table summarizes stock option activity for 2022:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in thousands)
Outstanding, December 31, 2021	8,373,921	$ 21.47	6.6	
Granted	2,794,997	9.32		
Exercised	(120,900)	1.43		
Forfeited	(509,569)	15.82		
Expired	(439,520)	22.77		
Outstanding, December 31, 2022	10,098,929	$ 18.58	6.5	$ 1,094
As of December 31, 2022:				
Exercisable	6,694,068	$ 21.35	5.5	$ 424
Vested and expected to vest	9,456,075	$ 18.91	6.4	$ 1,009

During 2022, 2021 and 2020 the Company issued 120,900, 332,767 and 504,445 net shares of common stock, respectively, in conjunction with stock option exercises. The Company received cash proceeds from the exercise of stock options of approximately $0.2 million, $5.8 million and $5.3 million during 2022, 2021 and 2020, respectively.

The weighted-average grant-date fair value of options granted during 2022, 2021 and 2020 was $6.84, $15.20 and $10.68 per share, respectively. The total intrinsic value of options exercised during 2022, 2021 and 2020 was approximately $0.6 million, $3.3 million and $4.3 million, respectively. The total fair value of stock options which vested during 2022, 2021 and 2020 was $19.6 million, $20.2 million and $16.7 million, respectively. As of December 31, 2022, the total unrecognized compensation expense related to non-vested stock options, net of related forfeiture estimates, was $24.3 million, which the Company expects to recognize over a weighted-average period of approximately 1.3 years.

The stock options outstanding and exercisable by exercise price at December 31, 2022 are as follows:

	Stock Options Outstanding			Stock Options Exercisable	
Range of Exercise Prices	Number of Shares	Weighted-Average Remaining Contractual Life in Years	Weighted-Average Exercise Price Per Share	Number of Shares	Weighted-Average Exercise Price Per Share
$0.94 - $5.00	357,628	8.8	$ 3.70	143,268	$ 3.76
$5.01 - $15.00	3,355,424	8.4	10.51	1,211,129	10.96
$15.01 - $25.00	4,041,994	6.1	20.21	3,152,550	20.39
$25.01 - $40.21	2,343,883	4.3	29.59	2,187,121	29.64
	10,098,929	6.5	$ 18.58	6,694,068	$ 21.35

Restricted Stock Units

The Company awards RSUs to employees. RSUs are valued based on the closing price of the Company's common stock on the date of the grant. The fair value of RSUs is recognized and amortized on a straight-line basis over the requisite service period of the award.

The following table summarizes RSU activity for 2022:

	Shares	Weighted-Average Grant Date Fair Value
Outstanding, December 31, 2021	21,500	$ 25.97
Granted	476,772	8.42
Vested	(10,445)	25.65
Forfeited or expired	(72,743)	8.74
Outstanding, December 31, 2022	415,084	$ 8.83

At December 31, 2022, there was $2.0 million of total unrecognized compensation cost related to unvested RSUs, which the Company expects to recognize over a remaining weighted-average period of one year.

10. Income Taxes

For the years ended December 31, 2022, 2021 and 2020 there was no provision for income taxes due to taxable losses generated, fully offset by a valuation allowance.

The significant components of the Company's deferred income tax assets (liabilities) were as follows (in thousands):

	December 31,	
	2022	2021
Deferred income tax assets:		
Federal U.S. net operating loss carryforward	$ 163,071	$ 175,802
State net operating loss carryforward	44,784	49,965
Research and development credit, net	65,084	60,514
Orphan drug credit, net	35,703	24,858
Operating lease liabilities	9,585	7,008
Deferred revenue	—	1,245
Section 174 deferred tax asset	43,192	—
Depreciation	158	—
Other	19,733	16,727
Gross deferred income tax assets	381,310	336,119
Valuation allowance	(372,267)	(327,595)
Net deferred income tax assets	9,043	8,524
Deferred income tax liabilities:		
Depreciation	—	(1,688)
Operating lease ROU assets	(7,522)	(4,576)
Prepaid expenditures	(1,521)	(2,260)
Gross deferred income tax liabilities	(9,043)	(8,524)
Net deferred income tax asset/(liability)	$ —	$ —

The Company recognizes valuation allowances to reduce deferred tax assets to the amount that is more likely than not to be realized. In assessing the likelihood of realization, management considers (i) future reversals of existing taxable temporary differences; (ii) future taxable income exclusive of reversing temporary difference and carryforwards; (iii) taxable income in prior carryback years if carryback is permitted under applicable tax law; and (iv) tax planning strategies. The Company's net

deferred income tax asset is not more likely than not to be utilized due to the lack of sufficient sources of future taxable income and cumulative book losses which have resulted over the years.

As of December 31, 2022, the Company has U.S. federal and state net operating loss (NOL) carryforwards of approximately $777.0 million. Of these NOLs, $172.0 million will expire in various years beginning in 2025 through 2037. $605.0 million of NOLs were generated post December 31, 2017 and carryforward indefinitely. In addition, the Company has U.S. federal tax credits of $94.0 million which will expire in various years beginning in 2023 through 2041.

The use of the Company's U.S. federal NOL and tax credit carryforwards in future years are restricted due to changes in the Company's ownership and tax attributes acquired through the Company's acquisitions. As of December 31, 2022, $13.5 million of the Company's U.S. Federal NOLs are limited for use over the years 2023 – 2028 in which a range of such amounts could be utilized on an annual basis of $0.2 million to $1.4 million. The remaining $763.0 million of NOLs is not limited and can be offset against future taxable income, subject to certain limitations for newly enacted tax legislation.

The reconciliation of the reported estimated income tax benefit to the amount that would result by applying the U.S. federal statutory tax rate to the net income is as follows (in thousands):

	Year Ended December 31,		
	2022	2021	2020
United States federal tax at statutory rate	$ (25,149)	$ (42,445)	$ (27,245)
State taxes (net of federal benefit)	(7,385)	(12,806)	(8,100)
Deferred income tax adjustments	308	473	344
Research credit, net	(4,569)	(10,243)	(14,691)
Orphan drug credit, net	(10,846)	(1,449)	(528)
Other permanent items	1,362	1,199	1,156
Equity-based compensation	1,604	1,079	554
Change in valuation allowance	44,675	64,192	48,510
Income tax expense/(benefit)	$ —	$ —	$ —

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

	Year Ended December 31,		
	2022	2021	2020
Beginning balance	$ 7,197	$ 6,126	$ 4,950
Increases for current year tax positions	548	965	839
Increases/(decreases) for prior year tax positions	(369)	106	337
Ending balance	$ 7,376	$ 7,197	$ 6,126

As of December 31, 2022 and 2021, of the total gross unrecognized tax benefits, approximately $7.4 million and $7.2 million would favorably impact the Company's effective income tax rate, respectively. Although, due to the Company's determination that the deferred income tax asset would not more likely than not be realized, a valuation allowance would be recorded, therefore, zero net impact would result within the Company's effective income tax rate. The Company's uncertain income tax position liability has been recorded to deferred income taxes to offset the tax attribute carryforward amounts.

For the years ended December 31, 2022, 2021 and 2020, the Company has not recognized any interest or penalties related to the uncertain income tax positions due to the fact such position is related to tax attribute carryforwards which have not yet been utilized. The Company does not expect its unrecognized income tax position to significantly decrease within the next twelve months.

The Company's U.S. Federal and state income tax returns from 2003 forward remain open to examination due to the carryover of unused income tax credits, and from 2004 forward due to the carryover of unused net operating losses.

Internal Revenue Code (IRC) Section 174

For tax years beginning on or after January 1, 2022, the Tax Cuts and Jobs Act of 2017 eliminates the option to currently deduct research and development expenses and requires taxpayers to capitalize and amortize them over five years for research activities performed in the United States and 15 years for research activities performed outside the United States

pursuant to IRC Section 174. Although Congress is considering legislation that would repeal or defer this capitalization and amortization requirement, it is not certain that this provision will be repealed or otherwise modified. If the requirement is not repealed or replaced, it could increase our U.S. federal and state cash taxes and reduce cash flows in 2023 and future years.

11. Employee Benefit Plan

In 2002, the Company established the MacroGenics 401(k) Plan (the Plan) for its employees under Section 401(k) of the IRC. Under this Plan, all employees at least 21 years of age are eligible to participate in the Plan, starting on the first day of each month. Employees may contribute up to 100% of their salary, subject to government maximums.

Employees are 100% vested in their contributions to the Plan. The Company's contribution to the Plan, as determined by the Board of Directors, is discretionary. For the years ended December 31, 2022, 2021 and 2020, the Company's contributions to the Plan totaled $2.3 million, $1.6 million and $1.4 million, respectively.

12. Subsequent Event

In March 2023, the Company entered into a Purchase and Sale Agreement (Royalty Purchase Agreement) with DRI Healthcare Acquisitions LP (DRI), a wholly-owned subsidiary of DRI Healthcare Trust. Under the Royalty Purchase Agreement, the Company sold its single-digit royalty interest on global net sales of TZIELD (teplizumab-mzwv) under the Provention Asset Purchase Agreement to DRI. The Company retains its other economic interests related to TZIELD, including future potential regulatory and commercial milestones.

Under the terms of the Royalty Purchase Agreement, at the closing of the transaction, DRI paid the Company $100.0 million for its single-digit royalty interest on global net sales of TZIELD. The Company will have the right to receive a 50% share of the royalty on global net sales above a certain annual threshold. In addition, the Company may also receive up to $50.0 million from DRI upon the occurrence of pre-specified events tied to the advancement of TZIELD for the treatment of newly diagnosed type 1 diabetes and transactions regarding TZIELD and Provention. The Company may also receive an additional $50.0 million milestone from DRI if TZIELD achieves a certain level of sales.

EXHIBIT INDEX

Exhibit No.	Description
3.1	Restated Certificate of Incorporation of the Company and Certificate of Correction to the Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibits 3.1 and 3.3, respectively, to the Company's Current Report on Form 8-K filed on October 18, 2013)
3.2	Amended and Restated By-Laws of the Company (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-36112) filed on April 2, 2021)
4.1	Specimen Stock Certificate (incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-1 (File No. 333-190994) filed by the Company on October 9, 2013)
4.2	Description of Common Stock (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 10-K filed on February 25, 2021)
10.1	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-1 (File No. 333-190994) filed by the Company on October 1, 2013)
10.2†	Global Collaboration and License Agreement by and between the Company and Incyte Corporation, dated October 24, 2017 (incorporated by reference to Exhibit 10.3 to the Company's Annual Report on Form 10-K filed on February 27, 2018)
10.3+	Company 2003 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registration Statement on Form S-1 (File No. 333-190994) filed by the Company on September 4, 2013)
10.4+	Form of Incentive Stock Option Agreement under 2003 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to the Registration Statement on Form S-1 (File No. 333-190994) filed by the Company on September 4, 2013)
10.5+	Company 2013 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-1 (File No. 333-190994) filed by the Company on October 1, 2013)
10.6+	Form of Incentive Stock Option Agreement under 2013 Equity Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registration Statement on Form S-1 (File No. 333-190994) filed by the Company on October 1, 2013)
10.7+	Form of Nonstatutory Stock Option Agreement under 2013 Equity Incentive Plan (incorporated by reference to Exhibit 10.7 to the Registration Statement on Form S-1 (File No. 333-190994) filed by the Company on October 1, 2013)
10.8+	Form of Restricted Stock Units Grant Notice under 2013 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 6, 2015)
10.9+	2016 Employee Stock Purchase Plan (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-8 (File No. 333-214386) filed by the Company on November 2, 2016)
10.10+	Employment Agreement between the Company and Scott Koenig, M.D., Ph.D. (incorporated by reference to Exhibit 10.14 to the Company's Annual Report on Form 10-K filed by the Company on February 29, 2016)
10.11+	Employment Agreement between the Company and James Karrels (incorporated by reference to Exhibit 10.15 to the Company's Annual Report on Form 10-K filed by the Company on February 29, 2016)
10.12+	Employment Agreement between the Company and Ezio Bonvini, M.D. (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on May 4, 2016)
10.13+	Employment Agreement between the Company and Eric Risser (incorporated by reference to Exhibit 10.16 to the Company's Annual Report on Form 10-K filed on February 28, 2017)
10.14+	Employment Agreement between the Company and Stephen Eck, M.D. (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on April 29, 2021)
10.15+	Employment Agreement between the Company and Thomas Spitznagel Ph.D. (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 3, 2022)
10.16†	Amendment No, 1 to the Global Collaboration and License Agreement by and between the Company and Incyte Corporation, dated March 15, 2018 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2018)
10.17#	Amendment No. 2 to the Global Collaboration and License Agreement by and between the Company and Incyte Corporation, dated April 7, 2022 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 8, 2022)

10.18#	Amendment No. 3 to the Global Collaboration and License Agreement by and between the Company and Incyte Corporation, dated April 7, 2022 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on November 3, 2022)
10.19#	Commercial Supply Agreement by and between Incyte Corporation and the Company, dated October 13, 2020 (incorporated by reference to Exhibit 10.16 to the Company's Annual Report on Form 10-K filed on February 25, 2021)
10.20#	Product Commercialization Agreement by and between the Company and Eversana Life Science Services, LLC, dated November 13, 2020 (incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K filed on February 25, 2021)
10.21	Stock Purchase Agreement by and between the Company and Zai Lab Limited, dated June 14, 2021 (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on July 29, 2021)
10.22#*	Collaboration and License Agreement by and between the Company and Gilead Sciences, Inc., dated October 14, 2022
10.23#*	Asset Purchase Agreement by and between the Company and Provention Bio, Inc., dated May 7, 2018
10.24#*	Amendment No. 1 to the Asset Purchase Agreement by and between the Company and Provention Bio, Inc., dated November 30, 2022
10.25#*	Lease by and between BMR-Medical Center Drive LLC and J. Craig Venter Institute, Inc., dated May 3, 2010
10.26#*	First Amendment to Lease by and between BMR-Medical Center Drive LLC and J. Craig Venter Institute, Inc. dated March 26, 2014
10.27#*	Second Amendment to Lease by and between the Company and BMR-Medical Center Drive LLC, dated July 31, 2015
10.28#*	Third Amendment to Lease by and between the Company and BMR-Medical Center Drive LLC, dated November 5, 2015
10.29#*	Fourth Amendment to Lease by and between the Company and BMR-Medical Center Drive LLC, dated July 21, 2017
10.30#*	Fifth Amendment to Lease by and between the Company and ARE-Maryland No. 45, LLC, dated December 14, 2022
23.1*	Consent of Ernst & Young, LLP, Independent Registered Public Accounting Firm
31.1*	Rule 13a-14(a) Certification of Principal Executive Officer
31.2*	Rule 13a-14(a) Certification of Principal Financial Officer
32.1**	Section 1350 Certification of Principal Executive Officer
32.2**	Section 1350 Certification of Principal Financial Officer
101.INS	XBRL Instance Document
101.SCH	XBRL Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.DEF	XBRL Definition Linkbase Document
101.LAB	XBRL Labels Linkbase Document
101.PRE	XBRL Presentation Linkbase Document
104	Cover Page Interactive Data (formatted as Inline XBRL and contained in Exhibit 101 filed herewith)

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment granted by the SEC.

Portions of this document (indicated by "[***]" have been omitted because they are not material and are the type that MacroGenics, Inc. treats as private and confidential.

+ Indicates management contract or compensatory plan.

* Filed herewith.

** Furnished herewith.

Exhibit 10.22

CERTAIN PORTIONS OF THIS EXHIBIT (INDICATED BY [***]) HAVE BEEN EXCLUDED PURSUANT TO ITEM 601(B)(10) OF REGULATION S-K BECAUSE THEY ARE BOTH NOT MATERIAL AND ARE THE TYPE THAT THE COMPANY TREATS AS PRIVATE AND CONFIDENTIAL.

COLLABORATION AND LICENSE AGREEMENT

between MACROGENICS, INC.

and

Gilead Sciences, Inc.

dated October 14, 2022

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COLLABORATION AND LICENSE AGREEMENT

This Collaboration and License Agreement ("**Agreement**"), effective as of October 14, 2022 (the "**Effective Date**"), is entered into by and between MacroGenics, Inc., a Delaware corporation with a place of business at 9704 Medical Center Drive, Rockville, MD 20850 ("**MacroGenics**"), and Gilead Sciences, Inc., a Delaware corporation with a place of business at 333 Lakeside Drive, Foster City, CA 94404 ("**Gilead**"). MacroGenics and Gilead may be referred to herein individually as a "**Party**" or collectively as the "**Parties**".

RECITALS

Whereas, MacroGenics has expertise in, and platforms for, the discovery, development and commercialization of products for the treatment of patients with cancer;

Whereas, MacroGenics has discovered and is developing a proprietary program that includes a therapeutic bi-specific DART® molecule that is directed to each of CD3 and CD123 and is coded by MacroGenics as MGD024 (as further defined below), for the treatment of multiple hematologic malignancies;

Whereas, Gilead has expertise in the research, development and commercialization of pharmaceutical products;

Whereas, MacroGenics desires to grant, and Gilead desires to receive, an exclusive option, exercisable during a specified period, to obtain an exclusive license under the MacroGenics CD123 Technology for the development, commercialization and other exploitation of CD123 Molecules and CD123 Products, including MGD024, in the Field in the Territory (with each capitalized term as defined below), pursuant to the terms and conditions set forth in this Agreement;

Whereas, the Parties additionally desire to pursue up to two (2) collaborative research programs pursuant to which the Parties would identify, discover and develop bi-specific antibodies based on MacroGenics' proprietary DART® and TRIDENT® platforms and targeting specified Research Target Combinations nominated by Gilead, all in accordance with a Research Plan for the given Research Program (with each capitalized term as defined below); and

Whereas, MacroGenics desires to grant to Gilead, and Gilead desires to receive, upon Gilead's exercise of its Research Program Opt-In for a given Research Program, an exclusive license under the MacroGenics Research Technology to research, develop, commercialize and otherwise exploit Research Molecules and Research Products in the Field in the Territory (with each capitalized term as defined below), pursuant to the terms and conditions set forth in this Agreement.

Now, Therefore, in consideration of the foregoing premises and the mutual covenants herein contained, the Parties hereby agree as follows:

AGREEMENT

1. **Definitions**. Unless specifically set forth to the contrary herein, the following capitalized terms, whether used in the singular or plural, shall have the respective meanings set forth below:

1.1 "**Accounting Standards**" means, with respect to a Person, the International Financial Reporting Standards or GAAP, as applicable, as generally and consistently applied throughout such Person's organization.

1.2 "**Acquirer**" means any Third Party who acquires a Party through a Change of Control transaction and, as of immediately before such Change of Control transaction, any of such Third Party's Affiliates.

1.3 "**Action**" means any claim, action, suit, arbitration, inquiry, audit, proceeding or investigation by or before, or otherwise involving, any governmental authority.

1.4 "**Affiliate**" means with respect to any Party, any person or entity controlling, controlled by or under common control with such Party, for as long as such control exists. For purposes of this Section 1.4 (Affiliate), "control" means (a) in the case of a corporate entity, direct or indirect ownership of at least fifty percent (50%) or more of the stock or shares having the right to vote for the election of directors of such corporate entity and (b) in the case of an entity that is not a corporate entity, the possession, directly or indirectly, of the power to direct, or cause the direction of, the management or policies of such entity, whether through the ownership of voting securities, by contract or otherwise.

1.5 "**Alliance Manager**" means the individual appointed by each Party from within their respective organization to coordinate and facilitate the communication, interaction and cooperation of the Parties pursuant to this Agreement.

1.6 "**Allowable Overruns**" means, for a given Calendar Year, any FTE Costs or Out-of-Pocket Costs incurred by or on behalf of MacroGenics in the performance of activities under the CD123 Development Plan, a Research Plan or the Manufacturing Transition Plan, in each case, that are [***].

1.7 "**Anti-Corruption Laws**" means the U.S. Foreign Corrupt Practices Act, the U.S. Travel Act, the U.S. Anti-Kickback Statute, the UK Bribery Act 2010, and any other laws that prohibit the corrupt payment, offer, promise or authorization of the payment or transfer of anything of value (including gifts or entertainment), directly or indirectly, to any Government Official, commercial entity, or any other Person to obtain an improper business, in each case, as amended.

1.8 "**Antitrust Law**" means any Applicable Law and Regulations that are designed to prohibit, restrict or regulate actions having the purpose or effect of monopolization, lessening of competition or restraint of trade, including the HSR Act.

1.9 "**Applicable Laws and Regulations**" means all international, national, federal, state, regional, provincial, municipal and local government laws, rules, treaties (including tax treaties), and regulations that apply to either Party or to the conduct of any Development, Manufacturing or Commercialization activities or Regulatory Activities, in each case, under this Agreement including cGMP, GCP, GBPS, and the laws, rules and regulations of the ICH, the United States and any country in the applicable Territory, each as may be then in effect, as applicable and amended from time to time.

1.10 "**Biosimilar Product**" means, with respect to a Licensed Product sold in a country, a product that: (a) is marketed by a Third Party that has not obtained the rights to such product as a Sublicensee or distributor of, or through any other contractual relationship with, Gilead or any of its

Affiliates or Sublicensees; and (b) has been granted Regulatory Approval as a biosimilar or interchangeable biological product by the applicable Regulatory Authority with such Licensed Product as the reference product, including any product authorized for sale in (i) the U.S. pursuant to an application under Section 351(k) of the US Public Health Service Act (42 U.S.C. § 262(k)), as may be amended, or any subsequent or superseding law, statute or regulation and (ii) in any other country or jurisdiction pursuant to the equivalent of such provision.

1.11 "**BLA**" means a Biologics License Application or New Drug Application ("**NDA**") filed with the FDA for marketing approval of a Licensed Product or any successor applications or procedures, and all supplements and amendments that may be filed with respect to the foregoing, or similar filings with applicable Regulatory Authorities outside of the U.S., for approval to commercially market, import and sell a Licensed Product. The term BLA shall exclude Pricing and Reimbursement Approvals.

1.12 "**Business Day**" means a day on which banking institutions in Washington, DC and Foster City, California are open for business, excluding (a) any Saturday or Sunday, (b) December 26 through December 31 and (c) the seven (7) day period that begins on a Sunday and ends on a Saturday during which period July 4th occurs.

1.13 "**Calendar Quarter**" means the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31, except that the first Calendar Quarter of the Term shall commence on the Effective Date and end on the day immediately prior to the first to occur of January 1, April 1, July 1 or October 1 after the Effective Date, and the last Calendar Quarter shall end on the last day of the Term.

1.14 "**Calendar Year**" means the respective periods of twelve (12) months commencing on January 1 and ending on December 31, except that the first Calendar Year of the Term shall commence on the Effective Date and end on December 31 of the year in which the Effective Date occurs and the last Calendar Year of the Term shall commence on January 1 of the year in which the Term ends and end on the last day of the Term.

1.15 "**Cancer Target**" means an [***].

1.16 "**CD123 Data Package**" means, individually or collectively, as the context requires, the [***] and the [***].

1.17 "**CD123 Molecule**" means (a) MGD024 and (b) [***] that (i) is [***] or [***] Effective Date or during the Term and (ii) [***]. For the avoidance of doubt, for purposes of this definition, a [***] shall include [***] that [***] MacroGenics' proprietary DART® platform or TRIDENT® platform.

1.18 "**CD123 Option Exercise Fee**" means (a) [***] with respect to the exercise of the CD123 Option during the [***]; and (b) [***] with respect to the exercise of the CD123 Option during the [***].

1.19 "**CD123 Product**" means, subject to Section 4.13 (CD123 Development Program Termination), any product that contains or incorporates a CD123 Molecule, alone or in combination with

one (1) or more therapeutically active ingredients, including all forms, formulations, dosages and delivery modes thereof.

1.20 "**cGCP**" means the current standards, practices and procedures promulgated or endorsed by the FDA as set forth in the guidelines adopted by the ICH, titled "guidance for Industry E6 Good clinical Practice: Consolidated Guidance," (or any successor document) including related regulatory requirements imposed by the FDA and the equivalent legal requirements in other applicable jurisdictions, all as the same may be amended from time to time.

1.21 "**cGMP**" means current Good Manufacturing Practices as set forth in the FDCA and the Public Health Service Act (the "**PHS Act**"), and in applicable regulations, including 21 C.F.R. Parts 210, 211, 314 and 600, as in effect at the time when any Licensed Product is being manufactured for clinical development or commercial use, when any Licensed Product is being sold or when any clinical trial regarding a Licensed Product is being conducted, provided, and to the extent applicable to such clinical trial, as such regulations are interpreted and enforced by the FDA, including as set forth in applicable guidance documents issued by the FDA, and in accordance with applicable, generally accepted industry standards, and the equivalent legal requirements in other applicable jurisdictions, all as the same may be amended from time to time.

1.22 "**Change of Control**" means, with respect to a Party, that: (a) any Third Party acquires directly or indirectly the beneficial ownership of any voting security of such Party, or if the percentage ownership of such Third Party in the voting securities of such Party is increased through stock redemption, cancellation or other recapitalization, and immediately after such acquisition or increase such Third Party is, directly or indirectly, the beneficial owner of voting securities representing more than fifty percent (50%) of the total voting power of all of the then outstanding voting securities of such Party; (b) a merger, consolidation, recapitalization, or reorganization of such Party is consummated that would result in stockholders or equity holders of such Party immediately prior to such transaction owning more than fifty percent (50%) of the outstanding securities of the surviving entity (or its parent entity) immediately following such transaction; (c) the stockholders or equity holders of such Party approve a plan of complete liquidation of such Party, or an agreement for the sale or disposition by such Party of all or substantially of such Party's assets, other than pursuant to the transaction described above or to an Affiliate; or (d) the sale or transfer to a Third Party of (i) all or substantially all of such Party's assets taken as a whole or (ii) a majority of such Party's assets which relate to this Agreement, is effected. Notwithstanding the foregoing, the following will not constitute a Change of Control: (i) a sale of capital stock to underwriters in an underwritten public offering of a Party's capital stock solely for the purpose of financing, or (ii) the acquisition of securities of a Party by any Person or group of Persons that acquires such Party's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for such Party through the issuance of equity securities.

1.23 "**Clinical Study Report**" means, with respect to a Clinical Trial, a report containing the results of such Clinical Trial that is consistent in content and format with Applicable Laws and Regulations and with the guidelines of the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH) on Structure and Content of Clinical Study Reports.

1.24 "**Clinical Trial**" means a Phase 1 Clinical Trial [***], Phase 2 Clinical Trial, Phase 3 Clinical Trial, Pivotal Clinical Trial or Phase 4 Clinical Trial, as applicable.

1.25 "**Collaboration Term**" means, individually or collectively, as the context requires, the CD123 Development Term and each Research Term.

1.26 "**Combination Product**" means (a) any single product comprising both (i) a Licensed Molecule and (ii) one or more other therapies or pharmaceutically active compounds or substances that is not a Licensed Molecule and, for [***]; (b) any Licensed Product sold together with one or more other therapies or products that are not Licensed Products for a single invoice price; or (c) any Licensed Product sold as part of a bundle with one or more other therapies, products or services that are not Licensed Products, where the sale of the Licensed Product is only available from the seller with the purchase of such other therapies, products or services, for a single invoice price, to the extent not described in clause (a) or (b). The Licensed Molecule or Licensed Product portion of any Combination Product, as applicable, shall be deemed the "**Licensed Component**" and the other portion of such Combination Product shall be deemed the "**Other Component**", and each Combination Product shall be deemed a Licensed Product hereunder. For clarity, the co-administration of separate products comprising a Licensed Product containing a Licensed Molecule and no Other Component, on the one hand, with another therapy or pharmaceutically active compound or substance on the other hand shall either be (i) a Combination Product, if sold together as reflected in clause (b) or (c) or (ii) two separate products, one a Licensed Product and the other, a product that does not generate Net Sales under this Agreement.

1.27 "**Commercialization**" or "**Commercialize**" means activities taken before or after obtaining Regulatory Approval relating specifically to the pre-launch, launch, promotion, marketing, sales force recruitment, sale and distribution of a pharmaceutical product and post-launch medical activities, including: (a) distribution for commercial sale; (b) strategic marketing, sales force, detailing, advertising, and market and product support; (c) medical education and liaison and any Phase 4 Clinical Trials unless required as a condition for Regulatory Approval, to the extent permitted by this Agreement; (d) all customer support and product distribution, invoicing and sales activities; and (e) all post-approval regulatory activities, including those necessary to maintain Regulatory Approvals. For clarity, "**Commercialization**" or "**Commercialize**" does not include Development or Manufacturing activities.

1.28 "**Commercially Reasonable Efforts**" means, with respect to the efforts to be expended by a Party with respect to any objective or activity under this Agreement, that measure of efforts and resources that is consistent with the efforts and resources used by pharmaceutical or biopharmaceutical companies, as applicable, of comparable size and resources to such Party for a similar biological or pharmaceutical product owned by it or to which it has rights, which product is at a similar stage in its development or product life and is of similar market potential taking into account all relevant factors, including efficacy, safety, approved labeling, the competitiveness of alternative products in the marketplace, the patent and other proprietary position of the product and the likelihood of Regulatory Approval given the regulatory structure involved. Commercially Reasonable Efforts will be determined on a country-by-country and indication-by-indication basis for the applicable Licensed Molecule or Licensed Product, and it is anticipated that the level of effort will change over time, reflecting changes in the status of such Licensed Molecule or Licensed Product (as applicable) and the market or country involved.

1.29 "**Competing Activity**" means the [***] of any compound or product that (a) contains a molecule that [***] or (b) [***].

1.30 "**Completion**" means the [***] in either the [***], as applicable.

1.31 "**Compulsory License**" means, with respect to a Licensed Product in a country or territory, a license, or rights granted to a Third Party by a governmental agency within such country or territory to sell or offer for sale such Licensed Product in such country or territory under any Patents or Know-How

owned or controlled by either Party or its Affiliates, without direct or indirect authorization from such Party or its Affiliates.

1.32 "**Compulsory Licensee**" means a Third Party granted a Compulsory License.

1.33 "**Confidential Information**" means, with respect to a Party, except as otherwise expressly provided in this Agreement, all information (including chemical or biological materials, chemical structures correspondence, customer lists, data, formulae, improvements, inventions, Know-How, processes, Regulatory Approvals, Regulatory Submissions and other regulatory filings, reports, strategies, techniques or other information) that is disclosed by or on behalf of such Party or any of its Affiliates to the other Party or any of its Affiliates pursuant to this Agreement or the Existing CDA, regardless of whether any of the foregoing are marked "confidential" or "proprietary" or communicated to the other Party by or on behalf of the Disclosing Party in oral, written, visual, graphic or electronic form. Without limiting the generality of the foregoing, and subject to the terms of Article 12 (Confidentiality; Publication): (a) the existence and terms of this Agreement will be the Confidential Information of both Parties (and both Parties will be deemed to be the Disclosing Party and the Receiving Party with respect thereto), (b) [***] will be (i) the Confidential Information of [***] (and [***] will be deemed to be the Disclosing Party and the Receiving Party with respect thereto), (ii) the Confidential Information of [***] (and [***] the Disclosing Party with respect thereto) and (iii) the Confidential Information of [***] (and [***] the Disclosing Party and [***] the Receiving Party with respect thereto), (c) [***] the Confidential Information [***] (and [***] the Disclosing Party and the Receiving Party with respect thereto), (ii) the Confidential Information [***] (and [***] the Disclosing Party with respect thereto) and (iii) the Confidential Information [***] (and [***] Disclosing Party and [***] Receiving Party with respect thereto) and (d) [***] the Confidential Information [***] the Disclosing Party with respect thereto). For clarity, if any Confidential Information of either [***] as applicable, is [***], then such Confidential Information will remain the Confidential Information of such Party (and such Party will be deemed to be the Disclosing Party and the other Party will be the Receiving Party with respect thereto).

1.34 "**Control**", "**Controls**" or "**Controlled by**" means, subject to Section 3.8 (New Upstream License Agreements), with respect to (a) a product or component (including a molecule) thereof, the legal authority or right to grant a license, sublicense, access, or right to use (as applicable) to the other Party under Patents that Cover or proprietary Know-How that is incorporated in or embodies such product or component on the terms set forth herein or (b) any Patent, Know-How or other intellectual property right, the extent of the ability of a Party or its Affiliates, as applicable (whether through ownership or license, other than pursuant to this Agreement) to grant to the other Party or its Affiliates access to, or a license or sublicense of, such item or right as provided for herein without violating the terms of any agreement or other arrangement with any Third Party; *provided* that, in each case, a Party or any of its Affiliates shall be deemed not to "Control" any Patent, Know-How or other intellectual property right if such Patent, Know- How or other intellectual property right is owned or in-licensed by an Acquirer of a Party that becomes an

Affiliate of such Party (or that merges or consolidates with such Party) on or after the Effective Date as a result of a Change of Control of such Party, except to the extent, and only to the extent that, such Patent, Know-How or other intellectual property right is either (a) actually used by such Party or its Affiliates, or the Acquirer, to Develop, Manufacture, Commercialize or otherwise Exploit the Licensed Molecules or Licensed Products following the consummation of such Change of Control or (b) made, conceived or reduced to practice by the Acquirer or its Affiliates through the use of, or reference to, any Patent, Know- How or other intellectual property right of such Party or (c) was Controlled by such Party or its Affiliates prior to the applicable Change of Control.

1.35 "**Cover**" or "**Covered**" means, with respect to a product, technology, process or method, that, in the absence of possession of the right (by ownership, license or otherwise) under a Valid Claim, the practice or exploitation of such product, technology, process or method, in each case as applicable given the context, would infringe such Valid Claim (or, in the case of a Valid Claim that has not yet issued, would infringe such Valid Claim if it were to issue as currently pending).

1.36 "**CPI**" means the Consumer Price Index-Urban Wage Earners and Clerical Workers, U.S. City Average, All Items, 1982-1984=100, published by the U.S. Department of Labor, Bureau of Labor Statistics (or its successor equivalent index) in the U.S.

1.37 "**Data Exclusivity Period**" means the period, if any, during which the applicable Regulatory Authority (including the FDA) prohibits reference, without the consent of the owner of a BLA, to the clinical and other data that is contained in such BLA and that is not published or publicly available outside of such BLA.

1.38 "**Data Protection Laws**" means all Applicable Law and Regulations relating to privacy, information security, cybersecurity, or data protection, including (a) the General Data Protection Regulation ((EU) 2016/679) and any national implementing law relating to the Processing of personal data or the privacy or security of electronic communications, including the Privacy and Electronic Communications Directive (2002/58/EC) and the Privacy and Electronic Communications (EC Directive) Regulations 2003 (SI 2003/2426) and (b) the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act adopted as part of the American Recovery and Reinvestment Act of 2009, and any regulations promulgated thereunder, and (c) FDA's regulatory guidance pertaining to informed consent or cybersecurity requirements.

1.39 "**Develop**" or "**Development**" means research, discovery, and preclinical and clinical drug or biological development activities, including toxicology, statistical analysis, preclinical studies and Clinical Trials (but excluding Phase 4 Clinical Trials unless required as a condition for Regulatory Approval) and pre-approval regulatory activities, including those in support of other Development activities. For clarity, "**Develop**" or "**Development**" does not include Manufacturing or Commercialization activities.

1.40 "**Dispute**" means any dispute, claim or controversy (other than matters that are within the decision-making authority of the JSC or a Party pursuant to Section 2.1(c) (Decision-Making), or are expressly stated herein to require the consent of both Parties or only one Party) arising from or related to this Agreement or to the interpretation, application, breach, termination or validity of this Agreement, including any claim of inducement of this Agreement by fraud or otherwise.

1.41 "**Effector Target**" means [***]: (a) [***] (b) [***] or (c) such other [***], in each case, [***], as further described in Section 5.1(c) ([***]) (such [***] in subsection (c), an "**Other Effector Target**").

1.42 "**Executive Officer**" means, with respect to either Party, a senior executive designated by such Party for purposes of resolving Deadlocks at the JSC pursuant to Section 2.1(c) (Decision-Making) and Disputes pursuant to Section 17.2 (Resolution by Executive Officers).

1.43 "**Existing CDA**" means that certain Mutual Confidential Disclosure Agreement between the Parties, [***].

1.44 "**Exploit**" or "**Exploitation**" means to research, develop, use, have used, sell, have sold, offer for sale, make, have made, distribute, import or otherwise exploit or have exploited.

1.45 "**FDA**" means the United States Food and Drug Administration, or any successor agency thereto.

1.46 "**FDCA**" means the Federal Food, Drug and Cosmetic Act, as amended.

1.47 "**Field**" means any and all uses.

1.48 "**First Commercial Sale**" means, with respect to any Licensed Product, the first sale of a such Licensed Product by Gilead, its Affiliates or its Sublicensees to a Third Party for end use or consumption of such Licensed Product in a country after Regulatory Approval has been granted by the Regulatory Authority for such Licensed Product in such country. First Commercial Sale excludes transfers of Licensed Product to Third Parties as *bona fide* samples, as donations, for the performance of Clinical Trials or for similar purposes in accordance with Applicable Law and Regulations pertaining to any expanded access program, any compassionate sales or use program (including named patient program or single patient program) or any indigent program.

1.49 "**Flotetuzumab**" means the therapeutic bi-specific molecule which binds to CD3 and CD123 and which is generated from MacroGenics' proprietary DART® platform, as further described in [***].

1.50 "**FTE**" means [***] of work devoted to or in direct support of specified Development or Manufacturing activities, conducted by one or more qualified employees or full-time contractors of a Party or its Affiliate. For clarity, any individual contributing less than [***] per Calendar Year (or equivalent pro-rata portion thereof for the period beginning on the Effective Date and ending on the last day of the first Calendar Year) shall be deemed a fraction of an FTE on a pro-rata basis. Overtime and work on weekends, holidays and the like will not be counted with any multiplier (e.g., time-and-a-half or double time) toward the number of hours that are used to calculate the FTE contribution. For the avoidance of doubt, no individual will count as more than one FTE for any year.

1.51 "**FTE Cost**" means, with respect to any period, activity and a Party or its Affiliate, the FTE Rate multiplied by the number of FTEs expended by such Party or its Affiliate in the conduct of such activity during such period; *provided* that the other Party shall not be charged more than once for any FTE Cost if such FTE Cost is already included as a component of other expenses payable under this Agreement.

1.52 "**FTE Rate**" means a rate of [***] per FTE per Calendar Year, pro-rated [***]. The FTE Rate includes all wages and salaries, employee benefits, bonus, travel

and entertainment, and other direct expenses expended in connection with an FTE's performance of activities under this Agreement and excludes indirect allocations, including all general and administrative expenses, human resources, finance, occupancy and depreciation expended in connection with such FTE's performance of activities under this Agreement.

1.53 "**Fully Burdened Manufacturing Cost**" means, with respect to MGD024 or MGD024 Product, whether as active pharmaceutical ingredient or finished form, supplied by MacroGenics to Gilead pursuant to Section 9.1 (MGD024 and MGD024 Products): [***] of: (a) solely with respect to the MGD024 Drug Product (and, for clarity, neither the MGD024 Drug Substance nor any other component thereof), [***] in connection with the supply of MGD024 Drug Product (and, for clarity, not any component thereof),-[***]; (b) [***], means: (i) the direct cost of raw materials (including reagents and associated warehousing costs), packaging and labeling materials (including vials), labor (as measured by FTE Costs and Out-of-Pocket Costs for consultants, contractors and other personnel performing manufacturing or supply activities), (ii) the direct cost of any quality assurance and control activities (including required stability monitoring) for MGD024 or MGD024 Product, (iii) operating costs of equipment and facilities and (iv) shipping costs (including all duties and import fees, as applicable), in each case (i) through (iv), as reasonably incurred by MacroGenics in connection with and reasonably allocated to the Manufacture of MGD024 or MGD024 Products. In no case shall Fully Burdened Manufacturing Costs include any amounts incurred due to the gross negligence or willful misconduct of MacroGenics, its Affiliates or any Third Party. All components of Fully Burdened Manufacturing Costs shall be allocated on a basis consistent with GAAP and consistent with the cost accounting policy applied by MacroGenics to other similar products that it produces. For clarity, Fully Burdened Manufacturing Costs will not include any cost or expense already paid for by Gilead pursuant to this Agreement or any other agreement between the Parties or their Affiliates.

1.54 "**GAAP**" means U.S. generally accepted accounting principles.

1.55 "**GBPS**" means the General Biological Products Standards as set forth in 21 C.F.R. Part 610, to the extent applicable.

1.56 "**GCP**" or "**Good Clinical Practices**" means current Good Clinical Practices as set forth in the Applicable Laws and Regulations, such as FDCA and the PHS Act and regulations set forth at 21 C.F.R. Part 312, as well as (but not limited to) the requirements set forth in Directive 2001/20/EC of the European Parliament and of the Council of 4 April 2001 and Commission Directive 2005/28/EC of 8 April 2005, to the extent applicable to a clinical trial regarding any Licensed Product, as such obligations are interpreted and enforced by the applicable Regulatory Authority, and as interpreted under prevailing industry standards, including standards of medical ethics, applicable guidance documents issued by the FDA and any other Regulatory Authority, including ICH GCP, the informed consent requirements set forth in 21 C.F.R. Part 50 and the equivalent legal requirements in other applicable jurisdictions, the requirements relating to Institutional Review Boards set forth in 21 C.F.R. Part 56 and the equivalent legal requirements in other applicable jurisdictions, as the same may be amended from time to time.

1.57 "**Gilead Agent Improvement IP**" means the Gilead Agent Improvement Know-How and Gilead Agent Improvement Patents.

1.58 "**Gilead Licensed Know-How**" means any Know-How (excluding any Patent or Jointly Owned Know-How) Controlled by Gilead or any of its Affiliates as of the Effective Date or at any time during the Collaboration Term that is necessary for MacroGenics to perform its obligations under the CD123 Development Plan or a Research Plan.

1.59 "**Gilead Licensed Patents**" means all Patents (excluding any Jointly Owned Patent) Controlled by Gilead or any of its Affiliates as of the Effective Date or at any time during the Collaboration Term that are necessary for MacroGenics to perform its obligations under the CD123 Development Plan or a Research Plan.

1.60 "**Gilead Licensed Technology**" means the Gilead Licensed Patents and the Gilead Licensed Know-How.

1.61 "**GLP**" or "**Good Laboratory Practices**" means the Good Laboratory Practices, set forth in the Applicable Laws and Regulations that govern the conduct of non-clinical safety studies and which seek to ensure the quality, integrity and reliability of study data, including those set forth in 21 C.F.R. Part 58 and the equivalent legal requirements in other applicable jurisdictions, as the same may be amended from time to time.

1.62 "**Government Official**" means (a) any official, officer, employee, or representative of, or any Person acting in an official capacity for or on behalf of, any regional, federal, state, provincial, county, or municipal government or government department, agency, or other division, or any other Governmental Entity; (b) any officer, employee, or representative of any commercial enterprise that is owned or controlled by a government, including any state-owned or controlled veterinary, laboratory, or medical facility; (c) any officer, employee, or representative of any Governmental Entity; (d) any political party or party official or candidate for political office; (e) a Politically Exposed Person (PEP) as defined by the Financial Action Task Force (FATF), Groupe d'action Financière sur le Blanchiment de Capitaux (GAFI); or (f) any person acting in an official capacity for any government or Governmental Entity, or other government entity, enterprise, or organization identified above.

1.63 "**Governmental Entity**" means any: (a) national, federal, state, county, local, municipal, foreign, or other government; (b) governmental or quasigovernmental authority of any nature (including any agency, board, body, branch, bureau, commission, council, department, entity, governmental division, instrumentality, office, officer, official, organization, representative, subdivision, unit, or political subdivision of any government, entity, or organization described in the foregoing clauses (a) or (b), and any court or other tribunal); (c) public international or multinational governmental organization or body; (d) entity or body exercising, or entitled to exercise, any executive, legislative, judicial, administrative, regulatory, police, military, or taxing authority or power of any nature (including any arbiter) or administrative functions of or pertaining to government; (e) any company, business, enterprise, or other entity owned, in whole or in part, or controlled by any government, entity, organization, or other Person described in the foregoing clauses (a), (b), (c), or (d) of this definition; or (f) any political party.

1.64 "**HSR Act**" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (15 U.S.C. § 18a).

1.65 "**ICH**" means the International Conference on Harmonisation.

1.66 "**IND**" means an Investigational New Drug application, or similar application or submission for approval to conduct human clinical investigations filed with or submitted to a Regulatory Authority in conformance with the requirements of such Regulatory Authority.

1.67 "**Indication**" means (a) with respect to solid tumors, any cancer with a particular organ of origin, [***] or (b) with respect to non-solid tumors, [***]. For the sake of clarity, (i) [***], and regardless of prophylactic or therapeutic use, pediatric or adult use and irrespective of different formulation(s), dosage forms, dosage strengths or delivery system(s) used; (ii) [***] Indication with respect to any Indication for which a Clinical Trial for such pharmaceutical or biological product had already been initiated or Regulatory Approval obtained and (iii) [***] for purposes of this Agreement [***].

1.68 "**Initiation**" means, with respect to a Clinical Trial of a Licensed Product [***].

1.69 "**Internal Program**" means an internal development program conducted by MacroGenics or its Affiliates that [***].

1.70 "**Jointly Owned IP**" means the Jointly Owned Know-How and the Jointly Owned Patents.

1.71 "**Know-How**" means (a) any proprietary scientific or technical information, results and data of any type whatsoever, in any tangible or intangible form whatsoever, including databases, practices, methods, techniques, specifications, formulations, formulae, knowledge, know-how, skill, experience, test data (including pharmacological, medicinal chemistry, biological, chemical, biochemical, toxicological and clinical test data), analytical and quality control data, stability data, studies and procedures, and manufacturing process and development information, results and data, and (b) any proprietary biological, chemical or physical materials.

1.72 "**Knowledge**" means, with respect to a Party, the actual knowledge of those Persons listed for such Party on **Schedule 1.72** (Knowledge Parties) after due inquiry.

1.73 "**Licensed Molecule**" means a CD123 Molecule or Research Molecule, as applicable.

1.74 "**Licensed Product**" means a CD123 Product or Research Product, as applicable.

1.75 "**MAA**" means any new drug application or other similar marketing authorization application, in each case, filed with the applicable Regulatory Authority in a country or other regulatory jurisdiction, which application is required to commercially market or sell a pharmaceutical or biologic product in such country or jurisdiction (and any amendments thereto), including all BLAs submitted to the FDA in the United States in accordance with the FDCA with respect to a biologic or pharmaceutical product or any analogous application or submission with any Regulatory Authority outside of the United States.

1.76 "**MacroGenics CD123 Know-How**" means any Know-How (excluding any Patents or Jointly Owned Know-How) that is Controlled by MacroGenics or any of its Affiliates as of the Effective Date or at any time during the Term that is necessary or reasonably useful to Exploit CD123 Molecules or CD123 Products in the Field in the Territory, including MacroGenics Platform Improvement Know-How.

1.77 **"MacroGenics CD123 Patents**" means any Patents (excluding any Jointly Owned Patents) that are Controlled by MacroGenics or any of its Affiliates as of the Effective Date or at any time during the Term that are necessary or reasonably useful to Exploit CD123 Molecules or CD123 Products in the Field in the Territory.

1.78 "**MacroGenics CD123 Technology**" means the MacroGenics CD123 Patents and MacroGenics CD123 Know-How.

1.79 "**MacroGenics Licensed Know-How**" means, individually or collectively, as the context requires, MacroGenics CD123 Know-How and MacroGenics Research Know-How.

1.80 "**MacroGenics Licensed Patent(s)**" means, individually or collectively, as the context requires, MacroGenics CD123 Patents and MacroGenics Research Patents. The MacroGenics Licensed Patents Controlled by MacroGenics or any of its Affiliates as of the Effective Date are listed in **Schedule 1.80** (MacroGenics Licensed Patents) attached hereto; *provided* that any failure of a Patent to be on **Schedule 1.80** (MacroGenics Licensed Patents) either as of the Effective Date or during the Term shall not, in itself, indicate that such Patent is not a MacroGenics Licensed Patent hereunder. MacroGenics will update **Schedule 1.80** (MacroGenics Licensed Patents) [***], until the CD123 Option Exercise Date (with respect to MacroGenics CD123 Patents) or the Research Program Opt- In Date (with respect to the applicable MacroGenics Research Patents).

1.81 "**MacroGenics Licensed Technology**" means the MacroGenics Licensed Patents and the MacroGenics Licensed Know-How.

1.82 "**MacroGenics Manufacturing Facilities**" means [***].

1.83 "**MacroGenics Manufacturing In-Licenses**" means [***].

1.84 [***].

1.85 "**MacroGenics Multi-Product Patent**" means any MacroGenics Licensed Patent that Covers the [***] in the Territory, and [***]. The MacroGenics Multi-Product Patents as of the Effective Date are identified as "MacroGenics Multi-Product Patents" in **Schedule 1.80** (MacroGenics Licensed Patents).

1.86 "**MacroGenics Platform**" means MacroGenics' proprietary DART® and TRIDENT® platforms regardless of application, each as further described in **Schedule 1.86** (MacroGenics Platform).

1.87 "**MacroGenics Platform Patent**" means a MacroGenics Licensed Patent that (a) Covers the MacroGenics Platform and (b) is not a MacroGenics Product-Specific Patent or a MacroGenics Multi- Product Patent. The MacroGenics Platform Patents as of the Effective Date are identified as "MacroGenics Platform Patents" in **Schedule 1.80** (MacroGenics Licensed Patents).

1.88 "**MacroGenics Platform Trademarks**" means any and all Trademarks Controlled by MacroGenics or any of its Affiliates as of the Effective Date or at any time during the Term, that are registered for or apply solely to the MacroGenics Platform. The MacroGenics Platform Trademarks Controlled by MacroGenics or any of its Affiliates as of the Effective Date are listed in **Schedule 1.88** (MacroGenics Platform Trademarks) attached hereto.

1.89 "**MacroGenics Product-Specific Patent**" means any MacroGenics Licensed Patent that [***] Covers the [***] in the Territory. The MacroGenics Product-Specific Patents as of the Effective Date are identified as "MacroGenics Product-Specific Patents" in **Schedule 1.80** (MacroGenics Licensed Patents).

1.90 "**MacroGenics Research Know-How**" means, with respect to a given Research Program, any Know-How (excluding any Patents or Jointly Owned Know-How) that is Controlled by MacroGenics or any of its Affiliates as of the Effective Date or at any time during the Term that is necessary or reasonably useful to Exploit Research Molecules or Research Products in the Field in the Territory, including MacroGenics Platform Improvement Know-How.

1.91 "**MacroGenics Research Patents**" means, with respect to a given Research Program, any Patents (excluding any Jointly Owned Patents) that are Controlled by MacroGenics or any of its Affiliates as of the Effective Date or at any time during the Term that are necessary or reasonably useful to Exploit Research Molecules or Research Products in the Field in the Territory in accordance with this Agreement.

1.92 "**MacroGenics Research Technology**" means the MacroGenics Research Patents and MacroGenics Research Know-How.

1.93 "**Major European Country**" means the [***].

1.94 "**Major Market Country**" means each [***].

1.95 "**Manufacture**" or "**Manufacturing**" means all operations involved in the manufacturing (including process development activities, formulation activities, quality assurance and quality control testing (including test method development and in-process, release and stability testing, if applicable), storage, releasing, packaging and importation) to supply molecules and products for Development and Commercialization. For clarity, "**Manufacturing**" includes Packaging and Labeling and does not include Development or Commercialization activities.

1.96 "**Manufacturing Process**" means the manufacturing process for (including any associated Know-How owned or Controlled by MacroGenics relating to the then-current process, and necessary or useful for) the Manufacture of the Licensed Molecules or the Licensed Products at the time of the Manufacturing Technology Transfer as more fully described in Section 9.4 (Manufacturing Technology Transfer) and as further developed under this Agreement.

1.97 "**Manufacturing Related Activities**" means those manufacturing-related activities specifically related to a given batch of MGD024 Product that are not included in the Fully Burdened

Manufacturing Costs, including manufacturing process development and validation, process improvements, formulation development, associated analytical development and validation and the manufacture and testing of stability and consistency lots (including process development, qualification, and test batches) and reference standards stability testing (including related costs of reference standards), shipment and such other commercially reasonable activities.

1.98 "**MGD024**" means the therapeutic bi-specific molecule which is directed to each of CD3 and CD123 and which is generated from MacroGenics' proprietary DART® platform, as further described [***].

1.99 "**MGD024 Drug Product**" means the MGD024 Drug Substance in its final finished form and separated into unlabeled vials (unless the Parties agree that MacroGenics shall provide MGD024 Drug Product in labeled vials).

1.100 "**MGD024 Drug Substance**" means the bulk drug substance for MGD024 for use as an active pharmaceutical ingredient in the MGD024 Drug Product.

1.101 "**MGD024 Product**" means, subject to Section 4.13 (CD123 Development Program Termination), any product that contains or incorporates MGD024, alone or in combination with one (1) or more therapeutically active ingredients, including all forms, formulations, dosages, and delivery modes thereof (which, for clarity, shall include MGD024 Drug Product).

1.102 "**Milestone Payments**" means the CD123 Development Milestone Payments, the Research Product Development Milestone Payments and the Commercial Milestone Payments.

1.103 "**Net Sales**" means the gross amount invoiced by Gilead or its Related Parties for the sale of a Licensed Product to a Third Party (other than a Related Party) after deducting, if not previously deducted from the amount invoiced, the following:

(a) normal and customary trade, cash, and quantity discounts, allowances, and credits allowed or paid, in the form of deductions actually allowed with respect to sales of Licensed Product;

(b) retroactive price reductions, allowances, or credits actually granted upon rejections or returns of Licensed Product, including for recalls or damaged good and billing errors;

(c) discounts, chargeback payments, rebates, and reimbursements granted to wholesalers or other distributors, pharmacies and other retailers, managed care organizations, group purchasing organizations, or other buying groups, pharmacy benefit management companies, health maintenance organizations, federal, state, provincial, local, or other governments, and any other providers for health insurance coverage, health care organizations, or other health care institutions (including hospitals), health care administrators, or patient assistance or other similar programs;

(d) compulsory payments and cash rebates related to the sales of such Licensed Products paid to a governmental authority (or agent thereof) pursuant to governmental regulations by reason of any national or local health insurance program or similar program, including required chargebacks and retroactive price reductions, to the extent allowed and taken, including government levied fees as a result of healthcare reform policies, to the extent such fees are specially allocated to sales of such Licensed Product as a percentage of Gilead's entire pharmaceutical or biological product sales;

(e) costs and expenses (including labor) related to storage and distribution of Licensed Product, including (i) handling and transportation to fulfill orders, (ii) customer services, including order

entry, billing and adjustments, inquiry and credit, and collection, (iii) cost of facilities and labor utilized for the storage or distribution of the Licensed Product, or (iv) amounts paid to Third Parties in respect of the storage or distribution of Licensed Product;

(f) tariffs, duties, levies, and other similar governmental charges (including goods and services Tax) actually paid in connection with the transportation, distribution, use, or sale of Licensed Product (other than income taxes, franchise taxes, or similar taxes);

(g) other similar and customary deductions which are in accordance with applicable Accounting Standard; and

(h) amounts invoiced for sales of Licensed Product that are written off as uncollectible after reasonable collection efforts; *provided* that any recovery of such amounts will be included in Net Sales.

Such amounts shall be determined from the books and records of Gilead or its Related Party, maintained in accordance with such Person's applicable Accounting Standards. Gilead further agrees, in determining such amounts, it shall use Gilead's then-current standard procedures and methodology, including Gilead's then-current standard exchange rate methodology for the translation of foreign currency sales into US Dollars or, in the case of Sublicensees, such similar methodology, consistently applied. Without limiting the generality of the foregoing, transfers or dispositions of Licensed Product for charitable, compassionate use, promotional (including samples, in amounts reasonably customary in the industry), non-clinical, clinical, or regulatory purposes shall be excluded from Net Sales, as will sales or transfers of Licensed Product among a Party and its Related Parties, unless such Party or Related Party is the end user of such Licensed Product, but rather the Net Sales shall be deemed to have arisen upon the subsequent sale or transfer of Licensed Product to Third Parties.

Net Sales will exclude amounts invoiced for Licensed Products or Combination Products, as applicable, by any Compulsory Licensee pursuant to a Compulsory License or any Settlement Sublicensee pursuant to the applicable settlement agreement.

If Gilead or any of its Related Parties sells a Licensed Product as a Licensed Component of a Combination Product in a country in the Territory in any Calendar Quarter, then Net Sales shall be calculated by multiplying the Net Sales of the Combination Product during such Calendar Quarter by the fraction A/(A+B), where A is the average Net Sales per unit sold of the Licensed Component when sold separately in such country during such Calendar Quarter (calculated by determining the Net Sales of the Licensed Component during such Calendar Quarter in accordance with the definition of Net Sales set forth herein and dividing such Net Sales by the number of units of the Licensed Component during such Calendar Quarter) and B is the average Net Sales per unit sold of the Other Component(s) included in the Combination Product when sold separately in such country during such Calendar Quarter (calculated by determining the Net Sales of such Other Component(s) sold during such Calendar Quarter by applying the definition of Net Sales set forth herein as if it applied to sales of such Other Component(s) and dividing such Net Sales by the number of units of such Other Component(s) sold during such Calendar Quarter).

For purposes of calculating the average Net Sales per unit sold of a Licensed Component and Other Component(s) of a Combination Product, any of the deductions described herein that apply to such Combination Product shall be allocated among sales of the Licensed Component and sales of the Other Component(s) included in such Combination Product as follows: (i) deductions that are attributable solely to the Licensed Component or one of the Other Component(s) shall be allocated solely to Net Sales of the Licensed Component or such Other Component, as applicable, and (ii) all other deductions shall be allocated among sales of the Licensed Component and sales of the Other Component(s) in proportion to

Gilead's and MacroGenics' mutual agreement based on a good faith assessment of the fair market value of the Licensed Component and the Other Component(s).

In the event that no separate sales of the Licensed Component or any Other Component(s) included in a Combination Product are made by Gilead or its Related Parties during a Calendar Quarter in which such Combination Product is sold, the average Net Sales per unit sold shall be determined by mutual agreement of the Parties in good faith based on the relative economic value contributions of the Licensed Component and each of the Other Component(s) included in such Combination Product.

1.104 "**Option Effective Date**" means [***].

1.105 "**Option Period**" means, individually or collectively, as the context requires, [***].

1.106 "**Other MacroGenics Licensed Patents**" means any MacroGenics Licensed Patents that [***].

1.107 "**Out-of-Pocket Costs"** means, with respect to certain activities hereunder, direct expenses actually paid by a Party or its Affiliates to Third Parties and specifically identifiable and incurred to conduct such activities, but excluding any costs included in the FTE Rate.

1.108 "**Packaging and Labeling**" means primary, secondary or tertiary packaging and labeling of a product (in its commercial or clinical packaging presentation) for sale or use and all testing and release thereof.

1.109 "**Patent Prosecution**" means with respect to a Patent, the responsibility for (a) preparing, filing, prosecuting, and pursuing registration of, applications (of all types) for such Patent, (b) maintaining such Patent, and (c) managing any initiation or defense of interference or opposition proceeding relating to the foregoing, including inter partes review, derivations, re-examinations, post-grant proceedings and other similar proceedings (or other defense proceedings with respect to such Patent, but excluding the defense of challenges to such Patent as a counterclaim in an infringement proceeding).

1.110 "**Patents**" means (a) all patents and patent applications in any country, region or supranational jurisdiction and (b) any provisionals, substitutions, divisions, continuations, continuations in part, reissues, renewals, registrations, confirmations, reexaminations, extensions, supplementary protection certificates and the like, of any such patents or patent applications.

1.111 "**Person**" means an individual, sole proprietorship, partnership, limited partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture or other similar entity or organization, including a government or political subdivision, department or agency of a government.

1.112 "**Phase 1 Clinical Trial**" means a human clinical trial, or the relevant portion of such trial, of a Licensed Product conducted in patients in any country in the Territory in accordance with GCP that generally provides for the first introduction into humans of a Licensed Product and intended to determine safety, metabolism and pharmacokinetic properties and clinical pharmacology of such Licensed Product in healthy patients, or that would otherwise satisfy the requirements of Applicable Laws and Regulations for such country in which such human clinical trial is conducted, such as 21 C.F.R. § 312.21(a), relating to

human clinical trials conducted in the United States, or any successor regulation thereto or foreign equivalents.

1.113 [***].

1.114 "**[***]**" means a written report containing all available clinical data obtained from the performance of the Phase 1 Clinical Trial of MGD024 Product in accordance with the CD123 Development Plan [***]. Without limiting the foregoing, the [***] will include all of the information set forth on [***].

1.115 "**[***]**" means the period commencing upon the Effective Date and ending upon [***] after the date of delivery of a complete [***] in accordance with Section 4.9(c) (CD123 Data Package).

1.116 [***].

1.117 [***].

1.118 "**[***]**" means a written report containing all available clinical data obtained from the performance of the Phase 1 Clinical Trial of MGD024 Product in accordance with the CD123 Development Plan [***]. Without limiting the foregoing, the [***] will include all of the information set forth on [***].

1.119 "**[***]**" means the period commencing upon the expiration of the [***] in accordance with Section 4.9(c) (CD123 Data Package).

1.120 "**Phase 2 Clinical Trial**" means a human clinical trial, or the relevant portion of such trial, of a Licensed Product, conducted in patients in any country in the Territory in accordance with GCP and intended to demonstrate efficacy and a level of safety in the particular Indication tested, as well as to obtain a preliminary Indication of the unit or daily dosage regimen required, or that would otherwise satisfy the requirements of Applicable Laws and Regulations of the country in which such human clinical trial is conducted, such as 21 C.F.R. § 312.21(b), relating to human clinical trials conducted in the United States, or any successor regulation thereto or foreign equivalents. For clarity, a Phase 1 Clinical Trial with an expansion cohort of patients that meets the descriptions or otherwise satisfies the requirements in the foregoing shall be deemed a Phase 2 Clinical Trial.

1.121 "**Phase 3 Clinical Trial**" means a human clinical trial, or the relevant portion of such trial, of a Licensed Product, conducted in patients in any country in the Territory in accordance with GCPs and the results of which are intended to be used as a pivotal study to establish both safety and efficacy of such Licensed Product as a basis for a BLA submitted to the FDA or the appropriate Regulatory Authority of such country, or that would otherwise satisfy the requirements of 21 C.F.R. § 312.21(c), or any successor regulation thereto or foreign equivalents.

1.122 "**Phase 4 Clinical Trial**" means a human clinical trial conducted after the Regulatory Approval of a Licensed Product in a country, which trial is conducted (a) voluntarily to enhance scientific knowledge of such Licensed Product (e.g., for expansion of product labeling or dose optimization); or (b) due to a request or requirement of a Regulatory Authority of such country.

1.123 "**Pivotal Clinical Trial**" means (a) a Phase 3 Clinical Trial or other human Clinical Trial designed to be or that becomes a registration trial sufficient for filing a BLA for a Licensed Product, as evidenced by a formal agreement with or statement from the FDA or applicable Regulatory Authority, or
(b) a Phase 3 Clinical Trial or other human Clinical Trial which Gilead intends to submit as the basis for Regulatory Approval of the Licensed Product. For clarity, the determination of whether a given Clinical Trial is sufficient for registrational purposes to support the filing of a BLA for a given Licensed Product may be made prior to, or any time after, Initiation of such Pivotal Clinical Trial.

1.124 "**Pricing and Reimbursement Approval**" means, in a country in which Regulatory Authorities authorize reimbursement for, or approve or determine pricing for, pharmaceutical or biologic products to be marketed and sold or reimbursed in such country, receipt (or, if required to make such authorization, approval or determination effective, publication) of such reimbursement authorization or pricing approval or determination (as the case may be).

1.125 "**Processing**" or "**Processed**" means any operation or set of operations performed upon personal data or sets of personal data, whether or not by automated means, such as collection, recording, organization, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.

1.126 "**Program**" means the CD123 Development Program or a given Research Program, as applicable.

1.127 "**Regulatory Activities**" means, with respect to a given Licensed Product, all regulatory activities required to obtain or maintain Regulatory Approval of such Licensed Product in the Field in the Territory, including: (a) preparing, obtaining and maintaining all Regulatory Submissions and Regulatory Approvals for such Licensed Product; and (b) conducting communications and interactions with the relevant Regulatory Authorities for such Licensed Product.

1.128 "**Regulatory Approval**" means, with respect to a particular country or other regulatory jurisdiction, any approval of a BLA or other MAA from the applicable Regulatory Authority necessary for the commercial marketing or sale of a pharmaceutical or biologic product in such country or other regulatory jurisdiction, including, in each case, Pricing and Reimbursement Approval in those countries and jurisdictions where required.

1.129 "**Regulatory Authority**" means any applicable government regulatory authority involved in granting approvals for the conduct of clinical trials or the manufacturing, marketing, reimbursement or pricing, as applicable, of a Licensed Product, including the FDA and any successor governmental authority having substantially the same function.

1.130 "**Regulatory Submissions**" means any filing, application, or submission with any Regulatory Authority, including authorizations, approvals or clearances arising from the foregoing, including INDs, BLAs, NDAs, and Regulatory Approvals, and all correspondence or communication with or from the relevant Regulatory Authority, as well as minutes of any material meetings, telephone conferences or discussions with the relevant Regulatory Authority, in each case, with respect to a Licensed Product.

1.131 "**Related Party**" means, with respect to a Party, its Affiliates and their respective Sublicensees.

1.132 [***].

1.133 "**Research Molecule**" means, with respect to a Research Program, [***] and (b) is directed to each of the Cancer Target and Effector Target in the Research Target Combination for such Research Program. For the avoidance of doubt, for purposes of this definition, [***] that is generated from MacroGenics' proprietary DART® platform or TRIDENT® platform.

1.134 "**Research Product**" means, subject to Section 5.10 (Research Program Termination), any product that contains or incorporates a Research Molecule, alone or in combination with one (1) or more therapeutically active ingredients, including all forms, formulations, dosages and delivery modes thereof.

1.135 "**Research Program Data Package**" means, with respect to a given Research Program, a written report containing all relevant information and data from the performance of the activities under the Research Plan for such Research Program, [***] Research Molecules and Research Products that are the subject of such Research Program.

1.136 "**Research Program Opt-In Exercise Fee**" means [***].

1.137 "**Royalty Bearing Patent**" means (a) a Jointly Owned Patent or (b) a MacroGenics Licensed Patent; [***].

1.138 "**Royalty Term**" means, on a Licensed Product-by-Licensed Product and country-by- country basis, the time period beginning on the First Commercial Sale of a Licensed Product in a country and expiring on the latest of the following dates: (a) the [***] of the date of First Commercial Sale of such Licensed Product in such country, (b) the expiration of the last-to-expire Royalty Bearing Patent having a Valid Claim Covering the composition of matter or method of use of such Licensed Product in the applicable country, or (c) the expiration of the last-to-expire Data Exclusivity Period for such Licensed Product in such country.

1.139 "**Settlement Sublicensee**" means a Third Party that is granted a license or sublicense under a settlement agreement between such Third Party and a Party, any of its Affiliates, or any of its or their respective licensees or sublicensees, which agreement was entered into in connection with any settlement or similar agreement.

1.140 "**Sublicensee**" means a Third Party to whom a Party or any of its Affiliates grants a sublicense under the licenses granted to such Party under this Agreement, as permitted herein, excluding all Permitted Subcontractors.

1.141 "**Terminated Product**" means (a) any Licensed Product with respect to which this Agreement is terminated pursuant to Article 18 (Term and Termination), and (b) in the event of termination of this Agreement in its entirety, all Licensed Products.

1.142 "**Terminated Program**" means (a) any Program with respect to which this Agreement is terminated pursuant to Article 18 (Term and Termination), and (b) in the event of termination of this Agreement in its entirety, all Programs.

1.143 "**Territory**" means all countries and regions of the world.

1.144 "**Third Party**" means an entity other than (a) Gilead and its Affiliates and (b) MacroGenics and its Affiliates.

1.145 "**Third Party Claims**" means collectively, any and all Third Party demands, claims, actions, suits, and proceedings (whether criminal or civil or in contract, tort, or otherwise).

1.146 "**Third Party Distributor**" means any Third Party that purchases Licensed Product from Gilead or its Affiliates or Sublicensees, takes title to such Licensed Product, and distributes such Licensed Product directly to customers, but does not Develop, Manufacture or otherwise Commercialize any Licensed Product and does not make any upfront, milestone, royalty, profit-share or other payment to Gilead or its Affiliates or Sublicensees, other than payment for the purchase of Licensed Products for resale.

1.147 "**Trademark**" means all trade names, logos, common law trademarks and service marks, trademark and service mark registrations and applications throughout the world.

1.148 "**Trademark Prosecution**" means, with respect to a Trademark, the responsibility for (a) preparing, filing, and seeking registration of, trademark applications (of all types) for such Trademark, (b) maintaining such Trademark, and (c) managing any interference or opposition proceeding relating to the foregoing.

1.149 "**Unavailable Target Combination**" means, with respect to [***]

1.150 "**United States**" or "**US**" means the United States of America and its territories and possessions, including the Commonwealth of Puerto Rico and the U.S. Virgin Islands.

1.151 "**Upstream License Agreement**" means any contract or agreement with a Third Party pursuant to which MacroGenics in-licenses or otherwise acquires Control of Patents, Know-How or other intellectual property rights that constitute MacroGenics Licensed Technology for purposes of this Agreement, including such Upstream License Agreements set forth on **Schedule 1.151** (Existing Upstream License Agreements) (each, an "**Existing Upstream License Agreement**").

1.152 "**US Dollars**" means United States Dollars, the lawful currency of the US.

1.153 "**Valid Claim**" means a claim of: (a) an issued and unexpired Patent in a country which has not been revoked or held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and has not been abandoned, disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise; or (b) a pending patent application that has been filed in good faith and that has not been cancelled, withdrawn, or abandoned and has not been pending for more than [***] from the earliest priority date, *provided* that, if a claim ceases to be a Valid Claim by reason of the foregoing subclause (b), then such claim shall again be deemed a Valid Claim in the event and at the time such claim subsequently issues.

1.154 **Additional Definitions**. Each of the following terms has the meaning described in the corresponding section of this Agreement indicated below:

Definition	Section
13D Group	Section 19.2(a)(iii) (Standstill)
Acquired Party	Section 3.10(c) (Business Combinations)
Acting Improperly	Section 13.2(a)(i) (Anti-Corruption Laws)
Agreement	Preamble
Antitrust Filing	Section 6.1(a) (Filings)
Assigned Regulatory Materials	Section 7.3(a) (Regulatory Transfer)
Assumed CD123 Development Activities	Section 4.5(a) (Conditions for Assumption)
Bankrupt Party	Section 18.5 (Termination for Bankruptcy)
Bankruptcy Events	Section 18.5 (Termination for Bankruptcy)
Breaching Party	Section 18.2(a) (Material Breach)
CD123 Clinical Subcommittee	Section 2.2 (Additional Subcommittees and Working Groups)
[***]	[***]
[***]	[***]
CD123 Development Activities Cure Period	Section 4.5(a) (Conditions for Assumption)
CD123 Development Milestone Event	Section 10.2(a) (CD123 Products)
CD123 Development Milestone Payment	Section 10.2(a) (CD123 Products)
CD123 Development Plan	Section 4.1 (CD123 Development Plan)
CD123 Development Program	Section 4.1 (CD123 Development Plan)

Definition	Section
CD123 Development Term	Section 4.11 (CD123 Development Term and Transfer of Development Activities)
CD123 Option	Section 4.9(a) (Option Grant)
CD123 Option Effective Date	Section 6.1(b)(i) (CD123 Development Program Effectiveness)
CD123 Option Exercise Date	Section 4.9(e) (Option Exercise)
CD123 Option Exercise Notice	Section 4.9(e) (Option Exercise)
CD123 Technology Transfer Period	Section 4.12 (Technology Transfer)
CD123 Technology Transfer Plan	Section 4.12 (Technology Transfer)
Clinical Quality Agreement	Section 9.1(a)(iii) (Clinical Supply Agreement)
Clinical Supply Agreement	Section 9.1(a)(iii) (Clinical Supply Agreement)
Clinical Supply Term	Section 9.1(a)(ii) (During the Clinical Supply Term)
CMO	Section 9.3 (Observation by Gilead)
Commercial Milestone Event	Section 10.3 (Commercial Milestone Payments)
Commercial Milestone Payment	Section 10.3 (Commercial Milestone Payments)
Competitive Product	Section 3.10(c) (Business Combinations)
Confirmed Research Target Combination	Section 5.1(c) (Confirmed Research Target Combinations)
Deadlock	Section 2.1(c) (Decision-Making)
Deficiency Notice	Section 4.9(c) (CD123 Data Package)
Disclosing Party	Section 12.1(a) (Definition and Restrictions)
Effective Date	Preamble
Enforcement Effort	Section 16.4(b)(i) (MacroGenics Platform Patents and Other MacroGenics Licensed Patents)
Exchange Act	Section 19.2(a)(i) (Standstill)
Excused Delay	Section 4.2(a) (Excused Delays)
Existing CMO Agreements	Section 9.1(a)(i) (Prior to the CD123 Option Effective Date)
Existing Upstream License Agreement	Section 1.151 (Upstream License Agreement)
Existing Upstream License Agreement Amendments	Section 3.7 (Existing Upstream License Agreement Amendments)
Export Control Laws	Section 13.2(d) (Export Control Laws)
Extrapolated Net Sales	Section 16.4(c)(ii) (Recovery Allocations)
Force Majeure	Section 19.1 (Force Majeure)
Gatekeeper	Section 5.1(b) (Gatekeeper)
Gilead	Preamble

Definition	Section
Gilead Agent Improvement Know-How	Section 16.1(d) (Gilead Agent Improvement IP)
Gilead Agent Improvement Patents	Section 16.1(d) (Gilead Agent Improvement IP)
Gilead CD123 Development Activities	Section 4.1 (CD123 Development Plan)
Gilead Indemnitee(s)	Section 15.2 (By MacroGenics)
ICC	Section 17.3 (Expedited Arbitration for Incidental Payment Disputes)
Identified Patent	Schedule 10.4(c)(iii) (Special Offset and Indemnification)
Identified Patent Rights	Schedule 10.4(c)(iii) (Special Offset and Indemnification)
Identified Patent Upstream License	Schedule 10.4(c)(iii) (Special Offset and Indemnification)
Improvement Plan	Section 13.2(a)(iii)(1) (Anti-Corruption Laws)
Incidental Payment Disputes	Section 17.2 (Resolution by Executive Officers)
Indemnified Party	Section 15.3 (Indemnification Procedure)
Indemnifying Party	Section 15.3 (Indemnification Procedure)
Initial CD123 Development Plan	Section 4.1 (CD123 Development Plan)
Initial Outside Date	Section 6.1(c) (Outside Date)
Involved Party	Section 19.3 (Section 365(n) of the Bankruptcy Code)
IP Assessment	Section 5.5 (Research Term)
IP Counsels	Section 3.8(a)(iii) (Third Party Platform Rights Dispute)
Joint CD123 Development Activities	Section 4.1 (CD123 Development Plan)
Joint Steering Committee or **JSC**	Section 2.1(a) (Membership)
Jointly Owned Know-How	Section 16.1(e) (Jointly Owned IP)
Jointly Owned Patents	Section 16.1(e) (Jointly Owned IP)
JSC Co-Chairperson	Section 2.1(a) (Membership)
Licensed Research Target Combination	Section 5.2 (Research Program)
[***]	[***]
[***]	[***]
Losses	Section 15.1 (By Gilead)
MacroGenics	Preamble
MacroGenics CD123 Development Activities	Section 4.1 (CD123 Development Plan)
MacroGenics Identified Rights	Section 3.8(b)(i) (Notice of MacroGenics Identified Rights)
MacroGenics Indemnitee(s)	Section 15.1 (By Gilead)
MacroGenics Negotiation Period	Section 3.8(a)(i) (Notice of Third Party Platform Rights)

Definition	Section
MacroGenics Platform Improvement Know-How	Section 16.1(c) (MacroGenics Platform Improvement IP)
MacroGenics Identified Upstream License	Section 3.8(b)(i) (Notice of MacroGenics Identified Rights)
Manufacturing Technology Transfer	Section 9.4 (Manufacturing Technology Transfer)
Manufacturing Transition Budget	Section 9.4 (Manufacturing Technology Transfer)
Manufacturing Transition Plan	Section 9.4 (Manufacturing Technology Transfer)
Materials	Section 3.9 (Materials Transfer)
MGD024 Transfer Price	Section 9.1(a)(iii) (Clinical Supply Agreement)
[***]	[***]
New License Agreement	Section 3.3(c) (Survival of Gilead Sublicensees)
Non-Bankrupt Party	Section 18.5 (Termination for Bankruptcy)
Non-Breaching Party	Section 18.2(a) (Material Breach)
Noninvolved Party	Section 19.3 (Section 365(n) of the Bankruptcy Code)
[***]	[***]
Obligants	Section 13.2 (Covenants, Representations and Warranties For Compliance with Laws)
OFAC	Section 13.2(d) (Export Control Laws)
Other Effector Target	Section 1.41 (Effector Target)
Outside Date	Section 6.1(c) (Outside Date)
Party or **Parties**	Preamble
Patent Challenge	Section 18.6 (Termination for Patent Challenge)
Patent Term Extensions	Section 16.7 (Patent Term Extensions)
Permitted Subcontractor	Section 3.4 (Subcontractors)
[***]	[***]
PHS Act	Section 1.20 (cGMP)
Proposed Research Target Combination	Section 5.1(c) (Confirmed Research Target Combinations)
[***] **Upstream License**	Section 3.8(c)(i) [***] Upstream Licenses)
Protected Personal Information	Section 13.2(b) (Data Protection Laws)
Recalls	Section 7.6 (Recalls)
Receiving Party	Section 12.1(a) (Definition and Restrictions)

Definition	Section
Recovery	Section 16.4(c)(i) (Recovery Allocations)
Representatives	Section 12.1(c)(iii) (Permitted Disclosures)
Requesting Party	Section 11.6 (Audit Rights)
Required Regulatory Activities Budget	Section 4.2(b) (Required Regulatory Activities)
Research Budget	Section 5.2 (Research Program)
Research Plan	Section 5.2 (Research Program)
Research Product Development Milestone Event	Section 10.2(b) (Research Products)
Research Product Development Milestone Payment	Section 10.2(b) (Research Products)
Research Program	Section 5.2 (Research Program)
Research Program Opt-In	Section 5.8(a) (Opt-In Grant)
Research Program Opt-In Date	Section 5.8(c) (Option Exercise)
Research Program Opt-In Effective Date	Section 6.1(b)(ii) (Research Programs Effectiveness)
Research Program Opt-In Exercise Notice	Section 5.8(c) (Option Exercise)
Research Program Opt-In Term	Section 5.8(c) (Option Exercise)
Research Program Subcommittee	Section 2.2 (Additional Subcommittees and Working Groups)
Research Program Technology Transfer Period	Section 5.9 (Technology Transfer)
Research Program Technology Transfer Plan	Section 5.9 (Technology Transfer)
Research Target Combination	Section 5.1(a) (Research Target Nomination Right)
Research Target Combination License Date	Section 5.2 (Research Program)
Research Target Combination License Fee	Section 5.2 (Research Program)
Research Target Nomination Right	Section 5.1(a) (Research Target Nomination Right)
Research Target Selection Period	Section 5.1(a) (Research Target Nomination Right)
Research Term	Section 5.5 (Research Term)
Reverted CD123 Products	Section 18.9(b) (Additional Effects of Certain Terminations)
Safety/AE Matters	Section 7.5 (Adverse Event Reporting; Global Safety Database)
Secured Information	Section 13.2(c)(i) (Information Security)

Definition	Section
Securities Regulator	Section 12.1(c)(ii) (Permitted Disclosures)
Security Incident	Section 13.2(c)(iv) (Information Security)
Skipped Milestone	Section 10.2(c) (Skipped Milestone)
Standstill Period	Section 19.2(a) (Standstill)
Subject Party	Section 13.1 (General)
Subject Party Audit	Section 13.2(a)(iii)(6) (Anti-Corruption Laws)
[***]	Section 5.1(d) [***]
Supplemental Platform Upstream License	Section 3.8(a)(i) (Notice of Third Party Platform Rights)
Term	Section 18.1 (Term)
[***]	**[***]**
Third Expansion Cohort	**[***]**
Third Party Allegation	Section 16.5(a) (Notice of Allegations)
Third Party Platform Rights	Section 3.8(a)(i) (Notice of Third Party Platform Rights)
Third Party Suit	Section 16.5(b) (Notice of Suit)

2. **Overview; Governance**.

2.1 **Joint Steering Committee**.

(a) **Membership**. Promptly after the Effective Date, the Parties will establish a joint steering committee (the "**Joint Steering Committee**" or "**JSC**"), to coordinate, oversee and, as applicable, approve the Parties' activities related to the Licensed Molecules and Licensed Products in accordance with this Article 2 (Overview; Governance). The JSC shall consist of three (3) representatives from each Party (or such other number as the Parties may agree). Each Party shall designate one (1) of its representatives of the JSC as a co-chairperson of the JSC (each, a "**JSC Co-Chairperson**"). Each Party may replace its appointed JSC representatives at any time upon reasonable written notice to the other Party. The JSC Co- Chairpersons, in consultation with the Alliance Managers, will have the following roles and responsibilities:
(i) to call meetings, send notice of each such meeting and designate the time, date and place of each such meeting; (ii) to convene or poll the representatives by other permitted means; and (iii) to approve (including via email) the final minutes of any meeting of the JSC. The JSC Co-Chairpersons shall have no other authority or special voting power.

(b) **Responsibilities**. The responsibilities of the JSC shall be:

(i) to provide a forum by which the Parties may share information regarding the overall strategy for the conduct of the CD123 Development Program and each Research Program and to discuss, monitor and coordinate all activities under the CD123 Development Program and each Research Program;

(ii) to facilitate the exchange of information between the Parties with respect to the activities hereunder and to establish procedures for the efficient sharing of information necessary for

the Parties to fulfill their respective responsibilities with respect to conduct of the CD123 Development Program and each Research Program;

(iii) review, discuss and determine whether to approve updates or amendments to the CD123 Development Plan, as described in Section 4.1 (CD123 Development Plan);

(iv) to share and discuss the progress of activities being conducted under the CD123 Development Program on a quarterly basis, as described in Section 4.1 (CD123 Development Plan);

(v) develop, discuss and determine whether to approve any amendments to the CD123 Development Plan to reflect any Required Regulatory Activities that will be conducted by MacroGenics, as described in Section 4.2(b) (Required Regulatory Activities) and Section 4.6 (CD123 Development Program Costs);

(vi) develop, discuss and determine whether to approve any Required Regulatory Activities Budget or updates or amendment thereto, as described in Section 4.2(b) (Required Regulatory Activities);

(vii) review, discuss and determine whether to approve each Research Plan and Research Budget and updates or amendments thereto, as described in Section 5.2 (Research Program) and Section 5.4 (Research Plan Costs);

(viii) to share and discuss the progress of activities being conducted under each Research Program on a quarterly basis, as described in Section 5.2 (Research Program);

(ix) review, discuss and determine whether to approve each Manufacturing Transition Plan (including each Manufacturing Transition Budget) and updates or amendments thereto and coordinate the activities under each such Manufacturing Transition Plan, as described in Section 9.4 (Manufacturing Technology Transfer); and

(x) to perform such other functions as expressly set forth in this Agreement or as appropriate to further the purposes of this Agreement, as determined by the Parties.

(c) **Decision-Making**. The JSC shall make **[***]**, with each Party's representatives collectively **[***]**. In the event the JSC cannot reach agreement regarding any matter within the JSC's authority for a period of **[***]** (a "**Deadlock**"), then either Party may elect to submit such issue to the Parties' Executive Officers, and if a Party makes an election to refer a matter to the Executive Officers, then the Executive Officers shall use good faith efforts to promptly resolve such matter, **[***]** after the submission of such matter to them. If the Executive Officers are unable to reach consensus on any such matter within **[***]**, then the Deadlock shall be resolved in accordance with the provisions of this Section 2.1(c) (Decision-Making):

(i) Except for those Deadlocks **[***]**, as set forth in Section 2.1(c)(ii) (Decision-Making) and subject to Section 2.1(c)(iii) (Decision-Making), [***] decision-making authority with respect to the [***] decision-making authority with respect to the [***] decision-making authority with respect to the [***] decision-making authority with respect to the [***].

(ii) Neither Party will have final decision-making authority over any Deadlock [***] thereto, and all matters in the foregoing clauses [***] the Parties in order to take any action or adopt any change from the then-current *status quo*.

(iii) Notwithstanding Section 2.1(c)(i) (Decision-Making) and Section 2.1(c)(ii) (Decision-Making), [***] decision-making authority on any such matters may, [***] Applicable Laws and Regulations or any agreement with any Third Party that exists as of the Effective Date (including the MacroGenics Manufacturing In-Licenses) or is otherwise entered into after the Effective Date in accordance with this Agreement or the infringement of intellectual property rights of any Third Party [***] under this Agreement.

(d) **JSC Meetings**. No later than [***] after the Effective Date, the JSC will hold a meeting to establish the JSC's operating procedures, and the JSC shall meet [***] as required under this Agreement or to resolve any matter or dispute referred to the JSC in accordance with this Agreement. In the case of any matter or dispute referred to the JSC, such meeting shall be held within [***] following referral to the JSC. Employees or consultants of either Party that are not representatives of the Parties on the JSC may attend JSC meetings with prior notice and with respect to any consultants, prior consent, of the other Party; *provided*, *however*, [***]. A JSC meeting may be held either in person or by audio, video or internet teleconference with the consent of each Party. Meetings of the JSC shall be [***]. Each Party shall be responsible for [***].

(e) **Duration and Scope of JSC and Subsequent Information Sharing**. The JSC shall continue to exist [***], unless the Parties mutually agree in writing to disband the JSC earlier, or upon termination of this Agreement in accordance with the terms hereof. After the dissolution of the JSC [***], Gilead shall share information and provide updates [***] in accordance with Sections 6.6 (Development Reporting), 7.6 (Recalls), 10.2 (Development and Regulatory Milestone Payments), 10.3 (Commercial Milestone Payments), 10.4 (Royalties on Net Sales) and 11.2 (Royalty Payments) and the Research Molecules and Research Products in accordance with Sections 6.6 (Development Reporting), 7.6 (Recalls), 10.2 (Development and Regulatory Milestone Payments), 10.3 (Commercial Milestone Payments), 10.4 (Royalties on Net Sales) and 11.2 (Royalty Payments).

(e) **Limitations**. The JSC shall have no authority other than that expressly set forth in this Section 2.1 (Joint Steering Committee) and, specifically, shall have no authority (i) to amend or interpret this Agreement, or (ii) to determine whether or not a breach of this Agreement has occurred.

2.2 **Additional Subcommittees and Working Groups**. The JSC may establish other subcommittees or working groups as needed to further the purposes of this Agreement, including any responsibilities assigned to the JSC under this Agreement; *provided*, *however*, that the JSC shall not delegate its dispute resolution authority. The purpose, scope and procedures of any such subcommittee or working group shall be mutually agreed in writing by the JSC. The Parties shall, within [***] after the Effective Date, establish: (a) a clinical subcommittee to review and discuss activities or matters related to the CD123 Development Program, including the CD123 Development Plan ("**CD123 Clinical Subcommittee**") and (b) a research subcommittee to review and discuss activities or matters related to each Research Program, including the applicable Research Plan ("**Research Program Subcommittee**"). Neither the CD123 Clinical Subcommittee, the Research Program Subcommittee nor any other subcommittee or working group shall have any decision-making authority.

2.3 **Alliance Managers**. Promptly following the Effective Date, each Party shall designate in writing an Alliance Manager to serve as the primary point of contact for the Parties regarding all activities contemplated under this Agreement. Each Alliance Manager shall, among other things: (a) facilitate communication and coordination of the Parties' activities under this Agreement relating to the Licensed Molecules and the Licensed Products; (b) coordinate meetings between members of each Party's CD123 Development Program teams and Research Program teams; and (c) attempt to resolve conflicts with respect to the CD123 Development Program and each Research Program. [***]. From time to time, each Party may substitute its Alliance Manager at any time upon written notice to the other Party.

3. **Licenses**.

3.1 **Licenses to Gilead**.

(a) **Research Term License**. Subject to the terms and conditions of this Agreement, effective upon the Research Target Combination License Date for a given Research Program, MacroGenics hereby grants to Gilead, during the Research Term for such Research Program, a worldwide, royalty-free, non-transferable (except in accordance with Section 19.4 (Assignment; Change of Control)), co-exclusive (with MacroGenics) license under the MacroGenics Research Technology and MacroGenics' right, title and interest in the Jointly Owned IP, with the right to grant sublicenses [***] (subject to Section 3.3(b) (Sublicensing by Gilead)), solely to the extent necessary or reasonably useful to conduct any Development or Manufacturing activities allocated to Gilead under the Research Plan for the applicable Licensed Research Target Combination that is the subject of such Research Program.

(b) **Exploitation Licenses for Research Molecules and Research Products**. Subject to the terms and conditions of this Agreement (including Section 3.5 (Retained Rights)), effective upon the Research Program Opt-In Effective Date for a given Research Program, MacroGenics hereby grants to Gilead an exclusive, royalty-bearing, non-transferable (except in accordance with Section 19.4 (Assignment; Change of Control)) license under the MacroGenics Research Technology and MacroGenics' right, title and interest in the Jointly Owned IP, with the right to grant sublicenses [***] (each subject to Section 3.3(b) (Sublicensing by Gilead)), to Exploit Research Molecules and Research Products with respect to such Research Program in the Field in the Territory. For clarity, the license granted to Gilead under this Section 3.1(b) (Exploitation Licenses for Research Molecules and Research Products) shall not include the right for Gilead or any of its Affiliates to:
(i) conduct any Development or Commercialization activities using the MacroGenics Platform or (ii) use any molecule or compound that is proprietary to MacroGenics, its Affiliates or its (sub)licensees (other than a Research Molecule) in combination with any Research Molecule or Research Product. Notwithstanding anything to the contrary in the foregoing, effective upon the Research Program Opt-In Effective Date for a given Research Program, the license granted under this Section 3.1(b) (Exploitation Licenses for Research Molecules and Research Products) shall supersede and extinguish the license granted under Section 3.1(a) (Research Term License).

(c) **Development Term License**. Subject to the terms and conditions of this Agreement, MacroGenics hereby grants to Gilead, during the CD123 Development Term, a worldwide, royalty-free, non-transferable (except in accordance with Section 19.4 (Assignment; Change of Control)), co-exclusive (with MacroGenics) license under the MacroGenics CD123 Technology and MacroGenics' right, title and interest in the Jointly Owned IP, with the right to grant sublicenses [***] (subject to Section 3.3(b) (Sublicensing by Gilead)), solely to the extent necessary or reasonably useful to perform any Development activities, Manufacturing activities or Regulatory Activities allocated to Gilead under the CD123 Development Plan for the CD123 Molecules and CD123 Products.

(d) **Exploitation License for CD123 Molecules and CD123 Products**. Subject to the terms and conditions of this Agreement (including Section 3.5 (Retained Rights)), effective upon the CD123 Option Effective Date, MacroGenics hereby grants to Gilead an exclusive, royalty-bearing, non- transferable (except in accordance with Section 19.4 (Assignment; Change of Control)) license under the MacroGenics CD123 Technology and MacroGenics' right, title and interest in the Jointly Owned IP, with the right to grant sublicenses [***] (each subject to Section 3.3(b) (Sublicensing by Gilead)), to Exploit CD123 Molecules and CD123 Products in the Field in the Territory. For clarity, the foregoing license shall not include the right for Gilead or any of its Affiliates to: (i) conduct any Development or Commercialization activities using the MacroGenics Platform other than as permitted under the CD123 Development Plan, or (ii) use any molecule or compound that is proprietary to MacroGenics, its Affiliates or its (sub)licensees that is not a CD123 Molecule.

3.2 **Licenses to MacroGenics**.

(a) **Research Term License**. Subject to the terms and conditions of this Agreement, effective upon the Research Target Combination License Date for a given Research Program, Gilead hereby grants to MacroGenics, during the Research Term for such Research Program, a worldwide, royalty-free, non-transferable (except in accordance with Section 19.4 (Assignment; Change of Control)), co-exclusive (with Gilead) license under the Gilead Licensed Technology and Gilead's right, title and interest in the Jointly Owned IP, with the right to grant sublicenses [***] (subject to Section 3.3(a) (Sublicensing by MacroGenics)), to conduct the Development and Manufacturing activities allocated to MacroGenics under the Research Plan for the Research Molecules and Research Products that are the subject of such Research Program.

(b) **Development License for CD123 Molecules and CD123 Products**. Subject to the terms and conditions of this Agreement, Gilead hereby grants to MacroGenics, during the CD123 Development Term, a worldwide, royalty-free, non-transferable (except in accordance with Section 19.4 (Assignment; Change of Control)) co-exclusive (with Gilead) license under the Gilead Licensed Technology and Gilead's right, title and interest in the Jointly Owned IP, with the right to grant sublicenses [***] (subject to Section 3.3(a) (Sublicensing by MacroGenics)), to conduct any Development activities allocated to MacroGenics under the CD123 Development Plan for the CD123 Molecules and CD123 Products.

3.3 **Sublicensees**.

(a) **Sublicensing by MacroGenics**. MacroGenics shall have the right to grant sublicenses of the licenses granted to it in Section 3.2 (Licenses to MacroGenics), including sublicenses to a subset of the rights granted thereunder, [***]. Each sublicense granted by MacroGenics under this Agreement shall reference, be consistent with and subject to this Agreement, and MacroGenics shall remain responsible to Gilead for the compliance of each such Sublicensee with the terms and conditions of this Agreement. For clarity, any fee-for-service agreement with a Permitted Subcontractor will not be subject to this Section 3.3(a) (Sublicensing by MacroGenics) and will instead be governed by Section 3.4 (Subcontractors).

(b) **Sublicensing by Gilead**. Gilead shall have the right to grant sublicenses [***] of the licenses granted to it in Section 3.1 (Licenses to Gilead), including sublicenses to a subset of the rights granted thereunder, [***]. Each sublicense granted by Gilead to a Third Party under this Agreement shall reference, be consistent with and subject to this Agreement, and Gilead shall remain responsible to MacroGenics for the compliance of each such Sublicensee with the terms and conditions of this Agreement, including with respect to the financial obligations and other obligations due under this Agreement. Gilead shall provide a complete copy of each such sublicense to a Third Party (and all material amendments or restatements thereof) granted by Gilead under this Agreement to MacroGenics within [***] after execution; *provided* that Gilead shall have the right to redact commercially sensitive information or information unrelated to the Licensed Products from such copies (which, for clarity, shall not include information regarding the scope of the license grants, territory or term of each such sublicense). For clarity, any fee-for-service agreement with a Permitted Subcontractor will not be subject to this Section 3.3(b) (Sublicensing by Gilead) and will instead be governed by Section 3.4 (Subcontractors).

(c) **Survival of Gilead Sublicenses**. Upon termination of this Agreement for any reason, upon the written request of any Sublicensee of Gilead who is not then in breach of its sublicense agreement or the terms of this Agreement applicable to such Sublicensee, MacroGenics agrees to discuss in good faith with such Sublicensee the possibility of entering into a direct license from MacroGenics, *provided* that, MacroGenics shall have sole discretion and decision-making authority as to whether to enter into such license agreement (each a "**New License Agreement**"). Under any such New License Agreement between MacroGenics and such former Sublicensee, such Sublicensee will be required to pay to MacroGenics the same amounts in consideration for such direct grant as MacroGenics would have otherwise received from Gilead pursuant to this Agreement on account of such Sublicensee's Exploitation of the Licensed Products had this Agreement not been terminated. Under such New License Agreement, MacroGenics will not be bound by any grant of rights broader than, and will not be required to perform any obligation other than those rights and obligations contained in, this Agreement and all applicable rights of MacroGenics set forth in this Agreement will be included in such New License Agreement.

3.4 **Subcontractors**. Each Party shall have the right to engage Third Party contractors to perform any portion of its obligations or exercise certain rights of such Party under this Agreement on a fee-for-service basis (including Third Party Distributors, contract research organizations and contract manufacturing organizations) (each such subcontractor, a "**Permitted Subcontractor**"), except, [***]. Any such Permitted Subcontractor to be engaged by a Party hereunder shall meet the qualifications typically required by such Party for the performance of work similar in scope and complexity to the subcontracted activity. Any such Permitted Subcontractor engaged by a Party hereunder shall be required to agree in writing to be bound by terms regarding maintaining the confidentiality of proprietary information that are no less stringent than those contained in this Agreement and regarding ownership of intellectual property that are consistent with those contained in this Agreement. A Party's use of Permitted Subcontractors shall not relieve it of any of its obligations pursuant to this Agreement. Any Party engaging a Permitted Subcontractor to perform any of its obligations hereunder shall remain principally responsible and obligated for the performance of such activities.

3.5 **Retained Rights**. Notwithstanding: (a) the license grant to Gilead pursuant to Section 3.1(d) (Exploitation Licenses for CD123 Molecules and CD123 Products), MacroGenics reserves for itself and its Affiliates: [***]; (iii) the right to Manufacture or have Manufactured MGD024 and MGD024 Products for Gilead during the Clinical Supply Term in accordance with this Agreement and the Clinical Supply Agreement and (iv) the right to conduct Regulatory Activities requested by Gilead for CD123

Products, as further described in Section 7.1(b) (After the CD123 Development Term); and (b) the license grant to Gilead pursuant to Section 3.1(b) (Exploitation Licenses for Research Molecules and Research Products), MacroGenics reserves for itself and its Affiliates the right to conduct Regulatory Activities requested by Gilead for Research Products, as further described in Section 7.2 (Research Molecules and Research Products). Except as explicitly set forth in this Agreement, no license or other right is or shall be created or granted by either Party under this Agreement by implication, estoppel, or otherwise. Each Party shall retain all rights not otherwise granted to the other Party. For clarity, notwithstanding the licenses granted to (A) Gilead pursuant to Section 3.1 (Licenses to Gilead), no right or license is granted by MacroGenics to Gilead under the MacroGenics Licensed Technology or MacroGenics Platform Trademarks with respect to any molecule or product Covered by such MacroGenics Licensed Technology or MacroGenics Platform Trademarks other than the Licensed Molecules and Licensed Products (including any Other Component of a Combination Product); and (B) MacroGenics pursuant to Section 3.2 (Licenses to MacroGenics), no right or license is granted by Gilead to MacroGenics under the Gilead Licensed Technology with respect to any molecule or product Covered by such Gilead Licensed Technology other than the Licensed Molecules and Licensed Products (including any Other Component of a Combination Product).

3.6 **Sublicense under the MacroGenics Manufacturing In-Licenses**. As of the Effective Date, certain MacroGenics Licensed Technology is in-licensed pursuant to the MacroGenics Manufacturing In-Licenses. [***]; *provided* that (a) with respect to the CD123 Development Program, at any time after the Clinical Supply Term, Gilead may elect, upon written notice to MacroGenics, to no longer include the MacroGenics Licensed Technology sublicensed under one or both MacroGenics Manufacturing In-Licenses as MacroGenics CD123 Technology and (b) on a Research Program-by-Research Program basis, at any time

during the Term, Gilead may elect, upon written notice to MacroGenics, to no longer include the MacroGenics Licensed Technology sublicensed under one or both MacroGenics Manufacturing In- Licenses as MacroGenics Research Technology for a Research Program. On a Program-by-Program basis, from and after the date of receipt of any such notice provided by Gilead, (i) the Know-How and Patents licensed to MacroGenics pursuant to the applicable MacroGenics Manufacturing In-Licenses will no longer be deemed MacroGenics Licensed Technology for the applicable Program, (ii) Gilead shall immediately cease to use any MacroGenics Licensed Technology previously sublicensed under such MacroGenics Manufacturing In-Licenses and (iii) [***].

3.7 **Existing Upstream License Agreements Amendments**. Promptly after the Effective Date, MacroGenics will use good faith efforts to [***] to the (a) [***] and (b) [***], [***] in each case, that include the conditions [***] **Schedule 3.7** [***] ("**Existing Upstream License Agreement Amendments**"). MacroGenics will (i) provide Gilead with an opportunity [***] Existing Upstream License Agreement Amendment and (ii) obtain Gilead's prior consent (not to be unreasonably withheld) [***] Existing Upstream License Agreement Amendments and, subject to the activities in clauses (i) and (ii) taking place, [***] specifically related to the [***] but subject to Gilead's right to [***]. If MacroGenics [***] Existing Upstream License Agreement Amendment(s) that collectively include all of the [***] **Schedule 3.7** (Existing Upstream License Agreements Amendments) [***] written notice from Gilead requesting that MacroGenics [***], as between the Parties, Gilead will have the sole right to [***] (as applicable) with respect to the subject matter described in this Section 3.7 (Existing Upstream License Agreements Amendments) *mutatis mutandis* to reflect Gilead as the contracting party, and, if Gilead does [***], Gilead will use good faith efforts to [***] **Schedule 3.7** (Existing Upstream License Agreements Amendments) [***]. The financial obligations under any such agreements with [***].

3.8 **New Upstream License Agreements**.

(a) **Third Party Platform Rights.**

(i) **Notice of Third Party Platform Rights**. MacroGenics will be responsible for using Commercially Reasonable Efforts to obtain and maintain rights to use any and all Patents or Know-How (whether through acquisition or a license) that Cover the use of the MacroGenics Platform under this Agreement ("**Third Party Platform Rights**"; any such agreement, a "**Supplemental Platform Upstream License**"). For clarity, MacroGenics' responsibility under this Section 3.8(a)(i) (Notice of Third Party Platform Rights) shall extend to any improvements of the MacroGenics Platform generated or developed after the Effective Date solely to the extent (1) MacroGenics actually uses such improvements in the performance of its activities under this Agreement or (2) the CD123 Development Plan or any Research Plan permits the use of such improvements. [***] Patents or Know-How comprise Third Party Platform Rights, [***] MacroGenics in its reasonable discretion [***] Third Party Platform Rights, or otherwise upon MacroGenics otherwise becoming aware of any such Third Party Platform Rights), or [***] pursuant to Section 3.8(a)(iii) (Third Party Platform Rights Dispute), MacroGenics [***]. If MacroGenics [***] after such determination is made in accordance with the immediately preceding sentence (such period, the "**MacroGenics Negotiation Period**"), [***]; *provided* that, if MacroGenics is [***]. For clarity, the Parties understand and agree that any Patent or Know-How Controlled by a Third Party that Covers a Research Molecule or Research Product due [***], shall not be deemed a "Third Party Platform Right". Notwithstanding anything to the contrary herein, this Section 3.8(a)(i) (Notice of Third Party Platform Rights) shall not apply to the Parties' rights and obligations with respect to any Identified Patent, the acquisition of such rights and obligations are separately addressed in **Schedule 10.4(c)(iii)** (Special Offset and Indemnification).

(ii) **Negotiation of Supplemental Platform Upstream License**. MacroGenics will use good faith efforts to negotiate a license under Third Party Platform Rights that: (A) to the extent such license also grants rights for any other molecule or product being Exploited by MacroGenics or a (sub)licensee of MacroGenics, [***] the Third Party Platform Rights such that MacroGenics or its Affiliate Controls such rights as MacroGenics Licensed Technology. If any proposed license under Third Party Platform Rights [***], then, to the extent MacroGenics [***] under such Third Party Platform Rights, MacroGenics will [***], unless otherwise agreed by the Parties in writing, MacroGenics will [***] and, as between the Parties, Gilead will [***]. At Gilead's request, MacroGenics will reasonably cooperate with Gilead to [***]. Prior to execution of any Supplemental Platform

Upstream License, MacroGenics will [***]. MacroGenics may request, no sooner than [***] Supplemental Platform Upstream License in [***] such Supplemental Platform Upstream License and Gilead will promptly [***]; *provided* that, in the event that MacroGenics includes the terms set forth in [***] of this Section 3.8(a)(ii) (Negotiation of Supplemental Platform Upstream License) and the activities described in [***] hereof take place, Gilead shall not unreasonably [***].

(iii) **Third Party Platform Rights Dispute**. If a Party disputes whether certain Patents or Know-How Cover the use of the MacroGenics Platform under this Agreement (it being understood that any Patent that is the subject of a dispute under this subsection (iii) shall be valid and enforceable as of the date either Party submits a dispute for resolution hereunder), then each Party may refer the matter to their respective intellectual property counsel (the "**IP Counsels**") for resolution. The IP Counsels will meet promptly to discuss and resolve the matter within [***] after referral of such matter to such IP Counsels. If the IP Counsels cannot agree on a resolution to the matter within such [***], then either Party may refer such matter for resolution to an independent Third Party expert agreed upon by the Parties within [***] after the IP Counsels have failed to resolve such matter. Such independent Third Party expert will be an attorney [***] (or who has such other similar credentials as agreed by the Parties), and unless otherwise agreed in writing by the Parties, must not be a current or former employee, contractor, agent or consultant of either Party or its Affiliates. [***] pursuant to this Section 3.8(a)(iii) (Third Party Platform Rights Dispute) [***]such expert and the Parties [***]. Within [***] of the engagement of such expert by the disputing Party, such expert will deliver its written decision to the Parties (including a detailed report as to such expert's rationale for such decision), [***]. Notwithstanding any provision to the contrary set forth in this Agreement, at any time during the pendency of any such dispute, Gilead will have the right to (1) obtain rights to such Third Party Platform Rights from the applicable Third Party and (2) if the expert [***] the MacroGenics Platform under this Agreement (as described in Section 3.8(a)(i) (Notice of Third Party Platform Rights)), [***] such Third Parties with respect to such Third Party Platform Rights [***], in all cases, [***] in accordance with this Agreement, [***].

(iv) **[***]**. If Gilead obtains rights to Third Party Platform Rights pursuant to Section 3.8(a)(i) (Notice of Third Party Platform Rights) or Section 3.8(a)(iii) (Third Party Platform Rights Dispute), then Gilead [***] Third Parties under any agreement between Gilead and such Third Parties with respect to such Third Party Platform Rights [***], in all cases, [***] under this Agreement (which, for clarity, will include the use of the MacroGenics Platform under this Agreement), [***] a Licensed Product under this Agreement (including, for clarity, any [***]; *provided* that, in no event [***] MacroGenics for a given Calendar Quarter [***] Gilead may [***] that are [***] in a Calendar Quarter but are not [***] MacroGenics in such Calendar Quarter as a result [***] MacroGenics in any subsequent Calendar Quarter (subject to the [***]) [***].

(b) **MacroGenics Identified Rights**.

(i) **Notice of MacroGenics Identified Rights**. If MacroGenics or any of its Affiliates is planning to [***] Third Party under which MacroGenics or its Affiliate [***] ("**MacroGenics Identified Rights**"; such agreement, a "**MacroGenics Identified Upstream License**"), then MacroGenics [***]. Following the Option Effective Date for the applicable Licensed Molecule or Licensed Product, Gilead will have [***] such MacroGenics Identified Rights, [***] to the extent such MacroGenics Identified Rights [***] Licensed Molecule or Licensed Product [***] and [***] products or programs of MacroGenics, [***].

(ii) **Negotiation of MacroGenics Identified Upstream License**. MacroGenics will use good faith efforts to negotiate a license under MacroGenics Identified Rights that:(A) to the extent such license also grants right for any other molecule or product being Exploited by MacroGenics or a (sub)licensee of MacroGenics [***] as MacroGenics Licensed Technology. If [***] MacroGenics Identified Rights [***] MacroGenics Identified Rights, then, to the extent MacroGenics [***] MacroGenics Identified Rights, MacroGenics will [***] agreed by the Parties in writing, MacroGenics [***] MacroGenics Identified Rights [***] MacroGenics Identified Rights [***]. At Gilead's request, MacroGenics will reasonably cooperate with Gilead [***] MacroGenics Identified Upstream License that [***] Licensed Molecule or Licensed Product, MacroGenics will [***] MacroGenics Identified Upstream License, [***] MacroGenics Identified Upstream License. MacroGenics may request, [***]-MacroGenics Identified Upstream License [***] MacroGenics Identified Upstream License and Gilead will [***]; *provided* that, in the event that MacroGenics includes the terms

set forth in [***] of this Section 3.8(b)(ii) (Negotiation of MacroGenics Identified Upstream License) and the activities described in [***] hereof take place, [***].

(c) **[***] Upstream Licenses**.

(i) [***] Supplemental Platform Upstream License, MacroGenics Identified Upstream License or Identified Patent Upstream License (such agreement, a [***] **Upstream License**"), MacroGenics will [***] MacroGenics may redact commercially sensitive information or other information unrelated to the Licensed Molecules or Licensed Products from such copy (which, for clarity, will not include information regarding the scope of the license grants, territory or term of such [***] Upstream License). [***] of the [***] Upstream License, Gilead [***] Third Party Platform Rights, MacroGenics Identified Rights or Identified Patent Rights [***] Notwithstanding the foregoing, if MacroGenics [***] in accordance with Section 3.8(a)(ii) (Negotiation of Supplemental Platform Upstream License), Section 3.8(b)(ii) (Negotiation of MacroGenics Identified Upstream License) or **Schedule 10.4(c)(iii)** (Special Offset and Indemnification), as applicable, and in each case, Gilead [***], then Gilead will [***] Upstream License as long as [***] pursuant to Section 3.8(a)(ii) (Negotiation of Supplemental Platform Upstream License), Section 3.8(b)(ii) (Negotiation of MacroGenics Identified Upstream License) or **Schedule 10.4(c)(iii)** (Special Offset and Indemnification), as applicable.

(ii) In the event that Gilead [***] Upstream License in accordance with this Section 3.8(c) ([***] Upstream Licenses), [***] Third Party Platform Rights, MacroGenics Identified Rights or Identified Patent Rights (as applicable) [***] MacroGenics Licensed Technology [***] Gilead pursuant to [***], (2) such agreement will thereafter be [***] Upstream License Agreements, and (3) Gilead hereby agrees [***] Upstream License Agreement with respect to [***] Upstream License Agreement.

(iii) If Gilead does not [***] Upstream License as an Upstream License Agreement pursuant to this Section 3.8(c) ([***] Upstream Licenses), then Gilead and its Affiliates will have [***] Upstream License. Notwithstanding any other provision of this Agreement, [***] MacroGenics CD123 Know-How, MacroGenics CD123 Patents, MacroGenics Research Know-How and MacroGenics Research Patents shall be [***] Third Party Platform Rights, MacroGenics Identified Rights or Identified Patent Rights licensed to MacroGenics or any of its Affiliates pursuant to a license or other agreement entered into by MacroGenics or its Affiliates after the Effective Date [***] Upstream License Agreement pursuant to this Section 3.8(c) ([***] Upstream Licenses).

(d) **Responsibility for Payments under Upstream License Agreements.** MacroGenics [***] Third Party under the Existing Upstream License Agreements (other than, subject to Section 3.6 (Sublicense under the MacroGenics Manufacturing In-Licenses), [***] MacroGenics under the MacroGenics Manufacturing In-Licenses to the extent related to the Manufacture of Licensed Molecules or Licensed Products, [***] and (ii) to any Third Party under any Supplemental Platform Upstream License, as described in Section 3.8(a) (Third Party Platform Rights). With respect to any MacroGenics Identified Upstream License that becomes an Upstream License Agreement pursuant to Section 3.8(c)(i) ([***]Upstream Licenses), Gilead will [***] Section 3.8(c)(i) ([***] Upstream Licenses) and that arise from the Exploitation of any Licensed Molecule or Licensed Product by Gilead, its Affiliates or Sublicensees under this Agreement, subject to Gilead's [***].

3.9 **Materials Transfer**. In order to facilitate the activities under, or to confirm any results of, a Program, either Party may provide to the other Party certain biological materials or chemical compounds Controlled by the supplying Party (collectively, "**Materials**"). Except as otherwise expressly set forth under this Agreement, all such Materials delivered to the other Party will remain the sole property of the supplying Party, will be used only in the performance of activities conducted in accordance with the CD123 Development Plan or applicable Research Plan or to confirm any results of a Program, will not be used or delivered to or for the benefit of any Third Party without the prior written consent of the supplying Party (except for Permitted Subcontractors performing any activities under the CD123 Development Plan or a Research Plan), and will be used in compliance with Applicable Law and Regulations (including GLP, cGMP, and cGCP, as applicable). Each Party will use the Materials supplied under this Agreement with prudence and appropriate caution in any experimental work as not all of their characteristics may be known. The supplying Party will provide the other Party the most current material safety data sheet for the Materials upon transfer of any Materials. Prior to the supply of any Materials by or on behalf of the supplying Party, the Parties will, upon the supplying Party's request, enter into a

material transfer agreement with respect to such supply. Except as expressly set forth in this Agreement, THE MATERIALS ARE PROVIDED "AS IS" AND WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY WARRANTY THAT THE USE OF THE MATERIALS WILL NOT INFRINGE OR VIOLATE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF ANY THIRD PARTY.

3.10 **Exclusivity**.

(a) **CD123 Program Exclusivity**. Commencing on the Effective Date and continuing until the earlier of (i) the five (5) year anniversary of the Effective Date or (ii) the termination of the CD123 Development Program in accordance with Section 4.13 (CD123 Development Program Termination) or Article 18 (Term and Termination), except as permitted under this Agreement, including in connection with
(1) any Development or other activities conducted with respect to CD123 Molecules or CD123 Products pursuant to the CD123 Development Plan, or (2) the exercise of MacroGenics' retained rights set forth in Section 3.5 (Retained Rights), MacroGenics shall not, itself, or with or through any of its Affiliates or any Third Party, Develop, have Developed, Commercialize, or have Commercialized any compound or product containing a multi-specific (which includes, for clarity, a bi-specific) antibody molecule that is directed to each of CD3 and CD123.

(b) **Research Program Exclusivity**. On a Research Program-by-Research Program basis, commencing on the Research Target Combination License Date for a given Licensed Research Target Combination that is the subject of a Research Program and ending upon the earlier of (i) the five (5) year anniversary of the Initiation of a Phase 1 Clinical Trial for the first Research Product for such Research Program or (ii) the termination of such Research Program in accordance with Section 5.10 (Research Program Termination) or Article 18 (Term and Termination), except as permitted under this Agreement, including in connection with the conduct of MacroGenics' activities with respect to such Research Program during the Research Term pursuant to the applicable Research Plan, MacroGenics shall not, itself, or with or through any of its Affiliates or any Third Party, Develop, have Developed, Commercialize, or have Commercialized any compound or product that is directed to the Licensed Research Target Combination that is the subject of such Research Program.

(c) **Business Combinations**. MacroGenics will not be in breach of the restrictions set forth in Section 3.10(a) (CD123 Program Exclusivity) or Section 3.10(b) (Research Program Exclusivity) if MacroGenics or any of its Affiliates undergoes a Change of Control with a Third Party (together with such Third Party and its Affiliates following the closing of the applicable Change of Control transaction, the "**Acquired Party**") that (either directly or through an Affiliate, or in collaboration with any other Third Party) at the closing of the Change of Control transaction is, or later performs, any Development or Commercialization activities on a compound or product that would be in breach of Section 3.10(a) (CD123 Program Exclusivity) or Section 3.10(b) (Research Program Exclusivity), if performed by MacroGenics (such compound or product, "**Competitive Product**") and such Acquired Party may perform such Development or Commercialization activities on a Competitive Product in the Territory, as long as [***] the Licensed Molecules, Licensed Products or Programs hereunder, Confidential Information of MacroGenics.

4. **CD123 Development Program; CD123 Option**.

4.1 **CD123 Development Plan**. During the CD123 Development Term, all Development and Manufacturing activities to be conducted by or on behalf of the Parties for the CD123 Molecules and CD123 Products will be conducted solely pursuant to a written development plan (the "**CD123 Development Plan**" and such activities the "**CD123 Development Program**"). The initial CD123 Development Plan is set forth on **Schedule 4.1(a)** (CD123 Development Plan) and includes the material Development and Manufacturing activities anticipated to be required to complete the Phase 1 Clinical Trial for the MGD024 Product (consistent with the clinical protocol synopsis attached hereto in **Schedule 4.1(b)** (Clinical Protocol Synopsis)) and the responsible Party(ies) for the performance of such activities (such plan, the "**Initial CD123 Development Plan**"). The CD123 Development Plan allocates the performance of specific activities to each of MacroGenics (the "**MacroGenics CD123 Development Activities**") and Gilead (the "**Gilead CD123 Development Activities**") and specifies activities, if any, to

be performed jointly by the Parties (the "**Joint CD123 Development Activities**"). The JSC shall (a) review, discuss and determine whether to approve any updates or amendments to the CD123 Development Plan [***], and (b) oversee and facilitate cooperation and information transfer between the Parties in conducting the activities set forth in the CD123 Development Plan. In addition, each Party shall have the right to propose additional amendments to the CD123 Development Plan in connection with the progress of the CD123 Development Program for the JSC to review, discuss and determine whether to approve. Any proposed amendments to the CD123 Development Plan will become effective only upon approval by the JSC. During the CD123 Development Term, each Party shall not, and shall procure that its Affiliates, Sublicensees and Permitted Subcontractors shall not, perform any pre-clinical or clinical Development activities with respect to any CD123 Molecule or CD123 Product other than (i) the activities expressly set forth in the CD123 Development Plan and (ii) any activities expressly permitted pursuant to Section 3.5 (Retained Rights).

4.2 [***].

(a) **Excused Delays**. If MacroGenics is delayed [***].

(b) **Required Regulatory Activities**. If any Regulatory Authority requires [***] ("**Required Regulatory Activities**"), [***]. The Parties, through the JSC, will promptly develop, discuss and determine whether to approve (1) an amendment to the CD123 Development Plan to reflect such Required Regulatory Activities [***] ("**Required Regulatory Activities Budget**").

4.3 **Conduct of the Phase 1 Clinical Trial of MGD024**. MacroGenics shall be responsible for, and shall use Commercially Reasonable Efforts to conduct, [***] the Phase 1 Clinical Trial for the MGD024 Product, as further described in, and in accordance with, the CD123 Development Plan. If Gilead does not exercise the CD123 Option during the [***], then MacroGenics shall be responsible for, and shall use Commercially Reasonable Efforts to conduct, [***] the Phase 1 Clinical Trial for MGD024 Product, as further described in, and in accordance with, the CD123 Development Plan.

4.4 **Performance Standards**. Each Party shall use Commercially Reasonable Efforts to conduct the CD123 Development Program activities for which it is responsible pursuant to the CD123 Development Plan and in compliance with all Applicable Laws and Regulations, including applicable national and international (e.g., ICH, GCP, GLP and cGMP) guidelines. Additionally, each Party shall use Commercially Reasonable Efforts to provide any assistance required by the other Party to address or complete activities for which such other Party is responsible pursuant to the CD123 Development Plan, or as otherwise mutually agreed upon by the Parties.

4.5 **Assumed CD123 Development Activities**.

(a) **Conditions for Assumption**. If, following a Change of Control of MacroGenics or Bankruptcy Event of MacroGenics that occurs any time after the Effective Date, Gilead reasonably believes that MacroGenics has defaulted on its obligations to perform one or more Development activities allocated to it under the CD123 Development Plan [***], then Gilead may provide MacroGenics

with written notice regarding such failure to perform. [***] (the "**CD123 Development Activities Cure Period**") and (y) at Gilead's request, the Parties will meet and cooperate to agree in good faith on a plan to resolve such material delay. If (A) MacroGenics has not commenced performance of such Development activities during the applicable CD123 Development Activities Cure Period, (B) MacroGenics notifies Gilead in writing that it anticipates that it will be unable to perform such Development activities or (C) MacroGenics does not perform such Development activities in accordance with the CD123 Development Plan or otherwise in accordance with this Article 4 (CD123 Development Program; CD123 Option), [***], Gilead may, upon written notice to MacroGenics, assume those Development activities that are the subject of such default by MacroGenics (the "**Assumed CD123 Development Activities**").

(b) **Effects of Assumption**. With respect to any Assumed CD123 Development Activities: (i) MacroGenics will work collaboratively and in good faith with Gilead, and make its personnel reasonably available to Gilead, in each case, in order to (1) transfer any applicable technology, materials or contracts with Permitted Subcontractors to Gilead that are necessary or reasonably useful for the performance of the applicable Assumed CD123 Development Activities, and (2) provide such other reasonable assistance so as to enable Gilead to assume performance of the applicable Assumed CD123 Development Activities, as mutually agreed upon by the Parties and set forth in an amendment to the CD123 Development Plan; (ii) the JSC will update the CD123 Development Plan to allocate performance of the Assumed CD123 Development Activities to Gilead and such Assumed CD123 Development Activities will thereafter be Gilead CD123 Development Activities; and (iii) Gilead will be solely responsible for all FTE Costs and Out-of-Pocket Costs incurred by or on behalf of Gilead in connection with the performance of the applicable Assumed CD123 Development Activities in accordance with the CD123 Development Plan (as applied to Gilead, *mutatis mutandis*). For the avoidance of doubt, in the event Gilead performs any Assumed CD123 Development Activities under this Agreement, (A) Gilead's performance of such Assumed CD123 Development Activities will not effect the timing of the license grants under Section 3.1 (Licenses to Gilead) or the mechanism for Gilead to exercise the CD123 Option (including all payment obligations therefor), *provided* that, any provisions or obligations of MacroGenics relevant to the performance of such activities (including the generation and submission of the CD123 Data Package) shall thereafter apply to Gilead, *mutatis mutandis*; and (B) the assumption of such activities by Gilead shall not, by itself, be deemed to be a breach by MacroGenics of any of its obligations under this Agreement.

4.6 **CD123 Development Program Costs**. [***] CD123 Development Program. Notwithstanding the foregoing, Gilead shall [***] in performing the Required Regulatory Activities to the extent such costs are incurred in accordance with the CD123 Development Plan [***] in accordance with the immediately preceding sentence, and Gilead shall [***] provide notice to the JSC and the JSC shall promptly discuss in good faith and approve an amendment to the CD123 Development Plan or the Required Regulatory Activities Budget in accordance with Section 2.1 (Joint Steering Committee) [***]. [***] JSC approving an amendment to the CD123 Development Plan or the Required Regulatory Activities Budget, [***].

4.7 **Records; Updates**. [***], each Party shall maintain complete, current and accurate records of all activities conducted under the CD123 Development Program, and all data and other information resulting from the performance of such activities. Such records shall fully and properly reflect all work performed and results achieved in the performance of any CD123 Development Program activities in good scientific manner appropriate for regulatory and patent purposes. Additionally, during each JSC meeting, each Party shall provide the JSC with an update on the results and progress of any CD123 Development Program activities conducted by or on behalf of such Party since the prior JSC meeting.

4.8 **Data Ownership**. [***].

4.9 **CD123 Option**.

(a) **Option Grant**. Gilead has an exclusive option to obtain an exclusive (subject to Section 3.5 (Retained Rights)), royalty-bearing, non-transferable (other than in accordance with Section

19.4 (Assignment; Change of Control)) license, with the [***], MacroGenics Licensed Technology, to Exploit CD123 Molecules and CD123 Products in the Field in the Territory ("**CD123 Option**").

Option Term. If [***], the Phase 1 Clinical Trial of the MGD024 Product [***].

(b) **CD123 Data Package**. MacroGenics shall deliver each CD123 Data Package to Gilead as promptly as possible, and in no event [***] CD123 Development Program that are required to generate the applicable CD123 Data Package. [***] following Gilead's receipt of a CD123 Data Package, Gilead may provide MacroGenics with written notice if Gilead believes in good faith that the purported CD123 Data Package provided by MacroGenics does not contain all of the information required to be provided in such data package, as set forth in **Schedule 1.114** or **1.118**, as applicable (each, a "**Deficiency Notice**"), which Deficiency Notice will reasonably specify the missing item(s). MacroGenics will modify such CD123 Data Package to reflect such comments and will provide an updated CD123 Data Package that includes the missing information [***] Deficiency Notice; *provided* that, for clarity, MacroGenics shall not be required to generate any additional data that is not in existence as of the date of delivery of each CD123 Data Package (including re-running previously performed studies) to the extent such data is supplementary and not required to be set forth in such CD123 Data Package or comply with any requests to modify the presentation or formatting of the then-existing data unless required to be set forth in such CD123 Data Package. If Gilead provides a Deficiency Notice, then the applicable Option Period will be extended [***]. In addition, at any time during the Option Period after Gilead's receipt of a CD123 Data Package, Gilead may, itself or through the JSC, provide MacroGenics with written notice requesting assistance and cooperation from MacroGenics in analyzing such CD123 Data Package, including a request for a discussion with MacroGenics representative(s) who have relevant knowledge and information regarding such CD123 Data Package, and MacroGenics will use good faith efforts to promptly provide any such assistance and cooperation reasonably requested by Gilead. Additionally, during the CD123 Development Term, Gilead shall use good faith efforts to assist MacroGenics in its efforts to coordinate and compile the contents of the CD123 Data Package in advance of completion of the activities under the CD123 Development Program and to respond to MacroGenics' queries regarding the formatting and completeness of such aspects of the CD123 Data Package.

(c) **CD123 Clinical Study Report**. MacroGenics shall deliver the Clinical Study Report [***] the Phase 1 Clinical Trial [***] Clinical Study Report. If Gilead does not exercise the CD123 Option [***] the Clinical Study Report for [***] the Phase 1 Clinical Trial, MacroGenics will [***] the Phase 1 Clinical Trial [***] Clinical Study Report. For clarity, the Clinical Study Report will not be required as part of the CD123 Data Package.

(d) **Option Exercise**. Gilead may exercise the CD123 Option [***] ("**CD123 Option Exercise Notice**") [***] "**CD123 Option Exercise Date**"; [***].

4.10 [***] MacroGenics, through completion of such activities, in accordance with the CD123 Development Plan [***].

4.11 **CD123 Development Term and Transfer of Development Activities**. The CD123 Development Program shall commence on the Effective Date and, unless earlier terminated pursuant to Section 4.13 (CD123 Development Program Termination) or Article 18 (Term and Termination), expire upon the earlier of the CD123 Option Effective Date or the Outside Date, in each case, in accordance with Section 6.1(b)(i) (CD123 Program Effectiveness) (the "**CD123 Development Term**"). If Gilead exercises the CD123 Option, then, at such times after the CD123 Option Effective Date as set forth in Section 4.12 (Technology Transfer), MacroGenics will, and will cause its Affiliates and Permitted Subcontractors to, cooperate with Gilead as Gilead may reasonably request to facilitate an orderly transition of the Development of the MGD024 Product to Gilead or its designee. Without limiting the foregoing, if Gilead exercises the CD123 Option [***] CD123 Option Effective Date, MacroGenics will (a) cooperate, and will ensure that its Affiliates and Permitted Subcontractors cooperate, with Gilead's reasonable requests to transfer the conduct of the Phase 1 Clinical Trial for the MGD024 Product to Gilead or its designees or (b) continue to conduct the Phase 1 Clinical Trial for the MGD024 Product at Gilead's cost and in accordance with the CD123 Development Plan [***].

4.12 **Technology Transfer**. [***] CD123 Option Effective Date, MacroGenics will provide Gilead with copies of all MacroGenics CD123 Know-How (other than MacroGenics CD123 Know-How relating to the Manufacture of CD123 Molecule and CD123 Products, the initial transfer of which will be performed in accordance with Section 9.4 (Manufacturing Technology Transfer)) that is necessary or reasonably useful for the Exploitation of the CD123 Molecules and CD123 Products. To facilitate such transfer, the Parties may mutually agree upon a written technology transfer plan to transfer to Gilead such MacroGenics CD123 Know-How ("**CD123 Technology Transfer Plan**"), which will set forth a process for the transfer of such MacroGenics CD123 Know-How, and an overall timeline for its progress and completion. Each Party shall complete the activities allocated to it under the CD123 Technology Transfer Plan (if any such plan is agreed upon) and shall use Commercially Reasonable Efforts to do so within the timelines set forth in such plan. Thereafter, on a periodic basis during the [***] MacroGenics CD123 Know-How (the "**CD123 Technology Transfer Period**"), as Gilead may reasonably request, MacroGenics will provide to Gilead copies of MacroGenics CD123 Know-How [***] Gilead to continue to Exploit any CD123 Molecules and CD123 Products and (c) related to any activities conducted in connection with the CD123 Development Plan or the Manufacture of MGD024 Products. In addition to providing copies of the MacroGenics CD123 Know-How in accordance with this Section 4.12 (Technology Transfer), MacroGenics will make its personnel reasonably available to Gilead during the CD123 Technology Transfer Period, [***] MacroGenics Technology in connection with the Exploitation of the CD123 Molecules and CD123 Products. Other than as set forth in the preceding sentence, [***] MacroGenics CD123 Know-How in accordance with this Section 4.12 (Technology Transfer).

4.13 **CD123 Development Program Termination**. In the event that: (a) Gilead does not exercise the CD123 Option [***], the following shall occur: (i) the CD123 Development Program and all rights and licenses granted by one Party to the other in connection therewith (including pursuant to Sections 3.1(c) (Development Term License), 3.1(d) (Exploitation License for CD123 Molecules and CD123 Products) and 3.2(b) (Development License for CD123 Molecules and Products)) shall terminate in their entirety, (ii) this Agreement shall terminate with respect to the CD123 Molecules and CD123 Products and for clarity, (1) CD123 Molecules shall not be deemed Licensed Molecules and CD123 Products shall not be deemed Licensed Products hereunder, (2) no molecule shall be deemed a CD123 Molecule or MGD024 and no product shall be deemed a CD123 Product or MGD024 Product hereunder and (3) no CD123 Development Milestone Payments, Commercial Milestone Payments or royalties, in each case, will be due for CD123 Products, (iii) MacroGenics' exclusivity obligations pursuant to Section 3.10(a) (CD123 Program Exclusivity) shall terminate immediately and (iv) Gilead shall promptly return to MacroGenics or destroy (at MacroGenics' election) any and all MacroGenics CD123 Know-How and any other Confidential Information of MacroGenics or its Affiliates solely related to the CD123 Molecules, CD123 Products or the CD123 Development Program, in accordance with Section 12.1(e) (Obligations Upon Termination). For the avoidance of doubt, upon the early termination of the CD123 Development Program in accordance with this Section 4.13 (CD123 Development Plan Termination), MacroGenics shall have no further obligations to Gilead with respect to any CD123 Molecule or CD123 Product and shall have the right to Exploit (or not Exploit) in any manner whatsoever, any CD123 Molecule or CD123 Product, in MacroGenics' sole discretion, without provision or disclosure of any related information or other Know-How to Gilead in connection therewith.

5. **Research Target Nomination; Research Plans; Licensed Research Target Combinations**.

5.1 **Research Target Nomination**.

(a) **Research Target Nomination Right**. [***] ("**Research Target Selection Period**"), Gilead shall have the right, in its sole discretion (subject to the remainder of this Article 5 (Research Target Nomination; Research Plans; Licensed Research Target Combinations)), [***], a "**Research Target Combination**" and such right, the "**Research Target Nomination Right**") for each of up to two (2) Research Programs for which the Parties would Develop Research Molecules and Research Products in accordance with the remainder of this Article 5 (Research Target Nomination; Research Plans; Licensed Research Target Combinations).

(b) **Gatekeeper**. Within [***] following Gilead's request, the Parties will mutually agree on one (1) individual who is not affiliated with either Party, who is experienced in the biopharmaceutical industry and who is able to take on an obligation of confidentiality to both Parties (such individual, the "**Gatekeeper**"). Gilead will pay the Out-of-Pocket Costs for the Gatekeeper. The Gatekeeper will be required to keep the identity of any Proposed Research Target Combinations confidential and not disclose the identity of any Proposed Research Target Combinations to MacroGenics or its Affiliates except as otherwise set forth in Section 5.1(c) (Confirmed Research Target Combinations).

(c) **Confirmed Research Target Combinations**. To exercise a Research Target Nomination Right, Gilead shall, within the Research Target Selection Period, notify the Gatekeeper in writing of the identity of a given Research Target Combination that Gilead wishes to nominate (each, a "**Proposed Research Target Combination**"). Gilead shall [***]. Notwithstanding the foregoing, Gilead shall notify MacroGenics in writing of the

identity of the Effector Target that Gilead intends to nominate in a given Research Target Combination [***]; *provided* that, in the event that such Effector Target constitutes an Other Effector Target, Gilead shall have the right to include such Other Effector Target in a Proposed Research Target Combination solely with MacroGenics' prior written approval (which may be withheld in MacroGenics' sole discretion). [***] Gatekeeper's receipt of such notice from Gilead, the Gatekeeper will notify MacroGenics that Gilead nominated a Proposed Research Target Combination. Within [***] Gatekeeper, MacroGenics will submit a schedule of the current Unavailable Target Combinations. The Gatekeeper will verify whether the Proposed Research Target Combination is on the list of Unavailable Target Combinations and notify the Parties in writing if the Proposed Research Target Combination is not an Unavailable Target Combination. If the Gatekeeper confirms that the Proposed Research Target Combination is not an Unavailable Target Combination, then the Proposed Research Target Combination shall be deemed to be a "**Confirmed Research Target Combination**" as of the date of such notification by the Gatekeeper. If the Gatekeeper notifies the Parties that the Proposed Research Target Combination is an Unavailable Target Combination, then Gilead shall [***] Proposed Research Target Combinations in accordance with the procedure set forth in this Section 5.1(c) (Confirmed Research Target Combinations), [***] two (2) Confirmed Research Target Combinations. Upon the expiration of the Research Target Selection Period, Gilead shall no longer have the right to nominate any Proposed Research Target Combination, except as set forth in Section 5.1(d) ([***]).

(d) **[***]**. Within the period of [***] **Period**"), Gilead shall have [***] the Research Target Combination for either Research Program. To exercise such [***], Gilead will, [***] notify the Gatekeeper in writing of the [***] Research Target Combination that Gilead [***] Confirmed Research Target Combination and the procedure set forth in Section 5.1(c) (Confirmed Research Target Combinations) for confirming whether a Proposed Research Target Combination is not an Unavailable Target Combination (including the procedure applicable to any Proposed Research Target Combination that contains an Effector Target) will apply, *mutatis mutandis*.

5.2 **Research Program**. On a Research Target Combination-by-Research Target Combination basis, [***] Parties receive notification (in accordance with Section 5.1 (Research Target Nomination)) that a given Research Target Combination is a Confirmed Research Target Combination, the Parties shall, through the JSC, discuss in good faith and mutually agree upon a research and early development plan ("**Research Plan**"), which shall be attached hereto as **Schedule 5.2** (Research Plan), for which the overall objective is to generate and characterize Research Molecules and Research Products that are directed to the applicable Confirmed Research Target Combination, from which Gilead can select a product candidate to progress for further Development (such program with respect to a Confirmed Research Target Combination, a "**Research Program**"). The Research Plan shall: (a) establish the criteria for evaluating potential Research Molecule candidates; (b) define the deliverables, timelines and responsibilities of each Party through the progression of selecting Research Molecule candidates [***] (the "**Research Budget**"). On a Research Program-by-Research Program basis, Gilead shall, within [***] Research Plan for the Confirmed Research Target Combination that is the subject of such Research Program (such date of JSC approval of the initial Research Plan, the "**Research Target Combination License Date**"), [***] (the "**Research Target Combination License Fee**"). Effective as of the Research Target

Combination License Date, the applicable Confirmed Research Target Combination shall be deemed a "**Licensed Research Target Combination**", and the license granted under Section 3.1(a) (Research Term License) shall be deemed to be effective as to such Licensed Research Target Combination. The JSC shall
(i) review, discuss and determine whether to approve any updates or amendments to each Research Plan no less than once per Calendar Quarter; and (ii) oversee and facilitate cooperation and information transfer between the Parties in conducting the activities set forth in each Research Plan. In addition, each Party shall have the right to propose additional amendments to a Research Plan in connection with the progress of the applicable Research Program for the JSC to review, discuss and determine whether to approve. Any proposed amendments to a Research Plan will become effective only upon approval by the JSC. During the applicable Research Term for each Research Program, each Party shall not, and shall procure that its Affiliates, Sublicensees and Permitted Subcontractors shall not, perform any pre-clinical or clinical Development activities with respect to any Research Molecules or Research Products under such Research Program other than the activities expressly set forth in applicable Research Plan.

5.3 **Performance Standards**. During the Research Term for each Research Program, each Party shall use Commercially Reasonable Efforts to conduct the activities allocated to such Party in the applicable Research Plan and in compliance with all Applicable Laws and Regulations, including applicable national and international (e.g., ICH, GCP, GLP and cGMP) guidelines, and the JSC shall oversee and facilitate the conduct of such activities. Additionally, each Party shall use Commercially Reasonable Efforts to provide any assistance required by the other Party to address or complete activities for which such other Party is responsible pursuant to the Research Plans, or as otherwise mutually agreed upon by the Parties.

5.4 **Research Plan Costs**. [***] conduct of activities under each Research Program. [***] in connection with the conduct of Research Program activities allocated to [***] under the applicable Research Plan, to the extent such costs are [***] Research Budget, [***]. If MacroGenics [***] in performing the Research Program activities allocated to MacroGenics under the applicable Research Plan that [***] Research Budget, [***] (including in connection with the performance of Regulatory Activities pursuant to Section 7.2 (Research Molecules and Research Products)) [***] Research Program activities that is [***] the JSC and the JSC shall promptly discuss in good faith and approve an amendment to the Research Plan or Research Budget in accordance with Section 2.1 (Joint Steering Committee) that [***] Research Budget or [***] applicable Research Plan). For clarity, in the absence of the JSC approving an amendment to the Research Plan or Research Budget, [***].

5.5 **Research Term**. On a Research Program-by-Research Program basis, the term of a Research Program shall commence on the Research Target Combination License Date for the applicable Research Target Combination to which such Research Program is directed and continue until the earlier of
(a) the end of the Research Program Opt-In Term for such Research Program, in the event that Gilead does not exercise its Research Program Opt-In for such Research Program, (b) the Research Program Opt-In Effective Date for such Research Program and (c) [***] of the Research Target Combination License Date for the Licensed Research Target Combination that is the subject of such Research Program (the "**Research Term**" for such Research Program). On a Research Program-by-

Research Program basis, if Gilead exercises the Research Program Opt-In for a Research Program, then MacroGenics will, and will cause its Affiliates and Permitted Subcontractors to, cooperate with Gilead as Gilead may reasonably request to facilitate an orderly transition of the Development of the applicable Research Molecules and Research Products to Gilead or its designee. During the Research Term for a given Research Program, Gilead shall have right, upon reasonable request and at such times mutually agreed upon by the Parties, to conduct a periodic assessment of the intellectual property landscape for the Research Molecules under such Research Program (an "**IP Assessment**"). MacroGenics shall reasonably cooperate with Gilead in its conduct of such IP Assessment.

5.6 **Records; Updates**. During the Term and [***], each Party shall maintain complete, current and accurate records of all activities conducted by or on behalf of such Party pursuant to each Research Plan, and all data and other information resulting from the performance of such activities. Such records shall fully and properly reflect all work performed and results achieved in the performance of any Research Program activities in good scientific manner appropriate for regulatory and patent purposes. Additionally, during each JSC meeting, each Party shall provide the JSC with an update on the results and progress of any Research Program activities conducted by or on behalf of such Party since the prior JSC meeting. In addition, on a Calendar Quarter basis during the Research Term for a given Research Program, each performing Party shall provide the other Party with access to all information and data generated by or on behalf of such Party under such Research Program, with such access being provided through a secure dataroom or such other format mutually agreed upon by the Parties.

5.7 **Data Ownership**. [***].

5.8 **Research Program Opt-In**.

(a) **Opt-In Grant**. On a Research Program-by-Research Program basis, Gilead has an exclusive option to obtain an exclusive, royalty-bearing, non-transferable (except in accordance with Section 19.4 (Assignment; Change of Control)) license under the MacroGenics Research Technology, with the right to grant sublicenses [***], to Exploit Research Molecules and Research Products that are directed to the applicable Licensed Research Target Combination that is the subject of such Research Program in the Field in the Territory (the "**Research Program Opt-In**").

(b) **Research Program Data Package**. MacroGenics shall deliver each Research Program Data Package to Gilead [***] Research Program that were required to generate the applicable Research Program Data Package ([***], for purposes of the Research Program Data Package, being deemed [***].

(i) **Deficiency Notice**. [***] Research Program Data Package, Gilead may provide MacroGenics with a Deficiency Notice if Gilead believes in good faith that the purported Research Program Data Package provided by MacroGenics does not contain all of the information required to be provided in such Research Program Data Package, which Deficiency Notice will reasonably specify any missing item(s). MacroGenics will modify such Research Program Data Package to reflect such comments and will provide an updated Research Program Data Package that includes the missing information [***]-Deficiency Notice; *provided* that, for clarity, MacroGenics shall not be required to generate any additional data that is not in existence as of the date of delivery of such Research Program Data Package (including re-running any previously performed studies) to the extent such data is supplementary and not required to be set forth in such Research Program Data Package or comply with any requests to modify the presentation or formatting of the then- existing data unless required to be set forth in such Research Program Data Package. If Gilead provides a Deficiency Notice, then the applicable Research Program Opt-In Term will be extended [***].

(ii) **Cooperation**. In addition, [***], Gilead may, itself or through the JSC, provide MacroGenics with written notice requesting assistance and cooperation from MacroGenics in analyzing such Research Program Data Package, including a request for a discussion with MacroGenics representative(s) who have relevant knowledge and information regarding such Research Program Data Package, and MacroGenics will use good faith efforts to provide any such assistance and cooperation reasonably requested by Gilead. Additionally, during the applicable Research Program Opt-In Term, Gilead shall use good faith efforts to assist MacroGenics in its efforts to coordinate and compile the

contents of the Research Program Data Package in advance of completion of the activities under the Research Program and to respond to MacroGenics' queries regarding the formatting and completeness of such aspects of the Research Program Data Package.

(c) **Option Exercise**. On a Research Program-by-Research Program basis, Gilead may exercise the Research Program Opt-In for a Research Program by providing written notification to MacroGenics that it is doing so ("**Research Program Opt-In Exercise Notice**") [***] (the "**Research Program Opt-In Term**"). Upon MacroGenics' receipt of a Research Program Opt-In Exercise Notice for a Research Program during the Research Program Opt-In Term, the license to Gilead under Section 3.1(b) (Exploitation Licenses for Research Molecules and Research Products) for the Research Molecules and Research Products that are directed to the applicable Licensed Research Target Combination that is the subject of such Research Program [***] ("**Research Program Opt-In Date**") [***].

5.9 **Technology Transfer**. [***] Research Program Opt-In Effective Date for a Research Program, MacroGenics will provide Gilead with copies of all MacroGenics Research Know-How (other than MacroGenics Research Know-How relating to the Manufacture of the applicable Research Molecules and Research Products, the initial transfer of which will be performed in accordance with Section 9.4 (Manufacturing Technology Transfer)) that [***] Research Molecules and Research Products. To facilitate each such transfer, the Parties may mutually agree upon a written technology transfer plan to such MacroGenics Research Know-How ("**Research Program Technology Transfer Plan**"), which will set forth a process and schedule for the transfer of such MacroGenics Research Know-How, projected levels of support to be provided by each Party, allocation among the Parties of the major activities for such technology transfer and an overall timeline for its progress and completion. Each Party shall complete the activities allocated

to it under each Research Program Technology Transfer Plan (if any such plan is agreed upon). Thereafter, on a periodic basis [***] MacroGenics Research Know-How (the "**Research Program Technology Transfer Period**") as Gilead may reasonably request, MacroGenics will provide to Gilead copies of all MacroGenics Research Know-How that is (a) created, developed, invented or otherwise made in the [***] MacroGenics Research Know-How, [***] Research Molecules and Research Products in accordance with the terms of this Agreement [***] Research Plan. In addition to providing copies of the MacroGenics Research Know-How in accordance with this Section 5.9 (Technology Transfer), MacroGenics will make its personnel reasonably available to Gilead during the Research Program Technology Transfer Period, at Gilead's expense, so as to enable Gilead to practice under the MacroGenics Technology in connection with the Exploitation of the applicable Research Molecules and Research Products. Other than as set forth in the preceding sentence, [***] MacroGenics Research Know- How in accordance with this Section 5.9 (Technology Transfer).

5.10 **Research Program Termination**. On a Research Program-by-Research Program basis, in the event that (a) Gilead does not exercise the Research Program Opt-In during the Research Program Opt-In Term for a Research Program or pay the Research Program Opt-In Exercise Fee in accordance with Section 5.8(c) (Option Exercise) or (b) the Outside Date for such Research Program occurs prior to the Research Program Opt-In Effective Date for such Research Program, the following shall occur: (i) such Research Program and all rights and licenses granted by one Party to the other in connection therewith (including pursuant to Sections 3.1(a) (Research Term License), 3.1(b) (Exploitation Licenses for Research Molecules and Research Products) and 3.2(a) (Research Term License)) shall terminate in their entirety,
(ii) this Agreement shall terminate with respect to such Research Program as well as all Research Products and Research Molecules with respect to such Research Program and for clarity, (1) Research Molecules with respect to such Research Program shall not be deemed Licensed Molecules and Research Products with respect to such Research Program shall not be deemed Licensed Products and (2) no Research Product Development Milestone Payments, Commercial Milestone Payments or royalties, in each case, will be due for Research Products with respect to such Research Program, (iii) MacroGenics' exclusivity obligations pursuant to Section 3.10(b) (Research Program Exclusivity) with respect to the applicable Research Molecules and Research Products shall terminate immediately and (iv) Gilead shall promptly return to MacroGenics or destroy (at MacroGenics' election) any and all MacroGenics Research Know-How and any other Confidential Information of MacroGenics or its Affiliates solely related to the applicable Research Molecules, Research Products or such Research Program, in accordance with Section 12.1(e) (Obligations Upon Termination). For the avoidance of doubt, upon the early termination of a given Research Program in accordance with this Section 5.10 (Research Program Termination), MacroGenics shall have no further obligations to Gilead with respect to the applicable Research Target Combination and any Research Molecule or Research Product and shall have the right to Exploit (or to not Exploit) in any manner whatsoever any Research Molecule or Research Product, in MacroGenics' sole discretion, without provision or disclosure of any related information or other Know-How to Gilead in connection therewith.

6. **Gilead Development**.

6.1 **Antitrust Filings**.

(a) **Filings**. If Gilead determines, in its sole discretion, that any filings, notices, applications or other submissions under Antitrust Law are necessary or advisable in connection with Gilead's exercise of the CD123 Option or a Research Program Opt-In ("**Antitrust Filing**"), then Gilead and MacroGenics will submit such Antitrust Filings (in draft form where applicable) as soon as reasonably practicable. MacroGenics will furnish in a timely manner all information, documents and assistance as

[***], in connection with the antitrust assessment and, if applicable, with the preparation of any such Antitrust Filings, *provided* that such information may be redacted as necessary to address legal privilege or confidentiality concerns, or to comply with Applicable Laws and Regulations, and that any information that is considered competitively sensitive may be designated as for "outside antitrust counsel only". In connection with any such Antitrust Filing, the Parties will furnish promptly to the United States Federal Trade Commission, the Antitrust Division of the United States Department of Justice and any other applicable Governmental Entity any additional information requested within their authority under the HSR Act or other Antitrust Law, use reasonable efforts to obtain antitrust clearance for the transactions contemplated hereunder as soon as practicable and otherwise cooperate with each other in any such governmental antitrust clearance process. [***]. Notwithstanding the foregoing, nothing in this Section 6.1(a) (Filings) or otherwise in this Agreement will require Gilead or its Affiliates to, in connection with obtaining antitrust clearance for any of the transactions contemplated hereunder, (i) propose, negotiate, effect or agree to, the sale, divestiture, license or other disposition of any assets or businesses of Gilead or any of its Affiliates or otherwise take any action that limits its freedom of action with respect to, or its ability to retain, any of the businesses, product lines or assets of Gilead or any of its Affiliates, or (ii) litigate or otherwise formally oppose any determination (whether judicial or administrative in nature) by a Governmental Entity seeking to impose any of the restrictions referenced in clause (ii) above.

(b) **Effectiveness**.

(i) **CD123 Development Program Effectiveness**. Following the CD123 Option Exercise Date, the license set forth in Section 3.1(d) (Exploitation License for CD123 Molecules and CD123 Products) [***], the "**CD123 Option Effective Date**." In addition, [***] CD123 Option Exercise Notice, the CD123 Development Term [***].

(ii) **Research Programs Effectiveness**. On a Research Program-by-Research Program basis, following the Research Program Opt-In Date for a Research Program, the license set forth in Section 3.1(b) (Exploitation Licenses for Research Molecules and Research Products) for the Research Molecules and Research Products that are directed to the applicable Licensed Research Target Combination [***], the "**Research Program Opt-In Effective Date**." [***] Research Program Opt-In Exercise Notice for a Research Program, the Research Term for such Research Program [***].

(c) **Outside Date**. If (i) Gilead determines any Antitrust Filings are necessary or advisable in connection with Gilead's exercise of the CD123 Option or a Research Program Opt-In and (ii) the CD123 Option Effective Date or applicable Research Program Opt-In Effective Date does not occur on or before [***] after the CD123 Option Exercise Date or applicable Research Program Opt-In Date (the "**Initial Outside Date**"), then Gilead [***] provide written notice to MacroGenics on or prior to the applicable Initial Outside Date to extend such Initial Outside Date by [***] (the Initial Outside Date, as it may be extended, if applicable, the "**Outside Date**");

provided, *however*, that the Parties may mutually agree to extend the Outside Date if such extension is necessary for Gilead to litigate, defend against, or otherwise contest any challenge, claim, lawsuit or other cause of action in connection with the Gilead's exercise of the CD123 Option Effective Date or applicable Research Program Opt-In Effective Date pursuant to or under any Antitrust Law.

(d) **Further Assurances**. Without limiting the foregoing obligations in this Section 6.1 (Antitrust Filings), each Party will promptly notify the other of the receipt and content of any inquiries or requests for additional information made by any Governmental Entity in connection with Gilead's exercise of the CD123 Option or a Research Program Opt-In and keep the other apprised on a prompt basis of the status of any such inquiry or request. Each Party will promptly inform the other Party of any oral communication with, and provide copies of written communications with, any Governmental Entity regarding Gilead's exercise of the CD123 Option or a Research Program Opt-In. Except as prohibited by Applicable Law and Regulations, no Party will independently participate in any meeting or conference call with any Governmental Entity in respect of any such filings, investigation or other such inquiry without giving the other Party prior notice of the meeting and, to the extent permitted by such Governmental Entity, the opportunity to attend and participate.

6.2 **CD123 Molecules and CD123 Products**. After the CD123 Option Effective Date, Gilead shall [***], for the Development of the CD123 Molecules and CD123 Products. Gilead shall use Commercially Reasonable Efforts to Develop [***]. After the CD123 Option Effective Date, Gilead [***] Development or obtaining Regulatory Approval of any CD123 Molecules or CD123 Products other than as set forth in this Section 6.2 (CD123 Molecules and CD123 Products).

6.3 **Research Molecules and Research Products**. On a Research Program-by-Research Program basis, after the applicable Research Program Opt-In Effective Date, Gilead [***] Development of each Research Molecule and Research Product. Gilead shall use Commercially Reasonable Efforts to Develop [***]. After the Research Program Opt-In Effective Date for a Research Program, Gilead will have no other diligence obligations with respect to the Development or obtaining Regulatory Approval of any Research Molecules or Research Products for such Research Program other than as set forth in this Section 6.3 (Research Molecules and Research Products).

6.4 **Performance Standards**. Each Party shall conduct all Development activities with respect to the Licensed Molecules and Licensed Products in compliance with all Applicable Laws and Regulations, including applicable national and international (e.g., ICH, GCP, GLP and cGMP) guidelines.

6.5 **Records**. [***] shall maintain complete, current and accurate records of all activities conducted by or on behalf of Gilead in furtherance of the Development of the Licensed Molecules and Licensed Products after the CD123 Option Effective Date and each Research Program Opt-In Effective Date, as applicable. Such records shall fully and properly reflect all work performed and results achieved in the performance of such Development activities in good scientific manner appropriate for regulatory and patent purposes.

6.6 **Development Reporting**. On a Program-by-Program basis, [***] Licensed Product for a Program in the Field in the Territory, Gilead shall provide MacroGenics [***] Development of Licensed Molecules and Licensed Products under such Program during [***], describing, among other matters, those:-[***].

6.7 **Data Ownership**. [***].

7. **Regulatory**.

7.1 **CD123 Molecules and CD123 Products**.

(a) **CD123 Development Term**. During the CD123 Development Term, MacroGenics shall be solely responsible, [***], for all Regulatory Activities related to the CD123 Molecules and CD123 Products in the Field in the Territory, and shall own all Regulatory Submissions (including Regulatory Approvals) generated with respect to CD123 Molecules or CD123 Products during the CD123 Development Term. Gilead shall have the right, but not the obligation, to review and comment on all Regulatory Submissions for CD123 Molecules and CD123 Products and MacroGenics shall reasonably incorporate any such comments in such Regulatory Submissions prior to filing thereof and shall promptly provide copies of any Regulatory Submissions (including all material updates thereof) to Gilead. Gilead (or its designee) shall have a right to participate (and MacroGenics may otherwise request Gilead to participate) in meetings and interactions with the Regulatory Authorities that solely relate to any CD123 Molecule or CD123 Product. Gilead shall assist MacroGenics, as reasonably requested by MacroGenics, in connection with the preparation and filing of Regulatory Submissions related to the combination of the [***] with the CD123 Product, including by providing MacroGenics with all necessary data or other information in Gilead's possession related to (i) [***] Gilead or (ii) the Required Regulatory Activities if Gilead elects to conduct such activities pursuant to Section 4.2(b) (Required Regulatory Activities).

(b) **After the CD123 Development Term**. After the expiration (but not early termination) of the CD123 Development Term (with Gilead having exercised the CD123 Option during such time), Gilead shall have the sole right and sole control over [***], all Regulatory Activities related to the CD123 Molecules and CD123 Products, except for any Regulatory Activities relating to the MacroGenics Manufacturing Facilities, including any Regulatory Authority inspections with respect thereto (for which matters MacroGenics shall have responsibility for in accordance with the Clinical Supply Agreement). MacroGenics will support Gilead as may be reasonably requested by Gilead from time to time in connection with Gilead's preparation, submission to Regulatory Authorities and maintenance of Regulatory Submissions for CD123 Products, including, upon Gilead's reasonable request, attending meetings with Regulatory Authorities regarding any CD123 Product. [***] Regulatory Activities [***] related to the CD123 Molecules or CD123 Products. Gilead shall [***] Regulatory Activities requested by Gilead after the CD123 Option Effective Date, in accordance with Section 11.1 (Development Costs, Plan Costs and Manufacturing Costs).

7.2 **Research Molecules and Research Products**. Gilead shall have the sole right and sole control over all Regulatory Activities to be undertaken with respect to Research Molecules and Research Products in connection with any Research Program for which Gilead has exercised the Research Program Opt-In. MacroGenics will support Gilead as may be reasonably requested by Gilead from time to time in connection with Gilead's preparation, submission to Regulatory Authorities and maintenance of Regulatory Submissions for Research Products, including, upon Gilead's reasonable request, attending meetings with Regulatory Authorities regarding any Research Product. [***] related to the Research Molecules or Research Products; *provided* that, with respect to MacroGenics, (a) prior to the Research Program Opt-In Effective Date, subject to Section 5.4 (Research Plan Costs), [***] or (b) after the applicable Research Program Opt-In Effective Date, [***] Gilead. Gilead shall [***].

7.3 **Transfer of Regulatory Materials**.

(a) **Regulatory Transfer**. Promptly after the CD123 Option Effective Date, MacroGenics will, or will cause its designee to, transfer and assign (and hereby does assign and transfer) to Gilead all rights, title and interests in and to all INDs and all other Regulatory Submissions that solely relate to MGD024 and the MGD024 Product (the "**Assigned Regulatory Materials**"), including copies of

all such Assigned Regulatory Materials in electronic format, to the extent the same have not been previously made available to Gilead, which transfer will [***] the CD123 Option Effective Date.

(b) **Cooperation**. Upon a Party's written request, the other Party will execute and deliver, or will cause to be executed and delivered, to the requesting Party such endorsements, assignments, commitments, acknowledgements and other documents as may be necessary (a) to assign, convey, transfer and deliver to Gilead all of MacroGenics' or its applicable Affiliate's or designee's rights, title and interests in and to the applicable Assigned Regulatory Materials, or (b) as a result of the transfer to Gilead of the Assigned Regulatory Materials, including submitting to each applicable Regulatory Authority or other governmental authority in the Territory a letter or other necessary documentation (with copy to the other Party) notifying such Regulatory Authority or other governmental authority of, or otherwise giving effect to, the transfer of ownership to Gilead of the Assigned Regulatory Materials in the Field in the Territory as provided in Section 7.3(a) (Regulatory Transfer).

7.4 **Right of Reference**. MacroGenics will grant, and hereby does grant, to Gilead, effective upon the CD123 Option Effective Date, a "Right of Reference," as that term is defined in 21 C.F.R. § 314.3(b) (or any successor rule or analogous Applicable Laws and Regulations recognized outside of the United States), to all Regulatory Submissions pertaining to the CD123 Products in the Field submitted by or on behalf of MacroGenics or its Affiliates. Gilead and its Sublicensees may use such right of reference solely for the purpose of seeking, obtaining, supporting and maintaining Regulatory Approval and any Pricing and Reimbursement Approvals, as applicable, for the CD123 Products in the Field in the Territory. MacroGenics will take such actions as may be reasonably requested by Gilead to give effect to the intent of this Section 7.4 (Right of Reference), including, if requested by Gilead, (a) providing a signed statement that Gilead may rely on, and that the applicable Regulatory Authority may access, MacroGenics' Regulatory Submissions in support of Gilead's application for Regulatory Approval for any CD123 Product, and (b) providing Gilead with any underlying raw data or information submitted by MacroGenics

to the Regulatory Authority with respect to any Regulatory Submissions Controlled by MacroGenics or any of its Affiliates that solely relates to any CD123 Product.

7.5 **Adverse Event Reporting; Global Safety Database**. During the CD123 Development Term, MacroGenics shall establish and maintain a drug safety database for MGD024 and the MGD024 Product, and shall be responsible for monitoring of all related clinical experiences, safety monitoring, pharmacovigilance surveillance and compliance and filing of all required safety reports to all Regulatory Authorities in connection therewith (collectively, "**Safety/AE Matters**"). MacroGenics will use reasonable efforts to complete the transfer to Gilead of such drug safety database for MGD024 and the MGD024 Product promptly following the CD123 Option Effective Date and, following such transfer, Gilead will have the sole right and responsibility for holding and maintaining such drug safety database. On a Research Program-by-Research Program basis, Gilead shall have the sole right and sole control over, at its sole cost and expense, all Safety/AE Matters in connection with the Research Molecules or Research Products for a given Research Program from and after the Research Program Opt-In Effective Date for such Research Program.

7.6 **Recalls**. On a Program-by-Program basis, during the Collaboration Term for a Program, MacroGenics will be responsible for any recalls, market suspensions or market withdrawals (collectively, "**Recalls**") for the Licensed Products for such Program. On a Program-by-Program basis, after completion of the Collaboration Term for a Program, Gilead shall have the sole right and sole control over any Recalls for the Licensed Products for such Program and MacroGenics will reasonably cooperate in any such Recall efforts. Gilead shall promptly notify MacroGenics in writing of any decision or obligation to undertake a Recall of any Licensed Product and to the extent such Recall is with respect to the MGD024 Product, Gilead shall include in such notice the reasoning behind such determination and any supporting facts. Subject to Article 15 (Indemnification), (a) if a Recall resulted from a Party's or its Affiliate's breach of its obligations under this Agreement or the Clinical Supply Agreement, or from such Party's or its Affiliate's gross negligence or willful misconduct, then such Party shall bear the expense of such Recall and (b) with respect to any Recall not covered by clause (a), Gilead shall be responsible for all costs of such Recall.

7.7 **Conflict**. If the Parties rights and obligations in this Article 7 (Regulatory) conflict with the Parties rights and obligations with respect to Development or Commercialization activities under this Agreement, then this Article 7 (Regulatory) will control solely with respect to any such conflict.

8. **Commercialization**.

8.1 **Responsibility/Diligence**. Effective upon the CD123 Option Effective Date, Gilead shall have the sole right and sole control over, [***] Commercialization of the CD123 Products in the Territory and shall [***] Gilead has received Regulatory Approval for a CD123 Product. Effective upon the Research Program Opt-In Effective Date for a Research Program, Gilead shall have the sole right and sole control over, [***] Commercialization of the Research Products for such Research Program in the Territory and shall use Commercially Reasonable Efforts to [***]. Gilead will have no other diligence obligations with respect to the Commercialization of any Licensed Products other than as set forth in this Section 8.1 (Responsibility/Diligence).

8.2 **Trademarks**. Gilead shall have the sole right and sole control over, at its own expense, all matters relating to the use of, and shall own, all Trademarks used in the Commercialization of Licensed Products, which may vary by country or within a country, but excluding the MacroGenics Platform Trademarks, including the selection, filing, prosecution, maintenance, defense and enforcement thereof.

9. **Manufacture and Supply**.

9.1 **MGD024 and MGD024 Products**.

(a) **Clinical Supply**.

(i) **Prior to the CD123 Option Effective Date**. Commencing on the Effective Date and continuing until the CD123 Option Effective Date, MacroGenics shall be solely responsible, [***] Manufacture, either by itself or through one or more Third Parties selected by MacroGenics in accordance with Section 3.4 (Subcontractors), of MGD024 Products for use in connection with any Development activities conducted by or on behalf of the Parties under the CD123 Development Plan (including, for clarity, the Phase 1 Clinical Trial of MGD024 Product). [***] CD123 Development Term, subject to the terms of MacroGenics' agreements with its Third Party CMOs responsible for the Manufacture of MGD024 Product (or any component thereof) as of the Effective Date, which agreements are set forth on **Schedule 9.1(a)(i)** (Existing CMO Agreements) (collectively, the "**Existing CMO Agreements**"), MacroGenics will use Commercially Reasonable Efforts to [***] MGD024 Drug Products [***]; *provided* that, Gilead [***] Manufacturing and supplying to Gilead any such quantities of MGD024 Product in excess of the quantities [***] for such quantities of MGD024 Drug Product. Notwithstanding the foregoing, upon the expiration (solely in the event that Gilead does not exercise the CD123 Option during such time) or termination of the CD123 Development Term, Gilead shall, upon MacroGenics' request, transfer to MacroGenics, [***], any MGD024 Drug Product that has not been used by Gilead as of such date.

(ii) **During the Clinical Supply Term**. Subject to Section 9.1(a)(v) (Failure to Supply), [***] (the "**Clinical Supply Term**"), MacroGenics shall use Commercially Reasonable Efforts to Manufacture or have Manufactured, itself or through its Permitted Subcontractors in accordance with Section 3.4 (Subcontractors), all clinical supply of MGD024 Drug Product for Gilead pursuant to the terms of the Clinical Supply Agreement entered into between the Parties; *provided* that [***], MacroGenics will supply Gilead with all clinical supply of MGD024 Drug Product required for Gilead's Development activities on and after the CD123 Option Effective Date and Gilead shall [***] in accordance with Section 11.1 (Development Costs, Plan Costs and Manufacturing Costs).

(iii) **Clinical Supply Agreement**. [***] (the "**Clinical Supply Agreement**") that will set forth the terms and conditions for MacroGenics' provision, during the Clinical Supply Term, of clinical supplies of the MGD024 Drug Product to Gilead for use in Clinical Trials to be conducted by Gilead using MGD024 Products. The Clinical Supply Agreement will include [***]. Under the Clinical Supply Agreement, MacroGenics shall provide batches of MGD024 Drug Product [***] (the "**MGD024 Transfer Price**"). The Clinical Supply Agreement will also include [***]. The Parties shall [***] that shall further address and govern issues related to the quality of the MGD024 Drug Product to be supplied by MacroGenics pursuant to the Clinical Supply Agreement (the "**Clinical Quality Agreement**"). MacroGenics will supply, or cause to be supplied, to Gilead the MGD024 Drug Product, in accordance with the provisions of this Agreement, and once executed, the Parties shall comply with their respective obligations to supply, or cause to be supplied, the MGD024 Drug Product, in accordance with the provisions of the Clinical Supply Agreement and the Clinical Quality Agreement.

(iv) **Gilead Responsibilities**. For clarity, during the Clinical Supply Term, Gilead will have the sole right and control over the Packaging and Labeling, either by itself or through one or more Third Parties, of the MGD024 Drug Product for Gilead's use in Clinical Trials in the Field in the Territory. Subject to completion of the Manufacturing Technology Transfer of all relevant MacroGenics CD123 Know-How in accordance with Section 9.4 (Manufacturing Technology Transfer), following the expiration of the Clinical Supply Term, Gilead shall have the sole right and control over the Manufacture, either by itself or through one or more Third Parties, of MGD024 Products and any other CD123 Products for Development activities conducted by or on behalf of Gilead in the Field in the Territory.

(v) **Failure to Supply**. If, (1) in any given [***] of the [***] of MGD024 Drug Product ordered by Gilead for delivery with respect to such period is not delivered or is delivered more than [***] of MGD024 Drug Product ordered by Gilead for delivery for each [***] Gilead will have the right to terminate the Clinical Supply Term after providing written notice to MacroGenics of such

failure to supply. For clarity, non-conforming MGD024 Drug Product will be deemed not to have been delivered unless and until MacroGenics supplies conforming replacement MGD024 Drug Product. Notwithstanding anything to the contrary herein, the existence of a supply failure pursuant to this Section 9.1(a)(v) (Failure to Supply) shall not, in itself, constitute a breach of this Agreement by MacroGenics (although, for clarity, the underlying cause of such supply failure may be a breach of this Agreement).

(b) **Commercial Supply**. Gilead shall have the sole right and control over the Manufacture, either by itself or through one or more Third Parties, of MGD024 Products and any other CD123 Products for Commercialization activities conducted by or on behalf of Gilead in the Field in the Territory.

9.2 **Research Molecules and Research Products**. Gilead shall have the sole right and sole control over the Manufacture of clinical and commercial supply of Research Molecules and Research Products, [***] Gilead shall ensure that all clinical and commercial supplies of Research Molecules and Research Products are Manufactured in accordance with all Applicable Laws and Regulations.

9.3 **Observation by Gilead**. On a Program-by-Program basis, after (a) with respect to the CD123 Development Program, the CD123 Option Exercise Date and (b) with respect to a Research Program, the Research Program Opt-In Date for such Research Program, MacroGenics will provide Gilead with the opportunity, upon Gilead's reasonable request, [***] the Manufacturing processes and procedures for the Licensed Molecules and Licensed Products related to such Program (e.g., review assays, batch records, and release processes and procedures) for the purpose of enabling Gilead (or a Third Party contract manufacturer ("**CMO**") designated by Gilead) to Manufacture such Licensed Molecules and Licensed Products pursuant to Section 9.4 (Manufacturing Technology Transfer). If MacroGenics utilizes a CMO for the Manufacture of any Licensed Molecules or Licensed Products, then MacroGenics will use Commercially Reasonable Efforts, including entering into a three- party confidentiality agreement with Gilead and such CMO, to enable Gilead to exercise its observational rights under this Section 9.3 (Observation by Gilead) with respect to any Manufacturing activities for the Licensed Molecules and Licensed Products being conducted by such CMO.

9.4 **Manufacturing Technology Transfer**. On a Program-by-Program basis, [***] (a) with respect to the CD123 Development Program, the CD123 Option Effective Date and (b) with respect to a Research Program, the Research Program Opt-In Effective Date for such Research Program, MacroGenics will work with Gilead to transfer to Gilead (or its designee) all MacroGenics Licensed Know-How [***] for the applicable Program, to the extent not previously transferred to Gilead under this Agreement, including by providing copies or samples of relevant documentation, materials, and other embodiments of any such MacroGenics Licensed Know-How, and by making available its qualified technical personnel on a reasonable basis to consult with Gilead with respect to such Know-How (for each Program, a "**Manufacturing Technology Transfer**"). Each Manufacturing Technology Transfer [***] Manufacturing Processes and Manufacture the applicable Licensed Product, and shall be subject to a written plan developed and approved by the Parties through the JSC in good faith with respect to the Manufacturing Technology Transfer (the "**Manufacturing Transition Plan**"). Each Manufacturing Transition Plan [***] performance of the activities set forth in the applicable Manufacturing Transition Plan (each, a "**Manufacturing Transition Budget**"). The Parties shall use Commercially Reasonable Efforts to implement each Manufacturing Technology Transfer to Gilead or its designee in accordance with the applicable Manufacturing Transition Plan. [***] Manufacturing Technology Transfer for the relevant Program(s). [***] MacroGenics to conduct activities under the Manufacturing Transition Plan for such Program(s) in accordance [***] MacroGenics shall provide notice to the JSC and the JSC shall promptly discuss in good faith and consider whether to implement any amendments to the Manufacturing Transition Plan [***].

9.5 **MacroGenics Manufacturing Support**. The Parties understand and agree following the Manufacturing Technology Transfer contemplated by Section 9.4 (Manufacturing Technology Transfer) it may be necessary for Gilead from time to time to seek assistance and cooperation from MacroGenics in connection with the Manufacture of Licensed Products, including with respect to activities performed to increase production quantities of the Licensed Products. MacroGenics will use reasonable efforts to provide any such assistance and cooperation reasonably requested by Gilead [***].

10. **Payments**.

10.1 **Upfront Payment**. Within [***] after the Effective Date, Gilead shall pay to MacroGenics Sixty Million US Dollars (US$60,000,000), which shall be non-creditable and non- refundable against any other payments due under this Agreement.

10.2 **Development and Regulatory Milestone Payments**.

(a) **CD123 Products**. Subject to the terms and conditions of this Agreement, Gilead shall pay to MacroGenics the one-time, non-creditable, non-refundable milestone payments set forth in the table below in this Section 10.2(a) (CD123 Products) after the first achievement of the applicable milestone events by a CD123 Product, whether such achievement is by or on behalf of Gilead, its Affiliate or any Sublicensee of Gilead (each event, a "**CD123 Development Milestone Event**" and each payment, a "**CD123 Development Milestone Payment**"). For clarity, each of the CD123 Development Milestone Payments shall be payable only once, regardless of the number of times the corresponding CD123 Development Milestone Event is achieved. Gilead will promptly notify MacroGenics upon the achievement of each CD123 Development Milestone Event and will pay the corresponding CD123 Development Milestone Payment within [***] following receipt of an invoice from MacroGenics for such CD123 Development Milestone Payment. If Gilead or its Affiliates or Sublicensees achieve all of the CD123 Development Milestone Events (regardless of the number of times such events occur or the number of CD123 Products that trigger such event), then the CD123 Development Milestone Payments payable by Gilead under this Section 10.2(a) (CD123 Products) will not exceed [***].

CD123 Development Milestones				
[***]	[***]	[***]		
		[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

(b) **Research Products**. Subject to the terms and conditions of this Agreement, on a Research Program-by-Research Program basis, Gilead shall pay to MacroGenics the one-time, non- creditable, non-refundable milestone payments set forth in the table below in this Section 10.2(b) (Research

Products) within [***] after the first achievement of the applicable milestone events by an Research Product for a Research Program, whether by or on behalf of Gilead, its Affiliate or any Sublicensee of Gilead (each event, a "**Research Product Development Milestone Event**" and each payment, a "**Research Product Development Milestone Payment**"). For clarity, each of the Research Product Development Milestone Payments shall be payable only once for each Research Program, regardless of the number of times the corresponding Research Product Development Milestone Event is achieved for such Research Program. If Gilead or its Affiliates or Sublicensees achieve all of the Research Product Development Milestone Events for a Research Program (regardless of the number of times such events occur or the number of Research Products that trigger such event for such Research Program), then the Research Product Development Milestone Payments payable by Gilead under this Section 10.2(b) (Research Products) for a Research Program will not exceed [***].

Research Milestones				
[***]	[***]	[***]		
		[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

(c) **Skipped Milestones**. The milestone events in Section 10.2(a) (CD123 Products) and Section 10.2(b) (Research Products) are intended to be successive with respect to each Licensed Product, such that if a particular milestone event set forth in the table above for a Licensed Product is not achieved prior to the achievement of the next milestone event set forth in the table above for such Licensed Product in such Indication (such non-achieved milestone event, a "**Skipped Milestone**"), then such Skipped Milestone shall be deemed to have been achieved upon the achievement of such next milestone event to occur, and the milestone payment for such Skipped Milestone shall be due and payable by Gilead to MacroGenics at the time the milestone payment is due and payable for such next milestone event. [***] shall be due and payable by Gilead to MacroGenics at the time the milestone payment for [***] is due and payable under this Section 10.2 (Development and Regulatory Milestone Payments).

10.3 **Commercial Milestone Payments**. Subject to the terms and conditions of this Agreement, Gilead shall pay to MacroGenics the one-time, non-creditable, non-refundable milestone payments set forth in the table below in this Section 10.3 (Commercial Milestone Payments) within [***] after the end of the Calendar Quarter after the first achievement of the applicable sales milestone event (each event, a "**Commercial Milestone Event**" and each payment, a "**Commercial Milestone Payment**"). For clarity: (a) the Commercial Milestone Payments in this Section 10.3 (Commercial Milestone Payments) shall be additive such that if multiple Commercial Milestone Events are achieved in the same Calendar Year, then the Commercial Milestone Payments for all such Commercial Milestone Events shall be payable with respect to such Calendar Year; (b) each of the Commercial Milestone Payments applicable to the CD123 Products shall be payable only once regardless of the number of times the corresponding Commercial Milestone Event is achieved; and (c) each of the Commercial Milestone Payments applicable to Research Products shall be payable only once for each Research Program (*i.e.*, upon achievement of the applicable Commercial Milestone Event by Research Products in each such Research Program). If Gilead or its Affiliates or Sublicensees achieve all of the Commercial Milestone Events (regardless of the number of times such events occur), then the Commercial Milestone Payments payable by Gilead under this Section
10.3 (Commercial Milestone Payments) will not exceed [***].

Commercial Milestone Event	Milestone Payment
The aggregate Net Sales of all CD123 Products in the Territory in a Calendar Year [***]	[***]
The aggregate Net Sales of all CD123 Products in the Territory in a Calendar Year [***]	[***]
The aggregate Net Sales of all CD123 Products in the Territory in a Calendar Year [***]	[***]
The aggregate Net Sales of all Research Products for a Research Program in the Territory in a Calendar Year [***]	[***]
The aggregate Net Sales of all Research Products for a Research Program in the Territory in a Calendar Year [***]	[***]
The aggregate Net Sales of all Research Products for a Research Program in the Territory in a Calendar Year [***]	[***]

10.4 **Royalties on Net Sales**.

(a) **Royalty Rate**. Subject to the terms and conditions of this Section 10.4 (Royalties on Net Sales), Gilead shall pay to MacroGenics, on a Research Product-by-Research Product and country- by-country basis in the Territory, an [***] royalty on Net Sales for each Research Product in

the Territory during the applicable Royalty Term for such Research Product in a country in the Territory. Additionally, subject to the terms and conditions of this Section 10.4 (Royalties on Net Sales), Gilead shall pay to MacroGenics on a CD123 Product-by-CD123 Product and country-by-country basis in the Territory, royalties at following percentages of Net Sales for all CD123 Product in the Territory during the applicable Royalty Term for a CD123 Product in a country in the Territory:

Annual Aggregate Net Sales of CD123 Products in the Territory	Royalty Rate
For that portion of aggregate annual Net Sales of all CD123 Products less than or equal to [***]	[***]
For that portion of aggregate annual Net Sales of all CD123 Products greater than [***]	[***]
For that portion of aggregate annual Net Sales of all CD123 Products greater than [***]	[***]

(b) **Expiration of the Royalty Term**. Upon expiration of the Royalty Term for a given Licensed Product in a given country (i) no further royalties will be payable in respect of sales of such Licensed Product in such country and no further Net Sales in such country will accrue toward the achievement of the Commercial Milestone Events by Gilead, and (ii) the licenses granted to Gilead under Section 3.1(b) (Exploitation Licenses for Research Molecules and Research Programs) and Section 3.1(d) (Exploitation License for CD123 Molecules and CD123 Products) with respect to the Exploitation of such Licensed Product in such country will automatically become fully paid-up, perpetual, irrevocable and royalty free. For clarity, only a single royalty will be payable as a result of one or more Valid Claims claiming a Licensed Product during the Royalty Term.

(c) **Royalty Reduction**.

(i) **Lack of Valid Claims**. On a Licensed Product-by-Licensed Product and country-by-country basis, if the composition of matter or method of use of a Licensed Product is no longer Covered by a Valid Claim within the Royalty Bearing Patents in a given country, then the royalties payable with respect to such Licensed Product in such country pursuant to Section 10.4(a) (Royalty Rate) will be [***].

(ii) **Biosimilar Product Market Effect**. If one or more Biosimilar Products with respect to a Licensed Product are on the market in a country and the volume of sales of such Biosimilar Products in such country constitute [***] or more of the total sales for such Biosimilar Products and Licensed Products in such country in a Calendar Quarter, then Gilead may reduce the royalty payments due for Net Sales for such Licensed Product in such country pursuant to Section 10.4(a) (Royalty Rate) by [***] in such Calendar Quarter and in each Calendar Quarter thereafter during the Royalty Term in which such market reduction exists.

(iii) [***] the royalties payable by Gilead to MacroGenics with respect to Net Sales of such Licensed Product pursuant to Section 10.4(a) (Royalty Rate) shall be reduced, on a Licensed Product-by-Licensed Product basis, by [***] of the amounts paid by Gilead or its Affiliates or Sublicensees [***] respect to such Licensed Product [***]; *provided* that the terms of [***] the Licensed Molecules or Licensed Products. In addition, subject to the terms of [***], Gilead will have the right to reduce the royalties payable by Gilead to MacroGenics with respect to Net Sales of a Licensed Product pursuant to Section 10.4(a) (Royalty Rate), on a Licensed Product-by-Licensed Product basis, [***].

(d) **Royalty Floor**. Subject to **Schedule 10.4(c)(c)(iii)** (Special Offset and Indemnification), in no event shall the royalty reductions available to Gilead under Section 10.4(c) (Royalty Reduction), collectively or individually, reduce the royalties payable to MacroGenics for a given Calendar Quarter to less than [***] of the amount otherwise payable under Section 10.4 (Royalties on Net Sales) with respect to an applicable Licensed Product. [***].

11. **Payments; Reports; Records; Audits**.

11.1 **Development Costs, Plan Costs and Manufacturing Costs**.

(a) Within [***] Calendar Quarter during the Term, MacroGenics shall submit an invoice to Gilead detailing the FTE Costs and Out-of-Pocket Costs incurred by MacroGenics during such Calendar Quarter to conduct the following activities and Gilead shall pay MacroGenics the full undisputed amount of each such invoice within [***] after its receipt:

(i) Research Program activities to the extent [***], as further described in and subject to Section 5.4 (Research Plan Costs);

(ii) [***] CD123 Molecules and CD123 Products [***], as further described in Section 7.1(b) (After the CD123 Development Term);

(iii) [***] Research Molecules and Research Products [***], as further described in Section 7.2 (Research Molecules and Research Products);

(iv) [***] the Manufacturing Transition Budget, *plus* any Allowable Overruns, [***], as further described in and subject to Section 9.4 (Manufacturing Technology Transfer); and

(v) [***] CD123 Development Plan and within the amount budgeted in the [***], as further described in and subject to Section 4.6 (CD123 Development Program Costs).

(b) [***], as further described in Section 9.1(a)(ii) (During the Clinical Supply Term), then MacroGenics will invoice Gilead for such MGD024 Drug Product at the MGD024 Transfer Price and Gilead will pay MacroGenics the full undisputed amount of each such invoice within [***]of its receipt.

(c) Subject to Section 3.6 (Sublicense under the MacroGenics Manufacturing In- Licenses), [***] Licensed Molecules or Licensed Products, shall be invoiced by MacroGenics and such undisputed invoices paid by Gilead within [***] after receipt thereof.

11.2 **Royalty Payments**.

(a) During the Term, for each Calendar Quarter following the First Commercial Sale of a Licensed Product in the Territory, Gilead shall furnish to MacroGenics:

(i) a quarterly written report for the Calendar Quarter showing, on a country- by-country basis, the gross sales of all Licensed Products subject to royalty payments sold by Gilead and its Related Parties in the Territory during the reporting period, a calculation of Net Sales showing the deductions provided for in the definition of "Net Sales" and a calculation of the royalties payable under this Agreement; and

(ii) a quarterly written report for the Calendar Quarter showing, on a country- by-country basis, Gilead's royalties payable to Third Parties on Net Sales made during such Calendar Quarter and any royalty adjustments taken by Gilead pursuant to Section 10.4(c) (Royalty Reduction), with such detail as shall reasonably allow MacroGenics to determine the basis for such quarterly costs.

(b) Reports under this Section 11.2 (Royalty Payments) shall be due within [***] following the close of each Calendar Quarter.

(c) Royalties shown to have accrued by each report shall, unless otherwise specified under this Agreement, be due and payable [***] after the date such report is due.

11.3 **Payment Exchange Rate**. All payments to be made by Gilead to MacroGenics under this Agreement shall be made in US Dollars by bank wire transfer in immediately available funds to a bank account in the United States designated in writing by MacroGenics. For invoices that Gilead shall forward

to MacroGenics, Gilead shall use an exchange rate as published [***] or such other source as the Parties may agree in writing.

11.4 **Taxes**. Each Party shall be solely responsible for the payment of all taxes, fees, duties, levies or similar amounts imposed on its share of income arising directly or indirectly from the activities of the Parties under this Agreement. Gilead will make all payments to MacroGenics under this Agreement without deduction or withholding for taxes, except to the extent that any such deduction or withholding is required by Applicable Laws and Regulations in effect at the time of payment. To the extent that Gilead is required by Applicable Laws and Regulations to deduct and withhold taxes on any payment to MacroGenics, Gilead shall pay the amounts of such taxes to the proper governmental authority in a timely manner and promptly transmit to MacroGenics an official tax certificate or other evidence of such payment sufficient to enable MacroGenics to claim such payment of taxes, and in such case, Gilead's remittance of such withheld taxes, together with payment to MacroGenics of the remaining payment, will constitute Gilead's full satisfaction of payments due under this Agreement. The Parties agree to cooperate with one another and use reasonable efforts to mitigate tax withholding or similar obligations in respect of the payments made under this Agreement, as permitted by Applicable Laws and Regulations. Notwithstanding the foregoing, if Gilead assigns its rights and obligations hereunder to an Affiliate or Third Party in compliance with Section 19.4 (Assignment; Change of Control) and if such Affiliate or Third Party shall be required by Applicable Laws and Regulations to withhold any additional taxes from or in respect of any amount payable under this Agreement as a result of such assignment, then any such amount payable under this Agreement shall be increased to take into account the additional taxes withheld as may be necessary so that, after making all required withholdings, MacroGenics receives an amount equal to the sum it would have received had no such assignment been made.

11.5 **Records**.

(a) **Gilead Financial Records**. [***], Gilead shall keep complete and accurate records in sufficient detail (i) to allow MacroGenics to determine the basis for the reimbursement amounts payable to MacroGenics under this Article 11 (Payments; Reports; Records; Audits) and (ii) to ensure that MacroGenics receives the full amount of payments for Commercial Milestone Events under Section 10.3 (Commercial Milestone Payments) and royalties payable to it under Section 10.4 (Royalties on Net Sales).

(b) **MacroGenics Financial Records**[***], MacroGenics shall keep complete and accurate records in sufficient detail to allow Gilead to determine the basis for the amounts payable to MacroGenics under (i) Section 11.1 (Development Costs, Plan Costs and Manufacturing Costs), including for the Manufacture of MGD024 and MGD024 Products during the Clinical Supply Term or (ii) the Clinical Supply Agreement.

11.6 **Audit Rights**. Upon the written request of a Party ("**Requesting Party**") with reasonable advance notice [***], the other Party shall permit an independent certified public accounting firm of internationally recognized standing selected by Requesting Party and reasonably acceptable to the other Party, at its own expense, to have access during normal business hours to such of the records as may be reasonably necessary to verify the relevant records required to be maintained by the other Party pursuant to Section 11.5 (Records) or that the correct amounts were paid by or to the Requesting Party under this Agreement as a result during any Calendar Year [***]. The accounting firm shall disclose to the Requesting Party only whether the reports are correct or incorrect and the specific details concerning any discrepancies. No other information shall be provided to Requesting Party in connection with this audit right. [***]. If such accounting firm identifies a discrepancy, the other Party shall pay Requesting Party the amount of the discrepancy [***] of the date Requesting Party delivers to the other Party such accounting firm's written report so concluding, or as otherwise agreed upon by the Parties. [***].

11.7 **Confidentiality**. Each Party shall treat all information of the other Party subject to review under this Article 11 (Payments; Reports; Records; Audits) in accordance with the confidentiality and non- use provisions of this Agreement, and shall cause its accounting firm to enter into an acceptable confidentiality agreement with the audited Party and any applicable Related Parties, obligating it or them to retain all such information in confidence pursuant to such confidentiality agreement.

12. **Confidentiality; Publication**.

12.1 **Nondisclosure Obligation**.

(a) **Definition and Restrictions**. All Confidential Information disclosed by one Party or any of its Affiliates (the "**Disclosing Party**") to the other Party or any of its Affiliates (the "**Receiving Party**") at any time, including before the Effective Date (to the extent related to the subject matter of this Agreement, including pursuant to the Existing CDA), shall: (1) be maintained in confidence by the Receiving Party, using no less than the efforts that Receiving Party uses to maintain in confidence its own confidential or proprietary information of similar kind and value, but in any case no less than reasonable care, and (2) not be disclosed by the Receiving Party to any Third Party or used by the Receiving Party for any purpose except as set forth herein or in connection with the exercise of such Party's rights and performance of its obligations under this Agreement without the prior written consent of the Disclosing Party, in each case ((1) and (2)), [***]. In addition, MacroGenics will keep confidential, and will cause its Affiliates and its and their employees, consultants, licensees, Permitted Subcontractors, professional advisors and Affiliates to keep confidential, the Know- How comprising MacroGenics Licensed Technology and Jointly Owned IP, in each case to the extent specifically related to the Licensed Molecules or Licensed Products on confidentiality terms at least as protective as the confidentiality provisions of this Agreement. The following shall not be deemed Confidential Information for purposes of the restrictions set forth in this Section 12.1(a) (Definition and Restrictions):

(i) information that is known by the Receiving Party at the time of its receipt without any obligation to keep it confidential or restriction on its use, and not through a prior disclosure by the Disclosing Party, as documented by the Receiving Party's written records;

(ii) information that is or becomes part of the public domain through no wrongful act or fault on the part of the Receiving Party;

(iii) information that is subsequently disclosed to the Receiving Party by a Third Party who may lawfully do so and is not under an obligation of confidentiality or any restriction on use with respect to such information; and

(iv) information that is developed by the Receiving Party independently of Confidential Information received from the Disclosing Party, as documented by the Receiving Party's written records.

(b) **Combinations**. Any combination of features or disclosures shall not be deemed to fall within the exclusions set forth in Section 12.1(a) (Definition and Restrictions) merely because individual features are published or available to the general public or in the rightful possession of the Receiving Party unless the combination itself and principle of operation are published or available to the general public or in the rightful possession of the Receiving Party.

(c) **Permitted Disclosures**. Notwithstanding the restrictions set forth in Section 12.1(a) (Definition and Restrictions), the Receiving Party may disclose Confidential Information of the other Party (including the existence and terms of this Agreement):

(i) to any Governmental Entity in order to obtain Patents or to gain or maintain approval to conduct Clinical Trials or to market Licensed Products, *provided* that such disclosure is only to the extent reasonably necessary to obtain such Patents or authorizations and reasonable steps are taken to ensure confidential treatment of such Confidential Information to the extent available, and for any such disclosure that may be subject to a public disclosure law or regulation, such as the Freedom of Information Act (FOIA) or EU Clinical Trial Regulation, Gilead shall have the obligations as the publishing Party and MacroGenics shall have the rights as the reviewing Party according to the procedure set forth under Section 12.2 (Publication) for review of such disclosure; or

(ii) subject to Section 12.1(d) (Securities Filings; Disclosures under Applicable Law), to the extent required in the reasonable opinion of such Party's legal counsel, in connection with complying with Applicable Laws and Regulations (including the rules and regulations promulgated by the United States Securities and Exchange Commission or any other national securities exchange in any jurisdiction in the Territory (each, a "**Securities Regulator**"));

(iii) to the extent the Receiving Party deems such disclosure necessary to be disclosed (1) to its Related Parties, or its or their respective employees, agents, representatives, consultants and Permitted Subcontractors ("**Representatives**") on a need-to-know basis for the Development, Manufacture or Commercialization of Licensed Molecules and Licensed Products, (2) its attorneys, accountants and advisors, (3) in connection with a prospective or actual licensing transaction or other business agreement or contractual obligation related to Licensed Molecules and Licensed Products, (4) to existing or *bona fide* prospective acquirers, merger partners, lenders or investors of the Receiving Party in connection with transactions or *bona fide* prospective transactions with the foregoing, including loans, financings or investments, acquisitions, mergers, consolidations, sale of assets or similar transactions (or for such entities to determine their interest in performing such activities or to determine their rights and obligations as a result of completing such transactions) or (5) in order to perform its obligations or exercise its rights under this Agreement, in each case on the condition that any Third Parties, other than Regulatory Authorities, to whom such disclosures are made agree to be bound by confidentiality and non-use obligations substantially similar to those contained in this Agreement; [***].

(iv) if a Party is required by judicial or administrative process to disclose Confidential Information of the other Party that is subject to the non-disclosure provisions of this Section 12.1 (Nondisclosure Obligation), in which case, such Party shall promptly inform the other Party of the disclosure that is being sought in order to provide the other Party an opportunity to challenge or limit the disclosure obligations. Confidential Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Section 12.1 (Nondisclosure Obligation), and the Party disclosing Confidential Information pursuant to law or court order shall take all steps reasonably necessary, including obtaining an order of confidentiality, to ensure the continued confidential treatment of such Confidential Information, including, by using not less than the same level of efforts to secure such confidential treatment of such information as it would to protect its own Confidential Information of like nature from disclosure.

(d) **Securities Filings; Disclosure under Applicable Law**. Each Party acknowledges and agrees that the other Party may submit this Agreement to, or file this Agreement with, the Securities Regulators or to other Persons as may be required by Applicable Law and Regulations, and if a Party submits this Agreement to, or files this Agreement with, any Securities Regulator or other Person as may be required by Applicable Law and Regulations, such Party agrees to consult with the other Party with respect to the preparation and submission of a confidential treatment request for this Agreement. Notwithstanding the foregoing, if a Party is required by any Securities Regulator or other Person as may be required by Applicable Law and Regulations to make a disclosure of the terms of this Agreement in a filing or other submission as required by such Securities Regulator or such other Person, and such Party has: (i) provided copies of the disclosure to the other Party reasonably in advance under the circumstances of such filing or other disclosure; (ii) promptly notified the other Party in writing of such requirement and any respective timing constraints; and (iii) given the other Party reasonable time under the circumstances from the date of provision of copies of such disclosure to comment upon and request confidential treatment for such disclosure, then such Party will have the right to make such disclosure at the time and in the manner reasonably determined by its counsel to be required by the Securities Regulator or the other Person. Notwithstanding the foregoing, if a Party seeks to make a disclosure as required by a Securities Regulator or other Person as may be required by Applicable Law and Regulations as set forth in this Section 12.1(d) (Securities Filings; Disclosure under Applicable Law) and the other Party provides comments in accordance with this Section 12.1(d) (Securities Filings; Disclosure under Applicable Law), the Party seeking to make such disclosure or its counsel, as the case may be, will use good faith efforts to incorporate such comments.

(e) **Obligations Upon Termination**. Upon the earlier of termination or expiration of the Agreement (or in the case of Confidential Information received pursuant to an Upstream License Agreement, upon the expiration or earlier termination of such agreement), except to the extent prohibited by Applicable Laws and Regulations, the Receiving Party shall, and shall promptly require all of its Representatives, to securely return to the Disclosing Party or securely dispose of all Confidential Information of the Disclosing Party (at the Disclosing Party's election), whether such Confidential Information is in written, electronic or other form of media. If the Receiving Party is not reasonably able to return or securely dispose of the Disclosing Party's Confidential Information, including, such Confidential Information stored on backup media, then the Receiving Party will continue to protect such Confidential Information in accordance with the terms of this Agreement until such time that it can reasonably return or securely dispose of such Confidential Information. Notwithstanding the foregoing, the Receiving Party may retain: (i) Confidential Information of the Disclosing Party to exercise rights and licenses which expressly survive such termination or expiration pursuant to this Agreement and (ii) solely for the purpose of determining the scope of its obligations under this Agreement, one (1) copy of Confidential Information received hereunder, and *provided further*, that a Receiving Party shall not be required to destroy electronic files containing such Confidential 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, and any such retained copies shall continue to be subject to the confidentiality and non-use obligations in accordance with this Agreement.

(f) **Third Party Confidential Information**. Notwithstanding any provision to the contrary in this Agreement, with respect to Confidential Information that [***].

12.2 **Publication**.

(a) **Publication of Results During the Collaboration Period**. Except for disclosures permitted pursuant to Section 12.1 (Nondisclosure Obligation), on a Program-by-Program basis, during the Collaboration Term for a Program, if a Party and its employees wish to publish, publicly present or otherwise publicly disclose any paper, publication, oral presentation, abstract, poster, manuscript or other presentation relating to any activity or other matter under this Agreement, then the publishing Party will provide the other Party with, (i) a copy of any proposed written publication at least [***] for an abstract) prior to submission for publication; and (ii) a copy of the graphics and written outline of material to be presented for the proposed oral disclosure (to the extent not included in the graphics) at least [***] prior to submission.

(b) **Review of Publications and Presentations During the Collaboration Period**.

(i) The reviewing Party shall have the right (1) to propose modifications to the publication or presentation presented for review under Section 12.2(a) (Publication of Results During the Collaboration Period) for patent reasons, trade secret reasons, or for purposes of removing the Confidential Information of the reviewing Party, or (2) to request a reasonable delay in publication or submission for presentation in order to protect trade secret or patentable information.

(ii) If the reviewing Party requests the removal of the reviewing Party's Confidential Information or a delay, the publishing Party shall remove such Confidential Information and if requested by the reviewing Party delay submission for publication or submission for presentation for a period of [***] to enable patent applications protecting each Party's rights in such Confidential Information to be filed in accordance with Article 16 (Intellectual Property) below.

(iii) Upon expiration of such [***] and satisfaction of any other conditions requested by the reviewing Party, the publishing Party shall be free to proceed with the publication or submission for presentation.

(iv) Upon request of the Party seeking publication, the reviewing Party shall consider expediting the time frames set forth in this Section 12.2 (Publication).

(v) If the reviewing Party requests modifications to the publication or submission for presentation, the publishing Party shall edit such publication to prevent disclosure of the Confidential Information of the reviewing Party.

(c) **Publication of Results After the Collaboration Period**. On a Program-by- Program basis, following the expiration of the Collaboration Term for a Program, (i) any proposed public disclosure (whether written, electronic, oral or otherwise) by MacroGenics or any of its Affiliates related to activities under this Agreement or the Licensed Molecules or the Licensed Products, in each case, for such Program will require the prior written consent of Gilead and (ii) Gilead or any of its Affiliates will have the right, without any required consents from MacroGenics, to publish, publicly present or otherwise publicly disclose any paper, publication, oral presentation, abstract, poster, manuscript or other presentation relating to any activity or other matter under this Agreement related to such Program, including the results of any Clinical Trial for such Program, or other activities under this Agreement for such Program. Gilead will provide MacroGenics with, (i) a copy of any proposed written publication at least [***] days for an abstract) prior to submission for publication; and (ii) a copy of the graphics and

written outline of material to be presented for the proposed oral disclosure (to the extent not included in the graphics) at least [***] prior to submission. At MacroGenics' request, Gilead will remove any Confidential Information of MacroGenics from the proposed publication and reasonably delay submission for publication for a period of [***] in order to enable MacroGenics to seek patent protection of MacroGenics' patentable information disclosed therein.

12.3 **Publicity; Use of Names**.

(a) **Press Releases**. On such date and time as may be agreed by the Parties after the Effective Date, the Parties shall issue a joint press release announcing the execution of this Agreement in the form attached hereto as **Schedule 12.3(a)** (Press Release). A Party may issue any subsequent press release relating to this Agreement or activities conducted hereunder [***] of the preceding sentence, the Disclosing Party shall provide the other Party a copy of such proposed disclosures at least [***] prior to the proposed release and consider in good faith any comments the other Party may make, where practicable, and in light of any reporting obligations of such Disclosing Party under Applicable Laws and Regulations, including the rules and regulations promulgated by the United States Securities and Exchange Commission or any other governmental agency.

(b) **No Other Use of Company Names**. Neither Party shall use the name, Trademark, trade name or logo of the other Party, its Affiliates or its or their employees in any publicity or news release relating to this Agreement or its subject matter without the prior express written permission of the other Party.

(c) **Approved Press Releases**. In addition and notwithstanding anything to the contrary herein, (i) if the relevant text of a proposed press release has already previously been reviewed and approved for disclosure by the other Party then such text may be disclosed or republished in such proposed press release, *provided* that the information in such press release remains true, correct and the most current information with respect to the subject matters set forth therein and, where practicable, the Party issuing such press release provides notice to the other Party of such press release [***] prior to the issuance of such press release, and (ii) if the relevant text of a proposed public announcement such as a corporate presentation or comments to analysts or investors has already previously been reviewed and approved for disclosure by the other Party (whether in the form of an approved press release or prior approved presentation materials, Q&A script or the like) then such text may be included in such proposed public announcement (but not a press release) without resubmission and review by the other Party so long as the information in such materials remains true, correct and the most current information with respect to the subject matters set forth therein.

13. **Compliance**.

13.1 **General**. Each Party shall comply with the terms of this Agreement and all Applicable Laws and Regulations relating to activities performed or to be performed by such Party (or its Affiliates, Permitted Subcontractor(s) or Sublicensee(s)) under or in relation to the Development, Manufacturing,

Commercialization, or other Exploitation of Licensed Molecules and Licensed Products pursuant to this Agreement (each such Party, a "**Subject Party**").

13.2 **Covenants, Representations and Warranties For Compliance with Laws**. Without limiting the generality of Section 13.1 (General), each Subject Party agrees, on behalf of itself, its Affiliates, and its and their officers, directors, employees, agents, representatives, consultants, and Permitted Subcontractors (together with such Party, the "**Obligants**") that for the performance of its obligations hereunder:

(a) **Anti-Corruption Laws**.

(i) Its Obligants shall not directly or indirectly pay, offer or promise to pay, or authorize the payment of any money, or give, offer or promise to give, or authorize the giving of anything else of value, to: (1) any Government Official in order to influence official action; (2) any Person (whether or not a Government Official) (x) to influence such Person to act in breach of a duty of good faith, impartiality or trust ("**Acting Improperly**"), (y) to reward such Person for Acting Improperly, or (z) where such Person would be Acting Improperly by receiving the money or other thing of value; (3) any other Person while knowing or having reason to know that all or any portion of the money or other thing of value shall be paid, offered, promised or given to, or shall otherwise benefit, a Government Official in order to influence official action for or against either Party in connection with the matters that are the subject of this Agreement; or (4) any Person to reward that Person for Acting Improperly or to induce that Person to Act Improperly.

(ii) Its Obligants shall not, directly or indirectly, solicit, receive or agree to accept any payment of money or anything else of value in violation of the Anti-Corruption Laws.

(iii) The Subject Party and its Obligants shall comply with the Anti-Corruption Laws and shall not take or perform any action that constitutes, or would reasonably be expected to constitute, a violation of any such laws or cause either Party (or its Affiliates) to be in violation of any such laws. In furtherance of the foregoing, each acknowledges and confirms the following:

(1) Each Subject Party has reviewed its internal programs in relation to the Anti-Corruption Laws and the ability of its Obligants to adhere to such laws in performance of its obligations hereunder in advance of the signing of this Agreement and warrants that it and its Obligants can and shall continue to comply with such Anti-Corruption Laws in performance of its obligations hereunder and further represents and warrants that should either Party identify in writing to the other Party any measures that should be reasonably taken to improve its Obligants' compliance with such Anti-Corruption Laws for the performance of its obligations hereunder (the "**Improvement Plan**"), the Subject Party shall use Commercially Reasonable Efforts to implement such Improvement Plan within an agreed reasonable timeframe (which shall in any event not be in [***]) from the [***]. In the absence of such Party using Commercially Reasonable Efforts to achieve the full implementation by such of such Improvement Plan within the aforesaid [***], the other Party shall be entitled to terminate this Agreement, upon written notice to the Subject Party with immediate effect, to be relieved of any obligations, and to seek compensation from the Subject Party;

(2) To the best of the Subject Party's and its Affiliates' knowledge after reasonable diligence, none of its Obligants that will participate in or support the Subject Party's performance of its obligations hereunder has, directly or indirectly, (x) paid, offered or promised to pay, or authorized the payment of any money; (y) given, offered or promised to give, or authorized the giving of anything else of value; or (z) solicited, received or agreed to accept any payment of money or anything else

of value, in each case ((x), (y) and (z)), in violation of the Anti-Corruption Laws during the three (3) years preceding the date of this Agreement.

(3) To the best of the Subject Party's and its Affiliates' knowledge, none of its intellectual property rights, technology, contracts, materials, or licenses or other assets that are the subject of this Agreement, other than those provided by or on behalf of the other Party, were procured in violation of any Anti-Corruption Laws.

(4) The Subject Party, on behalf of itself and its Obligants, represents and warrants to the other Party that all information provided by the Subject Party and its Obligants to the other Party in any anti-bribery and corruption due diligence checklist, similar due diligence process performed by the other Party or its Affiliates or inquiry by the other Party related to the Subject Party's or its Obligants compliance with Anti-Corruption Laws is true, complete and correct in all material respects at the date it was provided and that any material changes in circumstances relevant to the answers provided in such exercise shall be promptly disclosed to the other Party.

(5) The Subject Party shall promptly provide the other Party with written notice of any of the following events: (i) upon becoming aware of any actual, alleged, or potential breach or violation by the Subject Party or any of its Obligant of any representation, warranty or undertaking set forth in this Section 13.2 (Covenants, Representations and Warranties For Compliance with Laws); (ii) upon receiving a notification that it is the target or subject of an investigation, formal or informal inquiry or enforcement proceedings by a government authority for violation of any Anti-Corruption Laws; (iii) upon receiving any notice, request, subpoena or citation from a government authority for any violation of any Anti-Corruption Law; or (iv) upon receipt of information that any of the Subject Party's Obligants is the target or subject of an investigation, formal or inform enquiry or enforcement proceedings by a government authority for a violation of any Anti-Corruption Law.

(6) [***], the Subject Party shall for the purpose of auditing and monitoring the performance of its compliance with this Agreement and particularly this Section 13.2 (Covenants, Representations and Warranties For Compliance with Laws) permit the other Party, its Affiliates, any auditors of any of them and any government authority to have reasonable access to any premises of the Subject Party or its Obligants used in connection with this Agreement, together with a right to reasonably access personnel and records that relate to this Agreement ("**Subject Party Audit**"). The Subject Party shall provide or procure that its Obligants shall provide all co-operation as reasonably requested by the other Party for the purposes of the Subject Party Audit, with the understanding that the other Party shall be responsible for all costs and fees of any Subject Party Audit and the other Party shall procure that any auditor enters into a confidentiality agreement consistent with the confidentiality provisions elsewhere in this Agreement in all material respects.

(7) If (A) the other Party becomes aware of, whether or not through a Subject Party Audit, that the Subject Party (or any of its Obligants) is in breach or violation of any representation, warranty or undertaking in Section 13.1 (General) or of the Anti-Corruption Laws; or (B) the other Party receives notification that a suspected or actual violation of an Anti-Corruption Law has occurred by the Subject Party or any of its Obligants, in each case of (A)-(B), the other Party shall have the right, in addition to any other rights or remedies under this Agreement or to which the other Party may be entitled in law or equity, to take such steps as are reasonably necessary in order to avoid a potential violation or continuing violation by the other Party or any of its Affiliates of the Anti-Corruption Laws, including by requiring that the Subject Party agrees to and uses Commercially Reasonable Efforts to implement any curative actions requested by the other Party. In the event that the Subject Party refuses to agree to use Commercially Reasonable Efforts to achieve all of the curative actions requested by the other Party (and

provided that the other Party has (x) provided the Subject Party with an explanation in reasonable detail as to why the other Party considers such actions necessary, (y) given the Subject Party a reasonable opportunity to review and comment upon the proposed actions and to provide its view as to the necessity or usefulness of these to address the event concerned, and (z) considered such comments in good faith), the other Party shall be entitled to terminate this Agreement in its entirety with immediate effect. Any termination of this Agreement pursuant to this Section 13.2 (Covenants, Representations and Warranties For Compliance with Laws) shall be treated as a termination for breach by the Subject Party of this Agreement and the consequences of termination shall apply and additionally: (1) subject to the accrued rights of the Parties prior to termination, the other Party shall have no liability to the Subject Party for any fees, reimbursements or other compensation or for any loss, cost, claim or damage resulting, directly or indirectly, from such termination; and (2) any amounts that would otherwise be payable to the Subject Party pursuant to this Agreement in its entirety, as applicable, including any then outstanding and unpaid claims for payment shall be null and void to the extent permissible under Applicable Laws and Regulations.

(8) The Subject Party shall be responsible for any breach of any representation, warranty or undertaking in this Section 13.2 (Covenants, Representations and Warranties For Compliance with Laws) or of the Anti-Corruption Laws by any of its Obligants.

(b) **Data Protection Laws**. From time to time during the Term, either Party may provide the other Party with personal information that falls under the protection of Data Protection Laws ("**Protected Personal Information**"). Each Party agrees to comply with all Data Protection Laws relating to Processing of such Protected Personal Information. The Parties agree to use good-faith efforts to agree upon and implement any security protocols and information handling guidelines that such Party's legal advisors recommend in connection with such Party's compliance with Data Protection Laws.

(c) **Information Security**.

(i) Each Party will comply with Applicable Laws and Regulations in its storage, maintenance, use and dissemination of the other Party's Confidential Information which it receives or to which it obtains access (such Confidential Information "**Secured Information**").

(ii) Each Party will employ commercially reasonable security measures to protect Secured Information in accordance with accepted applicable industry standards and such Party's information security policy as amended from time to time. As necessary, each Party will employ additional security measures to protect Secured Information.

(iii) Each Party agrees and warrants that it will implement administrative, physical and technical safeguards to protect Secured Information that are no less rigorous than accepted industry practices and standards for information security and shall ensure that all such safeguards comply with Applicable Laws and Regulations.

(iv) Each Party will notify the other Party by email immediately, [***] of becoming aware of (1) any act or omission that materially compromises the security, confidentiality, or integrity of the physical, technical, administrative, or organizational safeguards put in place by or on behalf of a Party, that relate to the protection of the security, confidentiality, or integrity of Secured Information or Protected Personal Information, or (2) receipt of a notification in relation to Protected Personal Information or the privacy and data security practices of such Party or any actual or suspected accidental or unlawful destruction, loss, alteration, disclosure of, or access to, Protected Personal Information transmitted, stored or otherwise Processed; (each of (1) and (2) individually and collectively a "**Security Incident**").

(v) Other than as required by Applicable Laws and Regulations or a contractual obligation to a Third Party, each Party agrees that it will not inform any Third Party of an actual or potential Security Incident related to the other Party's Confidential Information (including but not limited to work product under the Agreement and such other Party's intellectual property) without first obtaining such other Party's prior consent.

(d) **Export Control Laws**. Each Party will comply with all Applicable Laws and Regulations relating to (i) economic and trade sanctions and embargoes imposed by the Office of Foreign Assets Control of the U.S. Department of Treasury or (ii) the export or re-export of commodities, technologies or services ("**Export Control Laws**"). Each Party acknowledges and expressly agrees that certain laws of the United States and other countries, including, without limitation, the Export Control Laws, the United States Anti-Money Laundering laws, the United States Anti-Terrorism laws and the FCPA, and U.S. sanctions programs administered by the Office of Foreign Assets Control ("**OFAC**") and the Bureau of Industry and Security, among others, may result in the imposition of sanctions on the other Party or its Affiliates in the event that, directly or indirectly, products are exported to or imported from, or payments are sent to or received from various countries or regions. Each Party warrants that it has searched OFAC's Consolidated Sanctions List, available at https://sdnsearch.ofac.treas.gov, in order to ensure compliance with all applicable sanctions regulations.

(e) **Compliance Event Reporting**. The other Party may disclose the terms of this Agreement or any action taken under this Section 13.2 (Covenants, Representations and Warranties For Compliance with Laws) to prevent a potential violation or continuing violation of applicable Anti- Corruption Laws, Data Protection Laws or Export Control Laws, including the identity of the Subject Party and the payment terms, to any government authority if the other Party determines, upon advice of counsel, that such disclosure is necessary.

14. **Representations and Warranties**.

14.1 **Representations and Warranties of MacroGenics**. Except as set forth on **Schedule 14.1** (Exceptions to the Representations and Warranties of MacroGenics) (which schedule may be updated by MacroGenics immediately prior to the CD123 Option Effective Date and each Research Program Opt-In Effective Date), MacroGenics represents and warrants to Gilead that, as of the Effective Date the CD123 Option Effective Date and each Research Program Opt-In Effective Date:

(a) it is duly organized, validly existing and in good standing under the Applicable Law and Regulations of the jurisdiction of its formation;

(b) this Agreement has been duly executed and delivered on behalf of such Party and constitutes a legal, valid and binding obligation, enforceable against it in accordance with its terms, except to the extent that enforcement of the rights and remedies created hereby is subject to: (i) bankruptcy, insolvency, reorganization, moratorium and other similar laws of general application affecting the rights and remedies of creditors; or (ii) laws governing specific performance, injunctive relief and other equitable remedies;

(c) it has the full right, power and authority to enter into this Agreement, to grant the licenses contemplated hereunder, and the fulfillment of its obligations and performance of its activities hereunder do not conflict with, violate, or breach or constitute a default under any contractual obligation or court or administrative order by which MacroGenics is bound;

(d) all necessary consents, approvals and authorizations of all government authorities and other persons required to be obtained by MacroGenics as of the Effective Date in connection with the execution, delivery and performance of this Agreement have been obtained;

(e) it Controls the right, title and interest in and to the MacroGenics Licensed Patents and MacroGenics Licensed Know-How, and has the right to grant to Gilead the licenses under such MacroGenics Licensed Patents and MacroGenics Licensed Know-How and the sublicenses under the Existing Upstream License Agreements that it purports to grant and may grant hereunder and has not granted any Third Party rights under such MacroGenics Licensed Patents, MacroGenics Licensed Know- How and Existing Upstream License Agreements that would interfere or be inconsistent with Gilead's rights hereunder;

(f) as of the Effective Date, **Schedule 1.80** (MacroGenics Licensed Patents) sets forth a complete and accurate list of all MacroGenics Licensed Patents issued or pending, and all such Patents have been prosecuted and maintained by or on behalf of MacroGenics in good faith and if issued, are in full force and effect and to its MacroGenics' Knowledge, are valid and enforceable. All application, registration, maintenance and renewal fees due as of the Effective Date with respect to all MacroGenics Licensed Patents set forth on **Schedule 1.80** (MacroGenics Licensed Patents) have been paid and all necessary documents and certificates have been filed with the relevant patent registries for the purpose of maintaining such MacroGenics Licensed Patents;

(g) Except with respect to any MacroGenics Licensed Technology that is licensed under the Upstream License Agreements, the MacroGenics Licensed Patents and MacroGenics Licensed Know-How are not subject to any other Third Party agreements or existing royalty or other payment obligations to any Third Party;

(h) Except with respect to any MacroGenics Licensed Technology that is licensed under the Existing Upstream License Agreements, MacroGenics is the sole and exclusive owner of the MacroGenics Licensed Patents and MacroGenics Licensed Know-How, in each case, free and clear of all liens and encumbrances;

(i) MacroGenics and its Affiliates have obtained from all individuals who participated in any respect in the invention or authorship of any MacroGenics Licensed Technology effective assignments of all ownership rights of such individuals in such MacroGenics Licensed Technology, either pursuant to written agreement or by operation of law; and to the Knowledge of MacroGenics, no Person who claims to be an inventor of an invention claimed in a MacroGenics Licensed Patent is not identified as an inventor of such invention in the filed patent documents for such MacroGenics Licensed Patent;

(j) all of MacroGenics and its Affiliates' employees, officers and consultants: (1) have executed agreements or have existing obligations under Applicable Law and Regulations requiring assignment to MacroGenics or its Affiliates of all inventions made during the course of and as the result of their association with MacroGenics or its Affiliates, as applicable, and obligating the individual to assign to MacroGenics or its Affiliates, as applicable, all inventions made during the course of performance under this Agreement; (2) are not subject to any agreement with any other Third Party that requires such officer or employee or consultant to assign any interest in any MacroGenics Licensed Technology to such Third Party; and (3) have executed agreements or have existing obligations under Applicable Law and Regulations obligating the individual to maintain as confidential MacroGenics' Confidential Information as well as confidential information of other parties (including of Gilead and its Affiliates) that such individual may receive in its performance under this Agreement, to the extent required to support MacroGenics' obligations under this Agreement;

(k) there is no action, suit, inquiry, investigation or other proceeding threatened in writing, pending, or ongoing by any Third Party that challenges or threatens the validity or enforceability of any of the MacroGenics Licensed Patents or MacroGenics Licensed Know-How. In the event that MacroGenics receives written notice of any such action or proceeding, it shall notify Gilead in writing;

(l) to the Knowledge of MacroGenics, the use of the MacroGenics Licensed Technology in the performance of the activities under the CD123 Development Plan and the Exploitation of any CD123 Molecule or CD123 Product, in each case, as contemplated to be conducted under this Agreement, does not infringe, misappropriate or otherwise violate any intellectual property owned or controlled by any Third Party;

(m) there is no action, suit, inquiry, investigation or other proceeding threatened in writing, pending, or ongoing by any Third Party (and it is not aware of any grounds therefor) that alleges the use of the MacroGenics Licensed Patents or the MacroGenics Licensed Know-How or the Exploitation of any Licensed Molecule or Licensed Product would infringe, misappropriate or otherwise violate any intellectual property rights of any Third Party (and it has not received any written notice alleging such an infringement). In the event that MacroGenics receives written notice of any such action or proceeding, it shall notify Gilead in writing;

(n) **Schedule 1.151** (Upstream License Agreements) sets forth a complete and accurate list of the Upstream License Agreements in effect as of the Effective Date, the CD123 Option Effective Date or the Research Program Opt-In Effective Date (as applicable). MacroGenics has provided Gilead true, correct and complete copies of each such Upstream License Agreement (in reasonably redacted form). Each such Upstream License Agreement is in full force and effect, and there has been no default of or under (or notice of default of or under) any such Upstream License Agreement, in each case, that could give the relevant Third Party licensor to such Upstream License Agreement the right to terminate such agreement as a result of any action or omission or alleged act or omission of MacroGenics or its Affiliates or, to the Knowledge of MacroGenics, the actions or omissions of any Third Party. MacroGenics has not waived any of its rights under any such Upstream License Agreement to which it is party. Immediately following the Effective Date, the CD123 Option Effective Date or the Research Program Opt-In Effective Date (as applicable), MacroGenics will continue to be permitted to exercise all of its rights under each such Upstream License Agreement to which it is party pursuant to the terms thereof without the payment of any additional amounts of consideration beyond ongoing fees, royalties or payments that MacroGenics would otherwise be required to pay in accordance with the terms of such Upstream License Agreement had the transactions contemplated by this Agreement not occurred;

(o) **Schedule 9.1(a)(i)** (Existing CMO Agreements) sets forth a complete and accurate list of the Existing CMO Agreements. MacroGenics has provided Gilead true, correct and complete copies of each such Existing CMO Agreement (in reasonably redacted form). Each such Existing CMO Agreement is in full force and effect, and there has been no default of or under (or notice of default of or under) any such Existing CMO Agreement, in each case, that could give the relevant Third Party CMO under such Existing CMO Agreement the right to terminate such agreement as a result of any action or omission or alleged act or omission of MacroGenics or its Affiliates or, to the Knowledge of MacroGenics, the actions or omissions of any Third Party;

(p) MacroGenics has disclosed to Gilead (i) all safety data and other material information and data related to MGD024, including all safety data from the ongoing clinical trial for MGD024, with the study number CP-MGD024-01; and (ii) all material correspondences sent to or received from any Regulatory Authority related to MGD024, in each case ((i) and (ii)), in the possession or control of MacroGenics or its Affiliates;

(q) Other than as permitted under the CD123 Development Plan or Research Plan, (i) the Development or Commercialization of the MacroGenics Platform by Gilead is not necessary (1) for Gilead to conduct the activities contemplated under the CD123 Development Plan or the Research Plans hereunder or (2) to MacroGenics' Knowledge, for the Exploitation of any Licensed Molecule or Licensed Product by Gilead in accordance with this Agreement to the extent known to MacroGenics and (ii) MacroGenics is not, and has not, Developed or Commercialized the MacroGenics Platform in the Exploitation of any Licensed Molecule or Licensed Product;

(r) Except as set forth in **Schedule 14.1**, no government funding, facilities of a university, college, or other educational institution or research center was used in the development of any of the MacroGenics Licensed Patents that are owned or jointly owned by MacroGenics. No individual who was involved in, or who contributed to, the creation or development of any MacroGenics Licensed Patent that is owned or jointly owned by MacroGenics has performed services for the government, a university, a college, or other educational institution or research center in a manner that would affect Gilead's rights to such MacroGenics Licensed Patent; and

(s) Solely as of the Effective Date, to the Knowledge of MacroGenics, MacroGenics has not intentionally failed to furnish Gilead with any material information specifically requested by Gilead in writing, or intentionally concealed from Gilead any material information in its possessions, in each case, relating to the MacroGenics Licensed Technology, that MacroGenics reasonably believes would be material to Gilead's decision to enter into this Agreement and undertake the commitments and obligations set forth herein as anticipated to be conducted hereunder.

14.2 **Representations and Warranties of Gilead**. Gilead represents and warrants to MacroGenics that, as of the Effective Date, the CD123 Option Effective Date and each Research Program Opt-In Effective Date:

(a) it is duly organized, validly existing and in good standing under the Applicable Law and Regulations of the jurisdiction of its formation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof;

(b) this Agreement has been duly executed and delivered on behalf of such Party and constitutes a legal, valid and binding obligation, enforceable against it in accordance with its terms, except to the extent that enforcement of the rights and remedies created hereby is subject to: (i) bankruptcy, insolvency, reorganization, moratorium and other similar laws of general application affecting the rights and remedies of creditors; or (ii) laws governing specific performance, injunctive relief and other equitable remedies;

(c) it has the full right, power and authority to enter into this Agreement, to grant the licenses granted hereunder, and the fulfillment of its obligations and performance of its activities hereunder do not conflict with, violate, or breach or constitute a default under any contractual obligation or court or administrative order by which Gilead is bound;

(d) all necessary consents, approvals and authorizations of all government authorities and other persons required to be obtained by Gilead as of the Effective Date in connection with the execution, delivery and performance of this Agreement have been obtained; and

(e) solely as of the Effective Date, neither it nor its Affiliates is, directly or indirectly, researching, developing, manufacturing or commercializing any bi-specific molecule that is directed to CD3 and CD123.

14.3 **Mutual Representations and Warranties**. Each Party represents and warrants to the other Party as of the Effective Date, such Party is not debarred under the United States Federal Food, Drug and Cosmetic Act or comparable laws in any other country or jurisdiction, and it does not, and will not during the Term, employ or use the services of any person or entity who is debarred, in connection with the Development, Manufacture or Commercialization of the Licensed Products. In the event that either Party becomes aware of the debarment or threatened debarment of any person or entity providing services to such Party, including the Party itself and its Affiliates or (Sub)licensees, which directly or indirectly relate to activities under this Agreement, the other Party shall be immediately notified in writing.

14.4 **Covenant**.

(a) **Mutual Covenant**. Each Party hereby covenants to the other Party that it will not, and will not permit its Affiliates, (Sub)licensees or anyone acting on its or their behalf to, grant or otherwise convey to any Third Party any rights that would interfere or be inconsistent with such other Party's rights hereunder.

(b) **Additional Covenants of MacroGenics**.

(i) Neither MacroGenics nor its Affiliates will grant any option, right or license to any Third Party relating to any of the intellectual property rights it Controls (including the MacroGenics Licensed Technology), or otherwise with respect to any Licensed Product, which (1) conflict with any of the options, rights or licenses granted to Gilead hereunder or (2) has an adverse effect on MacroGenics' ability to grant the options, rights or licenses granted to Gilead hereunder or to perform its obligations under this Agreement.

(ii) Except as otherwise expressly permitted under this Agreement, MacroGenics will not, and will cause its Affiliates not to: (1) assign, transfer, convey, encumber (through a lien, charge, security interest, mortgage or similar encumbrance) or dispose of, or enter into any agreement with any Third Party to assign, transfer, convey, encumber (through a lien, charge, security interest, mortgage or similar encumbrance) or dispose of, any assets related to the MacroGenics Licensed Technology or any Licensed Product, except to the extent that such assignment, transfer, conveyance, encumbrance or disposition would not conflict with, be inconsistent with or adversely affect in any respect any of the options, rights or licenses granted to Gilead hereunder; or (2) license or grant to any Third Party, or agree to license or grant to any Third Party, any rights under the MacroGenics Licensed Technology the Exploitation of any Licensed Product.

(iii) MacroGenics will: (1) maintain Control of all MacroGenics Licensed Technology licensed or sublicensed to Gilead under each Upstream License Agreement; and (2) not terminate, intentionally breach or otherwise materially default under any Upstream License Agreement or Existing CMO Agreement in a manner that would permit the counterparty thereto to terminate such Upstream License Agreement or Existing CMO Agreement (as applicable) or otherwise diminish the scope or exclusivity of the licenses granted to Gilead under any MacroGenics Licensed Technology.

(iv) MacroGenics will not (1) modify, amend, or terminate any Upstream License Agreement, or exercise, waive, release, or assign any rights or claims thereunder, in each case in a manner that would adversely affect Gilead's rights or MacroGenics' ability to perform its obligations under this Agreement or (2) modify or amend any Upstream License Agreement in a manner that would impose additional obligations on Gilead as a sublicensee under such Upstream License Agreement, in each case ((1) and (2)), without first obtaining Gilead's prior written consent.

(v) If MacroGenics receives notice of an alleged default by MacroGenics or its Affiliates under any Upstream License Agreement, where termination of such Upstream License Agreement or any diminishment of the scope or exclusivity of the licenses granted to Gilead under the MacroGenics Licensed Technology is being or could be sought by the counterparty or result from such default, then MacroGenics will provide written notice thereof to Gilead within [***] thereafter, which notice may be redacted to protect commercially sensitive information or information related to products that are not Licensed Products. Within [***] after receipt of such notice (or such other time period as is reasonably necessary to allow Gilead to meaningfully cure the alleged breach) and, solely in the event MacroGenics determines not to contest such alleged default and otherwise fails to cure such alleged default within such period, MacroGenics hereby grants to Gilead the right (but not the obligation) to: (1) cure such alleged breach; and (2) offset any costs or expenses incurred in connection therewith against any payments due or that may become due under this Agreement.

(c) **Additional Covenants of Gilead**.

(i) Gilead and its Affiliates shall comply with, and will contractually require its Sublicensees and Permitted Subcontractors to comply with, all applicable terms of any Upstream License Agreement with respect to a sublicensee that are disclosed to Gilead; and

(ii) If MacroGenics receives notice of an alleged breach by Gilead or any of its Affiliates, Sublicensees or Permitted Subcontractors of an Upstream License Agreement, then MacroGenics may notify Gilead of such breach and Gilead will use Commercially Reasonable Efforts to cooperate with and assist MacroGenics in curing such breach (which may include, at Gilead's election, terminating Gilead's sublicense under the applicable Upstream License Agreement).

14.5 **No Other Representations or Warranties**. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR NON-MISAPPROPRIATION OF THIRD- PARTY INTELLECTUAL PROPERTY RIGHTS, IS MADE OR GIVEN BY OR ON BEHALF OF A PARTY. ALL REPRESENTATIONS AND WARRANTIES, WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED. WITHOUT LIMITING THE FOREGOING, THE PARTIES AGREE THAT THE CD123 DEVELOPMENT MILESTONE EVENTS, RESEARCH PRODUCT DEVELOPMENT MILESTONE EVENTS, COMMERCIAL MILESTONE EVENTS AND NET SALES LEVELS SET FORTH IN THIS AGREEMENT OR THAT HAVE OTHERWISE BEEN DISCUSSED BY THE PARTIES ARE MERELY INTENDED TO DEFINE THE MILESTONE PAYMENTS AND ROYALTY OBLIGATIONS IF SUCH CD123 DEVELOPMENT MILESTONE EVENTS, RESEARCH PRODUCT DEVELOPMENT MILESTONE EVENTS, COMMERCIAL MILESTONE EVENTS OR NET SALES LEVELS ARE ACHIEVED. NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY, EITHER EXPRESS OR IMPLIED, THAT IT WILL BE ABLE TO SUCCESSFULLY DEVELOP, MANUFACTURE OR COMMERCIALIZE ANY LICENSED PRODUCT OR, IF COMMERCIALIZED, THAT ANY PARTICULAR SALES LEVEL OR PROFIT (LOSS) OF SUCH LICENSED PRODUCT WILL BE ACHIEVED.

15. **Indemnification**.

15.1 **By Gilead**. Gilead agrees to indemnify and hold harmless MacroGenics, its Affiliates, and its and their directors, officers, employees and agents (individually and collectively, the "**MacroGenics Indemnitee(s)**") from and against all losses, liabilities, damages and expenses (including reasonable attorneys' fees and costs) (individually and collectively, "**Losses**") incurred in connection with any Third

Party Claims to the extent arising from: (a) activities by Gilead or any of its Related Parties or their respective Representatives with respect to the Programs and any other Development, use, Manufacture, Commercialization, import, distribution, sale or other Exploitation of Licensed Molecules or Licensed Products or the exercise of their rights or performance of their obligations related thereto except those actions for which MacroGenics has an indemnification obligation to a Gilead Indemnitee under **Schedule 10.4(c)(iii)** (Special Offset and Indemnification), (b) the gross negligence, illegal conduct or willful misconduct of Gilead or any of its Related Parties or their respective Representatives in connection with this Agreement, or (c) Gilead's breach of this Agreement or the Clinical Supply Agreement, except, in each case of (a)-(c), to the extent such Third Party Claims arise from any action for which MacroGenics has an indemnification obligation to a Gilead Indemnitee under Section 15.2 (By MacroGenics) or **Schedule 10.4(c)(iii)** (Special Offset and Indemnification).

15.2 **By MacroGenics**. In addition to **Schedule 10.4(c)(iii)** (Special Offset and Indemnification), MacroGenics agrees to indemnify and hold harmless Gilead, its Affiliates, and its and their directors, officers, employees and agents (individually and collectively, the "**Gilead Indemnitee(s)**") from and against all Losses incurred in connection with any Third Party Claims to the extent arising from:
(a) activities by MacroGenics or any of its Related Parties or their respective Representatives with respect to (i) the Programs and any other Development, use, or Manufacture of Licensed Molecules or Licensed Products or the exercise of their rights or performance of their obligations related thereto, (ii) any Exploitation of any CD123 Molecule or CD123 Product prior to the Effective Date or after the effective date of termination of this Agreement and (iii) any Exploitation of any Research Molecule or Research Product after the effective date of termination of this Agreement, (b) the gross negligence, illegal conduct or willful misconduct of or any of MacroGenics or its Related Parties or their respective Representatives in connection with this Agreement, or (c) MacroGenics' breach of this Agreement or the Clinical Supply Agreement, except, in each case of (a)-(c), to the extent such Third Party Claims arise from any action for which Gilead has an indemnification obligation to a MacroGenics Indemnitee under Section 15.1 (By Gilead).

15.3 **Indemnification Procedure**. The Party that is seeking indemnification under Section 15.1 (By Gilead) or Section 15.2 (By MacroGenics) (the "**Indemnified Party**") will inform the other Party (the "**Indemnifying Party**") of the Third Party Claim giving rise to such indemnification obligations promptly after receiving written notice of the Third Party Claim (it being understood and agreed, *however*, that the failure or delay by an Indemnified Party to give such notice of a Third Party Claim will not affect the Indemnifying Party's indemnification obligations hereunder except to the extent the Indemnifying Party will have been actually and materially prejudiced as a result of such failure or delay to give notice). The Indemnifying Party will have the right, at its option, to assume the defense of any such Third Party Claim for which it is obligated to indemnify the Indemnified Party by giving written notice to the Indemnified Party within [***] after receipt of the notice of the Third Party Claim. The assumption of defense of a Third Party Claim will not be construed as an acknowledgement that the Indemnifying Party is liable to indemnify any Indemnified Party in respect of the Third Party Claim, nor will it constitute a waiver by the Indemnifying Party of any defenses it may assert against the Indemnified Party's claim for indemnification. The Indemnified Party will cooperate with the Indemnifying Party and the Indemnifying Party's agents and representatives (including insurers) as the Indemnifying Party may reasonably request, and at the Indemnifying Party's cost and expense. The Indemnified Party will have the right to participate, at its own expense and with counsel of its choice, in the defense of any Third Party Claim that has been assumed by the Indemnifying Party. If the Indemnifying Party does not assume and conduct the defense of a Third Party Claim as provided above, then (a) the Indemnified Party may defend against such Third Party Claim (and the Indemnified Party need not consult with the Indemnifying Party in connection therewith) and (b) the Indemnified Party reserves any rights it may have under this Article 15 (Indemnification) to obtain indemnification from the Indemnifying Party with respect to such Third Party Claim. If the Parties cannot agree as to the application of Section 15.1 (By Gilead) or Section 15.2 (By

MacroGenics) as to any Third Party Claim, pending resolution of the Dispute pursuant to Article 17 (Dispute Resolution), then the Parties may conduct separate defenses of such Third Party Claims, with each Party retaining the right to claim indemnification from the other Party in accordance with Section 15.1 (By Gilead) or Section 15.2 (By MacroGenics), as applicable, upon resolution of the underlying Third Party Claim; *provided* that the Parties will engage in good faith discussions regarding such Dispute before conducting separate defenses.

15.4 **Settlement**. The Indemnifying Party will not settle any Third Party Claim without first obtaining the prior written consent of the Indemnified Party, such consent not to be unreasonably withheld, conditioned or delayed; *provided*, *however*, that the Indemnifying Party will not be required to obtain such consent if the settlement: (a) involves only the payment of money and will not result in the Indemnified Party (or other MacroGenics Indemnitee(s) or Gilead Indemnitee(s), as applicable) becoming subject to injunctive or other similar type of relief; (b) does not require an admission by the Indemnified Party (or other MacroGenics Indemnitee(s) or Gilead Indemnitee(s), as applicable); and (c) does not adversely affect the rights or licenses granted to the Indemnified Party (or its Affiliates) under this Agreement. The Indemnified Party will not settle or compromise any such claim without first obtaining the prior written consent of the Indemnifying Party.

15.5 **Insurance**. Each Party will, [***] insurance policies, including product liability insurance when applicable, adequate to cover its obligations hereunder and that are consistent with normal business practices of prudent companies similarly situated. Such insurance will not be construed to create a limit of a Party's liability with respect to its indemnification obligations under this Article 15 (Indemnification). Each Party will provide the other Party with written evidence of such insurance upon request from the other Party. Notwithstanding any provision to the contrary set forth in this Agreement, Gilead may self-insure, in whole or in part, the insurance requirements described above.

15.6 **Limitation of Liability**. NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES OR FOR LOST PROFITS ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 15.6 (LIMITATION OF LIABILITY) IS INTENDED TO OR SHALL LIMIT OR RESTRICT (A) THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER THIS ARTICLE 15 (INDEMNIFICATION),
(B) DAMAGES AVAILABLE FOR MACROGENICS BREACH OF ITS OBLIGATIONS UNDER SECTION 3.10 (EXCLUSIVITY) OR (C) DAMAGES AVAILABLE FOR A PARTY'S GROSS NEGLIGENCE, INTENTIONAL MISCONDUCT OR FRAUD OR FOR A PARTY'S BREACH OF CONFIDENTIALITY OBLIGATIONS IN ARTICLE 12 (CONFIDENTIALITY; PUBLICATION).

16. **Intellectual Property**.

16.1 **Ownership of Intellectual Property**.

(a) **Ownership of Current MacroGenics IP**. As between MacroGenics and Gilead, MacroGenics shall remain the sole and exclusive owner of all MacroGenics Licensed Patents, MacroGenics Platform Trademarks and MacroGenics Licensed Know-How that exist as of the Effective Date, and shall be the sole and exclusive owner of all Patents and Trademarks filed after the Effective Date that claim priority to such MacroGenics Licensed Patents and MacroGenics Platform Trademarks.

(b) **Ownership of Current Gilead IP**. As between Gilead and MacroGenics, Gilead shall remain the sole and exclusive owner of all Gilead Licensed Patents and Gilead Licensed Know-How

that exist as of the Effective Date and shall be the sole and exclusive owner of all Patents filed after the Effective Date that claim priority to such Gilead Licensed Patents or any Trademarks that are registered by or on behalf of Gilead for a Licensed Molecule or Licensed Product.

(c) **MacroGenics Platform Improvement IP**. MacroGenics shall own all Know- How, whether patentable or not, conceived or reduced to practice by MacroGenics or Gilead in the course of conducting activities under this Agreement, in each case, that constitutes an improvement, modification or enhancement of the MacroGenics Platform, which Know-How arises from and only relates to the use of such MacroGenics Platform under this Agreement ("**MacroGenics Platform Improvement Know- How**"). Gilead shall, and hereby does (and shall cause its Related Parties and its and their respective Representatives to), assign to MacroGenics all of its and their right, title and interest in and to MacroGenics Platform Improvement Know-How. Upon MacroGenics' written request, Gilead shall, and shall cause its Related Parties and its and their respective Representatives to, execute and deliver such instruments and do such acts and things as may be necessary under Applicable Laws and Regulations, or as MacroGenics may reasonably request, to effectuate and confirm the vesting of all right, title and interest in and to the MacroGenics Platform Improvement Know-How in MacroGenics.

(d) **Gilead Agent Improvement IP**. Gilead shall own all Know-How, whether patentable or not, conceived or reduced to practice by MacroGenics or Gilead in the course of conducting activities under this Agreement, [***], which Know-How arises from [***] under this Agreement ("**Gilead Agent Improvement Know-How**"), together with all Patents that Cover such Gilead Agent Improvement Know-How ("**Gilead Agent Improvement Patents**"). MacroGenics shall, and hereby does (and shall cause its Related Parties and its and their respective Representatives to), assign to Gilead all of its and their right, title and interest in and to Gilead Agent Improvement IP. Upon Gilead's written request, MacroGenics shall, and shall cause its Related Parties and its and their respective Representatives to, execute and deliver such instruments and do such acts and things as may be necessary under Applicable Laws and Regulations, or as Gilead may reasonably request, to effectuate and confirm the vesting of all right, title and interest in and to the Gilead Agent Improvement IP in Gilead.

(e) **Jointly Owned IP**. Other than MacroGenics Platform Improvement Know-How and Gilead Agent Improvement Know-How, MacroGenics and Gilead shall jointly own all Know-How, whether patentable or not, jointly conceived or reduced to practice in the course of conducting activities under this Agreement ("**Jointly Owned Know-How**"), together with all Patents that Cover such Jointly Owned Know-How ("**Jointly Owned Patents**"), with each Party owning an undivided half interest, subject to any rights or licenses expressly granted by one Party to the other Party under this Agreement, and the right to exploit without the duty of accounting or seeking consent from the other Party to the extent permitted under Applicable Laws and Regulations. Each Party shall, and hereby does (and shall cause its Related Parties and its and their respective Representatives to), assign to the other Party an undivided half interest of its and their right, title and interest in and to Jointly Owned IP. Upon either Party's written request, the other Party shall, and shall cause its Related Parties and its and their respective Representatives to, execute and deliver such instruments and do such acts and things as may be necessary under Applicable Laws and Regulations, or as the requesting Party may reasonably request to effectuate and confirm the vesting of such right, title and interest in and to the Jointly Owned IP.

(f) **Ownership of All Other IP**. Other than MacroGenics Platform Improvement Know-How, Gilead Agent Improvement Know-How and Jointly Owned Know-How, ownership of all Know-How, whether patentable or not, conceived or reduced to practice in the course of conducting activities under this Agreement shall be based upon inventorship, as determined in accordance with U.S. patent law.

16.2 **Patent and Trademark Filing, Prosecution and Maintenance**.

(a) **Prosecution**.

(i) **Trademarks**. MacroGenics shall have the sole right to conduct any and all Trademark Prosecution for the MacroGenics Platform Trademarks listed in **Schedule 1.87** (MacroGenics Platform Trademarks) and Gilead shall have the sole right to conduct any and all Trademark Prosecution for all Trademarks that are registered by or on behalf of Gilead for a Licensed Molecule or Licensed Product.

(ii) **Gilead Licensed Patents**. As between the Parties, the responsibility for Patent Prosecution related to a Patent that is within the Gilead Licensed Patents shall be the responsibility of Gilead.

(iii) **MacroGenics Platform Patents or Other MacroGenics Licensed Patents**. As between the Parties, the responsibility for Patent Prosecution related to a Patent that is within the MacroGenics Platform Patents or Other MacroGenics Licensed Patents shall be the responsibility of MacroGenics. MacroGenics will provide Gilead with a copy of all material communications from any patent authority regarding the MacroGenics Platform Patents or the Other MacroGenics Licensed Patents and copies of any material filings or responses made to such patent authorities (excluding for clarity, any draft responses) promptly after submission thereof.

(iv) **MacroGenics Multi-Product Patents**. As between the Parties, the responsibility for Patent Prosecution related to a Patent that is within the MacroGenics Multi-Product Patents shall be the responsibility of MacroGenics. MacroGenics shall provide Gilead with a reasonable opportunity, [***] in advance of any relevant deadline, to review and comment on its efforts to prepare, file, prosecute and maintain the MacroGenics Multi-Product Patents, including by providing Gilead with a copy of all material communications from any patent authority regarding any MacroGenics Multi-Product Patent, and by providing drafts of any material filings or responses to be made to such patent authorities in advance of submitting such filings or responses. MacroGenics shall consider Gilead's comments regarding such communications and drafts in good faith. In the event that MacroGenics elects not to undertake the Patent Prosecution for any MacroGenics Multi-Product Patents, MacroGenics shall notify Gilead at least [***] before any such patent rights would become abandoned or otherwise forfeited, and the Parties will discuss in good faith whether to continue the prosecution and maintenance of such MacroGenics Multi-Product Patent. If the Parties are unable to agree in good faith whether to continue the prosecution and maintenance of such MacroGenics Multi-Product Patent, then MacroGenics shall, at Gilead's reasonable request, continue prosecution or maintenance of such MacroGenics Multi-Product Patent.

(v) **MacroGenics Product-Specific Patents**.

(1) **Prior to Option Exercise**. Prior to the applicable Option Effective Date for a Licensed Product, MacroGenics shall have the first right (but not the obligation), at its election and cost and expense, to file, prosecute and maintain the MacroGenics Product-Specific Patents for such Licensed Product. MacroGenics shall provide Gilead with a reasonable opportunity, [***] in advance of any relevant deadline, to review and comment on its efforts to prepare, file, prosecute and maintain such MacroGenics Product-Specific Patents, including by providing Gilead with a copy of all material communications from any patent authority regarding any such MacroGenics Product-Specific Patent, and by providing drafts of any material filings or responses to be made to such patent authorities in advance of submitting such filings or responses. MacroGenics shall consider Gilead's comments regarding such communications and drafts in good faith. In the event that MacroGenics elects

not to undertake the Patent Prosecution for any such MacroGenics Product-Specific Patents, MacroGenics shall notify Gilead [***] before any such patent rights would become abandoned or otherwise forfeited, and Gilead shall have the right (but not the obligation), at its sole cost and expense, to undertake the Patent Prosecution of such MacroGenics Product-Specific Patent.

(2) **After Option Exercise**. From and after the applicable Option Effective Date for a Licensed Product, Gilead shall have the first right (but not the obligation), at its election and cost and expense, to file, prosecute and maintain the MacroGenics Product-Specific Patents for such Licensed Product and Gilead shall do so using a patent prosecution firm that is (x) reasonably acceptable to both Parties or (y) at Gilead's election, selected by MacroGenics from a list of firms proposed by Gilead. Gilead shall provide MacroGenics with a reasonable opportunity to review and comment on its efforts to prepare, file, prosecute and maintain such MacroGenics Product-Specific Patents, including by providing MacroGenics with a copy of all material communications from any patent authority regarding any such MacroGenics Product-Specific Patent, and by providing drafts of any material filings or responses to be made to such patent authorities in advance of submitting such filings or responses. Gilead shall consider MacroGenics' comments regarding such communications and drafts in good faith. In the event that Gilead elects not to undertake the Patent Prosecution for any such MacroGenics Product-Specific Patent, Gilead shall notify MacroGenics [***] before any such patent rights would become abandoned or otherwise forfeited, and MacroGenics shall have the right (but not the obligation), at its sole cost and expense, to undertake the Patent Prosecution of such MacroGenics Product-Specific Patent. Notwithstanding the foregoing, MacroGenics' [***] Patent Prosecution of a MacroGenics Licensed Patent under this Section 16.2(a)(v)(2) (After Option Exercise) shall [***] MacroGenics Licensed Patent or Jointly Owned Patent. For clarity, [***].

(vi) **Jointly Owned Patents**. Gilead shall have the first right (but not the obligation), at its election, to file, prosecute and maintain the Jointly Owned Patents. Gilead shall provide MacroGenics with a reasonable opportunity to review and comment on its efforts to prepare, file, prosecute and maintain the Jointly Owned Patents, including by providing MacroGenics with a copy of all material communications from any patent authority regarding any Jointly Owned Patent, and by providing drafts of any material filings or responses to be made to such patent authorities in advance of submitting such filings or responses. Gilead shall consider MacroGenics' comments regarding such communications and drafts in good faith. In the event that Gilead elects not to undertake the Patent Prosecution for a Jointly Owned Patent, Gilead shall notify MacroGenics [***] before any such patent rights would become abandoned or otherwise forfeited, and MacroGenics shall have the right (but not the obligation), to undertake the Patent Prosecution of such Jointly Owned Patent and become the prosecuting Party therefor. Notwithstanding the foregoing, MacroGenics' right to assume Patent Prosecution of a Jointly Owned Patent shall not apply in the event such patent application was abandoned or otherwise forfeited by Gilead for strategic reasons.

(b) **Patent and Trademark Invalidations**. If either Party desires to undertake activities intended to invalidate a pending or issued Patent or Trademark owned or controlled by a Third Party and having one or more claims that Cover a Licensed Product (except insofar as such action is a counterclaim to or defense of, or accompanies a defense of, a Third Party's claim or assertion of infringement under Section 16.5 (Defense), in which case the provisions of Section 16.5 (Defense) will govern), such Party will so notify the other Party, and the Parties will promptly confer to determine whether

to bring such action, the strategy to be employed in connection with any such action, or the manner in which to settle such action. [***] Third Party Patents in the Territory that Cover the Licensed Product. [***] MacroGenics and MacroGenics will have [***]. The Party not bringing an action under this Section 16.2(b) (Patent and Trademark Invalidations) will be entitled to separate representation in such proceeding by counsel of its own choice and at its own expense and will cooperate fully with the Party bringing such action.

(c) **Costs of Patent and Trademark Prosecution**. All Out-of-Pocket Costs for Patent Prosecution and Trademark Prosecution of any Patent (other than the Jointly Owned Patents) or Trademark shall be solely incurred by and the sole responsibility of the prosecuting Party. The Parties shall equally share the Out-of-Pocket Costs to prosecute Jointly Owned Patents.

(d) **Patent Strategy**. Notwithstanding MacroGenics' right to file, prosecute and maintain the MacroGenics Multi-Product Patents: (1) the Parties will, and will cause their Affiliates to, cooperate and implement reasonable patent filing and prosecution strategies (including filing divisionals, continuations or otherwise) so that, to the extent reasonably feasible, the MacroGenics Product-Specific Patents, MacroGenics Platform Patents and MacroGenics Multi-Product Patents are pursued in mutually exclusive patent applications; (2) at Gilead's request and expense, MacroGenics will file any new MacroGenics Product-Specific Patents in a separate patent application from the existing MacroGenics Platform Patents and MacroGenics Multi-Product Patents, in each case to the extent reasonably feasible and in a manner that does not materially prejudice the prosecution of other MacroGenics Licensed Patents; and (3) for any MacroGenics Licensed Patents for which MacroGenics is responsible for filing, to the extent legally permitted by the applicable patent authority, MacroGenics will segregate claims to CD123 Products from products directed to other targets into separate Patents.

16.3 **Patent Prosecution Cooperation**. With respect to all Patent Prosecution related to pending or issued Patents that are Jointly Owned Patents, MacroGenics Licensed Patents or Gilead Licensed Patents, each Party shall:

(a) execute all further instruments to document their respective ownership consistent with this Agreement as reasonably requested by the other Party;

(b) make its employees, agents and consultants reasonably available to the other Party (or to the other Party's authorized attorneys, agents or representatives), to the extent reasonably necessary to enable the appropriate Party hereunder to undertake its Patent Prosecution responsibilities;

(c) cooperate, if necessary and appropriate, with the other Party in gaining Patent term extensions; and

(d) endeavor in good faith to coordinate its efforts under this Agreement with the other Party to minimize or avoid interference with the Patent Prosecution of the other Party's Patents.

16.4 **Enforcement**.

(a) **Notice**. Each Party shall promptly provide, but in no event [***], the other Party with written notice reasonably detailing any known or alleged infringement, misappropriation or other violation of any MacroGenics Licensed Technology, Jointly Owned IP or Gilead

Licensed Technology. The notifying Party will provide the other Party with all evidence available to it supporting its belief of such infringement.

(b) **Enforcement of Intellectual Property Rights**.

(i) **MacroGenics Platform Patents and Other MacroGenics Licensed Patents**. MacroGenics shall have the sole right to initiate and direct any infringement, misappropriation or other appropriate suit with respect to any Competing Activity ("**Enforcement Effort**") under the MacroGenics Platform Patents, the Other MacroGenics Licensed Patents or the MacroGenics Platform Trademarks; *provided* that at Gilead's request from and after the applicable Option Effective Date for a Licensed Product, [***]. With respect to any Enforcement Effort requested by Gilead after MacroGenics' decision not to so initiate or prosecute, MacroGenics will consult with Gilead regarding such Enforcement Effort and will consider, reasonably and in good faith, all input received from Gilead regarding such Enforcement Efforts. For purposes of this Section 16.4(b) (Enforcement of Intellectual Property Rights), a [***] Enforcement Effort, shall mean the following: [***].

(ii) **MacroGenics Multi-Product Patents**. MacroGenics shall have the first right (but not the obligation) to institute and direct Enforcement Efforts under the MacroGenics Multi- Product Patents. If MacroGenics (1) does not initiate any Enforcement Effort against a Third Party alleged to be conducting a Competing Activity, including by commencement of a legal action under the applicable MacroGenics Multi-Product Patents or obtaining a settlement thereof (in accordance with this Agreement), within [***] after receiving notice of such Competing Activity, (2) initiates such Enforcement Efforts within such period, and subsequently ceases to pursue or withdraws from such Enforcement Effort, or (3) provides written notice to Gilead that it does not intend to initiate such Enforcement Effort, then in each case ((1) through (3)) Gilead shall have the right (but shall not be obligated) to take all actions reasonably necessary to abate and seek damages resulting from such Competing Activity, including commencement of a lawsuit against the accused Third Party if necessary.

(iii) **MacroGenics Product-Specific Patents**.

(1) **Prior to Option Exercise**. Prior to the applicable Option Effective Date for a Licensed Product, MacroGenics shall have the first right (but not the obligation) to institute and direct Enforcement Efforts under the MacroGenics Product-Specific Patents. If MacroGenics
(x) does not initiate any Enforcement Effort against a Third Party alleged to be conducting a Competing Activity, including by commencement of a legal action under the applicable MacroGenics Product-Specific Patents or obtaining a settlement thereof (in accordance with this Agreement), within [***] after receiving notice of such Competing Activity, (y) initiates such Enforcement Efforts within such period, and subsequently ceases to pursue or withdraws from such Enforcement Effort, or (z) provides written notice to Gilead that it does not intend to initiate such Enforcement Effort, then in each case ((x) through (z)) Gilead shall have the right (but shall not be obligated) to take all actions reasonably necessary to abate and seek damages resulting from such Competing Activity, including commencement of a lawsuit against the accused Third Party if necessary; [***].

(2) **After Option Exercise**. From and after the applicable Option Effective Date for a Licensed Product, Gilead shall have the first right (but not the obligation) to institute and direct Enforcement Efforts under the MacroGenics Product-Specific Patents. If Gilead (x) does not initiate any Enforcement Effort against a Third Party alleged to be conducting a Competing Activity, including by commencement of a legal action under the applicable MacroGenics Product-Specific Patents or obtaining a settlement thereof (in accordance with this Agreement), within [***] after receiving notice of such Competing Activity, (y) initiates such Enforcement Efforts within such period, and subsequently ceases to pursue or withdraws from such Enforcement Effort, or (z) provides written notice to MacroGenics that it does not intend to initiate such Enforcement Effort, then in each case ((x) through (z)) MacroGenics shall have the right (but shall not be obligated) to take all actions reasonably necessary to abate and seek damages resulting from such Competing Activity, including commencement of a lawsuit against the accused Third Party if necessary; [***].

(iv) **Jointly Owned IP**. Gilead shall have the first right (but not the obligation) to institute and direct Enforcement Efforts under the Jointly Owned Patents. If Gilead (x) does not initiate any Enforcement Effort against a Third Party alleged to be conducting a Competing Activity, including by commencement of a legal action under the applicable Jointly Owned Patents or obtaining a settlement thereof (in accordance with this Agreement), within [***] after receiving notice of such Competing Activity, (y) initiates such Enforcement Effort within such period, and subsequently ceases to pursue or withdraws from such Enforcement Effort, or (z) provides written notice to MacroGenics that it does not intend to initiate such Enforcement Effort, then in each case ((x) through (z)) MacroGenics shall have the right (but shall not be obligated) to take all actions reasonably necessary to abate and seek damages resulting from such Competing Activity, including commencement of a lawsuit against the accused Third Party if necessary; [***].

(v) **Cooperation**. Each Party shall discuss in good faith with the other Party, and shall keep the other Party updated with respect to, the progress of each Enforcement Effort being undertaken by such Party pursuant to this Section 16.4 (Enforcement).

(c) **Recovery Allocations**.

(i) All amounts recovered by either Party in the Territory relating to an Enforcement Effort ("**Recovery**") shall be first used to reimburse each Party's Out-of-Pocket Costs incurred in connection with such Enforcement Effort.

(ii) After reimbursement of all amounts under Section 16.4(c)(i) (Recovery Allocations), any remainder of a Recovery that is obtained by Gilead from an Enforcement Effort or by MacroGenics from an Enforcement Effort shall be [***].

(d) **Cooperation in Enforcement Proceedings**. For any action by a Party pursuant to Section 16.4(b) (Enforcement of Intellectual Property Rights), in the event that such Party is unable to initiate or prosecute such action solely in its own name, the other Party shall join such action voluntarily and shall execute all documents necessary for such Party to initiate, prosecute and maintain such action. If either Gilead or MacroGenics initiates an enforcement action pursuant to Section 16.4(b) (Enforcement of Intellectual Property Rights), then the other Party shall cooperate to the extent reasonably necessary and at the first Party's sole expense (except for the expenses of the non-controlling Party's counsel, if any). Upon the reasonable request of the Party instituting any such action, such other Party shall join the suit and can be represented in any such legal proceedings using counsel of its own choice. Each Party shall assert and not waive the joint defense privilege with respect to all communications between the Parties reasonably the subject thereof.

(e) **Status; Settlement**. The Parties shall keep each other reasonably informed of the status of and of their respective activities regarding any enforcement action pursuant to Section 16.4(b) (Enforcement of Intellectual Property Rights). In no event may the Party who has the right to initiate an Enforcement Effort pursuant to Section 16.4(b) (Enforcement of Intellectual Property Rights) settle such Enforcement Effort in a manner that would limit the rights of the other Party or impose any obligation on the other Party, in each case, without the other Party's prior written consent, which consent will not be unreasonably withheld, delayed or conditioned.

16.5 **Defense**.

(a) **Notice of Allegations**. Each Party shall notify the other in writing of any allegations it receives from a Third Party that the manufacture, production, use, development, sale, offer for sale, import or distribution of a Licensed Molecule or Licensed Product or practice of any MacroGenics Licensed Technology or Jointly Owned IP infringes, misappropriates or otherwise violates the intellectual property rights of such Third Party ("**Third Party Allegation**"). Such notice shall be provided promptly, but in no event after more than [***], following receipt of such allegations.

(b) **Notice of Suit**. In the event that a Party receives notice that it or any of its Affiliates have been individually or collectively named as a defendant (or defendants) in a legal proceeding by a Third Party alleging infringement, misappropriation or any other violation of a Third Party's intellectual property right as a result of the Development, Manufacture, or Commercialization of a Licensed Molecule or Licensed Product or any of MacroGenics Licensed Technology or Jointly Owned IP ("**Third Party Suit**"), such Party shall promptly notify the other Party in writing and in no event notify such other Party later than [***] after the receipt of such notice. Such written notice shall include a copy of any summons or complaint (or the equivalent thereof) received regarding the foregoing. Each Party shall assert and not waive the joint defense privilege with respect to all communications between the Parties reasonably the subject thereof.

(c) **Right to Defend**.

(i) **Prior to Option Exercise**. Prior to the Option Effective Date for a Licensed Product, the Parties will meet and discuss any Third Party Allegation or Third Party Suit and determine in good faith how to defend such claim.

(ii) **After Option Exercise**. From and after the applicable Option Effective Date for a Licensed Product, Gilead will have the first right, but not the obligation, to defend any Third Party Allegation or Third Party Suit related to such Licensed Product or the applicable Licensed Molecule at its cost and expense. MacroGenics may participate in any such claim, suit or proceeding with counsel of its choice at its own cost and expense. Without limitation of the foregoing, if Gilead finds it necessary for

MacroGenics to join Gilead as a party to any such action, then the Parties shall cooperate to execute all papers and perform such acts as shall be reasonably required for MacroGenics to join such action. If Gilead (x) does not initiate any defense of any Third Party Allegation or Third Party Suit related to such Licensed Product or the applicable Licensed Molecule within [***] after receiving notice of such Third Party Allegation or Third Party Suit, (y) if such defense is initiated within such period, and Gilead ceases to pursue or withdraws from such defense, or (z) provides written notice to MacroGenics that it does not intend to defend against such Third Party Allegation or Third Party Suit, then in each case ((x) through (z)) MacroGenics shall have the right (but shall not be obligated) to take all actions reasonably necessary to defend such Third Party Allegation or Third Party Suit, including commencement of a lawsuit against the accused Third Party if necessary.

(d) **Status; Settlement**. The Parties shall keep each other informed of the status of and of their respective activities regarding any litigation or settlement thereof initiated by a Third Party as contemplated under Section 16.5(c) (Right to Defend); *provided*, *however*, that no settlement or consent judgment or other voluntary final disposition of a suit under this Section 16.5(d) (Status; Settlement) that affects the other Party's rights or interests may be undertaken by a Party without the consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed.

16.6 **Patent Listing**. From and after the applicable Option Effective Date for a Licensed Product, [***] in the then-current edition of the FDA's Purple Book in connection with the Regulatory Approval of such Licensed Product, or in equivalent patent listings in any other country within the Territory.

16.7 **Patent Term Extensions**. From and after the applicable Option Effective Date for a Licensed Product, [***] for patent term extensions, supplementary protection certificates, or equivalents thereto in any country in the Territory, in each case, where applicable to such Licensed Product (hereinafter "**Patent Term Extensions**"), including for any MacroGenics Licensed Patents or Jointly Owned Patents (but excluding any MacroGenics Platform Patent). [***] will provide support, assistance, and all necessary documents, in full, executed form if needed, to Gilead for the purpose of supporting, filing, obtaining and maintaining Patent Term Extensions.

17. **Dispute Resolution**.

17.1 **Exclusive Dispute Resolution Mechanism**. The Parties agree that the procedures set forth in this Article 17 (Dispute Resolution) shall be the exclusive mechanism for resolving any Dispute between the Parties that may arise from time to time pursuant to this Agreement relating to either Party's rights or obligations hereunder that is not resolved through good faith negotiation between the Parties. For the avoidance of doubt, this Article 17 (Dispute Resolution) shall not apply to any decision with respect to which a Party has final decision-making authority hereunder. Any Dispute, including Disputes that may involve the parent company, subsidiaries, or Affiliates under common control of any Party, shall be resolved in accordance with this Article 17 (Dispute Resolution).

17.2 **Resolution by Executive Officers**. Except as otherwise provided in this Article 17 (Dispute Resolution), in the event of any Dispute, the Parties will refer the Dispute to the Executive Officer of each Party for attempted resolution by good faith negotiation within [***] after such notice is received. Each Party may, in its discretion, seek resolution of [***] hereunder ("**Incidental**

Payment Disputes") that remains unresolved after escalation to Executive Officers in accordance with this Section 17.2 (Resolution by Execution Officers) through expedited arbitration in accordance with Section 17.3 (Expedited Arbitration for Incidental Payment Disputes) and (b) any other Disputes (other than Incidental Payment Disputes) that are not resolved within such [***] through litigation in accordance with the remainder of this Article 17 (Dispute Resolution).

17.3 **Expedited Arbitration for Incidental Payment Disputes**. Notwithstanding Section 17.4 (Jurisdiction; Venue; Service of Process), any unresolved Incidental Payment Disputes will be submitted to the International Court of Arbitration of the International Chamber of Commerce (the "**ICC**") and will be finally settled under the Rules of the Arbitration of the ICC as then in effect, except as modified herein. The seat, or legal place, of arbitration will be San Francisco, California and the Parties agree not to contest such seat of arbitration. The arbitration will be conducted by a [***] arbitrators, which will be constituted as follows: each Party will nominate an arbitrator within [***]. Each arbitrator will have expertise and significant experience with respect to licensing and partnering agreements in the pharmaceutical and biotechnology industries, including expertise in the applicable subject matter of the Incidental Payment Dispute. An arbitrator will be deemed to meet these qualifications unless a Party objects [***] after the arbitrator is nominated. If any of the arbitrators are not nominated within the time prescribed above, then the arbitrator(s) will be appointed by the ICC in accordance with ICC rules. The Parties agree not to contest the jurisdiction of the arbitral tribunal. The arbitral tribunal will submit its award to the International Court of Arbitration of the ICC within [***] of the final arbitration hearing or the final post-hearing submission, whichever is later, subject to extension by the Parties' mutual agreement. The Parties will in good faith facilitate an expedited arbitration process such that the arbitration will conclude within [***]. No arbitrator (nor the arbitral tribunal) will have the power to award punitive damages or to award costs and expenses of the proceeding or reasonable attorney's fees to any Party under this Agreement and such award is expressly prohibited. The award will be final and binding on the Parties and the Parties undertake to carry out any award without delay. Judgment on the award so rendered may be entered in any court of competent jurisdiction. No award or procedural order made in the arbitration will be published. The Parties acknowledge that this Agreement evidences a transaction involving interstate and international commerce. Notwithstanding the provision in Section 17.5 (Governing Law) with respect to applicable substantive law, any arbitration conducted pursuant to the terms of this Agreement will be governed by the U.S. Federal Arbitration Act.

17.4 **Jurisdiction; Venue; Service of Process**. Except with respect to Incidental Payment Disputes, each Party irrevocably submits to the exclusive jurisdiction of [***]. Each Party agrees to commence any Action either in the [***] or if such Action may not be brought in such court for jurisdictional reasons, in the courts of the [***] Each Party further agrees that service of any process, summons, notice or document by the U.S. registered mail to such Party's respective address set forth in Section 19.6 (Notices) will be effective service of process for any Action in New York with respect to any matters to which it has submitted to jurisdiction in this Section 17.3. (Jurisdiction; Venue; Service of Process). Each Party irrevocably and unconditionally waives any objection to the laying of venue of any Action arising out of this Agreement in [***], and hereby and thereby further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such Action brought in any such court has been brought in an inconvenient forum.

17.5 **Governing Law**. This Agreement, and all claims or causes of action (whether in contract, tort, statute, or otherwise) that may be based upon, arise out of, or relate to this Agreement, or the negotiation, execution, or performance of this Agreement, or the breach thereof (including any claim or cause of action based upon, arising out of, or related to any representation or warranty made in or in connection with this Agreement or as an inducement to enter into this Agreement), will be governed by, and enforced in accordance with, [***], including its statutes of limitations, without giving effect to any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction. The provisions of the United Nations Convention on Contracts for the International Sale of Goods are expressly excluded.

17.6 **Waiver of Jury Trial**. THE PARTIES HEREBY WAIVE, AND COVENANT THAT THEY WILL NOT ASSERT (WHETHER AS PLAINTIFF, DEFENDANT OR OTHERWISE), ANY RIGHT TO TRIAL BY JURY IN ANY ACTION ARISING IN WHOLE OR IN PART UNDER OR IN CONNECTION WITH THIS AGREEMENT, WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE. THE PARTIES AGREE THAT ANY OF THEM MAY FILE A COPY OF THIS PARAGRAPH WITH ANY COURT AS WRITTEN EVIDENCE OF THE KNOWING, VOLUNTARY AND BARGAINED-FOR AGREEMENT AMONG THE PARTIES IRREVOCABLY TO WAIVE ITS RIGHT TO TRIAL BY JURY IN ANY PROCEEDING WHATSOEVER BETWEEN THEM RELATING TO THIS AGREEMENT, AND THE PARTIES WILL INSTEAD BE TRIED IN A COURT OF COMPETENT JURISDICTION BY A JUDGE SITTING WITHOUT A JURY.

17.7 **Equitable Relief**. Notwithstanding anything to the contrary, either Party may at any time seek to obtain preliminary injunctive relief or other applicable provisional relief from a court of competent jurisdiction with respect to an issue arising under this Agreement if the rights of such Party would be prejudiced absent such relief.

18. **Term and Termination**.

18.1 **Term**. This Agreement shall become effective as of the Effective Date and, unless earlier terminated pursuant to this Article 18 (Term and Termination), shall continue in full force and effect until, on a Licensed Product-by-Licensed Product and country-by-country basis, the expiration of the last Royalty Term for a Licensed Product in a country ("**Term**").

18.2 **Termination for Material Breach**.

(a) **Material Breach**. This Agreement may be terminated in its entirety or with respect to a Program at any time during the Term upon written notice by a Party (the "**Non-Breaching Party**") if the other Party (the "**Breaching Party**") is in material breach of this Agreement (or in connection with the applicable Program, as applicable) and, in each case, has not cured such breach within the applicable cure period after written notice requesting cure of the breach, which notice will describe such material breach in reasonable detail and will state the Non-Breaching Party's intention to terminate this Agreement, in its entirety or in part. For any breach arising from a failure to make a payment set forth in this Agreement, the Breaching Party will have [***] notification to cure such breach. For all breaches other than a failure to make a payment as set forth in this Agreement, the Breaching Party will have [***] to cure such breach; *provided* that, if [***], then such [***]. For clarity, if a material breach is limited to one or more (but not all) Programs, then the Non-Breaching Party will have the right to terminate solely with respect to such Program(s).

(b) **Disagreement as to Material Breach**. Notwithstanding Section 18.2(a) (Material Breach), if the Parties in good faith disagree as to whether there has been a material breach of this Agreement, then: (i) the Breaching Party may contest the allegation by referring such matter, within [***]. following its receipt of notice of the alleged material breach, for resolution in accordance with Article 17 (Dispute Resolution); (ii) the relevant cure period with respect to such alleged material breach will be tolled from the date on which the Breaching Party notifies the Non-Breaching Party of the Dispute and through the resolution of such Dispute in accordance with the applicable provisions of this Agreement; (iii) during the pendency of such Dispute, all of the terms and conditions of this Agreement will remain in effect and the Parties will continue to perform all of their respective obligations hereunder; and (iv) if it is ultimately determined that the Breaching Party committed such material breach, then the

Breaching Party will have the right to cure such material breach, after such determination, within the applicable cure period set forth in Section 18.2(a) (Material Breach), which cure period will commence as of the date of such determination.

18.3 **Termination for Convenience**. At any time after the [***] of the Effective Date, Gilead may, in its sole discretion, terminate this Agreement in its entirety upon (a) [***] notice to MacroGenics prior to the CD123 Option Effective Date or (b) [***] notice to MacroGenics after the CD123 Option Effective Date. In addition, at any time after the [***] of the Effective Date, Gilead may, at its sole discretion, terminate this Agreement on a Program-by-Program basis upon (i) [***] notice to MacroGenics if such notice is provided [***], or (ii) [***] notice to MacroGenics [***].

18.4 **Termination for Force Majeure**. This Agreement may be terminated in its entirety or in part on a Program-by-Program basis at any time during the Term upon written notice by either Party in accordance with Section 19.1 (Force Majeure).

18.5 **Termination for Bankruptcy**. This Agreement may be terminated in its entirety, to the extent permitted by the Applicable Laws and Regulations, by a Party (the "**Non-Bankrupt Party**") upon the filing or institution of bankruptcy, reorganization, liquidation or receivership proceedings, or upon an assignment of a substantial portion of the assets for the benefit of creditors, in each case, of the other Party (the "**Bankrupt Party**"); *provided*, *however*, that in the case of any involuntary bankruptcy, reorganization, liquidation or receivership proceeding, such right to terminate will only become effective if the Bankrupt Party consents to the involuntary bankruptcy or such proceeding is not dismissed within [***] after the filing thereof (such bankruptcy and related events described in this Section 18.5 (Termination for Bankruptcy), collectively, "**Bankruptcy Events**").

18.6 **Termination for Patent Challenge**. Except to the extent the following is unenforceable under the Applicable Laws and Regulations of a particular jurisdiction in the Territory, on a MacroGenics Licensed Patent-by-MacroGenics Licensed Patent basis, MacroGenics may terminate the licenses granted to Gilead under Section 3.1 (Licenses to Gilead) for a MacroGenics Licensed Patent (and such Patent will cease to be a MacroGenics Licensed Patent for all purposes under this Agreement) upon written notice to Gilead if Gilead, its Affiliates, or Sublicensees, individually or in association with any other person or entity, commences a legal action challenging the validity, enforceability or scope of such MacroGenics Licensed Patent in a court or other governmental agency of competent jurisdiction, including a reexamination or opposition proceeding (a "**Patent Challenge**") and does not withdraw such Patent Challenge within [***] after receipt of notice from MacroGenics requesting

a withdrawal; *provided* that with respect to any Patent Challenge by any Sublicensee, MacroGenics will not have the right to terminate this Agreement under this Section 18.6 (Termination for Patent Challenge) if, within [***] of MacroGenics' notice to Gilead under this Section 18.6 (Termination for Patent Challenge), Gilead (a) causes such Patent Challenge to be terminated or dismissed or (b) terminates the sublicense granted to such Sublicensee under this Agreement. Notwithstanding the foregoing, MacroGenics will not have the right to terminate under this Section 18.6 (Termination for Patent Challenge) as a result of (i) any claim or proceeding that would otherwise be a Patent Challenge hereunder to the extent commenced by a Third Party that after the Effective Date acquires or is acquired by Gilead or its Affiliates or its other business assets, whether by stock purchase, merger, asset purchase or otherwise, *provided* that such proceeding was commenced prior to the closing of such acquisition; (ii) any claim or proceeding by a licensor of a product licensed by Gilead for which the licensor has an existing challenge, whether in a court or administrative proceeding against a MacroGenics Licensed Patent; (iii) any Patent Challenge required to be commenced pursuant to an order of a governmental authority or Applicable Laws and Regulations; (iv) any proceeding not initiated, directed or controlled by or on behalf of Gilead or one of its Affiliates (or any of their respective Sublicensees), for which Gilead or the Affiliate, as the case may be, opposes, or assists any Third Party to oppose, the grant of a MacroGenics Licensed Patent pursuant to any application in relation thereto in an administrative proceeding, such as a patent reexamination, inter partes review, or other post grant proceeding or opposition; (v) challenges by an open forum entity or other industry group in which Gilead or its Affiliates or Sublicensees do not direct or control the action of such entity; (vi) general activities not specifically directed to a particular Patent, such as amicus briefs on cases not involving a MacroGenics Licensed Patent; (vii) lobbying or other efforts directed to patent issues generally and not to any specific MacroGenics Licensed Patent; or (viii) providing documents or testimony in response to any discovery requests or court order in a valid legal process not directed to a Patent Challenge of a MacroGenics Licensed Patent.

18.7 **[***]**. Gilead shall have the right, on a Program- by-Program basis, to terminate this Agreement at any time upon providing [***] prior written notice to MacroGenics: [***].

18.8 **Alternative Remedy in Lieu of Termination**. MacroGenics agrees that Gilead's decision to enter into this Agreement and invest in the Development of the Programs is premised upon the assumption that MacroGenics will perform its obligations under this Agreement, and that a material breach of the Agreement by MacroGenics could undermine the economic fundamentals of the transaction for Gilead, and that in such event Gilead's damages arising from MacroGenics' breach would be of an uncertain amount and difficult to prove. Accordingly, if it has been conclusively determined that Gilead has the right to terminate this Agreement pursuant to Section 18.2 (Termination for Material Breach) or Section 18.5 (Termination for Bankruptcy) (for clarity, (i) based upon MacroGenics's acknowledgment of or failure to dispute, as applicable, under Section 18.2(b) (Disagreement as to Material Breach) such material breach or bankruptcy or (ii) pursuant to the procedures set forth in Section 18.2(b) (Disagreement as to Material Breach)), then in lieu of terminating this Agreement due to such material breach or suing MacroGenics for damages arising from such material breach, Gilead may, in its sole discretion, exercise the following remedy (which MacroGenics stipulates and agrees would be a reasonable remedy in such circumstance and not a penalty):

(a) Gilead may retain all of its licenses and other rights granted under this Agreement, subject to all of its payment and other obligations; except that, [***] (which for clarity, shall remain payable in its full amount in accordance with the terms of [***]; and

(b) any Gilead Confidential Information provided to MacroGenics pursuant to this Agreement will be promptly returned to Gilead or destroyed (at MacroGenics' election), and Gilead will be released from its ongoing disclosure and information exchange obligations with respect to activities after the date of such election.

For the avoidance of doubt, except as set forth in this Section 18.8 (Alternative Remedy in Lieu of Termination), if Gilead exercises the alternative remedy set forth above in this Section 18.8 (Alternative Remedy in Lieu of Termination), then all rights and obligations of both Parties under this Agreement will continue unaffected, unless and until this Agreement is subsequently terminated by either Party pursuant to this Article 18 (Term and Termination); *provided* that in the event that Gilead exercises the alternative

remedy set forth in this Section 18.8 (Alternative Remedy in Lieu of Termination) in the event of a material breach by MacroGenics (as described in Section 18.2 (Termination for Material Breach)) or upon the occurrence of a bankruptcy event of MacroGenics (as described in Section 18.4 (Termination for Bankruptcy)), Gilead will not have the right to terminate this Agreement or to seek monetary damages from MacroGenics for such material breach or, as it relates to this Agreement, bankruptcy, in each case for which the alternative remedy was exercised.

18.9 **Effects of Termination**.

(a) **In General**. Upon any termination of this Agreement in its entirety or with respect to a Program:

(i) Gilead shall pay any amounts accrued pursuant to Section 11.1 (Development Costs, Plan Costs and Manufacturing Costs) and Article 10 (Payments) for this Agreement or the Terminated Programs, as applicable, as of the effective date of termination to the extent not previously paid prior to the date of termination;

(ii) The licenses and sublicenses granted to each Party under this Agreement (or with respect to the Terminated Programs, as applicable) including pursuant to Sections 3.1 (Licenses to Gilead) and 3.2 (Licenses to MacroGenics), shall terminate and Gilead will cease any and all Exploitation of the Terminated Products as soon as is reasonably practicable under Applicable Laws and Regulations; *provided* that such licenses will continue as necessary for the Parties to complete the orderly wind-down of their activities under this Agreement in accordance with Applicable Laws and Regulations and as otherwise required in accordance with Section 18.9(a)(iii) (In General) [***];

(iii) Gilead shall cease all Development and Commercialization under each Terminated Program, including, to the extent permitted by any applicable Regulatory Authority or Applicable Laws and Regulations, halting enrollment of subjects (unless otherwise directed in writing by MacroGenics) into any Clinical Trial being conducted by the Gilead for the Terminated Programs and at MacroGenics' sole election shall either (1) wind-down (including to cease administering the Terminated Products to Clinical Trial subjects and conducting Clinical Trial procedures on such Clinical Trial subjects, to the extent medically advisable and permitted by any applicable Regulatory Authority or Applicable Laws and Regulations) or (2) if a [***] any such Clinical Trial then being conducted by Gilead [***] but in all cases in a timely manner and in accordance with all Applicable Laws and Regulations;

(iv) All sublicenses under the rights granted pursuant to Sections 3.1 (Licenses to Gilead) and 3.2 (Licenses to MacroGenics) shall terminate with respect to the Terminated Products, unless converted to a direct license under Section 3.3(c) (Survival of Gilead Sublicenses) subject to terms and conditions to be agreed between MacroGenics and such Sublicensee; and

(v) MacroGenics shall revoke (and Gilead shall allow revocation of) any powers of attorney for any MacroGenics Licensed Patents that Gilead holds as of the time of such termination.

(vi) MacroGenics shall have the right to assume all preparation, filing, prosecution, maintenance and enforcement activities under Article 16 (Intellectual Property) with respect to MacroGenics Licensed Patents as to which Gilead has assumed the right and authority to prepare, file, prosecute, maintain or enforce. Gilead will cooperate with MacroGenics and provide MacroGenics with reasonable assistance with the preparation, filing, prosecution, maintenance, and enforcement activities with respect to such MacroGenics Licensed Patents. The step-in rights granted to MacroGenics with respect to Jointly Owned Patents under Section 16.2(a)(vi) (Jointly Owned Patents) and Section 16.4(b)(iv) (Jointly Owned IP) shall remain in effect.

(b) **Additional Effects of Certain Terminations**. If (A) MacroGenics terminates this Agreement in its entirety or with respect to the CD123 Development Program pursuant to (1) Section 18.2 (Termination for Material Breach), (2) Section 18.5 (Termination for Bankruptcy) or (3) Section 18.6 ((Termination for Patent Challenge), solely to the extent the relevant Patent that is the subject of such Patent Challenge is the last MacroGenics Licensed Patent for which there exists a Valid Claim that Covers the composition of matter or method of use of a Licensed Product) or (B) if Gilead terminates this

Agreement in its entirety or with respect to the CD123 Development Program pursuant to Section 18.3 (Termination for Convenience), then, in addition to those general effects set forth in Section 18.9(a) (In General), upon such termination the following terms of this Section 18.9(b) (Additional Effects of Certain Terminations) will apply solely with respect to any CD123 Products that are not Combination Products ("**Reverted CD123 Products**"):

(i) Gilead shall [***] MacroGenics, at [***] MacroGenics, [***] and to (1) [***] for the Reverted CD123 Products, to the extent that MacroGenics [***] CD123 Development Program; and (2) [***] of the CD123 Molecules and Reverted CD123 Products), in [***] Related Parties or its or their respective agents solely related to such Reverted CD123 Products; and

(ii) Upon written request from MacroGenics to Gilead provided within [***] following MacroGenics' receipt or delivery, as applicable, of the notice of termination, the Parties [***] regarding the transition by Gilead to MacroGenics of assets and rights and the provision of assistance by each Party to the other Party as reasonably necessary, subject to agreement of the Parties, to enable the continued Development, Manufacture and Commercialization of the Reverted CD123 Products [***], among other things, the following matters: (i) [***] for the Reverted CD123 Products; (ii) [***] of the Reverted CD123 Products [***]; (iii) [***] applicable Reverted CD123 Products; (iv) [***] of CD123 Molecules and Reverted CD123 Products [***]; (v) [***] Gilead at the time of termination to [***] the Reverted CD123 Products; (vi) the [***] the Reverted CD123 Products; (vii) the [***] the Reverted CD123 Products; (viii) any [***] Reverted CD123 Products [***]; and (ix) [***] transition and assistance to MacroGenics; *provided* that [***] to MacroGenics under subsection [***] if such termination is [***] for a CD123 Product.

18.10 **Surviving Provisions**.

(a) **Accrued Rights; Remedies**. The expiration or termination of this Agreement for any reason will be without prejudice to any rights that will have accrued to the benefit of any Party prior to such expiration or termination, and any and all damages or remedies (whether at law or in equity) arising from any breach hereunder, each of which will survive expiration or termination of this Agreement. Such expiration or termination will not relieve any Party from obligations which are expressly indicated to survive expiration or termination of this Agreement. Except as otherwise expressly set forth in this Agreement, the termination provisions of this Article 18 (Term and Termination) are in addition to any other relief and remedies available to either Party under this Agreement, at law or in equity.

(b) **Survival**. Without limiting the provisions of Section 18.10(a) (Accrued Rights; Remedies), the following provisions, as well as any other provisions which by their nature are intended to survive termination or expiration, shall survive the termination or expiration of this Agreement for any reason: Articles 1 (Definitions) (as applicable), 12 (Confidentiality; Publication), 15 (Indemnification) (except that with respect to Section 15.5 (Insurance)), [***] following termination or expiration), 17 (Dispute Resolution), and Sections 3.3(c) (Survival of Gilead Sublicenses), 3.5 (Retained Rights) (solely with respect to the second and third sentences), 3.8(c)(ii) [***] Upstream Licenses) (solely with respect to any surviving provisions of sublicensed Upstream License Agreements), 3.9 (Materials Transfer) (solely with respect to the ownership of Materials and the last sentence), 4.7 (Records; Updates) (solely with respect to the obligation to maintain records for [***] following termination or expiration), 4.8 (Data Ownership), 4.13 (CD123 Development Program Termination), 5.4 (Research Plan Costs) (solely with respect to activities conducted prior to the effective date of termination or expiration of this Agreement), 5.6 (Records; Updates) (solely with respect to the obligation to maintain records for [***] following termination or expiration), 5.7 (Data Ownership), 5.10 (Research Program Termination), 6.5 (Records) (solely with respect to the obligation to maintain records for [***] following termination or expiration), 6.7 (Data Ownership), 9.1(a)(i) (Prior to the CD123 Option Effective Date) (solely with respect to the last sentence), 10.2 (Development and Regulatory Milestone Payments) through 10.4 (Royalties on Net Sales) (solely with respect to obligations accrued, but not yet paid, as of the effective date of expiration or termination of this Agreement), 11.1 (Development Costs, Plan Costs and Manufacturing Costs) and 11.2 (Royalty Payments) (solely with respect to obligations accrued, but not yet paid, as of the effective date of expiration or termination of this Agreement), 11.3 (Payment Exchange Rate), 11.4 (Taxes), 11.5 (Records) and 11.6 (Audit Rights) (solely for [***] following termination or expiration), 11.7 (Confidentiality), 13.2(a)(iii)(6) (Anti- Corruption Laws) (solely for [***] following expiration of termination), 13.2(a)(iii)(7) (solely with respect to the last sentence), 14.5 (No Other Representations or Warranties), 16.1 (Ownership of Intellectual Property), 16.2(a)(vi) (Jointly Owned Patents), 16.3 (Patent

Prosecution Cooperation) (solely with respect to Jointly Owned Patents), 16.4(a) (Notice) (solely with respect to Jointly Owned IP), 16.4(b)(iv) (Jointly Owned IP), 16.4(b)(v) (Cooperation) (solely with respect to Jointly Owned Patents), 16.4(c) (Recovery Allocations) (solely with respect to Jointly Owned Patents), 16.4(d) (Cooperation in Enforcement Proceedings) (solely with respect to Jointly Owned Patents), 18.9 (Effects of Termination), 18.10 (Surviving Provisions), 19.2 (Standstill) (solely for twelve (12) months after the Effective Date if the Agreement is terminated prior to such time), 19.3 (Section 365(n) of the Bankruptcy Code), 19.4(a) (Assignment), 19.5 (Severability) through 19.18 (Construction), and **Schedule 10.4(c)(iii)** (Special Offset and Indemnification).

19. **Miscellaneous**.

19.1 **Force Majeure**. Neither Party shall be held liable to the other Party nor be deemed to have defaulted under or breached this Agreement for failure or delay in performing any obligation under this Agreement to the extent such failure or delay is caused by or results from causes beyond the reasonable control of the affected Party, including embargoes, war, acts of war (whether war be declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, fire, floods, or other acts of God, or acts, omissions or delays in acting by any governmental authority or the other Party ("**Force Majeure**"); *provided* that the affected Party (a) notify the other Party of such Force Majeure circumstances as soon as reasonably practical and (b) promptly undertakes all reasonable efforts necessary to cure such Force Majeure circumstances, and will continue performance in accordance with the terms of this Agreement whenever such causes are removed. For the avoidance of doubt, the inability to expend or access financial resources in itself shall not be a Force Majeure. In the event a Party is unable to perform its obligations under this Agreement due to Force Majeure for a period of [***], the other Party shall have the option of unilaterally terminating this Agreement upon providing [***] written notice.

19.2 **Standstill.**

(a) Gilead agrees that neither it nor any of its subsidiaries (but excluding any Acquirer of Gilead or any Affiliates of such Acquirer following a Change of Control of Gilead), officers or directors acting at Gilead's direction and on its behalf, alone or as part of any 13D Group (as defined below), shall, directly or indirectly, for [***] (the "**Standstill Period**"), [***]:

(i) acquire, offer or publicly propose to acquire or agree to acquire or cause to be acquired, ownership (including, but not limited to, beneficial ownership as defined in Rule 13d-3 under the Securities Exchange Act of 1934 (the "**Exchange Act**")) of more than [***] of the voting equity securities of MacroGenics, or any rights or options to acquire more than [***] of the voting equity securities of MacroGenics;

(ii) make or participate in any "solicitation" of "proxies" (as such terms are used in Regulation 14A of the Exchange Act) to vote, or seek to advise or influence any Person with respect to the voting of, any voting securities of MacroGenics;

(iii) form or join a "group" (within the meaning of Section 13(d)(3) of the Exchange Act) ("**13D Group**") with respect to any voting securities of MacroGenics;

(iv) otherwise act to seek to publicly propose to MacroGenics any merger, business combination, restructuring, recapitalization or similar transaction with respect to or with MacroGenics or otherwise act to seek the removal of any member of the Board of Directors of MacroGenics, or nominate any person as a director of MacroGenics who is not nominated by a then incumbent director; or

(v) publicly announce its intentions to enter into any discussion, negotiations, arrangements or understandings with any Third Party with respect to, any of the foregoing.

(b) The restrictions set forth in this Section 19.2 (Standstill) shall be inoperative and of no force in effect and shall automatically terminate immediately if: (i) a Person or 13D Group (not including Gilead or its Affiliates) (1) commences or publicly announces its intent to commence a tender or exchange offer to acquire voting securities of MacroGenics representing more than twenty percent (20%) of the then-outstanding voting power of the voting securities of MacroGenics or (2) publicly announces a *bona fide* proposal to enter into a transaction described in, or of a similar nature to those described in, clause (ii)(1) or (ii)(2) below and either (x) MacroGenics publicly announces a willingness to consider such proposal or alternative proposals for a transaction described in, or of a similar nature as those described in, clause (ii)(1) or (ii)(2) below, (y) the Board of Directors of MacroGenics determines to engage in negotiations with such Person or 13D Group or any other Party (other than Gilead or its Affiliates) with respect to a transaction described in, or of a similar nature as those described in, clause (ii)(1) or (ii)(2) below, or (z) such offer or proposal is not publicly rejected or recommended against by the MacroGenics' Board of Directors within [***] after such offer or proposal becomes public or the MacroGenics' Board of Directors withdraws such recommendation of rejection or recommends acceptance of such tender or exchange offer, (ii) MacroGenics or its Affiliates publicly initiates a process to consider, or enters into a transaction described in clause (1) or (2) below, or enters into a letter of intent or definitive agreement with any Third Party regarding (1) any merger, consolidation, sale, reorganization, recapitalization, tender or exchange offer, restructuring, sale, equity issuance, dual listing structure, joint venture, liquidation, dissolution or other business combination or extraordinary transaction pursuant to which the stockholders or equity holders of MacroGenics immediately prior to such transaction would own, immediately after consummation of such a transaction, less than [***] of the total voting power of MacroGenics, any successor entity, parent entity or other entity surviving such transaction; or (2) any transaction or series of transactions that would result, directly or indirectly, in the sale or transfer to a Third Party of (A) all or a majority of MacroGenics' consolidated assets; or (B) a majority of MacroGenics' consolidated assets which relate to this Agreement, whether, in the case of clause (1) or (2), by way of a merger, consolidation, sale, reorganization, recapitalization, tender or exchange offer, restructuring, sale, equity issuance, dual listing structure, joint venture, liquidation, dissolution or other business combination or extraordinary transaction, (iii) any person (other than any person that is eligible to file a Schedule 13G under the Exchange Act with respect to such ownership) or 13D group becomes the beneficial owner of twenty percent (20%) or more of the outstanding voting power of MacroGenics or (iv) MacroGenics enters into a voluntary or involuntary bankruptcy or insolvency proceeding under Applicable Laws and Regulations.

(c) Nothing in this Agreement, including this Section 19.2 (Standstill), shall prohibit: (i) Gilead or its Affiliates or its or their Representatives from acquiring or offering to acquire any securities of MacroGenics in connection with any mutual fund, pension plan or employee benefit plan managed on behalf of employees or former employees of Gilead or its Affiliates; or (ii) Gilead or any of its Affiliates or its or their Representatives from making a private proposal to, or engaging in discussions or confidentially communicating with the Board of Directors of MacroGenics or any officer or member of senior management of MacroGenics, on a confidential, non-public basis regarding, any of the transactions contemplated under this Section 19.2 (Standstill) in such a manner that would not reasonably be expected to require Gilead or MacroGenics to make any public disclosure with respect thereto under Applicable Laws and Regulations.

19.3 **Section 365(n) of the Bankruptcy Code**. All rights and licenses granted under or pursuant to any section of this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of rights to "intellectual property" as defined under Section 101(35A) of the U.S. Bankruptcy Code. The Parties shall retain and may fully exercise all of their respective rights

and elections under the U.S. Bankruptcy Code. The Parties agree that a Party that is a licensee of such rights under this Agreement shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code, and that upon commencement of a bankruptcy proceeding by or against the licensing Party (such Party, the "**Involved Party**") under the U.S. Bankruptcy Code, the other Party (such Party, the "**Noninvolved Party**") shall be entitled to a complete duplicate of or complete access to (as such Noninvolved Party deems appropriate), any such intellectual property and all embodiments of such intellectual property, *provided* the Noninvolved Party continues to fulfill its payment or royalty obligations as specified herein in full. Such intellectual property and all embodiments thereof shall be promptly delivered to the Noninvolved Party (a) upon any such commencement of a bankruptcy proceeding upon written request therefor by the Noninvolved Party, unless the Involved Party elects to continue to perform all of its obligations under this Agreement or (b) if not delivered under (a) above, upon the rejection of this Agreement by or on behalf of the Involved Party upon written request therefor by Noninvolved Party. The foregoing is without prejudice to any rights the Noninvolved Party may have arising under the U.S. Bankruptcy Code or other Applicable Laws and Regulations.

19.4 **Assignment; Change of Control**.

(a) Neither Party may assign its rights and obligations under this Agreement without the prior written consent of the other Party, *provided* that each Party may assign its rights and obligations under this Agreement, without such consent from the other Party, to its Affiliate or any successor in interest in connection with the sale of all or substantially all of its assets or a sale of all or substantially of the business related to a Program, or a merger, acquisition or other similar transactions. For the avoidance of doubt, the terms and conditions of this Agreement shall be binding on the permitted successors and assignees of each Party.

(b) If MacroGenics undergoes a Change of Control, then

(i) MacroGenics will notify Gilead thereof within [***] upon the closing of the Change of Control; *provided* that a public announcement within such period by or through a nationally recognized news organization recognized pharma/biotech industry news organization or forum of such closing shall be sufficient to provide such notification;

(ii) If the MacroGenics Acquirer is Exploiting any Competitive Product, then MacroGenics will comply with the terms of Section 3.10(c) (Business Combinations);

(iii) Notwithstanding anything to the contrary in this Agreement, Gilead will have the right, at its sole discretion, by written notice delivered to MacroGenics (or its successor) at any time within [***] following the written notice contemplated by the foregoing Section 19.4(b)(i) (Assignment; Change of Control), to (1) terminate any or all provisions of this Agreement providing for any delivery by Gilead to MacroGenics of Confidential Information of Gilead relating to activities contemplated by this Agreement, save only for the provisions of Article 10 (Payments), and (2) require MacroGenics and its Acquirer to adopt reasonable procedures, to be agreed upon by the Parties in writing, to prevent disclosure of Confidential Information of Gilead to MacroGenics' Acquirer. For clarity this clause 19.4(b)(iii) (Assignment; Change of Control) does not limit any reporting obligations of Gilead that are financial in nature; and

(iv) MacroGenics covenants that there will be no material change in the level or nature of efforts or resources expended by MacroGenics and its Affiliates, which material change would reasonably be expected to adversely impact MacroGenics' ability to perform its obligations under this Agreement.

19.5 **Severability**. If any one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby, unless the absence of the invalidated provision(s) adversely affects the substantive rights of the Parties. The Parties shall in such an instance use their best efforts to replace the invalid, illegal or unenforceable provision(s) with valid, legal and enforceable provision(s) which, insofar as practical, implement the purposes of this Agreement.

19.6 **Notices**. All notices which are required or permitted hereunder shall be in a medium that has the capability to confirm the exact content, the times of transmission and receipt, and the identities or each sender and recipient of each communication sent through such medium. A communication to an intended recipient Party shall be deemed to be received by the intended recipient Party by the existence of documentation that clearly evidences such communication was sent through a medium permitted under this Agreement to an individual who was specifically designated by the recipient Party to receive such communication or, if no such designation was made, an individual who has routinely received communications with similar content under this Agreement on behalf of the recipient Party.

(a) For notices to be communicated in writing, such notices shall be delivered personally, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier), sent by nationally recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

if to MacroGenics, to: 9704 Medical Center Drive
Rockville, MD 20850
Attention: Chief Executive Officer Facsimile: (301) 251-5321

with copy to:
(which shall not constitute notice)

if to Gilead, to:	Gilead Sciences, Inc. 333 Lakeside Drive Foster City, CA 94404 United States Attention: Alliance Manager
with a copy to:	Gilead Sciences, Inc. 333 Lakeside Drive Foster City, CA 94404 United States Attention: General Counsel

or to such other address as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such notice shall be deemed to have been given upon receipt.

19.7 **Applicable Intellectual Property Law/Governing Law**. All questions of inventorship shall be determined in accordance with U.S. patent laws. In respect to all other Patent issues related to the enforceability or validity of a Patent, the laws of the jurisdiction in which the applicable Patent is filed or granted shall govern.

19.8 **Entire Agreement; Amendments**. The Agreement contains the entire understanding of the Parties with respect to the subject matter hereof, including the Programs and licenses granted hereunder. All express or implied prior or contemporaneous agreements and understandings, either oral or written, with regard to the subject matter hereof, including with respect to the Programs and the licenses granted hereunder, are superseded by the terms of this Agreement, including the Existing CDA. The Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by authorized representatives of both Parties hereto. Any confidential information disclosed by the Parties pursuant to the Existing CDA shall be deemed to constitute Confidential Information under this Agreement.

19.9 **Headings**. The captions to the several Sections hereof are not a part of the Agreement, but are merely for convenience to assist in locating and reading the several Sections and Sections of this Agreement.

19.10 **Independent Contractors**. It is expressly agreed that MacroGenics and Gilead shall be independent contractors and that the relationship between the two Parties shall not constitute a partnership, joint venture or agency. Neither MacroGenics nor Gilead shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other Party, without the prior written consent of the other Party.

19.11 **No Third Party Beneficiary Rights**. Except as expressly set forth in this Agreement, this Agreement is not intended to and will not be construed to give any Third Party any interest or rights (including any Third Party beneficiary rights) with respect to or in connection with any agreement or provision contained herein or contemplated hereby.

19.12 **Performance by Affiliates**. Each Party will have the right to perform any or all of its obligations and exercise any or all of its rights under this Agreement through any Affiliate. Each Party hereby guarantees the performance by its Affiliates of such Party's obligations under this Agreement and will cause its Affiliates to comply with the provisions of this Agreement in connection with such performance. Any breach by a Party's Affiliate of any of such Party's obligations under this Agreement will be deemed a breach by such Party, and the other Party may proceed directly against such Party without any obligation to first proceed against such Party's Affiliate.

19.13 **Waiver**. The waiver by either Party of any right hereunder, or the failure of the other Party to perform, or a breach by the other Party, shall not be deemed a waiver of any other right hereunder or of any other breach or failure by such other Party whether of a similar nature or otherwise.

19.14 **Cumulative Remedies**. No remedy referred to in this Agreement is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

19.15 **Waiver of Rule of Construction**. Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, the rule of construction that any ambiguity in this Agreement shall be construed against the drafting Party shall not apply.

19.16 **Counterparts**. The Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail, including Adobe™ Portable Document Format (PDF) or any electronic signature complying with the U.S. Federal ESIGN Act of 2000, and any counterpart so delivered will be deemed to be original signatures, will be valid and binding upon the Parties, and, upon delivery, will constitute due execution of this Agreement.

19.17 **Further Assurances**. Each Party shall duly execute and deliver, or cause to be duly executed and delivered, such further instruments and do and cause to be done such further acts and things, including the filing of such assignments, agreements, documents and instruments, as may be necessary or as the other Party may reasonably request in connection with this Agreement or to carry out more effectively the provisions and purposes, or to better assure and confirm unto such other Party its rights and remedies under this Agreement.

19.18 **Construction**. Except where the context otherwise requires, wherever used, the singular shall include the plural, the plural the singular, the use of any gender shall be applicable to all genders and the word "or" is used in the inclusive sense (and/or). Whenever this Agreement refers to a number of days, unless otherwise specified, such number refers to calendar days. The captions of this Agreement are for convenience of reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. The words "include", "includes," "including" and "such as" shall be deemed to be followed by the phrase "without limitation". The word "will" will be construed to have the same meaning and effect as the word "shall". Any reference to any person or entity will be construed to include the person's or entity's successor and assigns. The words "herein," "hereof," and "hereunder", and words of similar import, will be construed to refer to this Agreement in its entirety and not any particular provision. The word "notice" means notice in writing (whether or not specifically stated) and will include notices, consents, approvals, and other written communications contemplated under this Agreement. Provisions that require that a Party, the Parties, or any committee hereunder "agree," "consent," "approve," or the like will require that such agreement, consent, or approval be specific and in writing, whether by written agreement, letter, approved minutes, or otherwise (but excluding e-mail and instant messaging). References to "Section" or "Sections" are references to the numbered sections of this Agreement, unless expressly stated otherwise. All dollars are United States Dollars. Unless the context otherwise requires, countries shall include territories. References to any specific law or article, section or other division thereof, shall be deemed to include the then-current amendments or any replacement law thereto. Except as otherwise expressly set forth in this Agreement, when applied to Gilead, the phrases "at its own cost and expense," "at its sole cost and expense," "at its cost and expense," and similar phrases used in this Agreement do not preclude the possibility that Gilead may share such costs or expenses with a Third Party.

(Remainder of page intentionally left blank)

The Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

Gilead Sciences, Inc.	**MacroGenics, Inc.**
[***]	By:
[***]	Name:
[***]	Title:
[***]	

[Signature Page to Collaboration Agreement]

The Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

Gilead Sciences, Inc.	**MacroGenics, Inc.**
[***]	[***]
[***]	[***]
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Schedule 1.72

Knowledge Parties

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Schedule 1.80

MacroGenics Licensed Patents

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Schedule 1.86

MacroGenics Platform

[***].

Schedule 1.88

MacroGenics Platform Trademarks

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Schedule 1.114

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Schedule 1.118

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Schedule 1.151

Existing Upstream License Agreements

[***]

Schedule 3.7

Existing Upstream License Agreements Amendments

[***]:

Schedule 4.1(a)

CD123 Development Plan

[***]

Schedule 4.1(b)

Clinical Protocol Synopsis

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Schedule 5.2

Research Plan

Schedule 9.1(a)(i)

Existing CMO Agreements

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Schedule 9.1(a)(iii)

Clinical Supply Agreement Key Terms

*This term sheet outlines certain key terms that will be included in the Clinical Supply Agreement ("**Clinical Supply Agreement**") to be entered into pursuant to Section 9.1(a)(iii) of the Collaboration and License Agreement between the Parties (the "**Agreement**"). Capitalized terms used but not defined in this term sheet will have the meaning attributed to them in the Agreement.*

1. **Purpose and Scope**	Pursuant to the Clinical Supply Agreement, MacroGenics will Manufacture and supply exclusively to Gilead MGD024 Drug Products for use in Clinical Trials to be conducted by Gilead under the Agreement.
2. **Products**	MacroGenics will supply the MGD024 Drug Product [***], in accordance with the applicable specifications for such MGD024 Drug Product set forth in an exhibit to the Clinical Supply Agreement, as the same may be updated from time to time by agreement of the Parties (the "**Specifications**"). Unless otherwise agreed by the Parties, Gilead will be responsible for [***] MGD024 Drug Products.
3. **Term**	[***], unless otherwise mutually agreed by the Parties in writing or terminated earlier in accordance with its terms ("**Supply Term**").
4. **Purchase Orders**	[***] MGD024 Drug Products for use in Clinical Trials as well as to [***] ("**Purchase Orders**"). Each Purchase Order will specify the quantities of the applicable MGD024 Drug Products being ordered [***] after MacroGenics' receipt of a Purchase Order, MacroGenics will confirm the [***] MGD024 Drug Product ordered under such Purchase Order [***] Purchase Order provided by Gilead; *provided* that the [***]. From time to time, Gilead will discuss at the JSC its requirements of MGD024 Drug Products for Clinical Trials under the Agreement.
5. **Supply Price; Invoicing and Delivery**	MacroGenics will supply MGD024 Drug Products to Gilead at a supply price equal to [***] (as defined in the Agreement) incurred by MacroGenics to Manufacture a batch of MGD024 Drug Product for clinical supply purposes (the "**MGD024 Transfer Price**").

	[***] to have an independent public accounting firm audit MacroGenics' books and records to verify the accuracy of the [***]. Any overcharges shall be reimbursed to Gilead. MacroGenics will invoice Gilead for [***] MGD024 Transfer Price of MGD024 Drug Products ordered pursuant to a Purchase Order [***] for such MGD024 Drug Products (the "**Delivery Date**"). Gilead will pay all undisputed invoiced amounts within [***] after the date of the invoice. All MGD024 Drug Products will be delivered to Gilead [***] to be defined in the Clinical Supply Agreement.
6. **Applicable Laws and Regulations**	The national, federal, regional, state and provincial laws of the United States, EU and any other jurisdictions the Parties may agree on, including cGMP, GCP and GBPS of such jurisdictions.
7. **Product Warranty**	MacroGenics shall use Commercially Reasonable Efforts to Manufacture and deliver to Gilead MGD024 Drug Products. The MGD024 Drug Product (a) shall be in conformity with the applicable Specifications; (b) shall have been Manufactured in conformance with applicable cGMP and Applicable Laws and Regulations, the Agreement, the Clinical Supply Agreement and the Clinical Quality Agreement; (c) shall have been Manufactured in facilities that are in compliance with Applicable Laws and Regulations at the time of such Manufacture (including applicable inspection requirements of the FDA, its EU counterparts and other Regulatory Authorities agreed to by the Parties); (d) shall not be adulterated under the FFDCA, its EU counterparts, and similar provisions of the laws of other jurisdictions agreed to by the Parties; and (e) shall have a minimum shelf life as agreed upon by the Parties and incorporated into the Clinical Supply Agreement (collectively, the "**Product Warranty**"). MacroGenics shall be responsible for maintaining all regulatory approvals and compliance of the Manufacturing Facility with cGMP requirements and applicable law. Prior to shipment of any MGD024 Drug Product to Gilead, MacroGenics will conduct all QC and QA activities necessary to ensure that such MGD024 Drug Product meets the Product Warranty, including all activities set forth under the Clinical Quality Agreement, and will release such MGD024 Drug Product in compliance with the Product Warranty and Clinical Quality Agreement.
8. **Product Inspection / Replacement of Failed Batches**	Gilead will have [***] after delivery to inspect any MGD024 Drug Products and during such [***], Gilead may reject those lots that do not meet the Specifications. If Gilead identifies any MGD024 Drug Product during such [***] that do not meet Specification or subsequently identifies a latent defect of the MGD024 Drug Product that causes such MGD024 Drug Product to not meet Specifications, MacroGenics will use Commercially Reasonable Efforts to replace such MGD024 Drug Product as soon as reasonably practicable, at MacroGenics' sole cost and expense, or if MacroGenics is unable to replace such MGD024

	Drug Product, then refund Gilead for the amounts paid for such rejected MGD024 Product. If the Parties disagree as to whether there is a latent defect, then such dispute will be resolved by a root cause analysis conducted by an independent laboratory (with such process to be further specified in the Clinical Supply Agreement).
9. **Subcontracting**	MacroGenics may only subcontract fill and finishing of the MGD024 Drug Product [***] other fill and finishing subcontractors agreed to by the Parties. Additionally, MacroGenics may subcontract with testing labs and storage facilities.
10. **Ownership of Intellectual Property**	Ownership of all Intellectual Property developed by the Parties in the course of the performance of the Clinical Supply Agreement will be governed by the Agreement.
11. **Indemnification**	The indemnification obligations and limitations on liability set forth in Article 15 of the Agreement will apply, *mutatis mutandis*.
12. **Quality Agreement**	In conjunction with the Clinical Supply Agreement, the Parties will enter into a customary clinical quality agreement governing issues related to the quality of the MGD024 Drug Products to be supplied by MacroGenics under the Clinical Supply Agreement (the "**Quality Agreement**"). MacroGenics will be responsible for the manufacturer release of a cGMP batch of the MGD024 Drug Product to Gilead according to the Specifications and cGMP requirements, including providing a certificate of analysis and a certificate of compliance. Either the Clinical Supply Agreement or the Clinical Quality Agreement will provide that [***] MGD024 Drug Products [***]. Gilead will have the right to audit MacroGenics' Facility with up to [***] participating in any on-site visits and to the extent permitted by the applicable agreement, to the facilities of MacroGenics' vendors and subcontractors no more than [***] for quality and regulatory purposes unless for cause, as set forth in the Clinical Quality Agreement.
13. **Termination; Supply Failure**	The Clinical Supply Agreement may be terminated by either Party for the other Party's uncured material breach, insolvency or by Gilead due to a Supply Failure which is not cured by MacroGenics. If, (a) in any given [***] of the [***] of MGD024 Drug Product ordered by Gilead for delivery with respect to such period is [***], then in either such case, Gilead will have the right to terminate the Clinical Supply Agreement after providing written notice to MacroGenics of such failure to supply.

	[***].
14. **Assignment**	The Clinical Supply Agreement may be assigned by either Party in connection with a permitted assignment of the Agreement by such Party in accordance with Section 19.4 of the Agreement.
15. **Applicable Law, Dispute Resolution**	Article 17 of the Agreement will apply to the Clinical Supply Agreement, *mutatis mutandis*.
16. **Additional Terms**	The Clinical Supply Agreement will include additional terms and conditions relating to clinical supply that are customary in clinical supply agreements for biologic products.

Schedule 10.4(c)(iii)

Special Offset and Indemnification

1. **Acquisition of Rights to the Identified Patent**.
   a. **During the CD123 Development Term**. During the CD123 Development Term, MacroGenics will have the [***] Exploit the Licensed Molecules or Licensed Products in the Territory ("**Identified Patent Rights**" and such agreement, an "**Identified Patent Upstream License**") and notwithstanding Section 3.8(d) (Responsibility for Payments under Upstream License Agreements), MacroGenics will be [***] Identified Patent Upstream License. MacroGenics will ensure that the terms of any Identified Patent Upstream License that also grants right for any other molecule or product being Exploited by MacroGenics or a sublicensee of MacroGenics [***] the Licensed Molecules or Licensed Products. Prior [***] Identified Patent Upstream License, MacroGenics will [***] with respect to such agreement, and [***] the Identified Patent such that MacroGenics or its Affiliate [***]. MacroGenics may request, [***] Identified Patent Upstream License [***] Identified Patent Upstream License, and Gilead [***]; *provided* that, in the event that MacroGenics [***].

   b. **After the CD123 Option Effective Date**. From and after the CD123 Option Effective Date, Gilead will have the [***] Exploitation of Licensed Molecules or Licensed Products under this Agreement; *provided* that, prior to the [***]. Notwithstanding Section 10.4(c)(iii) [***] if Gilead or its Affiliates [***] Gilead or its Affiliate is subject to a [***] Exploitation of any Licensed Molecule or Licensed Product in one or more countries in the Territory under this Agreement, then, in each case ((a) and (b)), Gilead will [***] MacroGenics upon or after Initiation of a Pivotal Clinical Trial for a Licensed Product under this Agreement (including, for clarity, [***]

2. **[***]**. In no event will [***], collectively with the other [***] MacroGenics for a given Calendar Quarter [***] of the amount otherwise payable under Section 10.2 (Development and Regulatory Milestone Payments), 10.3 (Commercial Milestone Payments) or 10.4 (Royalties on Net Sales), as applicable, with respect to an applicable Licensed Product. Gilead may [***] and this **Schedule 10.4(c)(iii)** (Special Offset and Indemnification) that are [***] Calendar Quarter but are not [***] MacroGenics in such Calendar Quarter as a result of the [***] MacroGenics in any subsequent Calendar Quarter [***].

3. **Indemnification Obligations**. In addition to Section 15.2 (By MacroGenics), MacroGenics agrees to indemnify and hold harmless the Gilead Indemnitee(s) from and against all Losses incurred in connection with any Third Party Claims [***] (a) to the extent [***] Identified Patent Upstream License (by either MacroGenics with Gilead as a sublicensee thereunder or Gilead) or (b) [***] Identified Patent Upstream License, and except in all cases, to the extent such Third Party Claims arise from any action for which Gilead has an indemnification obligation to a MacroGenics Indemnitee under Section 15.1 (By Gilead), subject to the procedures set forth in Section 15.3 (Indemnification Procedures), *mutatis mutandis*.

Schedule 12.1(f)

Third Party Confidential Information

Notwithstanding any provision to the contrary in Section 12.1 (Nondisclosure Obligation), the following obligations will apply, and to the extent there is any conflict with the obligations in Section 12.1 (Nondisclosure Obligation) will supersede, solely with respect to any [***] that is clearly marked as [***]:

The confidentiality and non-use obligations will remain in place until the later of (a) [***].

[***]

[***] (a) its directors, officers, consultants and employees (i) with a need to know such [***] and (ii) who are bound by written confidentiality obligations at least as stringent as those set forth in this Agreement (including this Schedule) and (b) regulatory or governmental agencies for the purpose of regulatory compliance and for review for registration and use of the Licensed Molecules and Licensed Products.

The Receiving Party may provide [***] to its Affiliates and its Representatives who have a need to know or are directly concerned with the Receiving Party's obligations or exercise of rights [***]. The Receiving Party will advise its Representatives receiving [***] of its proprietary nature and have in place a written agreement covering these confidentiality obligations, and use reasonable safeguards to prevent its Representatives unauthorized use or disclosure of [***].

For purposes of this Schedule, "**Representatives**" means any officers, representatives, agents, subcontractors, employees, service providers, sublicensee or other Third Party under control or direction of the Receiving Party.

Schedule 12.3(a)

Press Release

Gilead Contacts: **MacroGenics Contact:**

Jacquie Ross, Investors Jim Karrels, Senior Vice President, CFO
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Marian Cutler, Media Marian.Cutler1@gilead.com

Confidential Draft –Not for Distribution

GILEAD AND MACROGENICS ANNOUNCE ONCOLOGY COLLABORATION TO DEVELOP BISPECIFIC ANTIBODIES

– Gilead Granted Exclusive Option to License MGD024, a Phase 1 CD123×CD3 DART® Molecule with Potential to Treat Various Hematologic Malignancies –

– Potential for Companies to Collaborate on Two Additional Future Research Programs –

Foster City, Calif., and Rockville, Md. October 17, 2022 – Gilead Sciences, Inc. (Nasdaq: GILD) and MacroGenics (NASDAQ: MGNX) today announced an exclusive option and collaboration agreement to develop MGD024, an investigational, bispecific antibody that binds CD123 and CD3 using MacroGenics' DART® platform, and two additional bispecific research programs. The collaboration agreement grants Gilead the option to license MGD024, a potential treatment for certain blood cancers, including acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS).

A leader in the bispecific antibody space, MacroGenics has extensive experience applying its proprietary DART platform to develop novel therapeutics. MGD024 is a next-generation, bispecific that incorporates a CD3 component that is designed to minimize cytokine-release syndrome (CRS), a potentially life- threatening toxicity, while increasing the magnitude of antitumor activity with a longer half-life to permit intermittent dosing.

"MacroGenics' bispecific expertise naturally complements Gilead's portfolio strengths in immuno- oncology and our growing hematology franchise," said Bill Grossman, MD, PhD, Senior Vice President, Oncology Clinical Development, Gilead Sciences. "We believe MGD024, with its potential to reduce CRS and permit intermittent dosing through a longer half-life, could translate to more patient-friendly dosing and enhanced clinical outcomes for people living with AML and MDS. This partnership is the latest in our efforts to develop and advance transformative new cancer therapies as we deepen our portfolio across oncology indications."

Scott Koenig, MD, PhD, President, and CEO, MacroGenics said, “Rapid advances over the last decade have made CD123 a very promising target in oncology research. Advancing our bispecific DART molecule, MGD024, through a strategic collaboration with the team at Gilead will accelerate our ability to drive further development of MGD024 to the potential benefit of people living with blood cancers.”

MacroGenics will be responsible for the ongoing Phase 1 study for MGD024 during which Gilead may elect to exercise its option to license the program at predefined decision points. The Phase 1 study will include a dose escalation segment and an expansion segment that is intended to evaluate MGD024 as monotherapy and in combination with other therapies across multiple indications.

Financial Considerations

As part of the agreement, Gilead will pay MacroGenics an upfront payment of $60 million and MacroGenics will be eligible to receive up to $1.7 billion in target nomination, option fees, and development, regulatory and commercial milestones. MacroGenics will also be eligible to receive tiered, double-digit royalties on worldwide net sales of MGD024 and a flat royalty on worldwide net sales of products under the two research programs.

Beginning in the first quarter of 2022, consistent with recent industry communications from the U.S. Securities and Exchange Commission (SEC), Gilead no longer excludes acquired IPR&D expenses from its non-GAAP financial measures and expects the transaction with MacroGenics to reduce Gilead’s GAAP and non-GAAP 2022 EPS by approximately $0.04.

About MacroGenics, Inc.

MacroGenics is a biopharmaceutical company focused on developing and commercializing innovative monoclonal antibody-based therapeutics for the treatment of cancer. The company generates its pipeline of product candidates primarily from its proprietary suite of next-generation antibody-based technology platforms, which have applicability across broad therapeutic domains. The combination of MacroGenics' technology platforms and protein engineering expertise has allowed the company to generate promising product candidates and enter into several strategic collaborations with global pharmaceutical and biotechnology companies. For more information, please see the company's website at www.macrogenics.com. MacroGenics, the MacroGenics logo, and DART are trademarks or registered trademarks of MacroGenics, Inc.

About Gilead Sciences

Gilead Sciences, Inc. is a biopharmaceutical company that has pursued and achieved breakthroughs in medicine for more than three decades, with the goal of creating a healthier world for all people. The company is committed to advancing innovative medicines to prevent and treat life-threatening diseases, including HIV, viral hepatitis, and cancer. Gilead operates in more than 35 countries worldwide, with headquarters in Foster City, California.

Gilead Forward-Looking Statements

This press release includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks, uncertainties, and other factors, including the ability

of the parties to complete the transaction in a timely manner or at all; the possibility that various closing conditions for the transaction may not be satisfied or waived, including the possibility that a governmental entity may prohibit, delay or refuse to grant approval for the consummation of the transaction; the risk that Gilead may not realize the potential benefits of this collaboration with MacroGenics or its other investments in oncology; difficulties or unanticipated expenses in connection with the collaboration and the potential effects on Gilead's revenues and earnings; Gilead's ability to achieve its anticipated full year 2022 financial results; the ability of the parties to initiate, progress or complete clinical trials within currently anticipated timelines or at all, and the possibility of unfavorable results from ongoing or additional trials, including those involving MGD024 or future research programs; the ability of the parties to file applications for regulatory approval or receive regulatory approvals in a timely manner or at all, including those involving MGD024 or future research programs, and the risk that any such approvals may be subject to significant limitations on use; the possibility that the parties may make a strategic decision to terminate the collaborations, including the development of MGD024 or future research programs, at any time; and any assumptions underlying any of the foregoing. These and other risks, uncertainties and other factors are described in detail in Gilead's Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, as filed with the U.S. Securities and Exchange Commission. These risks, uncertainties and other factors could cause actual results to differ materially from those referred to in the forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. The reader is cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties and is cautioned not to place undue reliance on these forward-looking statements. All forward-looking statements are based on information currently available to Gilead, and Gilead assumes no obligation and disclaims any intent to update any such forward-looking statements.

MacroGenics Forward-Looking Statements

Any statements in this press release about future expectations, plans and prospects for MacroGenics, including statements about the MacroGenics' strategy, future operations, clinical development of MGD024, including initiation and enrollment in clinical trials for MGD024, the consummation of the transactions discussed in this press release, milestone or option payments from Gilead and other statements containing the words "subject to", "believe", "anticipate", "plan", "expect", "intend", "estimate", "potential," "project", "may", "will", "should", "would", "could", "can", the negatives thereof, variations thereon and similar expressions constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward- looking statements as a result of various important factors, including: risks that MGD024 may not provide a significant clinical benefit to patients with certain blood cancers; the uncertainties inherent in the initiation and enrollment of clinical trials; the availability of financing to fund the development of MGD024 and MacroGenics' other product candidates; availability and timing of data from ongoing clinical trials; expectations for developing further programs under the collaboration agreement with Gilead; the possibility that the parties may make a strategic decision to terminate the collaborations, including the development of MGD024 or future research programs, at any time; expectations for the timing and steps required in the regulatory review process for MGD024; expectations for regulatory approvals; expectations of milestone payments; the impact of competitive products; economic or political disruptions due to catastrophes or other events, including natural disasters, terrorist attacks, civil unrest and actual or threatened armed conflict; public health crises such as the COVID-19 pandemic; and other risks described in the MacroGenics' filings with the Securities and Exchange Commission. In addition, the forward-looking statements included in this

press release represent MacroGenics' views only as of the date hereof. MacroGenics anticipates that subsequent events and developments will cause MacroGenics' views to change. However, while MacroGenics may elect to update these forward-looking statements at some point in the future, MacroGenics specifically disclaims any obligation to do so, except as may be required by law. These forward-looking statements should not be relied upon as representing MacroGenics' views as of any date subsequent to the date hereof.

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For more information about Gilead, please visit the company's website at www.gilead.com, follow Gilead on Twitter (@GileadSciences) or call Gilead Public Affairs at 1-800-GILEAD-5 or 1-650-574-3000.

Schedule 14.1

Exceptions to the Representations and Warranties of MacroGenics

Section 14.1(r) (Representations and Warranties of MacroGenics): [***].

[***].

[***].

Exhibit 10.23

CONFIDENTIAL TREATMENT REQUESTED: Certain portions of this document have been omitted pursuant to a request for confidential treatment and, where applicable, have been marked with an asterisk ("[*****]") to denote where omissions have been made. The confidential material has been filed separately with the Securities and Exchange Commission.

ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement (this **"Agreement"**) is made and entered into as of the 7th day of May 2018 (the **"Closing Date"**), by and between

PROVENTION BIO, INC., a Delaware corporation, the principal place of business of which is at United States of America (**"Buyer"**),

and

MACROGENICS, INC., a Delaware corporation, the principal place of business of which is at 9704 Medical Centre Drive, Rockville, MD 20850, United States of America (**"Seller"**);

RECITALS

WHEREAS, Buyer is a clinical stage biopharmaceutical company that possesses expertise in the research and development of pharmaceutical products which prevent and intercept immune-mediated diseases;

WHEREAS, Seller is a biopharmaceutical company that discovers and develops novel biologics for the treatment of cancer, autoimmune disorders and infectious diseases, and Seller has developed a novel cluster of differentiation 3 ("**CD3**") partial agonist known as "*Teplizumab*";

WHEREAS, Seller wishes to sell and transfer to Buyer all right, title and interest in and to certain assets related to "*Teplizumab*" pursuant to and in accordance with the terms and conditions of this Agreement;

WHEREAS, Buyer wishes to purchase from Seller such assets related to "*Teplizumab*";

NOW, THEREFORE, in consideration of the premises and the mutual covenants and promises contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS

1.1 As used in this Agreement, the following defined terms shall have the meanings provided below:

"Accounting Standards":	means the United States Generally Accepted Accounting Principles (U.S. GAAP) as consistently applied.
"Accounts Receivable":	means all trade accounts and notes receivable and other miscellaneous receivables, including those that are not evidenced by instruments or invoices, existing as of the Closing Date.
"Action or Proceeding":	means any claim, action, suit, litigation, proceeding, arbitration, order, inquiry, hearing, assessment, audit, contest, prosecution, enforcement action, examination or investigation (whether civil, criminal, administrative, investigative, appellate or informal) threatened, commenced, brought, conducted, pending or heard by or before, or otherwise involving, any Governmental Authority or any arbitrator or arbitration panel; provided that the foregoing shall exclude patent or trademark prosecution and examination before any relevant patent and/or trademark office in any applicable country or jurisdiction.

“Affiliate”:	means any corporation or other legal entity controlled by, controlling, or under common control with Buyer or Seller. For the purpose of this definition, the term “control” means direct or indirect beneficial ownership of at least fifty percent (50%) of the voting stock of a corporation or other legal entity, or to hold the effective power to appoint or dismiss members of the management.
“Agreement”:	means this Asset Purchase Agreement, including the Exhibits.
“API”:	means an active pharmaceutical ingredient, whether produced from a living organism or through synthetic process, i.e., any substance intended to be used in the manufacture of a drug product and that is intended to furnish pharmacological activity or other direct effect in the diagnosis, cure, mitigation, treatment or prevention of disease or to affect the structure or any function of the body of man or other animals, including peptides, antibodies, hybrid molecules, fusion proteins, cytokines or other cellular elements.
“Applicable Laws”:	means any and all of the applicable federal, provincial, regional, state or local law, statute or ordinance, rules and regulations, including any rules, regulations, guidelines, administrative guidance, or other requirements of any Governmental Authorities that may be in effect from time to time in any country or jurisdiction, including, without limitation, the FFDCA, current Good Manufacturing Practices (“**cGMP**”) and current Good Clinical Practices (“**cGCP**”).
“Assumed Contracts”:	means the agreements listed in Exhibit 3 under the heading “Assumed Contracts.” For the avoidance of doubt, “Assumed Contracts” shall not include any agreements or contracts of Seller that are not explicitly scheduled in Exhibit 3 hereto under the heading “Assumed Contracts.”
“Assumed Liabilities”:	means, collectively, all of the following liabilities, in each case to the extent related to and solely accruing during the period beginning immediately after the Closing Date in connection with the ownership of the Purchased Assets or the manufacturing, Development or Commercialization of a Product by Buyer, its Affiliates or its Licensees, but in all cases excluding the Retained Liabilities and the other obligations retained by Seller pursuant to Section 2.8 or any other Transaction Documents: (i) subject to Section 3.11, all liabilities to the extent arising out of or relating to the Assumed Contracts; (ii) all liabilities in respect of any lawsuits, claims, actions or proceedings to the extent arising out of or relating to the manufacture, Development or Commercialization of Products or the ownership, sale, lease or use of any of the Purchased Assets; (iii) all liabilities for warranty claims and product liability or similar claims, including all suits, actions or proceedings relating to any such liabilities, to the extent arising out of or relating to any and all Products; (iv) all liabilities for taxes to the extent arising out of or relating to or in respect of any Product or any Purchased Asset after the Closing Date; and (v) all other liabilities and obligations of whatever kind and nature, primary, secondary, direct or indirect, absolute or contingent, known or unknown, whether or not accrued, to the extent arising out of or relating to the Product or Purchased Assets. For the avoidance of doubt, Assumed Liabilities shall not include Excluded Taxes.

"Bill of Sale and General Assignment Agreement":	has the meaning set forth in Section 4.2(i).
"BLA Approval Milestone"	has the meaning set forth in Section 3.2.
"Business Day":	means any day other than (i) a Saturday, a Sunday, or (ii) a day on which commercial banks located in Lebanon, New Jersey, and/or Rockville, Maryland, are authorized or required under Applicable Laws to remain closed.
"Buyer":	has the meaning set forth at the beginning of this Agreement.
"Closing":	has the meaning set forth in Section 4.1.
"Closing Date":	means the effective date of this Agreement shown at the beginning of this Agreement.
"Commercial Milestone":	has the meaning set forth in Section 3.4.
"Commercialization" or **"Commercialize"**:	means the commercial manufacture, marketing, promotion, sale, offering for sale, distribution, and/or commercial importation or exportation of a Product.
"Combination Product":	means a Product combining Teplizumab together with another API.
"Completion":	means, for a clinical trial, the date upon which all patients have completed protocol-defined drug administration and [****].
"Confidential Information":	means any information of a confidential or proprietary nature disclosed by a Party or its Affiliates (the **"Disclosing Party"**) to the other Party or its Affiliates (the **"Receiving Party"**), including each Party's or its Affiliates' invention disclosures, proprietary materials, data, including any Data, know-how, including any Know-How, technologies, trade secrets, and/or manufacturing, marketing, personnel and other business information and plans, whether in oral, written, graphic or electronic form. Confidential Information (as defined in the Prior Confidentiality Agreement) disclosed under the Prior Confidentiality Agreement shall be deemed Confidential Information hereunder. Information shall not be deemed "Confidential Information" hereunder, and the Receiving Party shall have no obligation with respect to any information if it is: (i) known by the Receiving Party prior to disclosure by the Disclosing Party, as evidenced by internal records or documentation of the Receiving Party; or (ii) information which is in the public domain or subsequently enters the public domain through no fault of the Receiving Party; or (iii) information that is received by the Receiving Party from an independent Third Party with the lawful right to disclose it; or (iv) information that was independently developed by the Receiving Party (or its Affiliates') employees or contractors without the use of or reference to Confidential Information of the Disclosing Party as evidenced by internal records or documentation of the Receiving Party. Notwithstanding the foregoing, any combination of features or disclosures shall not be deemed to fall within the foregoing exclusions merely because individual features are published or available to the general public or in the rightful possession of the Receiving Party unless the combination itself and principle of operation are published or available to the general public or in the rightful possession of the Receiving Party. Confidential Information to the extent solely and specifically related to the Purchased Assets and/or the Product shall be deemed to be the Confidential Information of the Buyer, notwithstanding the fact that it was initially disclosed to the Buyer by the Seller.
"Consents and Waivers":	means the [****] Consent, [****] Waiver, [****] Novation and Consent and [****] Comfort Letter.
"Control" or **"Controlled"**:	means, the possession by a Party of the ability to assign, transfer or license rights or assets as contemplated by this Agreement with respect to (i) the Purchased Assets; and (ii) other intellectual property and assets of any kind, unless, with respect to

	intellectual property and/or assets other than the Purchased Assets, such assignment transfer or license of rights or assets would violate the terms of any agreement or other arrangement with any Third Party existing at the time such Party would be first required to assign, transfer or license such rights or assets; provided however that if such agreement or other arrangement with any Third Party later terminates, or would no longer be violated, then such intellectual property or other assets shall be deemed Controlled by such Party
"Core Representation":	has the meaning set forth in Section 9.1(ii)
"Damages":	means any loss, damage, injury, liability, settlement, judgment, obligation, award, fine, penalty, tax, fee (including any reasonable legal fee, accounting fee, expert fee or advisory fee), charge, cost (including any reasonable cost of investigation) or expense
"Data":	means any and all research data, technical data, test and development data, pre-clinical and clinical data, formulations, processes, protocols, regulatory files and the like which are developed by Seller, its Affiliates, licensees and/or Third Party providers of services, in each case including their respective predecessors in interest, and Controlled by Seller, prior to the Closing Date or generated in the performance of the Technology Transition Plan.
"Data Room":	
	means that certain electronic data room populated by the Seller on ShareVault.com relating to the Product and the Purchased Assets
"Development" or **"Develop"**:	means to discover, research or otherwise develop a product, including conducting any pre-clinical, non-clinical or clinical research and any drug development activity, including discovery, research, toxicology, pharmacology and other similar activities, test method development and stability testing, manufacturing process development, formulation development, delivery system development, quality assurance and quality control development, statistical analysis, clinical studies (including pre- and post-approval studies), diagnostic assays in connection with clinical studies, and all activities directed to obtaining any Regulatory Approval, including any marketing, pricing or reimbursement approval. For the sake of clarity, Development shall not include any activities related to Commercialization.
"Development and Regulatory Milestone":	has the meaning set forth in Section 3.2.
"Development Plan":	means plans for the Development of the Product as outlined in Exhibit 4 and as may be modified by the Buyer from time to time during the Term.
"Device":	means any medical device, instrument, apparatus, implant, or similar or related device that is used to diagnose, prevent and/or treat a disease or other condition, such as a drug delivery system (including a single use disposable injection device), that is distributed, marketed and/or sold by Buyer, its Affiliates and/or Licensees to Third Parties, including hospitals, clinics, medical practitioners, pharmacists, and patients, either in the secondary packaging of the Product or separately, the use of which is related to the use of the Product.
"Diagnostic Tool":	means any companion and/or diagnostic assay developed and used to (i) identify patients who are most likely to benefit from a Product, (ii) identify patients likely to be at increased risk for serious adverse reactions as a result of treatment with a Product, and/or (iii) monitor a patient's response to a Product for the purpose of adjusting treatment (*e.g.*, schedule, dose, discontinuation) to achieve improved safety or effectiveness.
"Disclosing Party":	shall have the meaning provided in the definition of "Confidential Information."
"Disclosure Schedules":	means the Disclosure Schedules set forth in Exhibit 5.
"Earn-Out Term":	means, on a Product-by-Product, and country-by-country basis, the period commencing upon the First Commercial Sale of such Product in such country and expiring upon the later of: (i) the last-to-expire Valid Claim in a Product Patent in a given country, or (ii) [****] years after the date of First Commercial Sale of such Product in such country.
"[****] **Agreement"**:	means the "[****] *Agreement*" entered into by and between Seller and [****], as subsequently amended on [****] and [****], which has [****].
"[****] **Consent"**:	means that certain [****] and Seller, dated as of [****].
"Encumbrance":	means any lien, pledge, charge, mortgage, security interest, lease, license, option, right of first refusal, preemptive right, put, call or other restriction on transfer (other than express provisions of Assumed Contracts), defect or imperfection of title, assessment, deed of trust, levy, or other encumbrance of any kind, or any conditional sale or title retention agreement or other agreement to give any of the foregoing in the future.
"Excluded Taxes":	means (i) all Taxes of or relating to Seller, or for which Seller is liable, for any taxable period, including (A) all Taxes of any member of an affiliated group of which Seller (or any predecessor) is or was a member on a prior to the Closing Date, including pursuant to Treasury Regulation Section 1.1502-6 or any analogous or similar state, local or foreign law; (B) any and all Taxes of any person imposed on Buyer as a transferee or successor, by contract or pursuant to any Applicable Law, which Taxes relate to an event or transaction occurring before the Closing Date, and (C) payments under any Tax allocation, sharing or similar agreement (whether oral or written); (ii) all Taxes relating to the "Retained Rights" described in Section 2.3 or Retained Liabilities for any taxable period; (iii) all Taxes attributable to ownership or use of any Purchased Assets or the Assumed Liabilities for any taxable period ending on or prior to the Closing Date and, with respect to any taxable period beginning before and ending after the Closing Date, for the portion of such taxable period ending on the Closing Date; and (iv) Seller's portion of transfer taxes (as provided in Section 3.9).
"Exhibit":	means any or all of the exhibits attached to this Agreement.
"FFDCA":	means the Federal Food, Drug, and Cosmetic Act.

"First Commercial Sale":	means, with respect to a Product in a given country, the first commercial sale or disposition for value of such Product to a Third Party (other than a Related Party) for end use or consumption of such Product in such country, excluding, however, transfers or dispositions of without consideration: (i) in connection with patient assistance programs; (ii) for charitable or promotional purposes; (iii) for preclinical, clinical, regulatory or governmental purposes or under so-called "named patient", "compassionate use" or other limited access programs; or (iv) for use in any tests or studies reasonably necessary to comply with Applicable Laws, regulation or request by a Governmental Authority. For clarity, First Commercial Sale shall be determined on a country-by-country basis.
"First Indication":	means a first indication for which a Product receives approval.
"FTE":	means a full time equivalent person by year consisting of [****] days per year of work, corresponding to [****] hours per year of work.
"FTE Rate":	means [****] United States Dollars (US$[****]) per FTE.
"Fundamental Representation":	has the meaning set forth in Section 9.1(i).
"Generic Competition":	means, with respect to a Product in any country in a given calendar quarter, that, during such calendar quarter, (i) one or more Generic Products are commercially available in such country, and (ii) aggregate Net Sales of such Product in such country in such calendar quarter equal less than [****] percent ([****]%) of the average aggregate Net Sales of the Product over the four (4) calendar quarters immediately prior to the calendar quarter in which one or more Generic Products first became commercially available in such country.
"Generic Product":	for a given country means a pharmaceutical product that (i) is sold by a Person that is not a Related Party under a Regulatory Approval granted by a Government Authority to a Third Party, (ii) contains the same active ingredient(s) as are contained in a Product, and (iii) is approved by the Government Authority pursuant to an abbreviated approval process that relies in part on such Government Authority's previous grant of marketing authorization to a Product.
"Governmental Authority":	means any court, tribunal, arbitrator, authority, agency, commission, official or other instrumentality of the United States of America or other country, including without limitation any regulatory authority involved in granting approval to initiate or conduct clinical testing in humans, for regulatory approval to market a pharmaceutical/biologic product and/or, to the extent required in such country or jurisdiction, for pricing or reimbursement approval for a pharmaceutical product in such country or jurisdiction, including (i) the Food and Drug Administration of the United States of America ("FDA"), (ii) the European Medicines Agency of the European Union ("EMA"), and (iii) the European Commission.
"Inbound Licenses":	has the meaning set forth in Section 5.7(v).
"Indemnitee":	has the meaning set forth in Section 9.4.
"Indemnitor":	has the meaning set forth in Section 9.4.
"INDs and CTAs":	means any and all investigational new drug applications and clinical trial applications with respect to the Product as listed in Exhibit 8.
"[****] Agreement":	means that certain [****] Agreement between Seller, [****] and [****], dated [****].
"[****] Payment":	means any payment due pursuant to Section 7.1.1(b) of the [****] Agreement.
"[****] Supply":	means supply of [****].
"[****] Waiver":	means that certain [****] Agreement, between [****],[****] and Seller, dated as of [****].
"[****]"	means [****].
"[****] Agreement"	means that certain [****] Agreement, effective as of [****] between the [****] and Seller.
"Know-How":	means technical and other information, including trade secrets and information comprising or relating to concepts, discoveries, designs, formulae, ideas, inventions, methods, models, assays, research plans, procedures, designs for experiments and tests and results of experimentation and testing (including results of Development), formulations, processes (including manufacturing processes, specifications and techniques), and any such information contained in the Data, including documents containing any of the above.

"Knowledge":	with respect to Seller, means the actual knowledge of the vice-president level or higher executive officers (or persons performing similar functions) of Seller after reasonable inquiry.
"Licensee":	means a Third Party licensee that has entered into a license agreement with Buyer for the Product.
"Listed Patents":	has the meaning set forth in Section 5.7(ii).
"Lock-Up Agreement"	means that certain Lock-Up Agreement, substantially in the form attached hereto as Exhibit 12.
"[****] **Novation and Consent"**:	means that certain Novation Agreement, between [****], Buyer and Seller, dated as of [****].
"Major European Country":	means France, Germany, Italy, Spain or the United Kingdom.
"[****]**"**	means any payments due to be [****] under the [****] or any other agreement entered into by Seller or any of its predecessors in interest prior the Closing Date.
"Net Sales":	means the gross amount billed or invoiced for a Product by (a) by Buyer; (b) by any Buyer's assignee (including such assignee's affiliates or licensees), (c) by Buyer's Affiliates, or (d) by Licensees (each of the Persons referred to in (b), (c) and (d), a "**Related Party**"), in each case, for the sale of a Product to Third Parties (excluding a sale of a Product to Affiliates or licensees for resale), subject to the following deductions, as allocable to such Product (if not previously deducted in calculating the amount invoiced and to the extent included in the gross invoice price):

(i) reasonable trade, quantity, prompt settlement and other cash discounts and rebates (including wholesale inventory management fees and fees or allowances to other distributors, buying groups, health care insurance carriers or other pharmacy benefit managers (or equivalents thereof), federal, state/provincial, local or other Governmental Authority or other institution, or their agencies or purchasers, reimbursers, or trade customers), chargebacks, and price reductions or allowances actually allowed or granted from the billed amount, and discounts to customers, including cash coupons, vouchers and loyalty cards (and their redemption) and co-pay assistance;

(ii) credits or allowances actually granted upon claims, rejections or returns of such sales of Products, including recalls;

(iii) taxes imposed on the production, sale, delivery, import, export, distribution or use of the Product (including sales, use, excise or value added taxes, but excluding income taxes), duties or other governmental charges levied on or measured by the billing amount when included in billing, as adjusted for tax refunds and tax rebates;

(iv) any discounts, rebates or similar payments in respect of sales paid for by any Governmental Authority, including Federal or state Medicaid, Medicare or similar state program, or any other similar program, or any other government imposed rebates or discounts from invoiced prices (to the extent not covered under clause (i) above); and

(v) transport, freight, postage and insurance costs relating to the transportation or delivery of Products.

Such amounts shall be determined from the books and records of Buyer or its Related Party, maintained in accordance with Accounting Standards with regard to Buyer, and, with respect to a related Party, in accordance with the accounting standards applicable to such a Related Party.

Net Sales shall exclude transfers or dispositions of Product, without consideration: (1) in connection with patient assistance programs; (2) for charitable or promotional purposes; (3) for preclinical, clinical, regulatory or governmental purposes or under so-called "named patient", "compassionate use" or other limited access programs; or (4) for use in any tests or studies reasonably necessary to comply with applicable Law, regulation or request by a Governmental Authority.

In the event that a Product is sold as a Combination Product, the Net Sales of the Product shall be determined by multiplying the Net Sales of the Combination Product by the fraction A/(A+B), where A is the weighted (by sales volume) average unit sale price of the Product in the applicable country, where net sales is calculated in the same manner as Net Sales, when sold separately in finished form and B is the weighted average unit sale price in that country (net sales being calculated in the same manner as Net Sales) of the other API which is included in the Combination Product when such API is sold separately in finished form at the same dosage levels, in each case during the applicable royalty reporting period, or, if sales of both the Product and the other API did not occur in the same country in such period, then in the most recent royalty reporting period in which sales of both occurred, provided that such "recent royalty reporting period" shall not have been more than twenty-four (24) months earlier.

In the event that such weighted average sale price of the Product cannot be determined, but the weighted average sale price of the other API can be determined, Net Sales shall be calculated by multiplying the Net Sales of the Combination Product by

the following formula: one (1) minus B / C where B is the weighted average sale price of the other API when sold separately in finished form and C is the weighted average selling price of the Combination Product.

In the event that the weighted average sale price of both the Product and the other API in the Combination Product cannot be determined, the Net Sales of the Product shall be calculated by multiplying the Net Sales of the Combination Product (determined as provided above for Products) by the fraction A / C where A is the predicted fair market value of the Product if such Product were sold as a stand-alone Product as determined in good faith by the Parties and C is the weighted average selling price of the Combination Product.

The weighted average sale price for a Product, any other API(s) used in a Combination Product, or any Combination Product shall be calculated once each calendar year, at the beginning of such calendar year, and such price shall be used during all applicable royalty reporting periods for such entire calendar year. When determining the weighted average sale price of a Product, other API(s), or Combination Product, the weighted average sale price shall be calculated by dividing the sales dollar (translated into U.S. dollars) by the units of active ingredient sold during the preceding calendar year (or the number of months sold in a partial calendar year) for the respective Product, other API(s), or Combination Product. In the initial calendar year, a forecasted weighted average sale price will be used for the Product, other API(s) or Combination Product.

"Outbound Licenses": has the meaning set forth in Section 5.7(iv).

"Party": means either Buyer or Seller, as the context requires, and, when used in plural, shall mean Buyer and Seller.

"Patents": means (i) all issued patents (extensions, restorations by existing or future extension or registration mechanism, including patent term adjustments, patent term extension, supplemental protection certificates or the equivalent thereof, substitutions, confirmations, re-registrations, re-examinations, reissues and patents of addition), (ii) patent applications (including all provisional and non-provisional applications, substitutions, requests for continuation, continuations, continuations-in-part, divisionals and renewals), (iii) inventor's certificates, (iv) design registrations, design registration applications, industrial designs, industrial design applications and industrial design registrations,

(v) any and all divisions, continuations, continuations in part, extensions, substitutions, renewals, registrations, revalidations, reversions, reexaminations, reissues or additions, of or to any of the foregoing items, (vi) all equivalents of the foregoing in any country of the world, and (vii) all rights and priorities afforded under any Applicable Law with respect to each of the foregoing items.

"Patent Assignment Agreement": means the "*Patent Assignment Agreement*" between Seller and Buyer to be executed on or prior to the Closing, in the form attached as Exhibit 7.

"Permitted Encumbrance": means all (i) mechanics', carriers', workmen's, repairmen's or warehousemen's Encumbrances arising under Applicable Law and incurred in the ordinary course of Seller's business and Encumbrances for taxes and other governmental charges which are not yet due and payable; and (ii) other imperfections of title or encumbrances, if any, which have no more than de minimis impact on the continued use and operation or value of the assets to which they relate.

"Person": means any natural person, corporation, general partnership, limited partnership, limited liability company, proprietorship, other business organization, trust, union, association or Governmental Authority.

"Phase III Clinical Trial": means with regard to the United States of America a clinical trial consistent with the United States Code of Federal Regulations, Title 21, Section 312.21 (c) "*Phase 3*", and means with regard to other countries a pivotal multi-center human clinical trial in a large number of patients to establish safety and efficacy in the particular claim and indication tested and required to obtain a Regulatory Approval.

"Prior Confidentiality Agreement": means that certain Mutual Confidentiality Agreement entered into by and between Buyer and Seller, effective as of August 8, 2017.

"Product": means a product which contains Teplizumab, whether or not as the sole API (i.e., including any Combination Product), in any dosage form, formulation (including lyophilizate or solution) and mode of administration and for all indications. For the sake of clarity, the term "Product" shall not be deemed to include any Device or Diagnostic Tool for purposes of determining if a First Commercial Sale has been made or for calculating Net Sales.

"Product Intellectual Property": means, any and all of (i) the Product Patents; and (ii) Product Know-How; and (iii) any copyrights, trademarks, domain names or any other intellectual property rights that are (a) [****] the Product and (b) Controlled by Seller as of the Closing Date.

"Product Know-How": means Know-How which (i) is Controlled by Seller as of the Closing Date; (ii) was used for or created as a result of the Development or Commercialization of the Product prior to the Closing Date; and (iii) [****] relates to the manufacture, use, Development or Commercialization of the Product, whether patentable or not. A listing of certain Product Know-How is set forth on Exhibit 8.

"Product Patents": means those patents and patent applications set forth in Exhibit 2.

"Program Contracts" means the Assumed Contracts, the Inbound Licenses, the Outbound Licenses and the Service Contracts.

"Program IP": has the meaning set forth in Section 5.7(i)

"Purchased Assets": means all right, title and interest of Seller in:

(i) the Product;
(ii) the Assumed Contracts;
(iii) the Product Intellectual Property;
(iv) the Transferred Materials;
(v) the INDs and CTAs;
(vi) the Transferable Books and Records;
(vii) any prepaid amounts under the Assumed Contracts;
(viii) all compensation, interests and other rights and benefits due under the Assumed Contracts that accrue after the Closing Date, including under any Outbound Licenses, but excluding the [****] Payment; and
(ix) all goodwill related to the foregoing.

"Qualified Consideration": means any consideration that Buyer or any of its Affiliates receive in connection with the (and, in a transaction in which rights to multiple products are transferred, to the extent allocable to a) grant of rights under the Product Intellectual Property and/or rights with respect Products in an agreement or arrangement with a Third Party ("**Qualified Consideration Agreement**"). In furtherance and not in limitation of the foregoing, Qualified Consideration shall not include (i) royalties based on Net Sales, (ii) amounts received to cover future reasonable, fully-burdened costs incurred or to be incurred by Buyer or its Affiliates in the performance of research, development or manufacturing activities to be performed by Buyer or its Affiliates after the Effective Date, (iii) amounts received as reimbursement for out-of-pocket costs incurred by Buyer in the preparation, filing, prosecution and maintenance of the Product Patents, or (iv) consideration for the issuance of equity interests in Buyer or its Affiliates to the extent there is no premium included in such issuance for rights granted with respect to the Product. If Buyer or its Affiliate receives non-cash consideration that otherwise qualifies as Qualified Consideration, the Qualified Consideration will be calculated based on the fair market value of such consideration, at the time of the transaction, assuming an arm's length transaction made in the ordinary course of business.

"Reasonable Commercial Efforts": means those efforts and resources to Develop a Product and Commercialize a Product that are consistent with the usual practice of Buyer in pursuing the development or commercialization of other compounds and pharmaceutical products in its portfolio that are at a similar development stage as the Product or are of a similar market potential as the Product, taking into account all relevant factors, including present and future market potential, and Buyer's own pharmaceutical products that are of similar market potential, financial return, medical and clinical considerations, present and future regulatory environment and competitive market conditions, all as measured by the facts and circumstances at the time such efforts are due.

"Receiving Party": has the meaning provided in the definition of "Confidential Information."

"**Regulatory Approval** means approval by a Governmental Authority of (i) a New Drug Approval Application or Biologics License Application (each, as defined in the FFDCA) in the U.S., or (ii) any corresponding application for regulatory approval in any country or jurisdiction outside the U.S., including, with respect to the European Union, a Marketing Authorization Application filed with the EMA pursuant to the Centralised Approval Procedure or with the applicable Regulatory Authority of a country in Europe with respect to the decentralised procedure, mutual recognition or any national approval procedure.

"Related Party": has the meaning provided in the definition of "Net Sales" in this Section 1.1.

"Related Technology": means all Know-How Controlled by Seller as of the Closing Date that is not Product Know-How and is necessary or useful for the Development, manufacture or Commercialization of Products; and (ii) all other Patents Controlled by Seller as of the Closing Date that (A) are not Product Patents; and (B) are necessary or useful for the Development, manufacture or Commercialization of Products.

"Required Consents":	has the meaning set forth in Section 7.1(i).
"**Retained Liabilities**":	means liabilities or obligations of any nature, whether known or unknown, fixed or contingent, accrued or unaccrued, to the extent arising in connection with the manufacture, Development or Commercialization of the Product, or the acts or omissions of Seller or its Affiliates prior to the Closing Date or in connection with the [****] Supply. For clarity, Retained Liabilities include but are not limited to (i) the obligations retained pursuant to Section 2.8, (ii) Excluded Taxes, (iii) any and all obligations in connection with the Related Technology and (iv) the JDRF Agreement.
"Second Indication":	means a new indication (i.e., a generally recognized distinct medical condition) and not an extension of the First Indication or a labeling change covering the First Indication.
"Seller":	has the meaning set forth at the beginning of this Agreement.
"Service Contracts":	has the meaning set forth in Section 5.7(vi).
"Survival Period":	has the meaning set forth in Section 9.1(iii).
"Taxes":	means all taxes of any kind including all U.S. federal, state, local or non-U.S. net income, capital gains, gross income, gross receipt, license, property, franchise, sales, use, excise, withholding, payroll, employment, social security, worker's compensation, disability, severance, unemployment, health-care, stamp, occupation, capital stock, transfer, registration, value added, alternative, estimated, gains, windfall profits, net worth, asset, transaction and other taxes, whether computed on a separate or consolidated, unitary or combined basis or in any other manner, and any interest, penalties or additions to tax with respect thereto, imposed upon any Person by any taxing authority or other Governmental Authority under Applicable Law, whether disputed or not.
"Technology Transition Plan":	means a plan developed and jointly agreed upon by the Parties in good faith after Closing as set forth in Section 2.7 for Seller to transfer the Product Intellectual Property to Buyer.
"Teplizumab":	means the compound "*Teplizumab*", designated by Seller as MGA031, a novel cluster of differentiation 3 ("**CD3**") partial agonist, as described in Exhibit 1.

"Third Party":	means any Person other than (i) Buyer or Seller, or (ii) an Affiliate of Buyer or Seller.
"Third Party Claims":	has the meaning set forth in Section 9.2.
"**Third Party Obligations**"	means (i) the [****] Consideration; (ii) the [****] Royalty; and (iii) all royalties, milestones other consideration due to Third Parties in connection with sales of a Product or the assignment or other transfer of rights in connection with a Product or the Purchased Assets under agreements entered into by Seller or its predecessors in interest prior to the Closing Date.
"[****]**"**:	means the [****] entered into by and between [****] effective as of [****] and [****].
"[****] **Consideration":**	means obligations to provide consideration to Tolerance under the [****], including such obligations under 2.5(c) of the [****]; provided that this definition shall not include any [****].
"[****] **Comfort Letter"**:	means that certain letter agreement between Buyer, Seller and [****].
"Transaction Documents":	means the Warrant, Bill of Sale and General Assignment Agreement, Patent Assignment Agreement and Lock-Up Agreement.
"Transfer Letter":	means the transfer letter to be submitted to each relevant Governmental Authority by Seller, in the form attached as Exhibit 9.
"Transferable Books and Records":	means all of the original (or if unavailable a copy) documents, Data, lists, files, records, research, studies, information and correspondence with Governmental Authorities, in whatever form kept, including electronic form, Controlled by Seller as of the Closing Date and relating solely and exclusively to the Assumed Contracts, the Product Intellectual Property or the Product, including all INDs and CTAs (including all amendments) and any other regulatory documentation to the extent solely and exclusively related to the Product, all clinical study reports, all data sets (SAS, ADaM, SDTM, etc.), copies of all Trial Master Files, all Financial Disclosure forms, the pharmacovigilance database and other similar books and records. Drafts, internal update reports, summaries of Data compiled for internal reporting, non-official communications and documents incidental to the Development and Commercialization of the Product conducted by Seller and which do not contain material Data or Product Know-How not otherwise subject to transfer to Buyer hereunder or under any Transaction Document are not deemed to be Transferrable Books and Records.

"Transferred Materials": means any and all of the biological and chemical materials and components used for or created as a result of the Development, manufacturing or Commercialization of the Product Controlled by Seller and relating solely and exclusively to the Product, including any work in progress, API, work product, inventory (including clinical supplies), master cell banks and working cell banks, as set forth in Exhibit 8 or in the Technology Transition Plan.

"Valid Claim": means: (i) a claim of an issued and unexpired patent in the Product Patents that has not been (A) held permanently revoked, unenforceable, unpatentable or invalid by a decision of a court or governmental body of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, (B) rendered unenforceable through disclaimer or otherwise, (C) abandoned or (D) permanently lost through an interference or opposition proceeding without any right of appeal or review; or (ii) a claim of a pending patent application in the Product Patents that (A) has been asserted and continues to be prosecuted in good faith and (B) has not been abandoned or finally rejected without the possibility of appeal or refiling, and (C) has not been pending longer than [****] years from the date of issuance of the first substantive patent office action considering patentability of such claim by the relevant patent office in the country or territory in which such claim is pending.

"Warrant": has the meaning set forth in Section 3.1.

1.2 For purposes of this Agreement (i) words in the singular shall be held to include the plural and vice versa as the context requires, (ii) the words "including" and "include" shall mean "including, without limitation", unless otherwise specified; (iii) the terms "hereof", "herein", "herewith", and "hereunder", and words of similar import shall, unless otherwise stated, be construed to refer to this Agreement as a whole and not to any particular provision of this Agreement; (iv) all references to "Article" or "Section", unless otherwise specified, are intended to refer to an Article or a Section of this Agreement; and (v) all references to "Exhibit" or "Schedule", unless otherwise specified, are intended to refer to an Exhibit or Schedule of this Agreement.

2. PURCHASE AND SALE OF ASSETS

2.1 Purchase and Sale of the Purchased Assets. Subject to the terms and conditions of this Agreement, on the Closing Date, Seller shall, or shall cause its relevant Affiliates to, sell, transfer, convey, assign and deliver to Buyer, free and clear from all Encumbrances (other than Permitted Encumbrances), and Buyer shall purchase, acquire and accept from Seller, and such Affiliates of Seller, all right, title and interest of Seller and such Affiliates in and to the Purchased Assets.

2.2 Assumption of Liabilities. On the Closing Date, Buyer shall assume and thereafter pay, perform and discharge when due, all Assumed Liabilities.

2.3 Retained Rights. Notwithstanding anything to the contrary contained in this Agreement, from and after the Closing Date, other than the Purchased Assets and the license to Related Technology provided hereby, Seller shall retain all of its right, title and interest in and to all of its assets, including:

(i) all cash and cash equivalents of Seller and its Affiliates;

(ii) all Accounts Receivable of Seller and its Affiliates;

(iii) all Related Technology;

(iv) all the trademarks and service marks, the corporate logos and trade names of Seller and its Affiliates, together with any variations and derivatives thereof and any other logos, symbols or trademarks, trade names or service marks of Seller and its Affiliates;

(v) any refund or credit of taxes attributable to any tax period prior to the Closing Date;

(vi) all books and records other than the Transferrable Books and Records;

(vii) all tangible property owned by Seller and its Affiliates, other than such tangible property included in the Purchased Assets; and

(viii) except as expressly included in the Purchased Assets, all other properties, assets, goodwill and rights of Seller and its Affiliates of whatever kind and nature, real, personal, mixed, tangible or intangible.

2.4 Retained Liabilities. Notwithstanding anything to the contrary contained in this Agreement, from and after the Closing Date, Buyer shall not assume any Retained Liability, each of which, as between the Parties, shall remain the sole and exclusive responsibility of Seller, irrespective of whether claims for such liabilities are brought on, before or after the Closing Date, and which Seller shall pay, perform and discharge when due.

2.5 Retention of Copies of Certain Assets. Notwithstanding anything to the contrary contained in this Agreement, Seller may retain, at its expense, and be able to use the information in, copies of any or all of the documentation that Seller or any of Seller's Affiliates deliver to Buyer hereunder or that otherwise constitute Purchased Assets solely (i) for archival purposes, (ii) to fulfill or otherwise dispose of any of Seller's rights or obligations under this Agreement, (iii) to comply with or fulfill its obligations under Applicable Law, including as necessary for any regulatory, tax or securities filing,

(iv) for use in any pending or threatened legal or administrative claim, suit, demand or action, (v) subject to its confidentiality obligations under this Agreement, in connection with a financing, acquisition or similar transaction, or (vi) for such other purposes as Seller may reasonably request, subject to Buyer's prior written consent, which shall be in Buyer's sole discretion.

2.6 Related Technology License. Seller grants to Buyer, and Buyer accepts, a perpetual, worldwide, royalty-free, non-exclusive license, with right to grant sublicenses (including through multiple tiers), under the Related Technology solely in connection with the Development, manufacture and Commercialization of the Products. Buyer shall have the right to sublicense its rights under this Section 2.6 to (i) an Affiliate of Buyer or (ii) any Third Party in connection with a license, agreement or transaction under which Buyer grants such Third Party a right to Develop or Commercialize the Product; provided that in each case such sublicensee agrees in writing to be bound by Buyer's obligations under this Section 2.6. Buyer shall provide Seller a copy of each executed sublicense entered into by Buyer under this agreement. Buyer shall (a) comply in all material respects with all Applicable Law relating to the Development, manufacture and Commercialization of Products; (b) not claim or represent through the use of the Related Technology that it has acquired any title in or ownership of the Related Technology; and (c) not register or permit any Related Party to register any industrial or intellectual property right embodying the Related Technology in any country without Seller's prior written consent, which consent shall not be unreasonably withheld or delayed.

2.7 Technology Transfer Transition Plan. As soon as practicable after the Closing Date, but in no case later than fifteen (15) Business Days after Closing the Parties shall meet in person at Seller's offices to discuss and agree upon a written Technology Transition Plan that will, at a minimum, include the items set forth on Exhibit 8. Beginning on the Closing Date and for a period of one hundred and five (105) days after the Closing Date (the "**Transition Period**"), Seller shall use commercially reasonable efforts to transfer to Buyer, the Product Know-How, Transferred Materials and Transferable Books and Records in accordance with the Technology Transition Plan. As part of such technology transfer, for the first eighteen (18) months following the Closing Date, Seller shall provide to Buyer or its designee, such Product Know-How and Related Technology as reasonably requested by Seller to enable Seller to Develop, manufacture and Commercialize Products; provided that such Product Know-How and/or Related Technology is in Seller's possession and reasonably capable of being transferred. Seller shall provide information and necessary support in accordance with the Technology Transition Plan. During the Transition Period, Seller shall bear its own expenses related to the Technology Transition Plan and the Technology Transfer. Buyer shall fund (a) all of the reasonable FTE costs incurred by Seller in the performance of the Technology Transition Plan after the Transfer Period and any subsequent transfer by Seller of Product Know-How, Transferred Materials or Transferable Books and Records on the basis of the FTE Rate per FTE and (b) all third party out-of-pocket expenses incurred by Seller in the performance of the Technology Transition Plan, to the extent such third party out-of-pocket costs are approved in writing in advance by Buyer.

Buyer shall pay such FTE costs and such approved third party out-of-pocket expenses within thirty (30) days following receipt of an invoice therefor. Without limiting the foregoing, the Seller shall continue to support the technology transition efforts during the first eighteen (18) months following the Closing Date until all Transferred Materials and Transferable Books and Records have been effectively transferred to Buyer.

2.8 [****] and Payment. The Parties acknowledge that (a) pursuant to the [****], Seller agreed to [****] with [****] in the performance of a [****] relating to the Product, including by [****] of Product to [****]; and (b) the [****] Payment is a portion of the compensation to be paid by [****] for the rights granted to [****] pursuant to the [****] Agreement. In consideration of the foregoing, and notwithstanding anything to the contrary herein, the Parties agree that (i) Seller (or its designated vendor) shall retain [****] (as defined in the [****] Agreement) of the inventory of Product as required to [****] the [****] under the [****] Agreement; (ii) Seller shall, directly or through its vendor, [****] such quantities of Product as required to [****]; (iii) Seller shall have the right to directly request and receive the [****] Payment; and (iv) Buyer shall not supply Product to [****] until after the [****] has been [****] unless (A) Seller has breached the [****] obligation and (B) the failure of Buyer to [****] would result in a breach of the [****] Agreement. All obligations to Third Parties related to the safety, efficacy or non-conformance of the [****], including any obligation to replace Product or to engage independent laboratories for testing, shall be deemed Retained Liabilities and shall remain with the Seller and Seller shall discharge all such obligations as required under each applicable agreement or understanding related to the [****]. As reasonably requested by Seller, Buyer shall cooperate with Seller to support Seller's efforts to fulfill the [****].

2.9 Grant Back. Buyer grants to Seller, and Seller accepts, a worldwide, royalty-free, non-exclusive license, with right to grant sublicenses, under the Purchased Assets solely to perform its obligations under this Agreement.

3. CONSIDERATION AND PAYMENT

3.1 Equity Interest. As partial consideration for the Purchased Assets, on the Closing Date the Buyer will issue to Seller a warrant to purchase 2,162,389 common shares, which is the number of common shares representing eight percent (8%) of Buyer's fully diluted outstanding shares on the issue date. The warrant will be exercisable for the period beginning on the Closing Date and ending on the date that is seven (7) years from the Closing Date at a per share exercise price equal to two dollars and fifty cents ($2.50), the per share price at which the Series A Preferred Shares were issued pursuant to a separate warrant purchase agreement substantially in the form attached hereto as Exhibit 10 (the "**Warrant**").

3.2 Development and Regulatory Milestones. Buyer shall pay (which payments shall not be creditable against any other obligations of Buyer hereunder) a non-refundable payment for each of the milestone events set forth in this Section 3.2 (each a **"Development and Regulatory Milestone"**), whether the Development and Regulatory Milestone is achieved by Buyer, its Affiliates or Licensees, or any Third Party acting on behalf of Buyer, its Affiliates or Licensees. Payment for each of the Development and Regulatory Milestones shall be made only once regardless of how many times a Product achieves the corresponding Development and Regulatory Milestone, and no payment shall be due for any Development and Regulatory Milestone which is not achieved. The Development and Regulatory Milestones shall be as follows:

Development and Regulatory Milestone	Payment
[****]	[****] United States dollars ($[****])
[****]	[****] United States dollars ($[****])
[****]	[****] United States dollars ($[****])
[****]	[****] United States dollars ($[****])
[****]	[****] United States dollars ($[****])
[****]	[****] United States dollars ($[****])

Buyer shall provide Seller with written notice within thirty (30) days after the achievement of the corresponding Development and Regulatory Milestone and the payment pertaining to such Development and Regulatory Milestone shall be made by Buyer to Seller within ninety (90) days after the achievement of the corresponding Development and Regulatory Milestone.

3.3 Earn-Out.

(a) Subject to Sections 3.3(b), (c) and (d), Buyer shall pay to Seller [****] percent ([****]%) of aggregate worldwide annual Net Sales of Product by Buyer, its Affiliates or Licensees, or any Third Party acting on behalf of Buyer, its Affiliates or Licensees of all Products in a given calendar year during the Earn-Out Term.

(b) If, during a given calendar quarter when a Product is being Commercialized by or on behalf of Buyer, its Affiliates or Licensees in a particular country, there is Generic Competition in such country with respect to a Product, then the earn-out payment payable pursuant to Section 3.3(a) on the Net Sales of Product in such country shall thereafter be reduced to [****] percent ([****]%) of the amounts otherwise payable pursuant to Section 3.3(a) with respect to such Product in such country for such calendar quarter for so long as such Generic Competition remains.

(c) Beginning on the date of the First Commercial Sale of a Product, and thereafter until all payment obligations due in connection with the sale of Product under the [****] Agreement (as such obligations exist as of the Closing Date) are satisfied, the earn-out due to Seller set forth in Section 3.3(a) shall be reduced dollar-for-dollar by the amount payable by Buyer to [****] (or its successor in interest) under the [****] Agreement for the corresponding calendar quarter.

(d) In the event that Buyer enters into a license with [****] in respect of the issue disclosed and further described on Schedule 5.7(vii), Buyer shall be entitled to credit [****] percent ([****]%) of the amount payable to [****] under such license in a given period in connection with such license against the amount payable to Seller under Section 3.3(a) for the corresponding period.

3.4 Commercial Milestones. Buyer shall pay a non-creditable, non-refundable milestone payment for each of the milestone events set forth in this Section 3.4 (each a **"Commercial Milestone"**), whether the Commercial Milestone is achieved by Buyer, its Affiliates or Licensees, or any Third Party acting on behalf of Buyer, its Affiliates or Licensees. Payment for each of the Commercial Milestones shall be made only once regardless of how many times a Product achieves the corresponding Commercial Milestone, and no payment shall be due for any Commercial Milestone which is not achieved. The Commercial Milestones shall be as follows:

Commercial Milestone	Payment
Aggregate worldwide Net Sales of Product that exceed [****] United States dollars ($[****]) based on the aggregate of all Net Sales of Product since the first commercial sale of Product	[****] United States dollars ($[****])
Aggregate worldwide Net Sales of Product that exceed [****] United States dollars ($[****]) based on the aggregate of all Net Sales of Product since the first commercial sale of Product	[****] United States dollars ($[****])
Aggregate worldwide Net Sales of Product that exceed [****] United States dollars ($[****]) based on the aggregate of all Net Sales of Product since the first commercial sale of Product	[****] United States dollars ($[****])

Buyer shall provide Seller with written notice within sixty (60) days of Buyer becoming aware of the occurrence of any of the Commercial Milestones (which awareness shall not be deemed to occur prior to twenty (20) days following the end of the fiscal quarter in which such milestone was achieved) and the payment pertaining to such Commercial Milestone shall be made by Buyer to Seller within ninety (90) days after the end of the calendar year in which such Commercial Milestone is achieved.

3.5 Qualified Consideration. Buyer shall pay Seller an amount equal to [****] percent ([****]%) of all Qualified Consideration received pursuant to any Qualified Consideration Agreement; provided that if Buyer or its Affiliates enter into the Qualified Consideration Agreement after the Completion of the first Phase III Clinical Trial for a Product, then all such amounts paid to Seller shall be creditable against future milestones related to the applicable Product which are due to Seller in accordance with Section 3.2 or Section 3.4.

3.6 Reports. Within forty-five (45) days (sixty (60) days in the event that a Licensee has generated Net Sales) after the conclusion of each calendar quarter in which Net Sales are generated or Qualified Consideration is received, Buyer shall deliver to Seller a report containing the following information (in each instance, with a Product-by-Product and country-by-country breakdown): (i) the gross amount billed or invoiced for Products sold, leased or otherwise transferred by Buyer, its Affiliates and Licensees during the applicable calendar quarter; (ii) a calculation of Net Sales for the applicable calendar quarter, including an itemized listing of deductions; (iii) a detailed accounting of all Qualified Consideration received during the applicable calendar quarter, if any; and (iv) the total amount payable to Seller in U.S. Dollars on Net Sales and Qualified Consideration for the applicable calendar quarter, together with the exchange rates used for conversion.

3.7 Payments. Within forty-five (45) days (sixty (60) days in the event that a Licensee has generated Net Sales) after the end of each calendar quarter, Buyer shall pay Seller all amounts due with respect to Net Sales and Qualified Consideration for the applicable calendar quarter. All payments due under this Agreement will be paid in U.S. Dollars. Conversion of foreign currency to U.S. Dollars will be made at the conversion rate existing in the United States (as reported in *The Wall Street Journal*, Eastern Edition) on the last working day of the applicable Calendar Quarter. Such payments will be without deduction of exchange, collection or other charges.

3.8 Interest. MacroGenics shall be entitled to charge interest on any payment under this Agreement that is overdue, to the extent permitted by Applicable Laws, at the thirty-day United States Dollar London Interbank Offered Rate (LIBOR) effective for the date that payment was due (as published in *The Wall Street Journal*, Eastern Edition) plus [****] percent ([****]%), on a per year basis.

3.9 Taxes. Buyer and Seller do not anticipate there being any sales taxes, value added tax, use taxes, transfer taxes, or similar taxes or withholding requirements that will become payable in connection with the transactions under this Agreement. In the event any such taxes are payable or withholding is required by Applicable Laws, the Parties shall discuss in good faith and agree on a fair allocation of such taxes or withholding requirements; provided that in the absence of such agreement, the Parties shall equally bear any such taxes or withholding requirements. Seller shall bear any such taxes payable in connection with the manufacture or Development of the Product prior to the Closing Date, Buyer shall bear any such taxes payable in connection with the manufacture, Development or Commercialization of the Product on or after the Closing Date, and the Parties will cooperate in the filing of all necessary tax returns and other documentation with respect to all such taxes. For clarity, Buyer shall be responsible for all fees charged by Governmental Authorities, including recording or filing fees or similar charges, for effecting or recording the transfer to Buyer of any Purchased Assets. For further clarity, Seller shall remain exclusively liable for all corporate income tax, capital tax, and other corporate taxes imposed on the Seller.

3.10 Books and Records. With respect to each quarter in which a payment was due hereunder, Buyer will maintain complete and accurate books and records in sufficient detail to enable verification of the correctness of the payments due hereunder for a period of five (5) years after such quarter. Seller may audit Buyer's and its Affiliates' and Licensees' relevant books and records in order to verify the aforesaid matters within the subject five year period. Upon reasonable prior notice and during normal business hours, Seller's independent public accountants, subject to confidentiality obligations consistent with Article 7, shall have access to such books and records in order to conduct such a review or audit. The Parties shall reconcile any underpayment within sixty (60) days after the accountant delivers the results of the audit. If any audit performed under this Section 3.10 reveals an underpayment in excess of [****] percent ([****]%) in any calendar year, Buyer shall reimburse Seller for all amounts incurred in connection with such audit. Seller may exercise its rights under this Section 3.10 only once every year per audited entity, each period shall only be subject to audit with reasonable prior notice to the audited entity.

3.11 MGNX Stock Consideration. Notwithstanding anything to the contrary in this Agreement or any other agreement related to the transactions contemplated herein, Seller shall be solely responsible for, and shall perform when required under the Assumed Contracts, all obligations related to the issuance of MGNX Stock Milestones.

4. CLOSING DELIVERIES

4.1 Time and Place. The closing of the transactions contemplated by this Agreement, including the purchase and sale of the Purchased Assets (the **"Closing"**), shall take place simultaneously with the signing of this Agreement, by electronic exchange of documents or otherwise at the offices of Seller, on the Closing Date, unless another place shall be agreed to by the Parties.

4.2 Seller Closing Deliveries. At Closing, Seller shall deliver or cause to be delivered to Buyer:

(i) the Bill of Sale and General Assignment Agreement (the **"Bill of Sale and General Assignment Agreement"**) attached hereto as Exhibit 6, duly executed by Seller;

(ii) the Patent Assignment Agreement, duly executed by Seller;

(iii) copies in electronic form of the documents placed in the Data Room prior to the Closing Date;

(iv) a duly executed copy of the Transfer Letter for each IND and CTA;

(v) the Lock-Up Agreement, duly executed by Seller; and

(vi) a copy of all Consents and Waivers, duly executed by Seller and each consenting Third Party.

4.3 Buyer Closing Deliveries. At Closing, Buyer shall deliver or cause to be delivered to Seller:

(i)the Warrant, duly executed by the Buyer;

(ii)the Lock-Up Agreement, duly executed by MDB Capital;

(iii)the Bill of Sale and General Assignment Agreement, duly executed by Buyer;

(iv)the Patent Assignment Agreement, duly executed by Buyer; and

(v)a copy of all Consents and Waivers to which Buyer is a party, duly executed by Buyer.

5. REPRESENTATIONS AND WARRANTIES OF SELLER

5.1 Seller hereby makes to Buyer the following representations and warranties set forth in Section 5.2 through 5.21, as of the Closing Date.

5.2 Corporate Organization. Seller is a corporation duly organized, validly existing and in good standing under the Applicable Laws of the State of Delaware.

5.3 Authority of Seller. Seller has all necessary power and authority and has taken all actions necessary to enter into this Agreement and the other Transaction Documents and to carry out the transactions contemplated hereby and thereby. This Agreement and the other Transaction Documents have been duly and validly executed and delivered by Seller and, when executed and delivered by Buyer, will constitute legal, valid and binding obligations of Seller enforceable against it in accordance with their respective terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium and other Applicable Laws of general application affecting enforcement of creditors' rights generally, and (ii) as limited by Applicable Laws relating to the availability of specific performance, injunctive relief or other equitable remedies. The execution, delivery and performance of this Agreement and all agreements, documents and instruments executed and delivered by Seller pursuant hereto, have been duly authorized by all necessary corporate or other action of Seller.

5.4 Non-Contravention. The execution and delivery by Seller of this Agreement and the other Transaction Documents to which it is a party, does not, and the performance by it or its relevant Affiliates of its or their obligations under this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby will not:

(i) conflict with or result in a material violation or breach of any of the terms, conditions or provisions of the Certificate of Incorporation or Bylaws or other organizational documents of Seller or its relevant Affiliates or of any Program Contract;

(ii) assuming the receipt of the Required Consents, conflict with or result in a material violation or breach of any term or provision of any Applicable Law that applies to Seller, the Product or the Purchased Assets;

(iii) other than the Required Consents, the Transfer Letter and the transfer of any other regulatory documentation, require from Seller any notice to, declaration or filing with, or consent or approval of, any Governmental Authority in any country or other Third Party (other than any filing of Product Patents required to be made in accordance with the terms of this Agreement); or

(iv) assuming the receipt of the Required Consents, accelerate any obligation under, or give rise to a right of termination of, any Program Contract.

5.5 Title; Encumbrances. Seller has exclusive, good, valid and marketable title to all of the Purchased Assets and full right and power to sell, convey, assign, transfer and deliver such title to Buyer, in each case free and clear from any and all Encumbrances, except with respect to any Permitted Encumbrance.

5.6 Contracts. Seller has made available to Buyer true, correct and complete copies of the Program Contracts. Except as set forth on Schedule 5.6 of the Disclosure Schedules, no cancellation of any Program Contract has occurred, Seller has not received any written notice of cancellation of any Program Contract by the other party thereto and, each Program Contract is legal, valid, binding and enforceable in all material respects in accordance with its terms with respect to Seller and, to the Knowledge of Seller, with respect to each other party to such Program Contract, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar Applicable Laws affecting the enforcement of creditors' rights in general and general principles of equity and the discretion of courts in granting equitable remedies. There does not exist under any Program Contract any material breach or material event of default, or event or condition that, after notice or lapse of time or

both, would constitute a material breach or material event of default thereunder on the part of Seller or any of its Affiliates or, to Seller's Knowledge, on the part of any other party thereto. The JDRF Agreement has been terminated and all obligations thereunder have been satisfied.

5.7 Intellectual Property.

(i) As of the Closing Date each item of Product Intellectual Property is Controlled by Seller free and clear of any Encumbrances, other than the Permitted Encumbrances. The Product Intellectual Property, together with the Related Technology (the "**Program IP**"), constitutes all of the intellectual property Controlled by Seller and/or any of its Affiliates as of the Closing Date that is used or held for use in connection with, or otherwise necessary or useful for the manufacture, Development or Commercialization of the Product. Except as set forth on Schedule 5.7(i) of the Disclosure Schedules, neither Seller, nor any of its Affiliates, transferred ownership of, or granted any license of, or right to use, or authorized the retention of any rights to use or joint ownership of any Product Intellectual Property to any other Person.

(ii) Exhibit 2 sets forth a true, correct and complete list of all Patents Controlled by Seller that are solely and exclusively related to the Product (the "**Listed Patents**") including, in each case, the title, jurisdiction(s) in which each Patent was or is filed, and the respective application number, patent number (if any), filing date and issuance date (if any). Seller has taken all actions required to duly file and maintain the Listed Patents in a timely manner, including the timely submission of all necessary filings in accordance with the legal and administrative requirements of the appropriate Government Authority. Neither Seller nor any of its Affiliates has received any written notice of any inventorship challenge, ownership dispute, Third Party right, interference, patentability, validity or enforceability with respect to any Listed Patent. Seller has made timely payment of any filing, registration, examination, maintenance, annuity and renewal fees due with respect to the Listed Patents, and the Listed Patents are not subject to any unpaid fees or taxes for filings falling due within sixty (60) days after the Closing Date.

(iii) Seller has not received any written communication from any Person (A) challenging, or threatening to challenge, the right of Seller or any of its Affiliates to use, exercise, sell, license, transfer or dispose of any Program IP or the Product, or (B) challenging the ownership, validity or enforceability of any Program IP. To Seller's Knowledge, (A) all issued Patents included in the Listed Patents are valid, subsisting, and enforceable; and (B) all Patent applications included in the Listed Patents are subsisting and, to Seller's Knowledge, valid and enforceable. Seller and its Affiliates have complied (and to Seller's Knowledge, any other Person involved in filing, maintaining and prosecution of the Listed Patents, have complied) in all material respects with Applicable Law regarding the duty to disclose and duties of candor in the filing, maintaining and prosecution of the Listed Patents.

(iv) Schedule 5.7(iv) lists all licenses, sublicenses and other agreements in effect as of the Closing Date to which Seller or any of its Affiliates is a party and pursuant to which any Third Party is granted (A) any license or other right to make, have made, use, sell, have sold, offer for sale, import or otherwise distribute or exploit any Product, including any materials transfer agreements and research agreements related to the Product, and any other material instrument by which the Product has been provided to any Third Party for research or any other purpose,

(B) any covenant not to assert/sue or other immunity from suit under or any other rights to, any Product Intellectual Property, (C) any ownership right or title, whether actual or contingent, to any Product Intellectual Property, or (D) an option or right of first refusal relating to any Product Intellectual Property (collectively, "**Outbound Licenses**"). Seller has delivered or otherwise made available to Buyer accurate and complete copies of all Outbound Licenses, and Seller or its applicable Affiliate is in compliance with (and, to Seller's Knowledge, each other party to such Outbound Licenses are in compliance with) all material terms and conditions of all Outbound Licenses. Except as set forth on Schedule 5.7(iv), neither Seller nor any of its Affiliates is party to any contract that provides for earn-outs, milestone payments, royalties or other contingent payments to be paid to Seller or its Affiliates related to the development, approval, manufacture, use, sale, offer for sale, or import or other exploitation of any Product.

(v) Schedule 5.7(v) lists all licenses, sublicenses and other agreements in effect as of the Closing Date to which Seller or any of its Affiliates is a party and pursuant to which any Third Party grants to Seller or any of its Affiliates (A) any license or other right to make, have made, use, sell, have sold, offer for sale, import or otherwise distribute or exploit any Product, (B) any covenant not to assert/sue or other immunity from suit under or any other rights to, any intellectual property rights claiming or covering the development, approval, manufacture, use, sale, offer for sale, or import or other exploitation of any Product and/or otherwise related to the Product Intellectual Property, (C) any ownership right or title, whether actual or contingent, to any intellectual property rights claiming or covering the development, approval manufacture, use, sale, offer for sale, or import or other exploitation of any Product and/or otherwise related to the Product Intellectual Property, or (D) an option or right of first refusal relating to any intellectual property rights claiming or covering the development, approval, manufacture, use, sale, offer for sale, or import or other exploitation of any Product and/or otherwise related to the Product Intellectual Property (collectively, "**Inbound Licenses**"). Schedule 5.7(v) also identifies all Inbound Licenses requiring Seller or any of its Affiliates to license, assign or otherwise grant rights to any Third Party for any additions, modifications or improvements to any Product Intellectual Property made by or for Seller or its Affiliates. Seller has delivered or otherwise made available to Buyer copies of all Inbound Licenses, and Seller or its Affiliate, as applicable, is in compliance with (and, to Seller's Knowledge, each other party to such Inbound Licenses are in compliance with) all material terms and conditions of all Inbound Licenses.

(vi) Schedule 5.7(vi) lists agreements for Development (including pre-clinical and clinical) or other services currently being provided by any Third Party or under which Seller has outstanding obligations related to the Product and/or the Product Intellectual Property ("**Service Contracts**"). Seller has delivered or otherwise made available to Buyer copies of all Service Contracts, and Seller or its Affiliate, as applicable, is in compliance with (and, to Seller's Knowledge, each other party to such Service Contracts are in compliance with) all material terms and conditions of all Service Contracts.

(vii) Except as set forth in Schedule 5.7(vii) of the Disclosure Schedules, neither Seller, nor any of its Affiliates, has received any written communication, claim or demand from any Third Party concerning Third Party intellectual property rights in connection with the Product, or alleging that any

material infringement, violation or misappropriation of any Third Party's intellectual property rights has occurred with respect to the Program IP or as a result of the manufacture, Development or Commercialization of the Product. During the last three (3) years, neither Seller nor any of its Affiliates has received any written communication alleging that the conduct of the practice of any Program IP violates any right to privacy or publicity of any Person, violates any Applicable Laws or constitutes unfair competition or trade practices under Applicable Law. To the Knowledge of Seller as of the Closing Date, neither the past or current Development, manufacture (including use of certain cells to produce Teplizumab for the Product), Commercialization, use, sale or import of Teplizumab or the Product has or would infringe, misappropriate or otherwise violate the intellectual property rights of any Third Party as of the Closing Date.

(viii) Seller has taken customary measures and precautions necessary to protect and maintain the confidentiality of the Product Know-How. During the last three (3) years, neither Seller nor any Seller Affiliate has received any written communication alleging any violation of Applicable Laws pertaining to the privacy and security of protected health information within any clinical data or regulatory materials related to the Product.

(ix) Each current or former employee, consultant and independent contractor employed or engaged by Seller or any of its Affiliates in the manufacture, Development or Commercialization of Product has executed a valid and binding written agreement (A) expressly assigning to Seller all right, title and interest in any intellectual property rights which relate the Product and were invented, created, developed, conceived or reduced to practice during the term of such employee's, consultant's or and independent contractor's employment or engagement; and (B) requiring each such employee, consultant or independent contractor to protect and preserve all applicable Program IP. Such assignments have been directly assigned to Seller or its Affiliates.

(x) Except as set forth in Schedule 5.7(x) of the Disclosure Schedules, neither Seller nor any of its Affiliates has (A) sought, applied for or received any support, funding, resources, materials or assistance from any Government Authority, university, college or other educational or non-profit institution or research center in connection with the creation or development of the Product Intellectual Property or the Product, or (B) used any facilities of a university, college, or other educational institution or research center in the development of any Product or the creation or development of the Product Intellectual Property. To Seller's Knowledge, no current or former employee, consultant or independent contractor who was in any way involved in (or has in any way contributed to) the creation or development of the Product Intellectual Property or the Product has performed services for any Government Authority, university, college or other educational or non-profit institution or research center during a period of time during which such employee, consultant or independent contractor was also performing services for Seller or Seller Affiliates that would result in any adverse claim or right relating to the Product Intellectual Property. Except as set forth in Schedule 5.7(x) of the Disclosure Schedules, no Government Authority, university, college or other educational or non-profit institution or research center has any claim of right to ownership of or other liens, claims or interests with respect to the Product Intellectual Property.

5.8 Compliance with Law. Seller has complied in all material respects with and is not in material breach, violation or noncompliance of any Applicable Laws with respect to the ownership, use, manufacture or Commercialization of the Product, except for such non-compliance as would not reasonably be expected to materially adversely affect Buyer's interest in the Purchased Assets or Buyer's ability to Develop, manufacture or Commercialize any Product.

5.9 Litigation. During the past five (5) years there have been no, and as of the Closing Date there are no Third Party Claims pending or, to the Knowledge of Seller, threatened against Seller, relating to, affecting or arising in connection with (i) a Product, (ii) the Purchased Assets, (iii) this Agreement, (iv) the Related Technology or (v) the transactions contemplated by this Agreement. To the Knowledge of Seller, no event has occurred, and no condition or circumstance exists, that can be reasonably expected to serve as a basis for the commencement of any such Third Party Claims against Seller with respect to the manufacture or Development of a Product until the Closing Date. Neither the Related Technology, nor the Purchased Assets are subject to any judgment, order, writ, injunction, decree or award of any court, arbitrator or governmental department, commission, board, bureau, agency or instrumentality against Seller that can reasonably be expected to materially and adversely affect, prevent, impair or delay the consummation of this Agreement.

5.10 Regulatory Compliance; Debarment. As of the Closing Date: (i) there is no pending or, to the Knowledge of Seller, threatened Action or Proceeding by a Governmental Authority against Seller relating to the Product, the Related Technology or the Purchased Assets, (ii) there is no pending or, to the Knowledge of Seller, threatened Action or Proceeding by a Governmental Authority against a Product Developed, manufactured or Commercialized by or on behalf of Seller or against any Purchased Assets, (iii) there is no act or omission by, or event or circumstance known to the Seller that, to the Knowledge of the Seller, would or reasonably would be expected to result in an Action or Proceeding by a Governmental Authority against Seller relating to the Product, the Related Technology or the Purchased Assets, (iv) all required submissions to the FDA related to Seller's manufacture or Development of the Product have been made, (v) all submissions made by or on behalf of Seller to the FDA or any other Governmental Authority, if any, are accurate and complete in all material respects; (vi) there is no arrangement to which Seller is a party or authorized by Seller providing for any rebates, kickbacks or other forms of compensation that are unlawful to be paid to any Person in return for the referral of business or for the arrangement for recommendation of such referrals, (vii) neither Seller, nor any individual who is an officer or director of Seller as of the Closing Date, nor, to the Knowledge of Seller, any other employee, consultant, agent of Seller or any of Seller's predecessors in interest or its collaborators, directly involved in the Development or manufacture of a Product (A) has been convicted of, charged with or, to the Knowledge of Seller, investigated for any offense related to healthcare, or (B) has been convicted of, charged with or, to the Knowledge of Seller, investigated for a violation of Applicable Laws related to fraud, theft, embezzlement, breach of fiduciary responsibility, financial misconduct, obstruction of an investigation or distribution of controlled substances, (C) has engaged in any conduct that has resulted, or would reasonably be expected to result, in debarments under 21 U.S.C. § 335a(a) or any similar Applicable Laws, or (D) committed an act, made a statement or failed to make a statement that would provide the basis for the FDA to invoke its policy respecting "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities," as set forth in 56 Fed. Reg. 46191 (September 10, 1991), (viii) there have been no recalls, field notifications or seizures or adverse regulatory actions taken (or, to the Knowledge of Seller after reasonable investigation, threatened) by any Governmental Authority with respect to the Product or, to the Knowledge of Seller, an ingredient of a Product, including any such actions materially and adversely affecting

facilities where the Product or Product ingredients are manufactured, produced, processed, packaged or stored for Seller, and Seller has not, either voluntarily or at the request of any Governmental Authority, initiated or participated in a recall of a Product.

5.11 Disclosures. Seller has made available to Buyer true, correct and complete copies of (i) all Program Contracts; (ii) the INDs and CTAs and all material Product related information that Seller is required to maintain pursuant to the requirements of the FDA, including Product complaint files and labeling change files, (iii) all Patents Controlled by Seller, to the extent not publicly available, relating to the Product or its manufacture or Commercialization and to the extent included in the Product Patents, (iv) the Transferrable Books and Records, including the complete regulatory file for the Product. Neither Seller nor any Affiliate is a party to any unwritten agreement directly relating to the Development, manufacture or Commercialization of Product that would materially adversely affect the sale, use, manufacture or Commercialization of a Product. Except as set forth on Schedule 5.11 of the Disclosure Schedules, Seller has not granted to a Third Party any right, and no Third Party has any right under the INDs and CTAs or the Product Intellectual Property, to manufacture, Develop or Commercialize the Product. To the Knowledge of Seller, all information provided by Seller to Buyer relating to the manufacture, Development and Commercialization of the Product has not contained any untrue statement of a material fact or intentionally omitted to state a material fact necessary in order to make the statements therein not misleading in light of the circumstances under which they were made.

5.12 Brokers. Seller has not retained any broker in connection with the transactions contemplated under this Agreement. Buyer will have no obligation to pay fees of any brokers, finders, investment bankers, or financial advisors engaged by Seller in connection with this Agreement or the transactions contemplated hereby.

5.13 Solvency. Seller has entered into this Agreement in good faith as a result of arms-length negotiations with Buyer. Seller is not entering into this Agreement or any transaction contemplated hereunder with the intent to hinder, delay or defraud any Person to which it is, or may become, indebted. As of the Closing Date, Seller has the capacity and financial capability to comply with and perform all of the covenants and obligations under this Agreement. Further, as of the Closing, giving effect to the consummation of all of the transactions contemplated by this Agreement, including, without limitation, the transfer and delivery of the Purchased Assets, will not cause Seller to be insolvent under any Applicable Law relating to fraudulent transfers or fraudulent conveyance.

5.14 [****] Agreement; Third Party Obligations. The [****] Agreement has been terminated and the [****] described in Amendment No. 2 to the [****] Agreement, dated as of [****], has been completed. There are no outstanding obligations or liabilities related to the Product or the Purchased Assets under the [****] Agreement. The total amount due under the [****]Agreement, as agreed between [****]Buyer and Seller in the [****] Consent is [****] U.S. dollars ($[****]) and is exclusively due as a royalty on sales of Product. Schedule 5.14(ii) sets forth a true, complete and correct list of the Third Party Obligations that would be payable on sales of Product.

5.15 Clinical Trials. Schedule 5.15 contains a complete listing of all clinical trials conducted using Product, including any investigator-Sponsored studies. The preclinical studies and clinical trials of the Product conducted by or on behalf of Seller were and, if still ongoing, are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all Applicable Laws (including, to the extent applicable, cGLPs and cGCPs). All required IRB approvals have been obtained and are currently in place for any ongoing clinical trials of Product. Valid informed consents have been obtained and are in the Seller's possession or control for all patients who have been in Seller's clinical trials of Product. All adverse experiences occurring in clinical trials have been reported to FDA as required. All Product used in such clinical trials materially complied with all Applicable Laws (including, to the extent applicable, cGMPs), and there have not been any material deficiencies or defects in such Product. Neither Seller, nor any of its agents, or to its Knowledge and of its collaborators, have received any written notices or correspondence from the FDA or any other Government Authority requiring the termination, suspension, hold or material modification of any preclinical study or clinical trial of a Product conducted by or on behalf of Seller. Neither Seller nor any of its agents, or to its Knowledge any of its collaborators, have received any written communication from any Person threatening any claim or lawsuit against Seller, any of its agents or its collaborators, arising from the administration of a Product to any Person in the course of any clinical trial conducted by or on behalf of Seller. FDA has not issued any 483 or finding of deficiency or non-compliance in respect of the Product, any clinical trial of the Product, or any Third Party involved in the conduct of a clinical trial of the Product.

5.16 Undisclosed Liabilities. To Seller's Knowledge, except for liabilities to Seller and any liabilities which are disclosed on Schedule 5.14(ii), there is no financial or economic liability that would be due in connection with the Development, manufacturing or Commercialization of the Product under agreements that were entered into by Seller, or to its Knowledge, its predecessors in interest prior to the Closing Date.

5.17 Transferred Materials; Suppliers. The Transferred Materials have been manufactured in compliance with all Applicable Laws including cGMP and have met all applicable specifications, except as would not materially adversely affect Buyer's ability to manufacture, Develop or Commercialize the Product. Neither Seller nor any Third Party has received any written notices or correspondence from the FDA or any other Government Authority regarding the Transferred Materials.

5.18 Sufficiency; Development and Manufacturing Pre-Closing. The Transferable Notes and Books accurately describe and document the Development and manufacturing of the Product in the manner done by Seller prior to the Closing Date. The Purchased Assets, together with the Related Technology, constitute the intellectual property rights necessary for the Development or manufacturing of the Product in the manner done by Seller prior to the Closing Date. Except for intellectual property rights that constitute Related Technology or that are included in the Purchased Assets, there are no intellectual property rights that Seller has an interest in prior to the Closing Date that are necessary for the Commercialization of the Product.

5.19 Data Room. All information and documentation contained in the Data Room, to which Buyer has been provided access, is true and accurate in all material respects and reflects the subject matter to which it relates. The Data Room (i) contains all material information in order to give a true and

documentation fair view of the Purchased Assets, the Assumed Liabilities and the Product, (ii) does not include any matter of material importance which is incorrect or misleading, and (iii) does not omit any information which is of material importance, which by omission would make the contents of the Data Room materially incorrect or misleading, except as would not materially adversely affect Buyer's interest in the Purchased Buyer's interest in the Purchased Assets or Buyer's ability to Develop, manufacture or Commercialize any Product.

5.20 Insurance. All of the Purchased Assets which are of an insurable nature have at all material times been insured against all such risks as persons carrying on a similar business to the Seller would be expected to cover by insurance. Seller has at all relevant times maintained adequate product liability insurance and insurance covering clinical trials related to the Product performed by it or on its behalf.

5.21 Accredited Investor. Seller is an "accredited investor" within the meaning of Rule 501 of Regulation D under the Securities Act of 1933 (the "Securities Act"), as amended. The Seller has substantial experience in evaluating and investing in securities in companies similar to the Buyer so that Seller is capable of evaluating the merits and risks of Seller's investment in Buyer (pursuant to the Warrant) and has the capacity to protect Seller's own interests. The Seller is acquiring the Warrant (and the shares issuable upon exercise of this Warrant) for investment for Seller's own account, not as a nominee or agent, and not with the view to, or for resale in connection with, any distribution thereof. Seller understands that the Warrant (and the shares issuable upon exercise of the Warrant) have not been, and will not be, registered under the Securities Act by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of Seller's representations as expressed herein and in the Warrant.

5.22 No Other Representations and Warranties. EXCEPT FOR THE REPRESENTATIONS OR WARRANTIES EXPRESSLY SET FORTH IN THIS ARTICLE 5 OR IN ANY OTHER TRANSACTION DOCUMENTS, SELLER DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS OR WARRANTIES, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, INCLUDING ANY INFORMATION FURNISHED BY SELLER WITH REGARD TO THE PRODUCT OR THE PURCHASED ASSETS, INCLUDING THE FUTURE PROFITABILITY OF ANY PRODUCT, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS.

6. REPRESENTATIONS AND WARRANTIES OF BUYER

6.1 Representations and Warranties. Buyer hereby makes to Seller the representations and warranties set forth in Sections 6.2 through 6.8, as of the Closing Date.

6.2 Corporate Organization. Buyer is a corporation duly organized, validly existing and in good standing under the Applicable Laws of Delaware.

6.3 Authority of Buyer. Buyer has all necessary power and authority and has taken all actions necessary to enter into this Agreement and the Transaction Documents and to carry out the transactions contemplated hereby and thereby. This Agreement and all Transaction Documents have been duly and validly executed and delivered by Buyer and, when executed and delivered by Seller, will constitute legal, valid and binding obligations of Buyer enforceable against it in accordance with their terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium and other Applicable Laws of general application affecting enforcement of creditors' rights generally, and (ii) as limited by Applicable Laws relating to the availability of specific performance, injunctive relief or other equitable remedies. The execution, delivery and performance of this Agreement and all agreements, documents and instruments executed and delivered by Buyer pursuant hereto, have been duly authorized by all necessary corporate or other action of Buyer.

6.4 Non-Contravention. The execution and delivery by Buyer of this Agreement does not, and the performance by it of its obligations under this

Agreement and the consummation of the transactions contemplated hereby will not:

(i) conflict with or result in a material violation or breach of any of the terms, conditions or provisions of the Articles of Incorporation, Bylaws or other organizational documents of Buyer;

(ii) assuming the receipt of the Required Consents, violate, conflict with or result in a violation of, or constitute a default (whether after the giving of notice, lapse of time or both) under, any provision of any Applicable Law, regulation or rule, or any order of, or any restriction imposed by, any court or governmental agency applicable to Buyer;

(iii) other than the Required Consents, require from Buyer any notice to, declaration or filing with, or consent or approval of any Governmental Authority in any country or other Third Party; or

(iv) assuming the receipt of the Required Consents, violate or result in a violation of, or conflict with or constitute or result in a violation of or default (whether after the giving of notice, lapse of time or both) under, accelerate any obligation under, or give rise to a right of termination of, any contract, agreement, permit, license, authorization or other obligation to which Buyer is a party or by which Buyer or any of its assets are bound.

6.5 Financial Capability. Buyer has entered into this Agreement in good faith as a result of arms-length negotiations with Seller. Buyer is not entering into this Agreement or any transaction contemplated hereunder with the intent to hinder, delay or defraud any Person to which it is, or may become, indebted. Buyer believes in good faith that it has or will have at the time required to perform the capacity and financial capability to comply with and perform all of the covenants and obligations under this Agreement.

6.6 Brokers. Buyer has not retained any broker in connection with the transactions contemplated hereunder. Seller will have no obligation to pay fees of any brokers, finders, investment bankers, or financial advisors engaged by Buyer in connection with this Agreement or the transactions contemplated hereby.

6.7 Diligence Investigation. Buyer has conducted its own independent investigation, review and analysis in connection with this Agreement and the transactions contemplated hereby, including regarding the Purchased Assets, the Assumed Contracts and the Product and the manufacture and Development thereof. Such investigation shall in no way limit any claims by Buyer resulting from any breach by Seller of any of its representations, warranties and covenants contained herein, including, without limitation, claims arising from or fraud or intentional misconduct.

6.8 Buyer Stock. The authorized capital stock of Buyer consists of (i) 50,000,000 shares of common stock, par value $0.0001 per share ("**Buyer Common Stock**"), 10,000,000 of which are issued and outstanding and (ii) 25,000,000 shares of preferred stock, $0.0001 par value, of which 13,000,000 shares have been designated as Series A Preferred Stock ("**Buyer Series A Preferred Stock**"), of which 11,381,999 shares of Buyer Series A Preferred Stock are issued and outstanding. Buyer has reserved 3,869,424 shares of Buyer Common Stock for issuance to officers, directors, employees and consultants of Buyer pursuant to its 2017 Equity Incentive Plan duly adopted by the board of directors of Buyer and approved by the stockholders of Buyer, of which 2,656,435 have been issued to employees and consultants of the Buyer. Buyer has reserved 558,740 shares of Buyer Series A Preferred Stock for issuance pursuant to that certain Warrant, dated as of April 25, 2017, in favor of MDB Capital Group, LLC. There are no bonds, debentures, notes or other indebtedness having general voting rights (or convertible into securities having such rights) ("**Voting Debt**") of Buyer issued and outstanding. Except as set forth above, there are no options, warrants, calls, subscriptions or other rights, agreements, arrangements or commitments of any kind relating to the issued or unissued capital stock of Buyer, obligating Buyer to issue, transfer or sell or cause to be issued, transferred or sold any shares of capital stock or Voting Debt of, or other equity interest in, Buyer or securities convertible into or exchangeable for such shares or equity interests, or obligating Buyer to grant, extend or enter into any such option, warrant, call, subscription or other right, agreement, arrangement or commitment.

6.9 No Other Representations and Warranties. EXCEPT FOR THE REPRESENTATIONS OR WARRANTIES EXPRESSLY SET FORTH IN THIS ARTICLE 6 OF THIS AGREEMENT OR IN ANY OTHER TRANSACTION DOCUMENTS, BUYER DISCLAIMS ALL OTHER REPRESENTATIONS OR WARRANTIES, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, RELATED TO THIS AGREEMENT.

7. COVENANTS OF THE PARTIES

7.1 Cooperation.

(i) Each Party shall cooperate fully with the other, as promptly as is reasonably practicable, in preparing and filing all notices, applications, submissions, reports and other instruments and documents that are necessary, proper or advisable under Applicable Law or required under Program Contracts or by Third Parties to consummate and make effective the transactions contemplated by this Agreement and obtaining any consent or approval of any Governmental Authority or other Third Party whose consent may be required to consummate and make effective the transactions contemplated by this Agreement, including the Consents and Waivers (the **"Required Consents"**).

(ii) Seller shall have no obligation to make any payments or provide other consideration to Buyer or any Third Party other than any amounts that are due and payable by Seller as of the Closing, if any, or are otherwise required by the terms of this Agreement or the other Transaction Documents. Seller's obligation to transfer or assign any Assumed Contract shall be contingent upon Seller's receipt of such Required Consent. Pending receipt of any Required Consent with respect to an Assumed Contract, the Parties shall use their commercially reasonable efforts to implement an alternative arrangement to permit Buyer to receive substantially similar rights and for Buyer to assume substantially similar obligations under such Assumed Contract as if such impediment to assignment or transfer did not exist; provided, however, that commercially reasonable efforts shall not include payment to Seller or Buyer, as applicable, or any Third Party other than payment of amounts due and payable by Seller and or Buyer, as applicable, as of the Closing.

7.2 Further Assurances. Seller shall from time to time, at the reasonable request of Buyer and at Buyer's expense, (i) provide such further information in Seller's possession, (ii) execute and deliver, or cause to be executed and delivered, such other instruments of conveyance and transfer, certificates, deeds or other documents, and (iii) take, or cause to be taken, all other actions and do, or cause to be done, such other acts and things, all as promptly as practicable as Buyer may reasonably request in order to more effectively consummate the transactions contemplated by this Agreement and to vest in Buyer good and marketable title to the Purchased Assets.

7.3 Confidentiality. Each Receiving Party shall maintain the confidentiality of any Confidential Information received from a Disclosing Party, and shall not disclose such information to any Third Party without the prior written consent of such Disclosing Party, except as otherwise provided in this Agreement (it being understood that any Confidential Information included in the Purchased Assets shall become Confidential Information of Buyer following Closing). As used herein, Confidential Information shall be deemed to include (i) all information that either Party provides in connection with this Agreement or the transactions contemplated hereby (including, without limitation, any claim or dispute arising out of or related to this Agreement or the transactions contemplated hereby, or the interpretation, making, performance, breach or termination thereof) identified to the other in writing as confidential or the nature of which or the circumstances of the disclosure of which would reasonably indicate that such information is confidential, this Agreement and all information concerning this Agreement (which shall be deemed the Confidential Information of both Parties); and (ii) the Purchased Assets that are not generally available to the public and including, without limitation, any information provided or made available following the Closing pursuant to this Agreement (including, without limitation, any information related to Net Sales any and all books and records, work papers, documents, schedules or other materials or information).

7.4 Legally Compelled Disclosure. In the event that a Receiving Party is required by Applicable Laws to disclose any Confidential Information of its Disclosing Party to any Governmental Authority in order to obtain regulatory approval for the Product, in connection with a bona fide legal process (including in connection with any bona fide disputes hereunder) or under the rules of the securities exchange upon which its securities are traded, the confidentiality requirements under Section 7.3 shall not apply, solely with respect to the Confidential Information required to be disclosed by Applicable Law, and so long as such Receiving Party (i) limits disclosure to such information required by Applicable Law while maintaining the confidentiality of all other Confidential Information of its Disclosing Party, and (ii) promptly gives such Disclosing Party advance notice of such disclosure and an opportunity to seek a protective order or confidential treatment. In the event of disclosure required by Applicable Laws under this Section 7.4, the Receiving Party shall cooperate in any such limitation on disclosure efforts at the Disclosing Party's reasonable request and expense.

7.5 Press Releases and Other Permitted Disclosures.

(i) Attached as Exhibit 11, is a copy of the press release to be issued by the Buyer on the Closing Date. Except as set forth in the previous sentence or otherwise in this Section 7.5, no press release, public statement or disclosure concerning the existence or terms of this Agreement shall be made, either directly or indirectly, by either Party, without first obtaining the written approval of the other Party, which such approval shall not be unreasonably withheld or delayed; provided that Seller may disclose the receipt of any milestone payment amount under this Agreement. Once any public statement or disclosure has been approved in accordance with this Section 7.5, then either Party may appropriately communicate information contained in such permitted statement or disclosure.

(ii) Each Party may disclose the existence and terms of this Agreement in confidence: (a) (1) to its attorneys, professional accountants, and auditors, and (2) bankers or other financial advisors in connection with an initial public offering, private financing or other strategic transaction, or corporate valuation for internal purposes; provided that any such disclosure to such professional accountants, auditors, bankers or other financial advisors is under an agreement to keep the terms of confidentiality and non-use no less rigorous than the terms contained in this Agreement and to use such information solely for the applicable purpose permitted pursuant to this Section 7.4(ii)(a); (b) to potential acquirers (and their respective attorneys and professional advisors), in connection with a potential merger, acquisition or reorganization; provided that such disclosure is under an agreement according to terms of confidentiality and non-use that are no less rigorous than the terms contained in this Agreement and require the use of such information solely for the purpose permitted pursuant to this Section 7.5(ii)(b); (c) to existing or potential investors, lenders or permitted assignees of such Party (and their respective attorneys and professional advisors); provided that such disclosure is under an agreement according to terms of confidentiality and non-use that are no less rigorous than the terms contained in this Agreement; and (d) to current and potential licensees or sublicensees or potential acquirors of such Party or of the Product (and their respective attorneys and professional advisors).

(iii) Notwithstanding the foregoing provisions of this Article 7, a Party may disclose the existence and terms of this Agreement or a Party's or the Parties' activities under this Agreement where required, as reasonably determined by the legal counsel of the disclosing Party, by Applicable Law, by applicable stock exchange regulation, as required in connection with filings under applicable securities laws or by order or other ruling of a competent court, although, to the extent practicable, the other Party shall be given prompt notice of any such legally required disclosure to comment and reasonably consider such comments provided by such Party on the proposed disclosure.

(iv) Nothing in this Section 7.5 shall be deemed to restrict Buyer from providing public updates on the Product or its Development, manufacturing or Commercialization as deemed necessary or advisable by the Buyer in its sole discretion; provided that Buyer does not use the name of Seller or its Affiliates (except to the extent referred to as the manufacturer of Product or licensor of certain Product-related rights, as may be necessary under applicable law or the Assumed Contracts) in any such public updates and does not otherwise disclose any Confidential Information of Seller.

7.6 Commercialization of Products. As of the Closing Date, Buyer shall be solely and exclusively responsible for the manufacture, Development and Commercialization of the Products, including all decisions pertaining to such manufacture, Development or Commercialization, including any recall of Products.

7.7 Regulatory Matters. A copy of each Transfer Letter authorizing the transfer of ownership of the INDs and CTAs as well as the orphan drug designation owned by Seller to Buyer shall be delivered on the Closing Date and within ten (10) Business Days after the Closing Date, (a) Seller shall submit the Transfer Letters to the relevant Governmental Authorities and shall notify Buyer of such submission on the date submitted (providing Buyer an electronic copy of the submission with such notification) and (b) shall provide to Buyer the full regulatory file for the INDs and CTAs held by the Seller, including all available electronic meta data. Upon notification of the Seller's submission of the Transfer Letter to the relevant Governmental Authorities, Buyer shall execute and submit to the relevant Governmental Authorities letters acknowledging Buyer's commitment to assume ownership of the INDs and CTAs and the orphan drug designation owned by Seller. As of the Closing Date, except as otherwise set forth in this Section 7.7, Buyer shall be solely responsible for taking any actions necessary to (i) obtain any documentation required to maintain the INDs and CTAs or the orphaned drug designation owned by Seller or obtain any further authorizations under any Applicable Law, and otherwise comply with any Applicable Law with respect to regulatory authorizations. During the period between the Closing Date and the date that is that is eighteen (18) months from the Closing Date, Seller shall provide reasonable assistance as requested by Buyer in connection with Buyer's fulfilment of its obligations under this Section 7.7. Except as set forth in any further written agreement between the Parties, as of the Closing Date, Buyer shall be solely responsible for investigating and reporting adverse experiences for the Product to any Governmental Authorities and addressing any such Governmental Authorities' inquiries related to the safety of the Product; provided, however, that Seller shall provide reasonable assistance and cooperation to Buyer to the extent any such investigations or inquiries related to the manufacture or development of the Product prior to the Closing Date by or on behalf of Seller. Except as set forth in any further written agreement between the Parties, as of the Closing Date, Buyer shall be solely responsible for addressing any Person's medical inquiries or complaints relating to the Product; provided, however, that Seller shall provide reasonable assistance and cooperation to Buyer to the extent any such inquiries or complaints related to the manufacture or Development of the Product prior to the Closing Date by or on behalf of Seller.

7.8 Development and Commercialization of Products after Closing. Following the Closing Date Buyer agrees to (i) use Reasonable Commercial Efforts to commence a [****] in accordance with the Development Plan; and (ii) use Reasonable Commercial Efforts to manufacture, Develop and Commercialize at least one Product in the United States and Europe. Buyer shall provide to Seller, semi-annually, written reports on its completed and planned Development and Commercialization activities with respect to each Product. Each such report shall include an update regarding Development activities conducted by or on behalf of Buyer (including activities conducted under the Development Plan) and progress towards achieving the Development and Regulatory Milestones.

8. MANUFACTURING

8.1 Manufacturing and Quality Agreements. As part of the Technology Transition Plan described in Section 2.7, during the Transition Period, Buyer and Seller shall negotiate in good faith manufacturing transfer and quality agreements for the Product that will include provisions regarding the transfer of: (i) existing clinical material; (ii) all cGMP and non-cGMP bulk drug substance or partially finished drug Product, including API, along with the corresponding cell lines and any specialized and dedicated equipment (e.g., proprietary media, dedicated purification columns/filters, etc.) required for the production of Teplizumab; and (iii) the CMC and quality support and documentation necessary to label, package, release and ship the existing inventory of cGMP finished drug product vials to clinical trial sites and/or a corresponding storage and distribution subcontractor. After the Transition Period, Seller shall continue to provide support on the manufacturing transfer described in this Section 8.1 in accordance with the Technology Transition Plan and in accordance with the terms of Section 2.7 for a period of eighteen (18) months from the Effective Date. Costs incurred by Seller in connection with this Section 8.1 shall be subject to the cost allocation and reimbursement provisions of Section 2.7.

9 INDEMNIFICATION

9.1 Survival of Representations, and Warranties.

(i) The Fundamental Representations shall survive the Closing Date indefinitely and shall bind the successors and assigns of the relevant Party, whether so expressed or not, and all such representations and warranties shall inure to the benefit of the successors and assigns of the Parties hereto, whether expressed or not. The "**Fundamental Representations**" are Sections 5.1 (Corporate Organization), 5.3 (Authority of Seller); 5.4 (Non-Contravention); 5.5 (Title; Encumbrances); 5.14 (Eli Lilly Agreement; Third Party Obligations); 6.2 (Corporate Organization); 6.3 (Authority of Buyer); 6.4 (Non-Contravention) and 6.8 (Buyer Stock).

(ii) The Core Representations shall survive the Closing Date for a period of five (5) years, and during such period shall bind the successors and assigns of the relevant Party, whether so expressed or not, and all such representations and warranties shall inure to the benefit of the successors and assigns of the Parties hereto, whether expressed or not. The "**Core Representations**" are Sections 5.7 (Intellectual Property); 5.10 (Regulatory Compliance); and 5.15 (Clinical Trials).

(iii) Except as set forth in subsections (i) and (ii) of this Section 9.1, the representations and warranties of Seller or Buyer contained in Articles 5 and 6 or documents executed in connection herewith shall survive the Closing Date for a period of eighteen (18) months (the **"Survival Period"**) and during the Survival Period shall bind the successors and assigns of the relevant Party, whether so expressed or not, and all such representations and warranties shall inure to the benefit of the successors and assigns of the Parties hereto, whether expressed or not.

(iv) Any claim whether for indemnification or otherwise based upon a breach of any such representation or warranty and asserted prior to the termination of the Survival Period by written notice in accordance with Section 9.2 shall survive until final resolution of such claim.

9.2 Indemnification by Seller. From and after the Closing Date, Seller shall indemnify, defend and hold harmless Buyer, its Affiliates and their respective officers, directors, employees, agents, successors and assigns from and against any and all Damages incurred in connection with any claim, action, suit, litigation, proceeding, arbitration or investigation (whether civil, criminal, administrative, investigative, appellate or informal) by

a Third Party, including a Governmental Authority (**"Third Party Claims"**) arising out of or relating to (i) any breach of any covenant, representation or warranty of Seller in this Agreement, (ii) any Retained Liability or (iii) Seller's fraud, gross negligence or willful misconduct.

9.3 Indemnification by Buyer. From and after the Closing Date, Buyer shall indemnify, defend and hold harmless Seller, its Affiliates, and their respective officers, directors, employees, agents, successors and assigns from and against any and all Damages incurred in connection with any Third Party Claims arising out of or relating to: (i) any breach of any covenant, representation or warranty of Buyer in this Agreement, (ii) any Assumed Liability or (iii) Buyer's fraud, gross negligence or willful misconduct.

9.4 Procedure. A Person intending to claim indemnification under this Article 9 (the **"Indemnitee"**) shall promptly provide written notice to the Party providing indemnification (the **"Indemnitor"**) of any Third Party Claim with respect to which the Indemnitee intends to claim such indemnification, which notice shall include a description of the Third Party Claim, the amount thereof (if known and quantifiable) and the basis for the Third Party Claim; provided that failure of the Indemnitee to give the Indemnitor notice as set forth herein shall not relieve the Indemnitor of its obligations hereunder, except to the extent that the Indemnitor is prejudiced thereby. The Indemnitor shall have the right, in its sole discretion and at its election by written notice to the Indemnitee within fifteen (15) days after delivering notice of the Third Party Claim to the Indemnitee, to conduct the defense against such Third Party Claim in its own name, provided that the Indemnitor (i) shall keep the Indemnitee reasonably informed regarding the status of such Third Party Claim, (ii) shall provide the Indemnitee the reasonable opportunity to consult with the Indemnitor regarding the defense of such claim, and (iii) may not settle or compromise any such Third Party Claim without the prior written consent of the Indemnitee (which consent shall not be unreasonably withheld, conditioned or delayed) unless (A) such settlement or compromise involves no finding or admission of any breach by any Indemnitee of any obligation to any other Person or any violation by any Indemnitee of any Applicable Law, and (B) the sole relief provided in connection with such settlement or compromise is monetary damages that are paid in full by the Indemnitor. If the Indemnitee fails to timely give notice of such election to conduct the defense, it will be deemed to have elected not to conduct the defense of the subject Third Party Claim, and in such event the Indemnitor shall have the right, at its own cost and expense, to conduct the defense in good faith with counsel reasonably satisfactory to the Indemnitee; provided that the Indemnitor (x) shall keep the Indemnitee reasonably informed regarding the status of such Third Party Claim,

(y) shall provide the Indemnitee the reasonable opportunity to consult with the Indemnitor regarding the defense of such claim and (z) may not settle or compromise any such Third Party Claim without the prior written consent of the Indemnitee (which consent shall not be unreasonably withheld, conditioned or delayed). The Indemnitee, its employees and agents, shall cooperate fully with the Indemnitor and its legal representative(s) in the investigation and defense of any Third Party Claim covered by this Section 9.4.

9.5 Limitation of Damages. The indemnification obligations of a Party under Section 9.2 or Section 9.3 and the liability of a Party for all damages whatsoever arising out of or related to this Agreement and the instruments and agreements contemplated hereby and the transactions contemplated hereby and thereby shall be limited as follows:

(i) *Insurance.* A Party shall not be liable to the extent an Indemnitee or the other Party receives payment from any insurer or other Third Party, but only with respect to amounts actually received from such insurer or other Third Party. The Indemnitor shall remain liable for the balance of any Damages unpaid to the Indemnitee or the other Party.

(ii) *Negligence, Illegal Act or Willful Misconduct.* A Party shall not be liable to the extent that the other Party, its Affiliates or any of their respective officers, directors, employees, agents, successors and assigns caused, by the illegal conduct, gross negligence or willful misconduct, the Damages.

9.6 Insurance. Buyer and Seller shall each maintain a commercial general liability insurance policy or policies to protect against potential liabilities and risk arising out of this Agreement and are as are appropriate to cover the Parties' respective indemnification obligations hereunder. Upon request, each Party shall provide certificates of insurance to the other evidencing the coverage specifies herein. Neither Party's liability to the other is in any way limited to the extent of its insurance coverage.

9.7 Limitations on Indemnification. Notwithstanding anything to the contrary herein, (i) Seller shall not have any liability under Section 9.2 for any individual item (or series of related items) where the Damages relating thereto until the aggregate damages related thereto meet or exceed [****] United States dollars ($[****]) provided that once the Damages equal or exceed [****] United States dollars ($[****]), the Seller shall be liable for all Damages from the first dollar and (ii) Seller's aggregate liability under Section 9.2(i) (other than for breaches of Fundamental Representations or Core Representations, or for claims related to fraud, gross negligence or willful misconduct) shall in no event exceed, on a cumulative basis, [****] percent ([****]%) of the Aggregate Consideration (as determined from time to time). Notwithstanding anything to the contrary herein, (a) Buyer shall not have any liability under Section 9.3 for any individual item (or series of related items) where the Damages relating thereto until the aggregate damages related thereto meet or exceed [****] United States dollars ($[****]) provided that once the Damages equal or exceed [****] United States dollars ($[****]), the Buyer shall be liable for all Damages from the first dollar and (b) Buyer's aggregate liability under Section 9.3(i) (other than for breaches of Fundamental Representations or Core Representations, or for claims related to fraud, gross negligence or willful misconduct) shall in no event exceed, on a cumulative basis, [****] percent ([****]%) of the Aggregate Consideration (as determined from time to time). For purposes of this Section 9.7, "**Aggregate Consideration**" means, as determined from time to time, the sum of each of the following amounts: (A) the [****], (B) the [****]; (C) [****] paid to Seller in accordance with Section [****]; (D) the [****]; (E) [****] paid to Seller in accordance with Section [****]; (F) the aggregate amount of [****], including consideration due to [****] in connection with the consummation of the transactions contemplated under this Agreement. Nothing in this Section 9.7 is intended to, nor shall it, limit Seller's liability under Sections 9.2(ii) or 9.2(iii) or Buyer's liability under Section 9.3(ii) or 9.3(iii).

9.8 Cap on Damages. Except for claims involving fraud, gross negligence or willful misconduct and for Seller's indemnification obligations pursuant to Section 9.2 or Buyer's indemnification obligations pursuant to Section 9.3, each Party's aggregate liability under this Agreement (including

negligence) shall not exceed the aggregate amounts actually paid (and, with respect to Buyer's liability hereunder, payable) by Buyer to Seller pursuant to Sections 3.1 through 3.5.

9.9 Set-Off. To the extent that any amount would have been payable to Buyer under Section 9.2 but for the "Aggregate Consideration" limitations set forth in Section 9.7, Buyer shall be entitled to set off such unpaid amount against the BLA Approval Milestone payment subject to the following conditions:

(a) the amount set off shall have been (i) agreed to by Seller or (ii) determined by an arbitrator, a court of competent jurisdiction or a Third Party mediator appointed by the Parties to make such determination; and

(b) the amount set-off shall not exceed the cap on damages under Section 9.7 after calculating the "Aggregate Consideration" under Section 9.7 with the inclusion of the payment of the BLA Approval Milestone payment.

10. NOTICES

10.1 Save as otherwise provided in this Agreement, any notice, demand or other communication (**"Notice"**) to be given by either Party under, or in connection with, this Agreement shall be in writing and signed by, on behalf of, the Party giving it. Any Notice shall be served by sending it by email to the address set out in Section 10.2, and/or delivering it by registered mail or courier to the address set out in Section 10.2 and in each case marked for the attention of the relevant Party set out in Section 10.2 (or as otherwise notified from time to time in accordance with the provisions of Section 10.3). Any Notice so served by email and/or registered mail or courier shall be deemed to have been duly given or made as follows:

(i) if sent by email, upon acknowledgment of receipt; or

(ii) in the case of delivery by registered mail, within five (5) Business Days from the date of dispatch; or

(iii) in the case of delivery by nationally recognized overnight courier service, within one (1) Business Day from date of dispatch, provided that in each case where delivery by registered mail or courier occurs after 6pm on a Business Day or on a day which is not a Business Day, service shall be deemed to occur at 9am on the next following Business Day.

10.2 The addressees of the Parties for the purpose of Section 10.1 are as follows:

(i) Buyer

Address:

Provention Bio, Inc.

Email: apalmer@provention.com

Attention: Ashleigh Palmer

With a copy to counsel, provided that such copy shall not constitute notice to Buyer:

Lowenstein Sandler LLP
1251 Avenue of the Americas
17th Floor
New York, NY 10020
Email:
mlerner@lowenstein.com;
hweinstein@lowenstein.com
Attention: Michael Lerner;
Herschel Weinstein

(ii) Seller

Address: MacroGenics, Inc.
9704 Medical Centre Drive
Rockville, MD 20850,
Email:
Attention: CEO

with copies to:

MacroGenics, Inc.
9704 Medical Center Drive
Rockville, MD 20850
Attention: General Counsel

10.3 A Party may notify the other Party of a change to its name, relevant addressee, address or email address for the purposes of this Article 10, provided that such notice shall only be effective on:

(i) the date specified in the notification as the date on which the change is to take place; or

(ii) if no date is specified or the date is less than five (5) Business Days after the date on which notice is given, the date following five (5) Business Days after notice of any change has been given.

10.4 In providing service it shall be sufficient to prove that the envelope containing such Notice was properly addressed and delivered to the address shown thereon or that the facsimile transmission was made and a facsimile confirmation report was received, as the case may be.

11. MISCELLANEOUS

11.1 Entire Agreement. This Agreement, including all the Exhibits, sets forth the entire understanding of the Parties with respect to the subject matter hereof and cancels and supersedes all previous communications, representations or understandings, and agreements, whether oral or written, between the Parties relating to the subject matter hereof including the Prior Confidentiality Agreement. Information disclosed under the Prior Confidentiality Agreement shall be deemed to be Confidential Information disclosed under this Agreement and subject to the same obligations of confidentiality and use as other Confidential Information disclosed hereunder.

11.2 Amendment. No modification or amendment of any provision of this Agreement shall be valid or effective unless made in writing and signed by duly authorized officers of each Party.

11.3 Assignment. Neither Party may assign, transfer, charge or otherwise encumber this Agreement or any right, benefit or interest under it, nor transfer it without the prior written consent of the other Party provided that a Party may assign this Agreement to any Affiliate or to any successor in interest by way of merger, acquisition or sale of all or substantially all of its assets to which this Agreement relates, provided that such successor agrees in writing to be bound by the terms of this Agreement as if it were the assigning Party. Each Party agrees that, notwithstanding any provisions of this Agreement to the contrary, if this Agreement is assigned by a Party in connection with a merger, acquisition or sale of all or substantially all of its assets, such assignment shall not provide the non-assigning Party with rights or access to any intellectual property or technology of the acquirer of the assigning Party beyond that which is specifically contemplated in this Agreement. This Agreement shall be binding upon the successors and permitted assigns of the Parties. Any assignment not in accordance with this Section 11.3 shall be void.

11.4 Governing Law. This Agreement shall be governed by and construed under the laws of the State of Delaware, without regard to conflict of law principles. The provisions of the United Nations Convention on Contracts for the International Sale of Goods the 1974 Convention on the Limitation Period in the International Sale of Goods, as amended by that certain Protocol, done at Vienna on April 11, 1980 shall not apply to the Transaction Agreements or any subject matter hereof or thereof.

11.5 Severability. If any of the provisions of this Agreement are held to be void or unenforceable by a court of competent jurisdiction, then such void or unenforceable provisions shall be replaced by valid and enforceable provisions which will achieve as far as possible the economic business intentions of the Parties. However, the remainder of this Agreement will remain in full force and effect, provided that the material interests of the Parties are not affected i.e., the Parties would presumably have concluded this Agreement without the unenforceable provisions.

11.6 Waiver. A waiver of any default, breach or non-compliance under this Agreement is not effective unless signed by the Party granting such waiver. No waiver will be inferred from or implied by any failure to act or delay in acting by a Party in respect of any default, breach, non-observance or by anything done or omitted to be done by the other Party. The waiver by a Party of any default, breach or non-compliance under this Agreement will not operate as a waiver of that Party's rights under this Agreement in respect of any continuing or subsequent default, breach or non-compliance.

11.7 Damages Limitation. EXCEPT WITH RESPECT TO THEIR RESPECTIVE INDEMNIFICATION OBLIGATIONS UNDER SECTIONS 9.2 AND 9.3 OF THIS AGREEMENT, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY UNDER OR WITH RESPECT TO THIS AGREEMENT, OR ANY OTHER AGREEMENT OR INSTRUMENT CONTEMPLATED HEREBY, FOR ANY INDIRECT, INCIDENTAL, EXEMPLARY, SPECIAL, OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS OR BUSINESS INTERRUPTION, OR PUNITIVE DAMAGES.

11.8 Expenses. Except as otherwise provided in this Agreement, each Party hereto shall pay its own expenses and costs incidental to the preparation of this Agreement and to the consummation of the transactions contemplated hereby, including the fees for any business, legal or regulatory counsel.

11.9 Relationship of the Parties. Neither Party shall be deemed an agent or representative of the other Party for any purpose, and this Agreement shall not create or establish an agency. Except as may be specifically provided herein, neither Party shall have any right, power, or authority, nor shall they represent themselves as having authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other Party, or otherwise act as an agent for the other Party for any purpose. This Agreement does not, is not intended to, and shall not be construed to, establish or create an employment, agency, partnership, joint venture or any other legal arrangement that would impose liability upon one Party for the act or failure to act of the other Party.

11.10 No Third Party Beneficiaries. This Agreement is neither expressly nor impliedly made for the benefit of any entity other than the Parties, and neither any Third Party nor any Affiliate shall have any claim against either Party on the basis of this Agreement.

11.11 Language. This Agreement has been drafted in the English language, and the English language shall control its interpretation. Any translation shall be for convenience purposes only and shall not be legally binding.

11.12 Interpretation. The Parties agree that the terms and conditions of this Agreement are the result of negotiations between the Parties and that this Agreement shall not be construed in favour of or against either Party by reason of the extent to which such a Party participated in the drafting of this Agreement.

11.13 Descriptive Headings. The descriptive headings of this Agreement are for convenience only and shall be of no force or effect in construing or interpreting any of the provisions of this Agreement.

11.14 Counterparts. The Parties shall execute this Agreement in two (2) counterparts, either of which the Parties shall deem an original, but which together shall constitute one and the same instrument. Counterparts may be signed and delivered by facsimile or PDF file, each of which shall be binding when received by the applicable Party.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Closing Date.

PROVENTION BIO, INC.:	**MACROGENICS, INC.:**
/s/ Ashleigh Palmer	/s/ Scott Koenig
Name: Ashleigh Palmer	Name: Scott Koenig, M.D. Ph.D.
Title: President and Chief Executive Officer	Title: President and Chief Executive Officer

Exhibits:

Exhibit 1:	Teplizumab
Exhibit 2:	Product Patents; Program IP
Exhibit 3:	Assumed Contracts
Exhibit 4:	Development Plan
Exhibit 5:	Disclosure Schedules
Exhibit 6:	Bill of Sale and General Assignment Agreement
Exhibit 7:	Patent Assignment Agreement
Exhibit 8:	Transferred Materials. Transferrable Books and Records and INDs and CTAs
Exhibit 9:	Form of Transfer Letter
Exhibit 10:	Form of Warrant
Exhibit 11:	Form of Press Release
Exhibit 12:	Form of Lock-Up Agreement

Exhibit 1

Teplizumab

Teplizumab (MGA031), a recombinant, humanized, FcR non-binding, anti-CD3 monoclonal antibody described in IND# [****]. Secretion Signal Sequence double underlined in lowercase letters.

Amino Acid Sequence:

Light Chain

[****]

Heavy Chain

[****]

Exhibit 2
Product Patents

Title	Country	Patent / Publication No.	Serial No.
[****]	[****]	[****]	[****]
[****]	[****]	[****]	[****]
[****]	[****]	[****]	[****]
[****]	[****]	[****]	[****]
[****]	[****]	[****]	[****]
[****]	[****]	[****]	[****]
[****]	[****]	[****]	[****]
[****]	[****]	[****]	[****]

Exhibit 3

Assumed Contracts

[****]

Exhibit 4

Development Plan

Treatment for patients with recent-onset T1D to preserve beta-cell function and insulin secretion

[****]

Exhibit 5

Disclosure Schedules

[****]

Exhibit 10.23

Exhibit 6

Bill of Sale and General Assignment Agreement

BILL OF SALE AND GENERAL ASSIGNMENT AGREEMENT

This Bill of Sale and General Assignment Agreement (this "Agreement") is made and entered into effective as of the ___ day of May, 2018 (the "Effective Date") by and between **PROVENTION BIO, INC.,** a Delaware corporation, having its principal place of business at (hereinafter "**Provention**") and **MACROGENICS, INC.,** a Delaware corporation having its principal place of business at 9704 Medical Center Drive, Rockville, MD 20850 (hereinafter **"MacroGenics"**).

WHEREAS, MacroGenics and Provention are parties to that certain Asset Purchase Agreement, dated as of May ____, 2018 (the "Asset Purchase Agreement").

WHEREAS, in connection with the consummation of the transactions contemplated by the Asset Purchase Agreement, (i) MacroGenics shall sell, transfer, convey and assign to Provention all of MacroGenics' right, title, and interest in and to the Purchased Assets, and Provention shall purchase from MacroGenics all of MacroGenics' right, title, and interest in and to the Purchased Assets, and (ii) MacroGenics shall assign to Provention and Provention has agreed to assume all of the Assumed Liabilities, each to be effective as of the Closing Date, subject to the terms and conditions of the Asset Purchase Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, MacroGenics and Provention (each a "Party" and collectively, the "Parties") agree as follows:

1. Sale, Assignment, and Assumption. To be effective as of the Closing Date, and pursuant to the terms and subject to the conditions of the Asset Purchase Agreement, MacroGenics (i) sells, transfers, conveys and assigns to Provention all of MacroGenics' right, title, and interest in and to the Purchased Assets and (ii) assigns the Assumed Liabilities to Provention. Provention (x) accepts such sale, transfer, conveyance and assignment of MacroGenics' right, title, and interest in and to the Purchased Assets, and (y) assumes and agrees to pay, perform and discharge as and when due, as applicable, all of the Assumed Liabilities.

2. Terms of the Agreement. Nothing contained in this Agreement shall be deemed to modify, limit, expand, supersede, or amend any rights or obligations of MacroGenics or Provention under the Asset Purchase Agreement. This Agreement is intended only to effect the sale, assignment, transfer and conveyance of the Purchased Assets to Provention by MacroGenics and assumption of the Assumed Liabilities by Provention, all in accordance with the terms and conditions of the Asset Purchase Agreement. To the extent any conflict arises between any of the terms and provisions of this Agreement and any of the terms and provisions of the Asset Purchase Agreement, the terms and provisions of the Asset Purchase Agreement shall govern and control.

3. No Third Party Beneficiaries. Nothing herein expressed or implied is intended to confer upon any person, other than the Parties and their respective successors and assigns, any rights, remedies, obligations, or liabilities.

4. Entire Agreement. This Agreement, together with the Asset Purchase Agreement (and the schedules and exhibits thereto) and the other documents executed in connection therewith, sets forth the entire agreement between the Parties with respect to the subject matter hereof, and cancels or supersedes all previous communications, representations, understandings, agreements, and arrangements between the Parties, written or oral, to the extent they relate in any way to the subject matter hereof.

5. Severability. Any term or provision of this Agreement that is invalid or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction. If any provision of this Agreement is so broad as to be unenforceable, such provision shall be interpreted to be only so broad as is enforceable.

6. Governing Law. This Agreement shall be governed by and construed in accordance with the substantive law of the State of Delaware without regard to conflict of law principles.

7. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be an original, but all of which together shall constitute one and the same agreement. This Agreement, any and all agreements and instruments executed and delivered in accordance herewith, along with any amendments hereto or thereto, to the extent signed and delivered by means of a facsimile machine or email delivery of a ".pdf" or similar format data file, shall be treated in all manner and respects and for all purposes as an original signature, agreement or instrument and shall be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. No Party hereto shall raise the use of a facsimile machine or e-mail delivery of a ".pdf" or similar format data file to deliver a signature to this Agreement or any amendment hereto or the fact that such signature was transmitted or communicated through the use of a facsimile machine or e-mail delivery of a ".pdf" or similar format data file as a defense to the formation or enforceability of a contract and each Party hereto forever waives any such defense.

9. Amendment and Modification. This Agreement may be amended by the Parties at any time only by a written instrument signed by each of the Parties.

[SIGNATURE PAGE FOLLOWS]

Exhibit 10.23

IN WITNESS WHEREOF, each of the Parties is signing this Agreement as of the Effective Date.

MACROGENICS:

MacroGenics, Inc.

By:

Name:

Title:

PROVENTION:

Provention Bio, Inc.

By:

Name:

Title:

Exhibit 7

Patent Assignment Agreement

PATENT ASSIGNMENT AGREEMENT

This Patent Assignment Agreement (this "Agreement") is made and entered into effective as of the ____ day of May, 2018 (the "Effective Date") by and between **PROVENTION BIO, INC.,** a Delaware Corporation, having its principal place of business at (hereinafter "**Provention**") and **MACROGENICS, INC.,** a Delaware corporation having its principal place of business at 9704 Medical Center Drive, Rockville, MD 20850 (hereinafter "**MacroGenics**").

WHEREAS, MacroGenics and Provention are parties to that certain Asset Purchase Agreement, dated as of May ____, 2018 pursuant to which MacroGenics shall transfer, convey, assign and deliver to Provention all of MacroGenics' rights, title and interests in all patent applications and issued patents that are identified on Schedule A attached hereto, or claim priority to any patent application listed on Schedule A (collectively, the "**Assigned Patents**").

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, MacroGenics and Provention (each a "Party" and collectively, the "Parties") agree as follows:

1.Patent Assignment. MacroGenics hereby conveys, transfers, and assigns to Provention, its successors and assigns, MacroGenics' entire right, title and interest for the United States, its territories and possession, and all foreign countries in and to the Assigned Patents and all rights, claims and privileges pertaining thereto, including without limitation, all inventions and discoveries disclosed therein, certificates of invention and applications for certificates of invention, and any substitutions, reissues, reexaminations, divisions, renewals, extensions, provisionals, continuations, continuations-in-part, continued prosecution applications, and corresponding foreign patents and patent applications and foreign counterparts thereof, and any and all rights to sue and recover for claims and remedies against and collect damages and other recoveries for past, present and future infringements of any or all of the foregoing, and rights for priority and protection of interests therein under the laws of any jurisdiction and hereby grants to Provention the right to apply, obtain and hold in its own name for patents or inventor's certificates and related rights heretofore or hereafter filed in any and all countries, including, without limitation, the right to prosecute and maintain the same and all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.

2.Authorization. MacroGenics authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any other official throughout the world whose duty is to register and record ownership in patent registrations and applications for registration of patents, to record Provention as the assignee and owner of any and all right in the Assigned Patents.

3.Miscellaneous. This Assignment will be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns, each of which such successors and permitted assigns will be deemed to be a Party hereto for all purposes hereof. This Assignment and any of the terms contained herein may be amended or modified by MacroGenics and Provention only in writing. This Assignment is executed by, and shall be binding upon, MacroGenics and Provention and their respective successors and assigns, for the uses and purposes set forth and referred to above, effective immediately upon its delivery to Provention. This Assignment shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to conflict of law principles. This Agreement may be executed in multiple counterparts, each of which shall be an original, but all of which together shall constitute one and the same agreement. This Agreement, any and all agreements and instruments executed and delivered in accordance herewith, along with any amendments hereto or thereto, to the extent signed and delivered by means of a facsimile machine or email delivery of a ".pdf" or similar format data file, shall be treated in all manner and respects and for all purposes as an original signature, agreement or instrument and shall be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. No Party hereto shall raise the use of a facsimile machine or email delivery of a ".pdf" or similar format data file to deliver a signature to this Agreement or any amendment hereto or the fact that such signature was transmitted or communicated through the use of a facsimile machine or e-mail delivery of a ".pdf" or similar format date file as a defense to the formation or enforceability of a contract and each Party hereto forever waives any such defense.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, each of the Parties is signing this Agreement as of the Effective Date.

MACROGENICS:

MacroGenics, Inc.

By:

Name:

Title:

Date:

STATE OF _____ }

}ss:

COUNTY OF _____ }

On the _____ day of _____ in the year 20____, before me, the undersigned, personally appeared

_____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose

name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public, State of _____

Printed Name:

Commission #:

PROVENTION:

Provention Bio, Inc.

By:

Name:

Title:

Date:

STATE OF _____ }

}ss:

COUNTY OF _____ }

On the _____ day of _____ in the year 20____, before me, the undersigned, personally appeared

_____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose

name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public, State of _____

Printed Name:

Commission #:

Exhibit 10.23

Schedule A

Title	Country	Patent / Publication No.	Serial No.
[****]	[****]	[****]	[****]

Exhibit 8

Transferred Documentation and Biological and Chemical Materials and Reagents

The items on this list are anticipated to be transferred by the Seller as soon as practicable using Commercially Reasonable Efforts during the Transition Period. Items that are not transferred during the Transition Period shall be transferred by the Seller during the remainder of the eighteen (18) months after the Effective Date using Commercially Reasonable Efforts to the extent available and feasible. Electronic documentation shall be transferred in formats to be mutually agreed upon by both Parties.

Documentation

[****]

Exhibit 9

Form of Transfer Letter

[****]

ATTN: [****]

RE: Transfer of IND Ownership and Notification of New Regulatory
Contact IND No. [****] SEQ No.: XXXX
Teplizumab (MGA031), Humanized Anti-Human CD3 Monoclonal Antibody

Dear Dr. [****] :

Reference is made to IND [****] and IND [****] for teplizumab, Humanized Anti-Human CD3 Monoclonal Antibody. IND [****] is active to evaluate teplizumab in the treatment of people with recent-onset Type 1 Diabetes Mellitus (T1DM). IND [****] is active to evaluate teplizumab in the prevention/delay of diagnosis of T1DM in people at risk for developing T1DM. A similar letter is being submitted to IND [****].

As of <insert date> , Provention Bio, <insert address> has acquired the worldwide development and commercialization rights to teplizumab from MacroGenics, Inc., 9640 Medical Center Drive, Rockville, MD 20850 USA.

On behalf of MacroGenics, I am authorizing the Food and Drug Administration to transfer ownership and responsibility for IND [****] effective as of <insert date> to:
Provention Bio

<insert date>

A complete copy of the IND, including all correspondence from the Agency, has been provided to Provention Bio and upon their acceptance of this IND, all future correspondence regarding this IND should be addressed to Provention Bio. The Regulatory contact for Provention Bio is:
<insert Provention Bio's Regulatory Authorized Sponsor>

<insert address, phone number and email address>

Provention Bio will submit a letter of acknowledgement and acceptance of the IND transfer and regulatory responsibilities under a separate correspondence to the Division.

If you have any questions regarding this submission, please do not hesitate to contact me at [****], or you may contact [****]. Please contact [****] for electronic submission-related questions. Thank you.

Sincerely,

[See appended electronic signature page.]

[****]

Exhibit 10.23

Exhibit 10

Form of Warrant

Warrant Number ____

THE WARRANT REPRESENTED BY THIS CERTIFICATE AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF MAY NOT BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) SUCH TRANSACTION IS MADE PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT FILED UNDER THE SECURITIES ACT AND THE APPLICABLE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION OR (2) THE COMPANY IS PROVIDED WITH AN OPINION OF COUNSEL, SATISFACTORY TO THE COMPANY, STATING THAT SUCH TRANSACTION IS IN COMPLIANCE WITH EXEMPTIONS FROM REGISTRATION UNDER THE SECURITIES ACT AND SUCH OTHER APPLICABLE LAWS. NO TRANSFER OF ANY INTEREST IN THIS WARRANT OR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF MAY BE EFFECTED WITHOUT FIRST SURRENDERING THIS WARRANT OR SUCH SECURITIES, AS THE CASE MAY BE, TO THE COMPANY OR ITS TRANSFER AGENT, IF ANY.

Warrant to Purchase

Shares of

Common Stock

As Herein Described

May __, 2018

WARRANT TO PURCHASE COMMON STOCK OF

PROVENTION BIO, INC.

This is to certify that, for value received, MacroGenics, Inc., or a proper assignee (the "Holder"), is entitled to purchase up to 2,162,389 shares ("Warrant Shares") of common stock, $0.0001 par value per share (the "Common Stock"), of Provention Bio, Inc., a Delaware corporation (the "Company"), subject to the provisions of this Warrant. This Warrant shall be exercisable at Two Dollars and Fifty Cents ($2.50) per share (the "Exercise Price"). This Warrant also is subject to the following terms and conditions:

1. Exercise and Payment; Exchange.

(a) This Warrant may be exercised in whole or in part at any time from and after the date hereof (the "Commencement Date") through the close of business on May __, 2025 (the "Expiration Date"), at which time this Warrant shall expire and become void, but if such date is a day on which federal or state chartered banking institutions located in the State of New York are authorized to close, then on the next succeeding day which shall not be such a day. Exercise ("Exercise") shall be by presentation and surrender to the Company, or at the office of any transfer agent designated by the Company (the "Transfer Agent"), of (i) this Warrant, (ii) the attached exercise form properly executed, and (iii) a certified or official bank check for the Exercise Price for the number of Warrant Shares specified in the exercise form. If this Warrant is exercised in part only, the Company or the Transfer Agent shall, upon surrender of the Warrant, execute and deliver a new Warrant evidencing the rights of the Holder to purchase the remaining number of Warrant Shares purchasable hereunder. Upon receipt by the Company of this Warrant, the properly executed exercise form, and payment as aforesaid, the Holder shall be deemed to be the holder of record of the Common Stock issuable upon such exercise, notwithstanding that the stock transfer books of the Company shall then be closed or that certificates representing such Warrant Shares shall not then be actually delivered to the Holder. Under no circumstance shall the Company be required to make any cash payments or net cash settlement to the Holder in lieu of delivery of the Warrant Shares.

(b) In lieu of exercising this Warrant for cash pursuant to Section 2(a), if the fair market value of one Warrant Share is greater than the Exercise Price (at the date of calculation as set forth below), the Holder may elect to receive a number of Warrant Shares equal to the value of this Warrant (or of any portion of this Warrant being canceled) by Exercise of this Warrant, in which event the Company shall issue to the Holder that number of Warrant Shares computed using the following formula:

$$X = \frac{Y (A - B)}{A}$$

Where:

X = The number of Warrant Shares to be issued to the Holder

Y = The number of Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation)

A = The fair market value of one Warrant Share (at the date of such calculation)

B = The Exercise Price (as adjusted to the date of such calculation)

For purposes of the calculation above, the fair market value of one Warrant Share shall be determined as set forth in Section 3(a) – (c) below.

(b) Conditions to Exercise or Exchange. The restrictions in Section 7 shall apply, to the extent applicable by their terms, to any exercise or exchange of this Warrant permitted by this Section 1.

2. Reservation of Shares. The Company shall, at all times until the expiration of this Warrant, reserve for issuance and delivery upon exercise of this Warrant the number of Warrant Shares which shall be required for issuance and delivery upon exercise of this Warrant. Upon issuance, all Warrant Shares will be validly issued and outstanding, fully paid and non-assessable, and free from all taxes, liens and charges with respect to the issuance thereof.

3. Fractional Interests. The Company shall not issue any fractional shares or scrip representing fractional shares upon the exercise or exchange of this Warrant. With respect to any fraction of a share resulting from the exercise or exchange hereof, the Company shall pay to the Holder an amount in cash equal to such fraction multiplied by the current fair market value per share of Common Stock, determined as follows:

(a) If the Common Stock is listed on a national securities exchange or admitted to unlisted trading privileges on such an exchange, the current fair market value shall be the last reported sale price of the Common Stock on such exchange on the last business day prior to the date of exercise of this Warrant or if no such sale is made on such day, the mean of the closing bid and asked prices for such day on such exchange;

(b) If the Common Stock is not so listed or admitted to unlisted trading privileges on a national securities exchange, the current fair market value shall be the mean of the last bid and asked prices reported on the last business day prior to the date of the exercise of this Warrant by the OTC Markets Group, Inc.; or

(c) If the Common Stock is not so listed or admitted to unlisted trading privileges on a national securities exchange and bid and asked prices are not so reported, the current fair market value shall be an amount, not less than book value, determined in such reasonable manner as may be prescribed by the Company in good faith.

4. No Rights as Shareholder. This Warrant shall not entitle the Holder to any rights as a shareholder of the Company, either at law or in equity. The rights of the Holder are limited to those expressed in this Warrant and are not enforceable against the Company except to the extent set forth herein.

5. Adjustments in Number and Exercise Price of Warrant Shares.

5.1 The number of shares of Common Stock for which this Warrant may be exercised and the Exercise Price therefor shall be subject to adjustment as follows:

(a) If the Company is recapitalized through the subdivision or combination of its outstanding shares of Common Stock into a larger or smaller number of shares, the number of Warrant Shares shall be increased or reduced, as of the record date for such recapitalization, in the same proportion as the increase or decrease in the outstanding shares of Common Stock, and the Exercise Price shall be adjusted so that the aggregate amount payable for the purchase of all of the Warrant Shares issuable hereunder immediately after the record date for such recapitalization shall equal the aggregate amount so payable immediately before such record date.

(b) If the Company declares a dividend on Common Stock payable in Common Stock or securities convertible into Common Stock, the number of shares of Common Stock for which this Warrant may be exercised shall be increased as of the record date for determining which holders of Common Stock shall be entitled to receive such dividend, in proportion to the increase in the number of outstanding shares (and shares of Common Stock issuable upon conversion of all such securities convertible into Common Stock) of Common Stock as a result of such dividend, and the Exercise Price shall be adjusted so that the aggregate amount payable for the purchase of all the Warrant Shares issuable hereunder immediately after the record date for such dividend shall equal the aggregate amount so payable immediately before such record date.

(c) If the Company distributes to holders of its Common Stock, other than as part of its dissolution or liquidation or the winding up of its affairs, any evidence of indebtedness or any of its assets (other than cash, Common Stock or securities convertible into Common Stock), the Company shall give written notice to the Holder of any such distribution at least fifteen (15) days prior to the proposed record date in order to permit the Holder to exercise this Warrant on or before the record date. There shall be no adjustment in the number of shares of Common Stock for which this Warrant may be exercised, or in the Exercise Price, by virtue of any such distribution.

(d) If the Company offers rights or warrants to the holders of Common Stock which entitle them to subscribe to or purchase additional Common Stock or securities convertible into Common Stock, the Company shall give written notice of any such proposed offering to the Holder at least fifteen (15) days prior to the proposed record date in order to permit the Holder to exercise this Warrant on or before such record date. There shall be no adjustment in the number of shares of Common Stock for which this Warrant may be exercised, or in the Exercise Price, by virtue of any such distribution.

(e) If the event, as a result of which an adjustment is made under paragraph (a) or (b) above, does not occur, then any adjustments in the Exercise Price or number of shares issuable that were made in accordance with such paragraph (a) or (b) shall be adjusted to the Exercise Price and number of shares as were in effect immediately prior to the record date for such event.

5.2 In the event of any reorganization or reclassification of the outstanding shares of Common Stock (other than a change in par value or from no par value to par value, or from par value to no par value, or as a result of a subdivision or combination) or in the event of any consolidation or merger of the Company with another entity after which the Company is not the surviving entity, at any time prior to the expiration of this Warrant, upon subsequent exercise of this Warrant the Holder shall have the right to receive the same kind and number of shares of common stock and other securities, cash or other property as would have been distributed to the Holder upon such reorganization, reclassification, consolidation or merger had the Holder exercised this Warrant immediately prior to such reorganization, reclassification, consolidation or merger, appropriately adjusted for any subsequent event described in this Section 5. The Holder shall pay upon such exercise the Exercise Price that otherwise would have been payable pursuant to the terms of this Warrant. If any such reorganization, reclassification, consolidation or merger results in a cash distribution in excess of the then applicable Exercise Price, the Holder may, at the Holder’s option, exercise this Warrant without making payment of the Exercise Price, and in such case the Company shall, upon distribution to the Holder, consider the Exercise Price to have been paid in full, and in making settlement to the Holder, shall deduct an amount equal to the Exercise Price from the amount payable to the Holder.

5.3 If the Company shall, at any time before the expiration of this Warrant, dissolve, liquidate or wind up its affairs, the Holder shall have the right to receive upon exercise of this Warrant, in lieu of the shares of Common Stock of the Company that the Holder otherwise would have been entitled to receive, the same kind and amount of assets as would have been issued, distributed or paid to the Holder upon any such dissolution, liquidation or winding up with respect to such Common Stock receivable upon exercise of this Warrant on the date for determining those entitled to receive any such distribution. If any such dissolution, liquidation or winding up results in any cash distribution in excess of the Exercise Price provided by this Warrant, the Holder may, at the Holder's option, exercise this Warrant without making payment of the Exercise Price and, in such case, the Company shall, upon distribution to the Holder, consider the Exercise Price to have been paid in full and, in making settlement to the Holder, shall deduct an amount equal to the Exercise Price from the amount payable to the Holder.

6. Notices to Holder. So long as this Warrant shall be outstanding (a) if the Company shall pay any dividends or make any distribution upon the Common Stock otherwise than in cash or (b) if the Company shall offer generally to the holders of Common Stock the right to subscribe to or purchase any shares of any class of Common Stock or securities convertible into Common Stock or any similar rights or (c) if there shall be any capital reorganization of the Company in which the Company is not the surviving entity, recapitalization of the capital stock of the Company, consolidation or merger of the Company with or into another corporation, sale, lease or other transfer of all or substantially all of the property and assets of the Company, or voluntary or involuntary dissolution, liquidation or winding up of the Company, then in such event, the Company shall cause to be mailed to the Holder, at least thirty (30) days prior to the relevant date described below (or such shorter period as is reasonably possible if thirty (30) days is not reasonably possible), a notice containing a description of the proposed action and stating the date or expected date on which a record of the Company's shareholders is to be taken for the purpose of any such dividend, distribution of rights, or such reclassification, reorganization, consolidation, merger, conveyance, lease or transfer, dissolution, liquidation or winding up is to take place and the date or expected date, if any is to be fixed, as of which the holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such event.

7. Transfer, Exercise, Exchange, Assignment or Loss of Warrant, Warrant Shares or Other Securities.

7.1 This Warrant may be transferred, exercised, exchanged or assigned ("transferred"), in whole or in part, subject to the following restrictions. This Warrant and the Warrant Shares or any other securities ("Other Securities") received upon exercise of this Warrant shall be subject to restrictions on transferability until registered under the Securities Act of 1933, as amended (the "Securities Act"), unless an exemption from registration is available. Until this Warrant and the Warrant Shares or Other Securities are so registered or exempt from registration, this Warrant and any certificate for Warrant Shares or Other Securities issued or issuable upon exercise of this Warrant shall contain a legend on the face thereof, in form and substance satisfactory to counsel for the Company, stating that this Warrant, the Warrant Shares or Other Securities may not be sold, transferred or otherwise disposed of unless, in the opinion of counsel satisfactory to the Company, which may be counsel to the Company, that this Warrant, the Warrant Shares or Other Securities may be transferred without such registration. This Warrant and the Warrant Shares or Other Securities may also be subject to restrictions on transferability under applicable state securities or blue sky laws.

7.2 Any transfer permitted hereunder shall be made by surrender of this Warrant to the Company or to the Transfer Agent at its offices with a duly executed request to transfer the Warrant, which shall provide adequate information to effect such transfer and shall be accompanied by funds sufficient to pay any transfer taxes applicable. The Company or Transfer Agent shall, without charge, execute and deliver a new Warrant in the name of the transferee named in such transfer request, and this Warrant promptly shall be cancelled.

7.3 Upon receipt by the Company of evidence satisfactory to it of loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, of reasonable satisfactory indemnification, or, in the case of mutilation, upon surrender of this Warrant, the Company will execute and deliver, or instruct the Transfer Agent to execute and deliver, a new Warrant of like tenor and date, any such lost, stolen or destroyed Warrant thereupon shall become void.

8. Representations and Warranties of the Holder. The Holder hereby represents and warrants to the Company with respect to the issuance of the Warrant as follows:

8.1 Legends. The Holder understands and acknowledges that the certificate(s) evidencing the securities issued by the Company will be imprinted with a restrictive legend as referenced in Section 7.1 above.

8.2 Access to Data. The Holder has had an opportunity to discuss the Company's business, management, and financial affairs with the Company's management and the opportunity to review the Company's facilities and business plans. The Holder has also had an opportunity to ask questions of officers of the Company, which questions were answered to its satisfaction.

8.3 Authorization. This Warrant and the agreements contemplated hereby, when executed and delivered by the Holder, will constitute a valid and legally binding obligation of the Holder, enforceable in accordance with their respective terms.

8.4 Brokers or Finders. The Company has not incurred, and will not incur, directly or indirectly, as a result of any action taken by such Holder, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Warrant or any transaction contemplated hereby.

9. Notices. All notices, requests, demands or other communications hereunder shall be in writing and shall be deemed to have been duly given, if delivered in person or mailed, certified, return-receipt requested, postage prepaid to the address previously provided to the other party, or sent by fax or email (to the extent stated below). Either party hereto may from time to time, by written notice to the other party, designate a different address. If any notice or other document is sent by certified or registered mail, return receipt requested, postage prepaid, properly addressed as aforementioned, the same shall be deemed delivered seventy-two (72) hours after mailing thereof. If any notice is sent by fax or email, it will be deemed to have been delivered on the date the fax or email thereof is actually received, provided the original thereof is sent by certified mail, in the manner set forth above, within twenty-four (24) hours after the fax or email is sent.

10. Amendment. Any provision of this Warrant may be amended or the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the mutual written consent of the Company and the Holder.

11. Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of New York.

[Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

PROVENTION BIO, INC.

By:

Name:

Title:

Exhibit 10.23

FORM OF EXERCISE

To be executed upon exercise of Warrant

(please print)

The undersigned hereby irrevocably elects to exercise the right, represented by this Warrant Number _____certificate, to _____ shares of

common stock, $0.0001 par value per share ("Common Stock") of Provention Bio, Inc. (the "Company") and herewith [tenders payment for such shares of Common Stock to the order of the Company the amount of $[●] per share in accordance with the terms hereof/elects to exercise this Warrant pursuant to Section 2(b) of the attached Warrant]. The undersigned requests that a certificate for such shares of Common Stock be registered in the name of

_____ whose address is _____. If said number of shares of Common Stock is less

than all of the shares of Common Stock purchasable hereunder, the undersigned requests that a new Warrant Certificate representing the remaining balance of the shares of Common Stock be registered in the name of _____, whose address is

_____, and that such Warrant Certificate be delivered to_____, whose address is

_____.

Representations of the undersigned.

a) The undersigned acknowledges that the undersigned has received, read and understood the Warrant and agrees to abide by and be bound by its terms and conditions.

b) (i) The undersigned has such knowledge and experience in business and financial matters that the undersigned is capable of evaluating the Company and the proposed activities thereof, and the risks and merits of this prospective investment.

[ ] YES [ ] NO

(iii) If "No", the undersigned is represented by a "purchaser representative," as that term is defined in the Securities Act of 1933, as amended (the "Securities Act") and Regulation D thereunder.

[ ] YES [ ] NO

c) (i) The undersigned is an "accredited investor," as that term is defined in the Securities Act and Rule 501 of Regulation D thereunder.

[ ] YES [ ] NO

(i) If "Yes," the undersigned comes within the following category of that definition (check one and complete the blanks as applicable):

[ ] 1. The undersigned is a natural person whose present net worth (or whose joint net worth with his or her spouse), excluding the value of the undersigned's primary residence, exceeds $1,000,000. For purposes of calculating the undersigned's present net worth, the undersigned has included the following as liabilities: (i) any indebtedness that is secured by the undersigned's primary residence in excess of the estimated fair market value of the undersigned's primary residence at the time of the sale of the shares, and (ii) any incremental debt secured by the undersigned's primary residence that was incurred in the 60 days before the sale of the shares, other than as a result of the acquisition of the undersigned's primary residence.

[ ] 2. The undersigned is a natural person who had individual income in excess of $200,000 in each of the last two years or joint income with the undersigned's spouse in excess of $300,000 during such two years, and the undersigned reasonably expects to have the same income level in the current year.

[ ] 3. The undersigned is an officer or director of the Company.

[ ] 4. The undersigned is a corporation or partnership not formed for the specific purpose of acquiring the securities offered, with total assets in excess of $5,000,000.

[ ] 5. The undersigned is a trust with total assets in excess of $5,000,000 whose purchase is directed by a person with such knowledge and experience in financial and business matters that such person is capable of evaluating the merits and risks of the prospective investment.

[ ] 6. The undersigned is an entity, all of whose equity owners are accredited investors under paragraphs 1, 2, 3, 4 or 5, above.

d) The undersigned understands that the shares purchased hereunder have not been registered under the Securities Act, in reliance upon the exemption from the registration requirements under the Securities Act pursuant to Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D thereunder; and, therefore, that the undersigned must bear the economic risk of the investment for an indefinite period of time since the securities cannot be sold, transferred or assigned to any person or entity without compliance with the provisions of the Securities Act.

Submitted by:		Accepted by Provention Bio, Inc.:	
By:		By:	
Date:		Date:	
SS/Tax ID:		Tax ID:	
Telephone:			
Email:			

(Signature must conform in all respects to name of holder as specified on the face of the Warrant Certificate.)

Exhibit 11

Press Release

Exhibit 10.23

Exhibit 12

Form of Lock-Up Agreement

PROVENTION BIO, INC.

LOCK-UP AGREEMENT

May __, 2018

MDB Capital Group, Inc.

2425 Cedar Springs Road

Dallas, Texas 75201

Re: Provention Bio, Inc. - Lock-Up Agreement

Ladies and Gentlemen:

This Lock-Up Agreement is being delivered to you in connection with the Warrants (the "**Warrants**"), each dated as of May __, 2018 between Provention Bio, Inc., a Delaware Corporation, (the "**Company**") and MacroGenics, Inc., a Delaware corporation (the "**Subscriber**"), in which Subscriber desires to acquire warrants exercisable into an aggregate of 2,432,688 shares of Common Stock, par value $0.0001 per share (the "**Common Stock**"), of the Company in consideration of the Company's and Subscriber's entry into an Asset Purchase Agreement and License Agreement, each dated as of May __, 2018.

In order to induce MDB Capital Group, LLC ("**MDB**") to locate investors to participate in an initial public offering by the Company, the undersigned agrees that, *commencing* on the earlier of (a) the date of the final prospectus relating to the Company's initial public offering of its Common Stock (the "**IPO**") and (b) the listing of the Company's Common Stock on an exchange or any tier of The NASDAQ Stock Market or New York Stock Exchange and *ending* on the date that is 12 months thereafter (the "**Lock-Up Period**"), the undersigned will not, and will cause all affiliates (as defined in Rule 144 promulgated under the Securities Act of 1933 Act, as amended) of the undersigned not to, (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock, or securities exercisable or convertible into shares of Common Stock, held as of the date hereof (the "**Subscriber's Shares**") or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Subscriber's Shares, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise.

The foregoing restriction is expressly agreed to preclude the undersigned, and any affiliate of the undersigned from engaging in any hedging or other transaction which is designed to or which reasonably could be expected to lead to or result in a sale or disposition of the Subscriber's Shares even if the Subscriber's Shares would be disposed of by someone other than the undersigned. Such prohibited hedging or other transactions would include, without limitation, any short sale or any purchase, sale or grant of any right (including, without limitation, any put or call option) with respect to any of the Subscriber's Shares or with respect to any security that includes, relates to, or derives any significant part of its value from the Subscriber's Shares.

Notwithstanding the foregoing, the undersigned may transfer the Subscriber's Shares, provided that in case of items (i) through (v) below, any such transfer shall not involve a disposition for value, and provided further that any transferee shall agree to be bound by the terms of this Lock-up Agreement:

(i) bona fide gift or gifts or by will or intestate succession upon the death of the undersigned; or

(ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned; or

(iii) if the undersigned is a trust, any distribution to a beneficiary of the trust or to the estate of a beneficiary of such trust and such transfer is not for value; or

(iv) as a distribution or transfer to stockholders, members, limited partners, or other securityholders of the undersigned or to regular employees of the undersigned whether or not for value; or

(v) to any corporation, partnership, limited liability company or other entity all of the beneficial ownership interests of which are held by the undersigned or to the undersigned's affiliates or to any investment fund or other entity controlled or managed by or under common control with the undersigned.

For purposes of this Lock-Up Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

Notwithstanding anything contrary in this Lock-Up Agreement, (i) the undersigned may exercise warrants to purchase shares of Common Stock, *provided* that the underlying shares of Common Stock shall continue to be subject to the restrictions on transfer set forth in this letter agreement, (ii) the undersigned can enter into a sales plan pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), provided that no sales, dispositions or other transfers of the Subscriber's Shares may be made under such plan during the Lock-Up Period and no public announcement or filing under the Exchange Act regarding the establishment of such plan shall be required of or voluntarily made by or on behalf of the undersigned or the Company;

(iii) nothing in this Lock-Up Agreement shall prevent the transfer of securities of the Company pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of Common Stock, provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the Subscriber's Shares shall remain subject to the restrictions contained in this Lock-Up Agreement, and (iv) nothing in this Lock-Up Agreement shall prevent the transfer of the Subscriber's Shares with the written consent of MDB and the agreement of the transferee that it will be subject to the restrictions contained herein.

In order to enforce this covenant, the Company shall impose stop-transfer instructions preventing the Company's transfer agent (the "**Transfer Agent**") from effecting any actions in violation of this Lock-Up Agreement. The undersigned agrees and consents to the entry of stop transfer instructions with the Company's Transfer Agent and registrar against the transfer of the Undersigned's Shares except in compliance with the foregoing restrictions. The Company is a third party beneficiary of this provision.

The undersigned acknowledges that the execution, delivery and performance of this Lock-Up Agreement is a material inducement to MDB and the Company to complete the transactions contemplated by the Subscription Agreement and the Private Placement, and that MDB and the Company shall each be entitled to specific performance of the undersigned's obligations hereunder. The undersigned hereby represents that the undersigned has the power and authority to execute, deliver and perform this Lock-Up Agreement, that the undersigned has received adequate consideration therefor and that the undersigned will indirectly benefit from the closing of the transactions contemplated by the Subscription Agreement entered into in connection with the Private Placement.

The undersigned understands and agrees that this Lock-Up Agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors, and assigns.

At the discretion of MDB some or all of the Subscriber's Shares may be released from the restrictions of this Lock-Up Agreement, and the Company will take the required action to permit the securities so released to be free of the restrictions of this Lock-Up Agreement.

This Lock-Up Agreement may be executed in two counterparts, each of which shall be deemed an original but both of which shall be considered one and the same instrument.

This Lock-Up Agreement will be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to any choice of law or conflicting provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the laws of any jurisdiction other than the State of Delaware to be applied. In furtherance of the foregoing, the internal laws of the State of Delaware will control the interpretation and construction of this Lock-Up Agreement, even if under such jurisdiction's choice of law or conflict of law analysis, the substantive law of some other jurisdiction would ordinarily apply.

[Remainder of page intentionally left blank. Signature Page to Follow.]

Very truly yours,

Exact Name of Shareholder

Authorized Signature

Title

Agreed to and Acknowledged:

MDB CAPITAL GROUP, LLC

By:

Name:

Title:

Exhibit 10.23

CERTAIN PORTIONS OF THIS EXHIBIT (INDICATED BY [***]) HAVE BEEN EXCLUDED PURSUANT TO ITEM 601(B)(10) OF REGULATION S-K BECAUSE THEY ARE BOTH NOT MATERIAL AND ARE THE TYPE THAT THE COMPANY TREATS AS PRIVATE AND CONFIDENTIAL.

AMENDMENT NO. 1 TO ASSET PURCHASE AGREEMENT

This Amendment No. 1 to the Asset Purchase Agreement (this "**Amendment No. 1**"), by and between MacroGenics, Inc.**,** a Delaware corporation, having its principal place of business at 9704 Medical Center Drive, Rockville, MD 20850 ("**Seller**"), and Provention Bio, Inc., a Delaware corporation, having its principal place of business at 55 Broad Street, 2nd Floor, Red Bank, NJ 07701 ("**Buyer**"), together with Seller, the "**Parties**" and each separately, a "**Party**"), and is meant to amend that certain Asset Purchase Agreement, dated as of May 7, 2018, between Seller and Buyer (the "**Agreement**"). Capitalized terms used and not otherwise defined herein shall have the meanings ascribed to such terms in the Agreement.

WHEREAS, the FDA granted a first Regulatory Approval for the Product on November 17, 2022; and

WHEREAS, the Parties have agreed to revise the payment terms for achievement of the BLA Approval Milestone;

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained herein, and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the Parties agree as follows:

1) This Amendment No. 1 shall be effective on November 30, 2022 (the "**Amendment Effective Date**").

2) The Parties agree that the Agreement shall be amended from and after the Amendment Effective Date as follows:

   a) The defined term "**Change of Control**" and its following definition are hereby added to Section 1.1 of the Agreement:

   "**Change of Control**" means that (a) (i) any Third Party acquires the beneficial ownership of any voting security of Buyer, or (ii) if the percentage ownership of a Third Party in the voting securities of Buyer is increased through stock redemption, cancellation or other recapitalization, and, in the case of (i) and (ii),after such acquisition or increase such Third Party is the beneficial owner of voting securities representing more than fifty percent (50%) of the total voting power of all of the then outstanding voting securities of Buyer; (b) a merger, consolidation, recapitalization, or reorganization of Buyer is consummated that would result in stockholders or equity holders of Buyer immediately prior to such transaction ceasing to own more than fifty percent (50%) of the outstanding securities of the surviving entity (or its parent entity) immediately following such transaction; or (c) the sale or transfer to a Third Party of all or substantially all of Buyer's assets taken as a

whole or which relate to this Agreement is effected. Notwithstanding the foregoing, the following will not constitute a Change of Control: (i) a sale of capital stock to underwriters in an underwritten public offering of Buyer's capital stock solely for the purpose of financing, or (ii) the acquisition of securities of Buyer by any Person or group of Persons that acquires Buyer's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for Buyer through the issuance of equity securities.

b) The defined term "Payment Acceleration Event" and its following definition are hereby added to Section 1.1 of the Agreement:

"**Payment Acceleration Event**" means a Change of Control.

c) Section 3.2 is hereby deleted and replaced with the following text:

Development and Regulatory Milestones. Buyer shall pay (which payments shall not be creditable against any other obligations of Buyer hereunder) a non-refundable payment for each of the milestone events set forth in this Section 3.2 (each a **"Development and Regulatory Milestone"**), whether the Development and Regulatory Milestone is achieved by Buyer, its Affiliates or Licensees, or any Third Party acting on behalf of Buyer, its Affiliates or Licensees. Payment for each of the Development and Regulatory Milestones shall be made only once regardless of how many times a Product achieves the corresponding Development and Regulatory Milestone, and no payment shall be due for any Development and Regulatory Milestone which is not achieved. The Development and Regulatory Milestones shall be as follows:

Development and Regulatory Milestone	Payment
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

[***]	[***]

Buyer shall provide Seller with written notice within thirty (30) days after the achievement of the corresponding Development and Regulatory Milestone. The payment pertaining to each Development and Regulatory Milestone, other than the BLA Approval Milestone Payment which shall be governed in accordance with Section 3.2(a), shall be made by Buyer to Seller within ninety (90) days after the achievement of the corresponding Development and Regulatory Milestone.

d) The following text is hereby added to the Agreement as new Section 3.2(a):

Payment of BLA Approval Milestone. The Parties acknowledge and agree that the BLA Approval Milestone was achieved. Buyer shall pay Seller the BLA Approval Milestone payment in four (4) installments as follows:

i. an initial payment of Fifteen Million United States dollars ($15,000,000) by November 30, 2022;
ii. a further Fifteen Million United States dollars ($15,000,000) by March 1, 2023;
iii. a further Fifteen Million United States dollars ($15,000,000) by June 1, 2023; and
iv. a further Fifteen Million United States dollars ($15,000,000) by September 1, 2023

(together, the "**BLA Approval Payments**").

e) The following text is hereby added to the Agreement as new Section 3.2(b):

Acceleration of BLA Approval Payments. On or at any time after the occurrence of a Payment Acceleration Event, Seller may by notice to Buyer declare that all or part of the outstanding BLA Approval Payments, together with accrued interest, and all other amounts accrued or outstanding under this Agreement be due and payable, at which time they shall become due and payable [***].

f) The following text is hereby added to the Agreement in Section 3.5:

Notwithstanding anything contained in the Agreement to the contrary, the [***] with respect to the Product, Teplizumab; provided, that no [***]; provided, further, that [***] may be [***] that may become due pursuant to [***].

3) Entire Agreement. The Agreement (including Amendment No. 1), as supplemented and modified by this Amendment No. 1, together with the exhibits thereto, contains the entire understanding of the Parties with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral or written, with respect to such matters, which the Parties acknowledge have been merged into the Agreement.

4) Governing Law. This Amendment No. 1 shall be governed by and construed under the laws of the State of Delaware, without giving effect to any choice of law principles that would require the application of the laws of a different state.

5) Execution in Counterparts. This Amendment No. 1 may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Amendment No. 1 may be executed by .pdf or other electronically transmitted signatures and such signatures shall be deemed to bind each Party as if they were the original signatures.

6) Remaining Provisions of the Agreement. Except as expressly provided herein, each of the other provisions of the Agreement shall remain in full force and effect.

7) References. Upon the effectiveness of this Amendment No. 1, on and after the date hereof, each reference in the Agreement to "this Agreement," "hereunder," "hereof," "herein" or words of like import shall mean and be a reference to the Agreement, as amended hereby

[signature page follows]

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment No. 1 to the Asset Purchase Agreement to be duly executed by their respective authorized signatories effective as of the Amendment Effective Date.

MACROGENICS, INC.

By: /s/ Scott Koenig, M.D., Ph.D. Name: Scott Koenig, M.D., Ph.D.
Title: President and Chief Executive Officer

PROVENTION BIO, INC.

By: /s/ Ashleigh Palmer Name: Ashleigh Palmer
Title: President and Chief Executive Officer

CERTAIN PORTIONS OF THIS EXHIBIT (INDICATED BY [***]) HAVE BEEN EXCLUDED PURSUANT TO ITEM 601(B)(10) OF REGULATION S-K BECAUSE THEY ARE BOTH NOT MATERIAL AND ARE THE TYPE THAT THE COMPANY TREATS AS PRIVATE AND CONFIDENTIAL.

LEASE

THIS LEASE (this "Lease") is entered into as of this [***] day of [***] (the "Execution Date"), by and between BMR-MEDICAL CENTER DRIVE LLC, a Delaware limited liability company ("Landlord"), and J. CRAIG VENTER INSTITUTE, INC., successor in interest to The Institute for Genomic Research, Inc., a Maryland non-stock corporation (''Tenant").

RECITALS

A. WHEREAS, Landlord owns certain real property ("Property") and the improvements on the Property located at 9704 Medical Center Drive, Rockville, Maryland, including the building located thereon (the "Building"); and

B. WHEREAS, Landlord wishes to lease to Tenant, and Tenant desires to lease from Landlord, certain premises (the "Premises") comprising all of the Building, pursuant to the terms and conditions of this Lease, as detailed below.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Lease of Premises.

1.1 Effective on the Term Commencement Date (as defined in Article 4 below), Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises, as shown on Exhibit A attached hereto, including the patio/deck shown on Exhibit A and all shafts, cable runs, risers, mechanical spaces and rooftop areas, for use by Tenant in accordance with the Permitted Use (as defined below) and no other uses. The Property and all landscaping, parking facilities, private drives and other improvements and appurtenances related thereto, including the Building and the other buildings located at 9708, 9710, 9712 and 9714 Medical Center Drive (such other buildings, the "Lower Campus"), Rockville, MD, are hereinafter collectively referred to as the "Project." All driveways, loading docks, sidewalks, parking areas and landscaped areas for the buildings in the Project are hereinafter referred to as the "Common Areas").

2. Basic Lease Provisions. For convenience of the parties, certain basic provisions of this Lease are set forth herein. The provisions set forth herein are subject to the remaining terms and conditions of this Lease and are to be interpreted in light of such remaining terms and conditions.

2.1 This Lease shall take effect upon the Execution Date and, except as specifically otherwise provided within this Lease, each of the provisions hereof shall be binding upon and inure to the benefit of Landlord and Tenant from the date of execution and delivery hereof by all parties hereto.

2.2 In the definitions below, each current Rentable Area (as defined below) is expressed in rentable square footage. Rentable Area and Tenant's Pro Rata Shares (as defined below) are all subject to adjustment as provided in this Lease.

Definition or Provision	**Means the Following (As of the Term Commencement Date)**
Rentable Area of Premises	[***] square feet
Rentable Area of Building	[***] square feet
Rentable Area of Project	[***] square feet
Tenant's Pro Rata Share of Building	[***]%
Tenant's Pro Rata Share of Common Areas	[***]%

2.3 Initial monthly and annual installments of Base Rent for the Premises ("Base Rent") as of the Term Commencement Date, subject to adjustment under this Lease:

Dates	**Square Feet of Rentable Area**	**Base Rent per Square Foot of Rentable Area**	**Monthly Base Rent**	**Annual Base Rent**
[***]	[***]	[***]	[***]	[***]

2.4 Estimated Term Commencement Date: [***]

2.5 Estimated Term Expiration Date:[***]

2.6 Security Deposit: $[***].

2.7 Permitted Use: Tenant shall have the right to use the Premises for any use in conformity with all federal, state, municipal and local laws, codes, ordinances, rules and regulations of Governmental Authorities (as defined below), committees, associations, or other regulatory committees, agencies or governing bodies having jurisdiction over the Premises, the Building, the Property, the Project, Landlord or Tenant, including both statutory and common law and hazard waste rules and regulations ("Applicable Laws")

2.8 Address for Rent Payment:

2.9

	Address for Notices to Landlord: BMR-Medical Center Drive LLC 17190 Bernardo Center Drive San Diego, California 92128 Attn: Cynthia Crossmon
Address for Notices to Tenant:	J. Craig Venter Institute, Inc. at the Premises Attn: Vice President, General Counsel
With a copy to:	Arnold & Porter LLP 555 12th Street, NW Washington, DC 20004 Attention: Kenneth Schwartz

2.10 The following Exhibits are attached hereto and incorporated herein by reference:

Exhibit A	Premises
Exhibit B	Depiction of Tenant's Exclusive Parking Area
Exhibit C	Acknowledgement of Term Commencement Date and Term Expiration Date
Exhibit D	Intentionally Omitted
Exhibit E	Form of Letter of Credit
Exhibit F	Rules and Regulations
Exhibit G	Intentionally Omitted
Exhibit H	Tenant's Personal Property
Exhibit I	Form of Estoppel Certificate
Exhibit J	Maintenance and Service Obligations of Landlord and Tenant

3. Term. The actual term of this Lease (as the same may be extended pursuant to Article 42 hereof and as the same may be earlier terminated in accordance with this Lease, the "Term") shall commence on the Term Commencement Date (as defined in Article 4) and end on the date that is [***] months after the Term Commencement Date (such date, the "Term Expiration Date"), subject to earlier termination of this Lease as provided herein.

4. Possession and Commencement Date.

4.1 The "Term Commencement Date" shall be the date of the consummation of the closing of Landlord's acquisition of fee title to the Premises pursuant to that certain Agreement of Purchase and Sale dated as of [***] by and between Landlord and Tenant. Tenant shall execute and deliver to Landlord written acknowledgment of the actual Term Commencement Date and the Term Expiration Date within [***] days after Landlord requests the same in the form attached as Exhibit C hereto. Failure to execute and deliver such acknowledgment, however, shall not affect the Term Commencement Date or Landlord's or Tenant's liability hereunder. Failure by Tenant to obtain required governmental licensing for the Permitted Use by Tenant at the Premises shall not serve to extend the Term Commencement Date.

4.2 Prior to the Term Commencement Date, Tenant shall furnish to Landlord evidence satisfactory to Landlord that insurance coverages required of Tenant under the provisions of Article 23 are in effect.

5. Condition of Premises. Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of the Premises, the Building or the Project, or with respect to the suitability of the Premises, the Building or the Project for the conduct of Tenant's business. Tenant acknowledges that (a) Tenant is the prior owner and primary occupant of the Project; (b) Tenant is in possession of the Premises and is fully familiar with the condition of the Premises and agrees to take the same in its condition "as is" as of the Term Commencement Date; and (c) except as otherwise expressly set forth in this Lease, Landlord shall have no obligation to alter, repair or otherwise prepare the Premises for Tenant's occupancy or to pay for or construct any improvements to the Premises to prepare the Premises for Tenant's continued occupancy.

6. Rentable Area.

6.1 Landlord and Tenant irrevocably stipulate that the Rentable Area of the Premises shall be as set forth in Section 2.2. Subject to the foregoing, the term "Rentable Area", to the extent it relates exclusively to the Lower Campus shall reflect such areas as are reasonably calculated by Landlord's architect, as the same may be reasonably adjusted from time to time by Landlord in consultation with Landlord's architect to reflect changes to the Lower Campus.

6.2 The Rentable Area of the Lower Campus is generally determined by making separate calculations of Rentable Area applicable to each floor within the Lower Campus and totaling the Rentable Area of all floors within the applicable improvements. The Rentable Area of a floor is computed by measuring to the outside finished surface of the permanent outer applicable building walls. The full area calculated as previously set forth is included as Rentable Area, without deduction for columns and projections or vertical penetrations, including stairs, elevator shafts, flues, pipe shafts, vertical ducts and the like, as well as such items' enclosing walls.

6.3 The Rentable Area of the Project is the total Rentable Area of all buildings within the Project (with the understanding that the Building Rentable Area is stipulated as set forth herein and not subject to further adjustment).

7. Rent.

7.1 Tenant shall pay to Landlord as Base Rent for the Premises, commencing on the Term Commencement Date, the sums set forth in Section 2.3, subject to the rental adjustments provided in Article 8 hereof. Base Rent shall be paid in equal monthly installments as set forth in Section 2.3, subject to the rental adjustments provided in Article 8 hereof, each in advance on the first day of each and every calendar month during the Term.

7.2 In addition to Base Rent, Tenant shall pay to Landlord as additional rent ("Additional Rent") at times hereinafter specified in this Lease (a) Tenant's pro rata share, as set forth in Section 2.2 ("Tenant's Pro Rata Share"), of Operating Expenses, (b) the Property Management Fee (as defined below) and (c) any other amounts that Tenant assumes or agrees to pay under the provisions of this Lease that are owed to Landlord, including any and all other sums that may become due by reason of any default of Tenant or failure on Tenant's part to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after notice and the lapse of any applicable cure periods.

7.3 Base Rent and Additional Rent shall together be denominated "Rent." Rent shall be paid to Landlord, without abatement, deduction or offset except as expressly provided in Sections 16.2, 24.5 and 31.14, in lawful money of the United States of America at the office of Landlord as set forth in Section 2.8 or to such other person or at such other place as Landlord may from time designate in writing. In the event the Term commences or ends on a day other than the first day of a calendar month, then the Rent for such fraction of a month shall be prorated for such period on the basis of a thirty (30) day month and shall be paid at the then-current rate for such fractional month.

8. Rent Adjustments. Base Rent shall be subject to an annual upward cost-of-living adjustment of the then-current Base Rent based upon comparing the increase of the Consumer Price Index numbers published by the United States Department of Labor, entitled United States Department of Labor, Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers, Washington-Baltimore, DC-MD-VA-WV ("CPI Index") for the month immediately preceding the anniversary of the Commencement Date over the CPI Index published for the same calendar month for the prior year, with the understanding that this escalation is intended to be a "prior year'' CPI Index escalation, not a "base year" CPI Index escalation. In the event that the CPI Index is not published for one of the months specified in the immediately preceding sentence, the CPI Index to be used shall be the last monthly CPI Index published prior to the month specified. In the event that such index is discontinued, then another comparable index or source of such information generally recognized as authoritative shall be substituted by Landlord with Tenant's consent, such consent not to be unreasonably withheld, conditioned or delayed. The first such adjustment shall become effective commencing with that monthly rental installment that is due on or after the first (1st) annual anniversary of the Term Commencement Date, and subsequent adjustments shall become effective on every successive annual anniversary for so long as this Lease continues in effect; provided, in no event shall the Base Rent be increased by less than [***] percent ([***]%) of Base Rent in effect for the preceding year, or increased by more than [***] percent ([***]%) of the Base Rent in effect for the preceding year.

9. Operating Expenses.

9.1 As used herein, subject to the exclusions listed below and the provisions of Article 43, the term "Operating Expenses" shall include the following costs and expenses with respect to the Building and the Common Areas consistent with the standards applicable to comparable first-class combined laboratory/office facilities in the Rockville, Maryland area ("Comparable Buildings"), with the understanding that if the cost or expense relates to the Common Areas then the Tenant's Pro Rata Share of Common Areas shall apply, not the Tenant's Pro Rata Share of the Building:

9.1.1. Government impositions including property tax costs consisting of real and personal property taxes and assessments, including amounts due under any improvement bond upon the Building or the Common Areas, including the parcel or parcels of real property upon which the Building and areas serving the Building are located or assessments in lieu thereof imposed by any federal, state, regional, local or municipal governmental authority, agency or subdivision (each, a "Governmental Authority") are levied; taxes on or measured by gross rentals received from the rental of space in the Building or the Common Areas; taxes based on the square footage of the Premises, the Building or the Common Areas, as well as any parking charges, utilities surcharges or any other costs levied, assessed

or imposed by, or at the direction of, or resulting from Applicable Laws or interpretations thereof, promulgated by any Governmental Authority in connection with the use or occupancy of the Building or the Common Areas; any fee for a business license to operate an office building; and any expenses, including the reasonable cost of attorneys or experts, reasonably incurred by Landlord in seeking reduction by the taxing authority of the applicable taxes, with a credit against Operating Expenses for any tax refunds obtained as a result of an application for review thereof (or a payment of such refunds if the Term has expired). Operating Expenses shall not include any net income, franchise, capital stock, gift, estate or inheritance taxes, or taxes that are the personal obligation of Landlord or of another tenant of the Project; and

9.1.2. All other costs of any kind paid or incurred by Landlord in connection with the operation or maintenance of the Building (including, without limitation, the service corridors, stairways, elevators, public restrooms and public lobbies contained therein) and the Common Areas, including costs of repairs and replacements to improvements within the Building and the Common Areas as appropriate to maintain the Building and the Common Areas as required hereunder, excluding costs of funding such reserves for future repairs and replacements; costs of utilities furnished to the Building and the Common Areas; sewer fees; trash collection; cleaning, including windows; heating; ventilation; air-conditioning; maintenance of landscaping and grounds; maintenance of drives and parking areas; maintenance of the roof; security services and devices; building supplies; maintenance or replacement of equipment utilized for operation and maintenance of the Building and the Common Areas; license, permit and inspection fees; sales, use and excise taxes on goods and services purchased by Landlord in connection with the operation, maintenance or repair of the Building or Common Areas systems and equipment; telephone, postage, stationery supplies and other similar expenses incurred in connection with the operation, maintenance or repair of the Building and the Common Areas; accounting, legal and other professional fees and expenses incurred in connection with the Building and the Common Areas; costs of carpeting, landscaping and other customary and ordinary items of personal property provided by Landlord for use in the Building and the Common Areas; Capital Expenditures, as hereinafter defined (provided Capital Expenditures shall be amortized over their useful life with an interest rate not to exceed the prime rate listed in the Wall Street Journal plus [***] percent [***]%) per annum) determined pursuant to generally accepted accounting principles applied on a consistent basis; costs of complying with Applicable Laws (except to the extent such costs are incurred to remedy noncompliance as of the Execution Date with Applicable Laws); so long as Landlord owns solely the Project, the costs and expenses incurred by Landlord associated with the operation of business of the legal entity or entities which constitute Landlord, not to exceed $[***]; costs to keep the Building and the Common Areas in compliance with, or fees otherwise required under, any CC&Rs (as defined below); insurance premiums, including premiums for public liability, property casualty, terrorism and environmental coverages (but not earthquake coverage); portions of insured losses paid by Landlord as part of the deductible portion of a loss pursuant to the terms of insurance policies; service contracts; costs of services of independent contractors retained to do work of a nature referenced above; and costs of

compensation (including employment taxes and fringe benefits) of all persons who perform regular and recurring duties connected with the day-today operation and maintenance of the Building and the Common Areas, its equipment, the adjacent walks, landscaped areas, drives and parking areas, including janitors, floor waxers, window washers, watchmen, gardeners, sweepers and handymen, pro-rated if their services are part-time to the Building and the Common Areas as applicable. For purposes of this Lease, the term "Capital Expenditures" shall include (1) any capital replacements of improvements, fixtures, equipment, systems and similar property at the end of such property's useful life; and (2) any capital expenditures required of Landlord pursuant to the terms of this Lease, but shall specifically exclude any enhancements or additions to the Common Areas.

(i) Notwithstanding the foregoing, Operating Expenses shall not include any leasing commissions; expenses that relate to preparation of rental space for a tenant; expenses of initial development and construction, including grading, paving, landscaping and decorating (as distinguished from maintenance, repair and replacement of the foregoing); legal expenses relating to other tenants; costs of repairs to the extent reimbursed by payment of insurance proceeds received by Landlord; interest upon loans to Landlord or secured by a mortgage or deed of trust covering the Project or a portion thereof (provided that interest upon a government assessment or improvement bond payable in installments shall constitute an Operating Expense under Subsection 9.1.1); any ground rent; salaries of executive officers of Landlord and any employee of Landlord at or above the level of director (or that is above the level of the property manager or building engineer); depreciation claimed by Landlord for tax purposes (provided that this exclusion of depreciation is not intended to delete from Operating Expenses actual costs of repairs and replacements that are provided for in Subsection 9.1.2); taxes that are excluded from Operating Expenses by the last sentence of Subsection 9.1.1; property management fees and expenses (except for the Property Management Fee); general overhead and administrative and accounting expenses, except to the extent reasonably and properly directly allocable to the operation of the Building and the Common Areas; advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any free rent and construction allowances for tenants; legal and other expenses incurred in (i) the negotiation, interpretation, preparation, termination or enforcement of leases or other occupancy agreements affecting the Project or (ii) the review, approval or other actions in connection with the sublease or assignment of tenant leases; costs to be reimbursed by other tenants of the Project or taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid; the salaries, wages, benefits and other compensation paid to any employee of Landlord or Landlord's managing agent who does not devote substantially all of his or her time to the Project, except to the extent such wages and benefits are reasonably, properly and equitably allocable to time spent by such employee in directly servicing the Project; at such time as Landlord owns real property and assets unrelated to the Project, the costs and expenses incurred by Landlord associated with the operation of the business of the legal entity or entities which constitute Landlord; bad debt losses, rent losses and costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Project; costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project (except Tenant); penalties, fines or interest incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of taxes required to be made by Landlord hereunder before delinquency, unless such failure is due to Tenant's failure to pay

any Rent due hereunder; the costs of any item paid to Landlord or to any entity or person related to or affiliated with Landlord to the extent such cost exceeds the amount payable for such services at then-existing market rates to unrelated persons or entities; costs of Landlord's charitable or political contributions, or of fine art maintained at the Project; costs in connection with services (including electricity), items or other benefits which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord; costs incurred in the sale or refinancing of the Project; rent for any commercially reasonable sized office at market rates for Landlord or its managing agent located in the Project or offsite; costs associated maintaining, managing, operating, repairing or replacing any of the buildings comprising the Lower Campus; costs associated with any property or building other than the Building and the Common Areas; costs of repairs and replacements caused by the exercise of any right of condemnation or eminent domain by any public or quasi-public authority; and any other costs or expenses for which Landlord actually receives reimbursement from any source (except from tenants as part of their operating expense obligations), including condemnation awards and costs for which Landlord has been reimbursed by its insurance carrier, any tenant's insurance carrier, any tenant, any warrantor or any other third party. To the extent that Tenant uses more than Tenant's Pro Rata Share of any item of Operating Expenses, Tenant shall pay Landlord for such excess in addition to Tenant's obligation to pay Tenant's Pro Rata Share of Operating Expenses. In no event shall Tenant be required to pay any expense, cost or tax twice under the terms of this Lease.

9.2 Tenant shall pay to Landlord on the first day of each calendar month of the Term, as Additional Rent, (a) the Property Management Fee and (b). Landlord's reasonable estimate of Tenant's Pro Rata Share of Operating Expenses with respect to the Building and the Project, as applicable, for such month.

(x) The "Property Management Fee" shall equal [***] percent ([***]%) of Base Rent due from Tenant.

(y) Within [***] days after the conclusion of each calendar year (or such longer period as may be reasonably required by Landlord, but no later than [***] days after the end of the applicable year), Landlord shall furnish to Tenant a statement showing in reasonable detail the actual Operating Expenses and Tenant's Pro Rata Share of Operating Expenses for the previous calendar year. Any additional sum due from Tenant to Landlord shall be immediately due and payable. If the amounts paid by Tenant pursuant to this Section exceed Tenant's Pro Rata Share of Operating Expenses for the previous calendar year, then Landlord shall credit the difference against the Rent next due and owing from Tenant; provided that, if the Term has expired, Landlord shall accompany said statement with payment for the amount of such difference.

(z) Any amount due under this Section for any period that is less than a full month shall be prorated (based on a thirty (30)-day month) for such fractional month.

9.3 Landlord's annual statement shall be final and binding upon Tenant unless Tenant, within [***] days after Tenant's receipt thereof, shall request the right to review and audit the same. In such event, Landlord shall provide Tenant with reasonable access to Landlord's books and records to the extent relevant to determination of Operating Expenses, and such information as Landlord reasonably determines to be responsive to Tenant's written inquiries. In the event that, after Tenant's review of such information, Landlord and Tenant cannot agree upon the amount of Tenant's Pro Rata Share of Operating Expenses or if Tenant desires to have a third party review and audit the same, then Tenant shall have the

right to have an independent public accountant or other person or firm with expertise in commercial real estate accounting and auditing ("Auditor") hired by Tenant not on a contingent fee basis (at Tenant's sole cost and expense) and approved by Landlord (which approval Landlord shall not unreasonably withhold, condition or delay) audit and review such of Landlord's books and records for the year in question as directly relate to the determination of Operating Expenses for such year (the "Independent Review"). Landlord shall make such books and records available to Tenant and its Auditor for review and copying at the location where Landlord maintains them in the ordinary course of its business. Landlord need not provide copies of any books or records. Tenant shall commence the Independent Review within fifteen (15) days after the date Landlord has given Tenant access to Landlord's books and records for the Independent Review. Tenant shall complete the Independent Review and notify Landlord in writing of Tenant's specific objections to Landlord's calculation of Operating Expenses (including Tenant's Auditor's written statement of the basis, nature and amount of each proposed adjustment) no later than [***] days after Landlord has first given Tenant access to Landlord's books and records for the Independent Review. Landlord shall review the results of any such Independent Review. The parties shall endeavor to agree promptly and reasonably upon Operating Expenses taking into account the results of such Independent Review. If, as of [***] days after Tenant has submitted the Independent Review to Landlord, the parties have not agreed on the appropriate adjustments to Operating Expenses, then the parties shall engage a mutually agreeable independent third party accountant with at least [***] years' experience in commercial real estate accounting and auditing in the Washington, DC region (the "Accountant''). If the parties cannot agree on the Accountant, each shall within [***] days after such impasse appoint an Accountant (different from the accountant and accounting firm that conducted the Independent Review) and, within [***] days after the appointment of both such Accountants, those two Accountants shall select a third (which cannot be the accountant and accounting firm that conducted the Independent Review). If either party fails to timely appoint an Accountant, then the Accountant the other party appoints shall be the sole Accountant. Within ten [***] after appointment of the Accountant(s), Landlord and Tenant shall each simultaneously give the Accountants (with a copy to the other party) its determination of Operating Expenses, with such supporting data or information as each submitting party determines appropriate. Within [***] days after such submissions, the Accountants shall by majority vote select either Landlord's or Tenant's determination of Operating Expenses. The Accountants may not select or designate any other determination of Operating Expenses. The determination of the Accountant(s) shall bind the parties. If the parties agree or the Accountant(s) determine that Tenant's Pro Rata Share of Operating Expenses actually paid for the calendar year in question exceeded Tenant's obligations for such calendar year, then Landlord shall, at Tenant's option, either (a) credit the excess to the next succeeding installments of estimated Additional Rent or (b) pay the excess to Tenant within [***] days after delivery of such results. If the parties agree or the Accountant(s) determine that Tenant's payments of Tenant's Pro Rata Share of Operating Expenses for such calendar year were less than Tenant's obligation for the calendar year, then Tenant shall pay the deficiency to Landlord within [***] days after delivery of such results. If the Independent Review reveals or the Accountant(s) determine that the Operating Expenses billed to Tenant by Landlord and paid by Tenant to Landlord for the applicable calendar year in question exceeded by more than [***] percent ([***]%) what Tenant should have been billed during such calendar year, then Landlord shall pay the reasonable cost

of the Independent Review and the review by the Accountant(s). In all other cases, Tenant shall pay the cost of the Independent Review.

9.4 Tenant shall be responsible for the costs of any services or utilities incurred by Tenant and attributable to the time period prior to the Term Commencement Date. Tenant's responsibility for Tenant's Pro Rata Share of Operating Expenses shall continue until the expiration of the Lease Term or the earlier termination of this Lease.

9.5 Operating Expenses for the calendar year in which Tenant's obligation to share therein commences and for the calendar year in which such obligation ceases shall be prorated on a basis reasonably determined by Landlord. Expenses such as taxes, assessments and insurance premiums that are incurred for an extended time period shall be prorated based upon the time periods to which they apply so that the amounts attributed to the Premises relate in a reasonable manner to the time period wherein Tenant has an obligation to share in Operating Expenses.

9.6 In the event that Tenant reasonably believes it is entitled to reimbursements from Landlord pursuant to the terms of this Lease, then, within [***] days after the end of each calendar month, Tenant shall submit to Landlord an invoice, or, in the event an invoice is not available, an itemized list, of all costs and expenses that (a) Tenant has incurred (either internally or by employing third parties) during the prior month and (b) for which Tenant reasonably believes it is entitled to reimbursements from Landlord pursuant to the terms of this Lease.

9.7 [intentionally deleted]

9.8 So long as Tenant has not assigned the Lease, Tenant shall have the exclusive right to contest applicable taxes included in Operating Expenses, at Tenant's sole cost and expense, and Landlord shall reasonably cooperate with Tenant with respect to such contest, provided Landlord shall not be required to incur any costs or liability in connection with the same.

9.9 In the event that Tenant delivers a Turnover Notice (as defined below), for each year following the Turnover Date (as defined below), Landlord shall deliver to Tenant a reasonably itemized budget for the Building and for the Common Areas (the "Operating Budget") setting forth Landlord's good faith reasonable estimate of the Operating Expenses for the following partial or full calendar year, respectively, it being agreed that Landlord shall provide such estimate by no later than [***] days prior to the calendar year. Upon Tenant's request from time to time within the final [***] days of each calendar year, Landlord shall provide Tenant with Landlord's then-current good faith estimate (i.e., then-current working draft) of the Operating Budget for the next following calendar year. Tenant acknowledges that the Operating Budget is simply Landlord's good faith estimate of Operating Expenses and shall in no event operate to restrict or prohibit Landlord from including in Operating Expenses amounts or categories of expenses that are not reflected on such Operating Budget. If Tenant has any comments regarding the Operating Budget, Tenant shall notify Landlord thereof within [***] days after Landlord's delivery of such Operating Budget (which notice shall also set forth Tenant's comments with reasonable particularity), with the failure of Tenant to do the same within such [***] day period being deemed an approval by Tenant thereof. Landlord and Tenant shall discuss the line items in the Operating Budget (or items desired to be added to or deleted from such budget) with respect to which Tenant has commented and the amounts allocated

to each line item. Landlord shall consider in good faith the budget changes proposed by Tenant. In the event that the Operating Expenses which are within the control and discretion of Landlord (the "Controllable Operating Expenses") exceed the Controllable Operating Expenses for the prior year of the Term by [***] percent ([***]%) or more, that portion of the Operating Budget relating to such Controllable Operating Expenses shall be subject to Tenant's approval (not to be unreasonably withheld, conditioned or delayed); provided, however, neither Landlord nor Tenant shall be required to consent to any such change (or to any resulting variation in the types or levels of services provided by Landlord) that (a) is inconsistent with the operation and management practices of landlords of Comparable Buildings or (b) Landlord reasonably determines may have an adverse effect on the Building structure or cause the Building to fail to comply with Applicable Laws. In the event that Tenant is entitled to approve the Controllable Operating Expenses set forth in the Operating Budget pursuant to the foregoing sentence, and Tenant fails to respond to Landlord within [***] days of Landlord's delivery to Tenant of the Operating Budget, Tenant shall be deemed to have approved of the Operating Budget and such Controllable Operating Expenses. If Landlord determines that an Operating Budget was incorrect by a material amount, Landlord shall endeavor to provide Tenant with a revised Operating Budget; provided that such revised Operating Budget shall be accompanied by a good faith explanation of any increased amounts set forth thereon.

10. Taxes on Tenant's Property.

10.1 Tenant shall pay prior to delinquency any and all taxes levied against any personal property or trade fixtures placed by Tenant in or about the Premises.

10.2 If any such taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property or, if the assessed valuation of the Building, the Property or the Project is increased by inclusion therein of a value attributable to Tenant's personal property or trade fixtures, and if Landlord, after written notice to Tenant, pays the taxes based upon any such increase in the assessed value of the Building, the Property or the Project, then Tenant shall, upon demand, repay to Landlord the taxes so paid by Landlord.

10.3 If any improvements in or alterations to space in the Lower Campus leased by other tenants at the Project, whether owned by Landlord or such other tenant and whether or not affixed to the real property so as to become a part thereof, are assessed for real property tax purposes at a valuation higher than the valuation at which improvements conforming to Landlord's building standards (the "Building Standard"), then the real property taxes and assessments levied against Landlord or the Building, the Property or the Project by reason of such excess assessed valuation shall not be included in Operating Expenses. If the records of the County Assessor are available and sufficiently detailed to serve as a basis for determining whether said improvements or alterations are assessed at a higher valuation than the Building Standard, then such records shall be binding on both Landlord and Tenant.

11. Security Deposit.

11.1 Tenant shall deposit with Landlord, on or before the Execution Date, the sum set forth in Section 2.6 (the "Security Deposit"), which sum shall be held by Landlord as security for the faithful performance by Tenant of all of the terms,

covenants and conditions of this Lease to be kept and performed by Tenant during the Term. If Tenant defaults (after applicable notice and cure periods) with respect to any provision of this Lease, including any provision relating to the payment of Rent, then Landlord may (but shall not be required to) use, apply or retain all or any part of the Security Deposit for the payment of any Rent or any other sum in default (after applicable notice and cure periods), or to compensate Landlord for any other loss or damage that Landlord may suffer by reason of such default. If, at any time prior to the date that is [***] days prior to the expiration of the Term, any portion of the Security Deposit is so used or applied, then Tenant shall, within [***] business days following demand therefor, deposit cash with Landlord in an amount sufficient to restore the Security Deposit to its original amount, and Tenant's failure to do so shall be a material breach of this Lease. The provisions of this Article shall survive the expiration or earlier termination of this Lease.

11.2 In the event of bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for all periods prior to the filing of such proceedings.

11.3 Landlord may deliver to any purchaser of Landlord's entire interest in the Premises the Security Deposit delivered hereunder by Tenant, and, upon such purchaser's agreement in writing to assume Landlord's obligations under this Lease with respect to the Security Deposit, Landlord shall be discharged from any further liability with respect to such Security Deposit. This provision shall also apply to any subsequent transfers.

11.4 The Security Deposit, or the remaining balance thereof following Landlord's use, application or retention of the Security Deposit pursuant to Section 11.1, shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within thirty (30) days after the expiration or earlier termination of this Lease.

11.5 Intentionally Deleted.

11.6 If the Security Deposit shall be in cash, Landlord shall hold the Security Deposit in an interest-bearing account at a federally-insured banking organization selected by Landlord; provided, however, that Landlord shall maintain a separate account for the Security Deposit, and shall not intermingle it with other funds of Landlord. Tenant shall be entitled to all interest and/or dividends, if any, accruing on the Security Deposit. Landlord shall not be required to credit Tenant with any interest for any period during which Landlord does not receive interest on the Security Deposit.

11.7 The Security Deposit may be in the form of cash, a letter of credit or, to the extent acceptable to Landlord in its sole discretion, any other security instrument. Tenant may at any time, except when Tenant is in Default (as defined below), deliver a letter of credit (the "L/C Security") as the entire Security Deposit, as follows:

11.7.1. If Tenant elects to deliver L/C Security, then Tenant shall provide Landlord, and maintain in full force and effect throughout the Term and until the date that is two (2) months after the then-current Term Expiration Date, a letter of credit in the form of Exhibit E issued by an issuer reasonably satisfactory to Landlord, in the amount of the Security Deposit, with an initial term of at least one year. Notwithstanding the foregoing,

Tenant shall have the right at any time and from time to time during the Term to deliver a cash security deposit in lieu of the L/C Security upon not less than 30 days' advance written notice to Landlord. Upon delivery of a cash security deposit by Tenant to Landlord in lieu of the L/C Security, Landlord shall promptly return the original L/C Security to Tenant. Landlord may require the L/C Security to be re-issued by a different issuer at any time during the Term if Landlord reasonably believes that the issuing bank of the L/C Security is or may soon become insolvent; provided, however, Landlord shall return the existing L/C Security to the existing issuer immediately upon receipt of the substitute L/C Security. If any issuer of the L/C Security shall become insolvent or placed into FDIC receivership, then Tenant shall within [***] days thereafter deliver to Landlord (without the requirement of notice from Landlord) substitute L/C Security issued by an issuer reasonably satisfactory to Landlord, and otherwise conforming to the requirements set forth in this Article. As used herein with respect to the issuer of the L/C Security, "insolvent" shall mean the determination of insolvency as made by such issuer's primary bank regulator *(i.e.,* the state bank supervisor for state chartered banks; the OCC or OTS, respectively, for federally chartered banks or thrifts; or the Federal Reserve for its member banks).

11.7.2. If Tenant delivers to Landlord L/C Security conforming to the requirements set forth in this Article in place of the entire Security Deposit, Landlord shall remit to Tenant any cash Security Deposit Landlord previously held within ten (10) business days after such delivery.

11.7.3. Landlord may draw upon the L/C Security, and hold and apply the proceeds in the same manner and for the same purposes as the Security Deposit, if: (i) an uncured Default exists; (ii) as of the date [***] days before any L/C Security expires (even if such scheduled expiry date is after the Term Expiration Date but the same must be before the outside expiry date required hereunder) Tenant has not delivered to Landlord an amendment or replacement for such L/C Security, reasonably satisfactory to Landlord, extending the expiry date to the earlier of (1) [***] months after the then-current Term Expiration Date or (2) the date [***] after the then-current expiry date of the L/C Security; (iii) the L/C Security provides for automatic renewals, Landlord asks the issuer to confirm the current L/C Security expiry date, and the issuer fails to do so within [***] business days; or (iv) Tenant fails to pay (when and as Landlord reasonably requires) any bank charges for Landlord's transfer of the L/C Security; or (v) the issuer of the L/C Security ceases, or announces that it will cease, to maintain an office in the United States of America where Landlord may present drafts under the L/C Security (and fails to permit drawing upon the L/C Security by overnight courier or facsimile). This Section does not limit any other provisions of this Lease allowing Landlord to draw the L/C Security under specified circumstances.

11.7.4. Tenant shall not seek to enjoin, prevent, or otherwise interfere with Landlord's draw under L/C Security, even if it violates this Lease. Tenant acknowledges that the only effect of a wrongful draw would be to substitute a cash Security Deposit for L/C Security, causing Tenant no legally recognizable damage. Landlord shall hold the proceeds of any draw in the same manner and for the same purposes as a cash Security Deposit. In the event of a wrongful draw, the parties shall cooperate to

allow Tenant to post replacement L/C Security simultaneously with the return to Tenant of the wrongfully drawn sums, and Landlord shall upon request confirm in writing to the issuer of the L/C Security that Landlord's draw was erroneous.

11.7.5. If Landlord transfers its interest in the Premises, then Tenant shall at Tenant's expense, within [***] business days after receiving a request from Landlord, deliver (and, if the issuer requires, Landlord shall consent to) an amendment to the L/C Security naming Landlord's grantee as substitute beneficiary. If the required Security Deposit changes while L/C Security is in force, then Tenant shall deliver (and, if the issuer requires, Landlord shall consent to) a corresponding amendment to the L/C Security.

12. Use.

12.1 Tenant shall use the Premises for the purpose set forth in Section 2.7, and shall not use the Premises, or permit or suffer the Premises to be used, for any other purpose without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion.

12.2 Tenant shall not use or occupy the Premises in violation of Applicable Laws; zoning ordinances; or the certificate of occupancy issued for the Building or the Project, and shall, upon [***] days' written notice from Landlord, discontinue any use of the Premises that is declared or claimed by any Governmental Authority having jurisdiction to be a violation of any of the above. Tenant shall comply with any direction of any Governmental Authority having jurisdiction that shall, by reason of the nature of Tenant's use or occupancy of the Premises, impose any duty upon Tenant or Landlord with respect to the Premises or with respect to the use or occupation thereof.

12.3 Tenant shall not do or permit to be done anything that will (a) invalidate or (b) increase the cost of (unless Tenant agrees to pay for the same), any fire, environmental, extended coverage or any other insurance policy covering the Building or the Project, and shall comply with all rules, orders, regulations and requirements of the insurers of the Building and the Project, and Tenant shall promptly, upon demand, reimburse Landlord for any additional premium charged for such policy by reason of Tenant's failure to comply with the provisions of this Article.

12.4 Tenant shall, upon termination of this Lease, return to Landlord all keys to offices and restrooms either furnished to or otherwise procured by Tenant. In the event any key so furnished to Tenant is lost, Tenant shall pay to Landlord the cost of replacing the same or of changing the lock or locks opened by such lost key if Landlord shall deem it necessary to make such change.

12.5 No awnings or other projections shall be attached to any outside wall of the Building other than those existing as of the date hereof. Neither the interior nor exterior of any windows shall be coated or otherwise sunscreened without Landlord's prior written consent. No equipment, furniture or other items of personal property other than those in existence as of the date hereof shall be placed on any exterior balcony without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

12.6 Tenant shall be entitled to building signage for the Premises, inside and outside the Building and on the Property ("Signage"), at Tenant's sole discretion and expense, subject to all Applicable Laws. AJ] existing Signage is hereby approved by Landlord. For any Signage, Tenant shall, at Tenant's own cost and expense, (a) acquire all permits for such Signage in compliance with Applicable Laws and (b) design, fabricate, install and maintain such Signage in a first-class condition. The existing directory tablet shall be provided exclusively for the display of the name and location of tenants only.

12.7 Tenant shall only place equipment within the Premises with floor loading consistent with the Building's structural design without Landlord's prior written approval, and such equipment shall be placed in a location designed to carry the weight of such equipment.

12.8 Subject to Section 22, Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations therefrom from extending into the Common Areas or other buildings in the Project.

12.9 Tenant shall not (a) do or permit anything to be done in or about the Premises that shall in any way unreasonably interfere with the rights of other tenants or occupants of the Project, (b) use or allow the Premises to be used for unlawful purposes, (c) cause, maintain or permit any nuisance or waste in, on or about the Project or (d) take any other action that would in Landlord's reasonable determination in any manner adversely affect other tenants' quiet use and enjoyment of their space or adversely impact their ability to conduct business in a professional and suitable work environment. Landlord shall use commercially reasonable efforts to apply similar standards on other tenants in the Project for the benefit of the Tenant.

12.10 Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for all liabilities, costs and expenses arising out of or in connection with the compliance of the Premises with the Americans with Disabilities Act, 42 U.S.C. § 12101, et seq., and any state and local accessibility laws, codes, ordinances and rules (collectively, and together with regulations promulgated pursuant thereto, the "ADA"), provided that: (a) if ADA compliance requires alteration of the Premises from its condition as of the Term Commencement Date due to a change in the ADA or the enforcement thereof which takes effect after the Term Commencement Date; (b) such ADA compliance is not required as the result of any Alterations made by Tenant after the Term Commencement Date; and (c) such alteration of the Premises is considered capital in nature in accordance with generally accepted accounting principles, then Landlord shall be responsible for performing such alterations, the cost for which shall be considered an Operating Expense and shall be amortized in accordance with Article 9. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

13. Rules and Regulations, CC&Rs, Parking Facilities and Common Areas.

13.1 Tenant shall have the non-exclusive right, in common with other tenants of the Project, to use the Common Areas, subject to the rules and regulations adopted by Landlord and attached hereto as Exhibit F, together with such other reasonable and nondiscriminatory rules and regulations as are hereafter promulgated by Landlord in its reasonable discretion (the "Rules and Regulations"). Tenant shall

faithfully observe and comply with the Rules and Regulations. To the extent the Rules and Regulations conflict with the terms of this Lease, then the terms of this Lease shall prevail. Landlord shall not be responsible to Tenant for the violation or non-performance by any other tenant or any agent, employee or invitee thereof of any of the Rules and Regulations.

13.2 This Lease is subject to any recorded covenants, conditions or restrictions on the Project or Property (the "CC&Rs"), as the same may be amended, amended and restated, supplemented or otherwise modified from time to time; provided that any such amendments, restatements, supplements or modifications do not materially modify Tenant's rights or obligations hereunder. Tenant shall comply with the CC&Rs.

13.3 Tenant shall have an exclusive license to use up to [***] of the parking spaces serving the Premises (equal to [***] parking spaces per [***] rentable square feet of the Premises), at no cost to Tenant during the Term, in the area shown on Exhibit B.

13.4 Landlord reserves the right to modify the Common Areas, including the right to add or remove exterior and interior landscaping and to subdivide real property, provided the same does not unreasonably interfere with Tenant's use of the Premises. Tenant acknowledges that Landlord specifically reserves the right to allow the exclusive use of corridors and restroom facilities located on specific floors to one or more tenants occupying such floors of the Lower Campus; provided, however, that Tenant or its subtenants or assigns shall have exclusive use of the corridors, restrooms, lobbies, entryways, and patios that serve the Premises.

14. Project Control by Landlord.

14.1 Landlord reserves full control over the Building and the Project to the extent not inconsistent with Tenant's rights under this Lease. This reservation includes Landlord's right to subdivide the Project; convert the Lower Campus to condominium units; grant easements and licenses to third parties provided that no such easement or license materially and adversely affects Tenant's use or occupancy of the Premises for the Permitted Use; maintain or establish ownership of the Building separate from fee title to the Property; make additions to or reconstruct portions of the Lower Campus provided the same does not unreasonably interfere with Tenant's use of the Premises; install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building or the Project pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises, the Building or elsewhere at the Project, provided the same does not materially and adversely interfere with Tenant's use of the Premises; and alter or relocate any other Common Area or facility, including private drives, lobbies and entrances located on the Lower Campus provided the same does not unreasonably interfere with Tenant's use of the Premises.

14.2 Subject to the provisions of Article 43 and Section 31.14, possession of areas of the Premises necessary for utilities, services, safety and operation of the Building is reserved to Landlord.

14.3 Tenant shall, at Landlord's request, promptly execute such further documents as may be reasonably appropriate to assist Landlord in the performance of its

obligations hereunder; provided that Tenant need not execute any document that creates additional liability for Tenant, that imposes additional obligations on Tenant or that deprives Tenant of the quiet enjoyment and use of the Premises as provided for in this Lease.

14.4 Landlord may, at any and all reasonable times during non-business hours (or during business hours if Tenant so requests), and upon twenty-four (24) hours' prior notice (provided that no time restrictions shall apply or advance notice be required if an emergency necessitates immediate entry), enter the Premises to (a) inspect the same and to determine whether Tenant is in compliance with its obligations hereunder, (b) supply any service Landlord is required to provide hereunder, (c) show the Premises to prospective purchasers or tenants during the final year of the Term, (d) post notices of non-responsibility, (e) access the telephone equipment, electrical substation and fire risers and (f) alter, improve or repair any portion of the Building other than the Premises and other than areas for which access to the Premises is reasonably necessary. In connection with any such alteration, improvement or repair as described in Subsection 14.4(f). Landlord may erect in the Premises or elsewhere in the Project scaffolding and other structures reasonably required for the alteration, improvement or repair work to be performed, provided the same does not materially and adversely impair Tenant's use of the Premises. In no event shall Tenant's Rent abate as a result of Landlord's activities pursuant to this Section; provided, however, that all such activities shall be conducted in such a manner so as to cause as little interference to Tenant as is reasonably possible. Landlord shall at all times retain a key with which to unlock all of the doors in the Premises. If an emergency necessitates immediate access to the Premises, Landlord may use whatever force is necessary to enter the Premises, and any such entry to the Premises shall not constitute a forcible or unlawful entry to the Premises, a detainer of the Premises, or an eviction of Tenant from the Premises or any portion thereof.

15. Quiet Enjoyment. So long as Tenant is not in default under this Lease after applicable notice and cure periods, Landlord or anyone acting through or under Landlord shall not disturb Tenant's occupancy of the Premises, except as permitted by this Lease.

16. Utilities and Services. The parties acknowledge that Tenant shall initially be responsible for the utilities and services to the Premises including, without limitation, the utilities and services listed as Tenant's responsibility on Exhibit J attached hereto and incorporated herein by reference, and that Landlord's responsibilities under this Article 16 do not arise until after the Turnover Date (or unless otherwise specifically set forth herein).

16.1 Landlord shall provide the following services and utilities to the Premises to a standard consistent with those provided to Comparable Buildings: the following services shall be provided 24 hours per day, 7 days per week, 365 days per year unless Tenant elects to reduce such hours: hot and cold water; gas; heat, ventilation and air conditioning; light; telephone; fire and life safety; electricity; sewer; other utilities; security system services existing as of the Term Commencement Date. In addition, Landlord shall provide cleaning (internal and external) and trash removal at reasonable times or as otherwise mutually agreed to by Landlord and Tenant (provided Landlord shall use commercially reasonable efforts to provide internal cleaning and trash removal after 5:00 p.m. on weekdays); extermination and pest control at appropriate intervals; snow removal from sidewalks, drives, and entrances at reasonable times or as otherwise mutually agreed to by Landlord and Tenant (provided Landlord shall use commercially reasonable efforts to provide such snow removal prior to 7:00 a.m.

on any weekday or weekend day); elevator service with at least one (1) elevator in service and operational at all times; and access to the Premises (including, without limitation, the Building and the parking facilities) twenty-four (24) hours per day, three hundred sixty-five (365) days per year. Tenant shall pay for the foregoing along with any fees, surcharges and taxes thereon. If any such utility is not separately metered to Tenant, Tenant shall pay a reasonable proportion (to be determined by Landlord based on Tenant's usage) of all charges of such utility jointly metered with other premises in the Building as part of Tenant's Pro Rata Share of Operating Expenses or, in the alternative, Landlord may, at its option, monitor the usage of such utilities by Tenant and pay the cost of purchasing, installing and monitoring such metering equipment, which cost shall be paid by Landlord. Notwithstanding the foregoing, during the Lease Term, Landlord and Tenant shall discuss, on an annual basis, the scope of services and utilities to be provided to Tenant under this Lease and Tenant shall have the right to request and Landlord shall consider in good faith any request for adjustment in the amount and/or quality of services and utilities provided Tenant confirms that it shall pay the costs of the same as Operating Expenses.

16.2 Except with respect to the gross negligence or intentional misconduct of Landlord, its contractors, employees or agents, Landlord shall not be liable for, nor shall any eviction of Tenant result from, the failure to furnish any utility or service Landlord is required to provide pursuant to this Lease, whether or not such failure is caused by accident; breakage; repair; strike, lockout or other labor disturbance or labor dispute of any character; act of terrorism; shortage of materials, which shortage is not unique to Landlord or Tenant, as the case may be; governmental regulation, moratorium or other governmental action, inaction or delay; or other causes beyond Landlord's control (collectively, "Force Majeure"). In the event of such failure, Tenant shall not be entitled to termination of this Lease or any abatement or reduction of Rent, nor shall Tenant be relieved from the operation of any covenant or agreement of this Lease. Landlord shall exercise reasonable diligence and good faith efforts to remedy any interruption, curtailment, stoppage or suspension of services, utilities or systems, and if any interruption of the services, utilities or systems is caused by Landlord's gross negligence or willful misconduct and shall continue for more than [***] business days and shall render any material portion of the Premises unusable for the purpose of conducting Tenant's business as permitted under this Lease, then all Base Rent payable hereunder with respect to the affected portion of the Premises shall be abated for the period beginning on the sixth (6^{th}) business day of such failure and shall continue until substantial use of the entire Premises is restored to Tenant. In addition, if any such interruption is caused by the gross negligence or willful misconduct of Landlord and such interruption renders a material portion of the Premises untenantable or reasonably unusable by Tenant for its business purposes, and Tenant, by reason thereof, cannot occupy all or such material portion of the Premises for [***] consecutive days or a total of [***], then Tenant shall have the right to terminate this Lease by giving notice to Landlord within [***] days after such [***] day period expires, and the parties shall have no further obligations to each other except for such obligations as are expressly stated in this Lease to survive the termination of this Lease.

16.3 Tenant shall pay for, prior to delinquency of payment therefor, any utilities and services that may be furnished to the Premises during or, if Tenant occupies the Premises after the expiration or earlier termination of the Term, after the Term, beyond those utilities required to be provided by Landlord pursuant to this Lease, including telephone, internet service, cable television and other

telecommunications, together with any fees, surcharges and taxes thereon. Upon Landlord's demand, utilities and services provided to the Premises that are separately metered shall be paid by Tenant directly to the supplier of such utilities or services.

16.4 Regardless of whether a Turnover has occurred, Tenant shall not, without Landlord's prior written consent, use any device in the Premises (including data processing machines) that will in any way (a) increase the amount of ventilation, air exchange, gas, steam, electricity or water beyond the existing capacity of the Building or the Project as proportionately allocated to the Premises based upon Tenant's Pro Rata Share of the Common Areas; or (b) exceed Tenant's Pro Rata Share of the Building's or Project's (as applicable) capacity to provide such utilities or services, unless Tenant makes alterations to the same to permit such device and agrees to pay any increased costs in connection therewith, provided Tenant shall obtain Landlord's prior approval with respect to any such alterations (unless such alterations constitute Cosmetic Alterations), such approval not to be unreasonably withheld, conditioned or delayed.

16.5 Landlord shall ensure that the Project will be managed and operated in accordance with comparable standards of quality followed in Comparable Buildings and Landlord shall take reasonable efforts to advise Tenant of all status changes relating to the management personnel for the Building.

16.6 Landlord shall provide hot and cold water in the Premises for drinking, lavatory, kitchen, toilet and ordinary cleaning purposes only; provided, however, that if Landlord determines that Tenant requires, uses or consumes water for any purpose other than such purposes, Landlord may install a water meter. Landlord shall keep said meter and installation equipment in good working order and repair at Landlord's sole cost and expense. Tenant agrees to pay for water consumed, as shown on said meter, as and when bills are rendered. If Tenant fails to timely make such payments, Landlord may pay such charges and collect the same from Tenant. Any such costs or expenses incurred, or payments made by Landlord for any of the reasons or purposes hereinabove stated, shall be deemed to be Additional Rent payment by Tenant and collectible by Landlord as such.

16.7 Regardless of whether or not a Turnover has occurred, provided Landlord does not unreasonably interfere with Tenant's use of the Premises and provided Landlord uses commercially reasonable efforts to provide such service again as soon as is reasonably possible after the cessation thereof, Landlord reserves the right to stop service of the elevator, plumbing, ventilation, air conditioning and electric systems due to accident, emergency or the need to make repairs, alterations or improvements, until such repairs, alterations or improvements shall have been completed, and Landlord shall further have no responsibility or liability for failure to supply elevator facilities, plumbing, ventilation, air conditioning or electric service when prevented from doing so by Force Majeure; a failure by a third party to deliver gas, oil or another suitable fuel supply; or Landlord's inability by exercise of reasonable diligence to obtain gas, oil or another suitable fuel. Without limiting the foregoing, it is expressly understood and agreed that any covenants on Landlord's part to furnish any service pursuant to any of the terms, covenants, conditions, provisions or agreements of this Lease, or to perform any act or thing for the benefit of Tenant, shall not be deemed breached if Landlord is unable to furnish or perform the same by virtue of Force Majeure.

16.8 For the Premises, Landlord shall (a) maintain and operate the heating, ventilating and air conditioning systems used for the standard office and R&D only, including HVAC related to laboratory fixtures and equipment ("HVAC") and (b) subject to clause (a) above, furnish HVAC as reasonably required (except as this Lease otherwise provides) for reasonably comfortable occupancy of the Premises twenty-four (24) hours a day, every day during the Term, subject to casualty, eminent domain or as otherwise specified in this Article. Notwithstanding anything to the contrary in this Section, Landlord shall have no liability, and Tenant shall have no right or remedy, on account of any interruption or impairment in HVAC services except as set forth to the contrary in this Lease; provided that Landlord diligently endeavors to cure any such interruption or impairment as soon as the same occurs. Any existing supplemental HVAC systems are hereby approved. Tenant shall have the right to install additional supplemental HVAC units in the Premises and to connect to the Building's chiller/condenser system, subject to the prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed.

16.9 Throughout the Term, Tenant shall be permitted to provide supplemental security services for the Building, subject to Landlord's prior written consent, such consent not to be unreasonably withheld, conditioned or delayed, including without limitation the right to (i) mount, operate and modify from time to time the security systems serving the Building and in particular the security cameras located on the exterior of the Building, (ii) operate, modify from time to time, remove and/or replace the deionized water system serving the Building and (iii) operate, modify from time to time, remove and/or replace the fire/life/safety systems serving the Building. Landlord and Tenant each agree to cooperate with the other to coordinate the security it provides with any security provided by the other.

16.10 For any utilities serving the Premises for which Tenant is billed directly by such utility provider, Tenant agrees to furnish to Landlord (a) any invoices or statements for such utilities within [***] days after Tenant's receipt thereof, (b) within [***] days after Landlord's request, any other utility usage information reasonably requested by Landlord, and (c) within [***] days after each calendar year during the Term, an ENERGY STAR® Statement of Performance (or similar comprehensive utility usage report (e.g., related to Labs 21), if requested by Landlord) to the extent available to Tenant at minimal cost and any other information reasonably requested by Landlord for the immediately preceding year. Tenant shall retain records of utility usage at the Premises, including invoices and statements from the utility provider, for at least [***] months, or such other shorter period of time as may be requested by Landlord. Tenant acknowledges that any utility information for the Premises, the Building and the Project may be shared with third parties, including Landlord's consultants and Governmental Authorities. In the event that Tenant fails to comply with this Section, Tenant hereby authorizes Landlord to collect utility usage information directly from the applicable utility providers.

17. Alterations.

17.1 Tenant shall make no alterations, additions or improvements in or to the Premises or engage in any construction, demolition, reconstruction, renovation, or other work (whether major or minor) of any kind in, at, or serving the Premises ("Alterations") without Landlord's prior written approval, which approval Landlord shall not unreasonably withheld, conditioned or delayed;

provided, however, that in the event any proposed Alteration affects (a) any structural portions of the Building, including exterior walls, roof, foundation, foundation systems (including barriers and subslab systems), or core of the Building, (b) the exterior of the Building or (c) any Building systems, including elevator, plumbing, air conditioning, heating, electrical, security, life safety and power, then Landlord may withhold its approval with respect thereto in its sole and absolute discretion. Tenant shall, in making any such Alterations, use only those architects, contractors, suppliers and mechanics of which Landlord has given prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. In seeking Landlord's approval, Tenant shall provide Landlord, at least fourteen (14) days in advance of any proposed construction, with plans, specifications, bid proposals, certified stamped engineering drawings and calculations by Tenant's engineer of record or architect or record, (including connections to the Building's structural system, modifications to the Building's envelope, non-structural penetrations in slabs or walls, and modifications or tie-ins to life safety systems), work contracts, requests for laydown areas and such other information concerning the nature and cost of the Alterations as Landlord may reasonably request. Notwithstanding the foregoing, Tenant may make strictly cosmetic changes to the Premises ("Cosmetic Alterations") without Landlord's consent; provided that (y) the cost of any Cosmetic Alterations does not exceed [***] in any one instance or [***] in any twelve-month period, (z) such Cosmetic Alterations do not (i) require any structural modifications to the Premises, (ii) require any changes to, or adversely affect, the Building systems, (iii) affect the exterior of the Buildings or (iv) trigger any requirement under Applicable Laws that would require Landlord to make any alteration or improvement to the Premises, the Building or the Project. Tenant shall give Landlord at least [***] days' prior written notice of any Cosmetic Alterations.

17.2 Tenant shall not construct or permit to be constructed partitions or other obstructions that might interfere with free access to mechanical installation or service facilities of the Building or with other tenants' components located within the Building, or interfere with the moving of Landlord's equipment to or from the enclosures containing such installations or facilities.

17.3 Tenant shall accomplish any work performed on the Premises or the Building in such a manner as to permit any life safety systems to remain fully operable at all times.

17.4 Any work performed on the Premises, the Building or the Project by Tenant or Tenant's contractors shall be done at such times and in such manner as Landlord may from time to time reasonably designate. Tenant covenants and agrees that all work done by Tenant or Tenant's contractors shall be performed in full compliance with Applicable Laws. Within [***] days after completion of any Alterations, Tenant shall provide Landlord with complete "as-built" drawing print sets and electronic CADD files on disc (or files in such other current format in common use as Landlord reasonably approves or requires) showing any changes in the Premises.

17.5 Before commencing any work, Tenant shall give Landlord at least [***] business days' prior written notice of the proposed commencement of such work; provided, however, in the event that the deadline for Landlord to post any notices of nonresponsibility or similar notices requires more advance notice, Tenant shall provide Landlord with prior written notice at least [***] business days' prior to such deadline. If the work is anticipated to cost more than $[***], and if required

by Landlord, Tenant shall secure, at Tenant's own cost and expense, a completion and lien indemnity bond satisfactory to Landlord for said work (unless said work relates to Cosmetic Alterations).

17.6 All Alterations, fixtures, equipment, additions, improvements and Signage, permanently attached to or built into the Premises and not listed on Exhibit H attached hereto shall become the property of Landlord upon the expiration or earlier termination of the Term, and shall remain upon and be surrendered with the Premises as a part thereof; provided, Landlord shall have the right to notify; Tenant, at the time Landlord provides its consent to any Alteration, that Tenant shall be required to remove such Alteration upon the expiration or earlier termination of the Term. Tenant shall have the right to deliver an updated Exhibit H from time to time, which Exhibit H shall be deemed to replace the Exhibit H attached hereto, provided such updates shall be subject to the prior written approval of Landlord, such approval not to be unreasonably withheld, conditioned or delayed. The Premises shall at all times remain the property of Landlord and shall be surrendered to Landlord upon the expiration or earlier termination of this Lease. All such Alterations, fixtures, equipment, additions, improvements and Signage installed by or under Tenant shall be the property of Landlord.

17.7 Tenant shall repair any damage to the Premises caused by Tenant's removal of any property from the Premises. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

17.8 Except as to those items listed on Exhibit H attached hereto, all business and trade fixtures, machinery and equipment, built-in furniture and cabinets, together with all additions and accessories thereto, installed in and upon the Premises and owned by Tenant as of the date of this Lease shall be and remain the property of Tenant and shall not be moved by Tenant at any time during the Term (unless the same is replaced with items of reasonably equivalent value). If Tenant shall fail to remove any of its effects from the Premises which are not required to stay in the Premises under the terms of this Lease prior to or upon the termination of this Lease, then upon prior written notice to Tenant Landlord may, at its option, remove the same in any manner that Landlord shall choose and store said effects without liability to Tenant for loss thereof or damage thereto, and Tenant shall pay Landlord, upon demand, any costs and expenses incurred due to such removal and storage or Landlord may, at its sole option and without notice to Tenant, sell such property or any portion thereof at private sale and without legal process for such price as Landlord may obtain and apply the proceeds of such sale against any (a) amounts due by Tenant to Landlord under this Lease and (b) any expenses incident to the removal, storage and sale of said personal property, with the balance thereafter being paid to Tenant.

17.9 Notwithstanding any other provision of this Article to the contrary, in no event shall Tenant remove any improvement from the Premises as to which Landlord contributed payment without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion, unless the same is replaced with an equivalent value improvement.

17.10 Tenant shall pay to Landlord an amount equal to [***] percent ([***]%) of the actual costs to Tenant of all changes installed by Tenant or its contractors or agents which require Landlord's approval, which costs will include the actual

third party out-of-pocket costs incurred by Landlord in connection therewith (but not in excess of $1.00 per rentable square foot of the Premises), to cover Landlord's overhead and expenses for plan review, coordination, scheduling and supervision thereof. For purposes of payment of such sum, Tenant shall submit to Landlord copies of all bills, invoices and statements covering the costs of such charges, accompanied by payment to Landlord of the fee set forth in this Section. Tenant shall reimburse Landlord for any extra expenses incurred by Landlord by reason of faulty work done by Tenant or its contractors or by reason of inadequate clean-up.

17.11 Within [***] days after final completion of any Alterations performed by Tenant with respect to the Premises, Tenant shall submit to Landlord documentation showing the amounts expended by Tenant with respect to such Alterations performed by Tenant with respect to the Premises, together with supporting documentation reasonably acceptable to Landlord.

17.12 Tenant shall require its contractors and subcontractors performing work on the Premises to name Landlord and its affiliates and Lenders as additional insureds on their respective insurance policies.

18. Repairs and Maintenance.

18.1 As further detailed on Exhibit J attached hereto and incorporated herein by reference, Landlord shall repair, replace and maintain in accordance with standards for comparable first-class buildings in the Rockville, Maryland area and in accordance with all Applicable Laws (a) the Common Areas, (b) the structural and exterior portions of the Building and the Project, including without limitation roofing and covering materials, foundations and exterior walls (collectively, the "Structural Building improvements"), and (c) upon Tenant's request for a Turnover pursuant to Article 43, following the Turnover Date, the elevators and the base Building plumbing, fire and life safety, heating, ventilating, air conditioning, electrical, security and mechanical systems (collectively, the "Building System Improvements").

18.2 As further detailed on Exhibit J attached hereto and incorporated herein by reference, Tenant shall at Tenant's sole cost and expense maintain and keep the Premises and every part thereof in good condition and repair, damage thereto from ordinary wear and tear excepted, it being understood and agreed by Landlord that ordinary wear and tear for purposes of this Lease shall mean operation of the Building and the Building systems 24 hours per day, 7 days per week, 365 days per year. Tenant shall, upon the expiration or sooner termination of the Term, surrender the Premises to Landlord in as good a condition as when received, ordinary wear and tear excepted; and shall remove all of Tenant's personal property listed on Exhibit H attached hereto and incorporated herein by reference (which list may be updated from time to time by Tenant, subject to Landlord's prior written approval, such approval not to be unreasonably withheld, conditioned or delayed), and repair any damage to the Premises caused thereby. Upon such surrender, Landlord shall have no obligation to alter, remodel, improve, repair, decorate or paint the Premises or any part thereof.

18.3 Except as otherwise set forth herein, Landlord shall not be liable for any failure to make any repairs or to perform any maintenance that is an obligation of Landlord except as set forth in Section 31.14.

18.4 If any excavation shall be made upon land adjacent to the Building, or shall be authorized to be made, Tenant shall afford to the person causing or authorized to cause such excavation, license to enter the Premises for the purpose of performing such work as said person shall deem necessary or desirable to preserve and protect the Building from injury or damage and to support the same by proper foundations, without any claim for damages or liability against Landlord and without reducing or otherwise affecting Tenant's obligations under this Lease, provided Tenant's use of the Premises will not be materially and adversely interfered with in connection therewith.

18.5 This Article relates to repairs and maintenance arising in the ordinary course of operation of the Building and the Project. In the event of a casualty described in Article 24, Article 24 shall apply in lieu of this Article. In the event of eminent domain, Article 25 shall apply in lieu of this Article.

18.6 Costs incurred by Landlord pursuant to this Article shall constitute Operating Expenses, unless such costs are incurred due in whole or in part to any act, neglect, fault or omissions of Tenant or its employees, agents, contractors or invitees, in which case Tenant shall pay to Landlord the cost of such repairs and maintenance.

19. Liens.

19.1 Tenant shall keep the Premises, the Building and the Project free from any liens arising out of work performed by, materials furnished to or obligations incurred by Tenant. Tenant further covenants and agrees that any mechanic's lien filed against the Premises, the Building or the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant shall be discharged or bonded by Tenant within [***] days after the filing thereof, at Tenant's sole cost and expense.

19.2 Should Tenant fail to discharge or bond against any lien of the nature described in Section 19.1, Landlord may, at Landlord's election, pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title, and Tenant shall immediately reimburse Landlord for the costs thereof as Additional Rent. Tenant shall indemnify, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from and against any Claims arising from any such liens, including any administrative, court or other legal proceedings related to such liens.

19.3 In the event that Tenant leases or finances the acquisition of trade fixtures, office equipment, furnishings or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code financing statement shall, upon its face or by exhibit thereto, indicate that such financing statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Premises, the Building or the Project be furnished on a financing statement without qualifying language as to applicability of the lien only to removable personal property located in an identified suite leased by Tenant. Should any holder of a financing statement record or place of record a financing statement that appears to constitute a lien against any interest of Landlord or against equipment that may be located other than within an identified suite leased by Tenant, Tenant shall, within [***] days after filing such financing statement, cause (a) a copy of the Lender security agreement or other documents to which

the financing statement pertains to be furnished to Landlord to facilitate Landlord's ability to demonstrate that the lien of such financing statement is not applicable to Landlord's interest and (b) Tenant's Lender to amend such financing statement and any other documents of record to clarify that any liens imposed thereby are not applicable to any interest of Landlord in the Premises, the Building or the Project.

20. Estoppel Certificate. Tenant shall, within [***] days after receipt of written notice from Landlord, execute, acknowledge and deliver a statement in Writing substantially in the form attached to this Lease as Exhibit I, or on any other form reasonably requested by a proposed Lender or purchaser, (a) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which rental and other charges are paid in advance, if any, (b) acknowledging that there are not, to Tenant's knowledge, any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (c) setting forth such further factual information with respect to this Lease or the Premises as may be reasonably requested thereon. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Premises are a part. Tenant's failure to deliver such statement within such the prescribed time shall, at Landlord's option, constitute a Default (as defined below) under this Lease, and, in any event, shall be binding upon Tenant that the Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution. Landlord shall, within [***] days after receipt of written notice from Tenant, execute, acknowledge and deliver a comparable certificate to Tenant as set forth above, provided Landlord's failure to deliver such statement within such prescribed time shall not be deemed to be an acknowledgment by Landlord that the Lease is in full force and effect and without modification.

21. Hazardous Materials.

21.1 Tenant shall not cause or permit any Hazardous Materials (as defined below) to be brought upon, kept or used in or about the Premises, the Building or the Project in violation of Applicable Laws by Tenant or its employees, agents, contractors or invitees. In the event that: (a) any Hazardous Materials are brought upon, kept or used in or about the Premises, the Building or the Project in violation of Applicable Laws by Tenant or its employees, agents, contractors or invitees at any time during the Term or any extension or renewal hereof or holding over hereunder, (b) the presence of Hazardous Materials is the result of Tenant's breach of the covenants set forth in this Section 21.1 and results in contamination of the Project, any portion thereof, or any adjacent property, or (c) contamination of the Project, any portion thereof, or any adjacent property by Hazardous Materials otherwise occurs at any time during the Term or any extension or renewal hereof or holding over hereunder, then Tenant shall indemnify, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from and against any and all Claims, including (a) diminution in value of the Project or any portion thereof, (b) damages for the loss or restriction on use of rentable or usable space or of any amenity of the Project, (c) damages arising from any adverse impact on marketing of space in the Project or any portion thereof and (d) sums paid in settlement of Claims that arise prior to, during or after the Term as a result of such breach or contamination. This indemnification by Tenant includes costs incurred in connection with any investigation of site conditions or any clean-up, remedial, removal or restoration work required by any Governmental Authority because of

Hazardous Materials present in the air, soil or groundwater above, on or under or about the Project. Without limiting the foregoing, if the presence of any Hazardous Materials in, on, under or about the Project, any portion thereof or any adjacent property caused or permitted by Tenant results in any contamination of the Project, any portion thereof or any adjacent property, then Tenant shall promptly take all actions at its sole cost and expense as are necessary to return the Project, any portion thereof or any adjacent property to its respective condition existing prior to the time of such contamination; provided that Landlord's written approval of such action shall first be obtained, which approval Landlord shall not unreasonably withhold; and provided, further, that it shall be reasonable for Landlord to withhold its consent if such actions could have a material adverse long-term or short-term effect on the Project, any portion thereof or any adjacent property. Nothing in the foregoing shall obligate Tenant to provide any indemnity with respect to periods prior to the Commencement Date.

21.2 Landlord acknowledges that it is not the intent of this Article to prohibit Tenant from operating its business for the Permitted Use. Tenant may operate its business according to the custom of Tenant's industry so long as the use or presence of Hazardous Materials is strictly and properly monitored in accordance with Applicable Laws. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord upon the request of Landlord prior to the Term Commencement Date a list identifying each type of Hazardous Material to be present at the Project arid setting forth any and all governmental approvals or permits required in connection with the presence of such Hazardous Material at the Project (the "Hazardous Materials List"). Upon Landlord's request, Tenant shall deliver to Landlord an updated Hazardous Materials List on or prior to each annual anniversary of the Term Commencement Date and shall also deliver an updated Hazardous Materials List before any new Hazardous Materials are brought to the Project. Tenant shall deliver to Landlord true and correct copies of the following documents (hereinafter referred to as the "Documents") relating to the handling, storage, disposal and emission of Hazardous Materials prior to the Term Commencement Date or, if unavailable at that time, concurrently with the receipt from or submission to any Governmental Authority: permits; approvals; reports and correspondence; storage and management plans; notices of violations of Applicable Laws; plans relating to the installation of any storage tanks to be installed in, on, under or about the Project (provided that installation of storage tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent Landlord may withhold in its sole and absolute discretion); and all closure plans or any other documents required by any and all Governmental Authorities for any storage tanks installed in, on, under or about the Project for the closure of any such storage tanks. Tenant shall not be required, however, to provide Landlord with any portion of the Documents containing information of a proprietary nature, which Documents, in and of themselves, do not contain a reference to any Hazardous Materials or activities related to Hazardous Materials. Upon Landlord's written request, Tenant agrees that it shall enter into a written agreement with other tenants of the Project concerning the equitable allocation of fire control areas (as defined in the Uniform Building Code as adopted by the city or municipality(ies) in which the Project is located (the "UBC")) within the Project for the storage of Hazardous Materials. In the event that Tenant's use of Hazardous Materials is such that it utilizes fire control areas in the Project in excess of Tenant's Pro Rata Share of the Building or Common Areas, as applicable, as set forth in Section 2.2, Tenant agrees that it shall, at its sole cost and expense and upon Landlord's written request, establish and maintain

a separate area of the Premises classified by the UBC as an "H" occupancy area for the use and storage of Hazardous Materials or take such other action as is necessary to ensure that its share of the fire control areas of the Building and the Project is not greater than Tenant's Pro Rata Share of the Building or Common Areas, as applicable.

21.3 At any time, and from time to time, prior to the expiration of the Term, Landlord shall have the right to conduct appropriate tests of the Project or any portion thereof to demonstrate that Hazardous Materials are present or that contamination has occurred due to Tenant or Tenant's employees, agents, contractors or invitees. Tenant shall pay all reasonable costs of such tests if such tests reveal that Hazardous Materials exist at the Project in violation of this Lease.

21.4 If underground or other storage tanks storing Hazardous Materials are located on the Premises or are hereafter placed on the Premises by any party, Tenant shall monitor the storage tanks, maintain appropriate records, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other steps necessary or required under the Applicable Laws.

21.5 Tenant's obligations under this Article shall survive the expiration or earlier termination of the Lease. During any period of time needed by Tenant or Landlord after the termination of this Lease to complete the removal from the Premises of any such Hazardous Materials, Tenant shall be deemed a holdover tenant and subject to the provisions of Article 27 below.

21.6 As used herein, the term "Hazardous Material" means any hazardous or toxic substance, material or waste that is or becomes regulated by any Governmental Authority.

21.7 Landlord shall require other tenants in the Project to comply with obligations comparable to those set forth in this Article 21.

22. Odors and Exhaust. Tenant will restrict odors or fumes (whether or not noxious), from emanating from the Premises, provided, however, that Landlord acknowledges and agrees that Tenant shall have the right to operate one or more (currently three) supplemental generators during the Term generally consistent with the demand response requirements currently set forth in Tenant's utility contract with Enernoc, a copy of which has been provided to Landlord. In addition, Tenant shall have the right to operate such generators on a regular basis for maintenance purposes and at any other times in Tenant's reasonable discretion.

22.1 Tenant shall vent all fumes and odors from the Premises (and remove odors from Tenant's exhaust stream) in compliance with Applicable Laws, and as Landlord reasonably requires. The placement and configuration of all material changes to the ventilation exhaust pipes, louvers and other equipment shall be subject to Landlord's approval, such approval not to be unreasonably withheld, conditioned or delayed.

22.2 Tenant shall, at Tenant's sole cost and expense, provide odor eliminators and other devices (such as filters, air cleaners, scrubbers and whatever other equipment may in Landlord's reasonable judgment be necessary or appropriate from time to time) to remove, eliminate and abate to the extent practicable any odors, fumes or other substances in Tenant's exhaust stream that, in Landlord's

reasonable judgment, emanate from Tenant's Premises. Any work Tenant performs under this Section shall constitute Alterations.

22.3 Tenant's obligations under this Article 22 shall continue throughout the Term. In connection with any request by Tenant to make Alterations associated with the ventilation system of the Building, Landlord's approval of such Alterations shall not preclude Landlord from requiring additional measures to eliminate odors, fumes and other adverse impacts of Tenant's exhaust stream (as Landlord may designate in Landlord s discretion).

22.4 Landlord shall use commercially reasonable efforts to require other tenants in the Project to comply with obligations comparable to those set forth in this Article 22.

23. Insurance; Waiver of Subrogation.

23.1 Landlord shall maintain insurance for the Building and the Project in amounts equal to full replacement cost (exclusive of the costs of excavation, foundations and footings, and without reference to depreciation taken by Landlord upon its books or tax returns) or such lesser coverage as Landlord may reasonably elect. provided that such coverage shall not be less than [***] percent ([***]%) of such full replacement cost or the amount of such insurance Landlord's Lender, if any, requires Landlord to maintain, providing protection against any peril generally included within the classification "Fire and Extended Coverage," together with insurance against sprinkler damage (if applicable), vandalism and malicious mischief. Landlord, subject to availability thereof, shall further insure, if Landlord deems it appropriate, coverage against flood, environmental hazard, loss or failure of building equipment, rental loss during the period of repairs or rebuilding, workmen's compensation insurance and fidelity bonds for employees employed to perform services. Notwithstanding the foregoing, Landlord may, but shall not be deemed required to, provide insurance for any improvements installed by Tenant or that are in addition to the standard improvements customarily furnished by Landlord, without regard to whether or not such are made a part of or are affixed to the Building.

23.2 In addition, Landlord shall carry comprehensive public liability insurance with limits of not less than [***] Dollars ($[***]) per occurrence for death or bodily injury or property damage with respect to the Project.

23.3 Tenant shall, at its own cost and expense, procure and maintain in effect, beginning on the Term Commencement Date and continuing throughout the Term (and occupancy by Tenant, if any, after termination of this Lease) comprehensive public liability insurance with limits of not less than [***] Dollars ($ [***]) per occurrence for death or bodily injury and for property damage with respect to the Premises (including $ [***] fire legal liability (each loss)).

23.4 The insurance required to be purchased and maintained by Tenant pursuant to this Lease shall name Landlord, BioMed Realty, L.P., BioMed Realty Trust, Inc. and their respective officers, directors, employees, agents, general partners, members, subsidiaries, affiliates and Lenders ("Landlord Parties") as additional insureds. Said insurance shall be with companies having a rating of not less than policyholder rating of A minus and financial category rating of at least Class VIII X in "Best's Insurance Guide." Tenant shall obtain for Landlord from the insurance companies or cause the insurance companies to furnish certificates of coverage to Landlord. No such policy shall be cancelable or subject to

cancellation except after [***] days' prior written notice to Landlord from the insurer (except in the event of non-payment of premium, in which case [***] days' written notice shall be given). All such policies shall be written as primary policies, not contributing with and not in excess of the coverage that Landlord may carry. Tenant's policy may be a "blanket policy" that specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least [***] days prior to the expiration of such policies, furnish Landlord with renewals or binders. Tenant agrees that if Tenant does not take out and maintain such insurance, Landlord may (but shall not be required to) procure said insurance on Tenant's behalf and at its cost to be paid by Tenant as Additional Rent.

23.5 Tenant assumes the risk of damage to any fixtures, goods, inventory, merchandise, equipment and leasehold improvements owned by Tenant, and Landlord shall not be liable for injury to Tenant's business or any loss of income therefrom, relative to such damage, all as more particularly set forth within this Lease. Tenant shall, at Tenant's sole cost and expense, carry such insurance as Tenant desires for Tenant's protection with respect to personal property of Tenant or business interruption.

23.6 In each instance where insurance is to name Landlord Parties as additional insureds, Tenant shall, upon Landlord's written request, also designate and furnish certificates evidencing such Landlord Parties as additional insureds to (a) any Lender of Landlord holding a security interest the Building, the Property or the Project, (b) the landlord under any lease whereunder Landlord is a tenant of the Property if the interest of Landlord is or shall become that of a tenant under a ground lease rather than that of a fee owner and (c) any management company retained by Landlord to manage the Project.

23.7 Landlord and Tenant each hereby waive any and all rights of recovery against the other or against the officers, directors, employees, agents, general partners, members, subsidiaries, affiliates and Lenders of the other on account of loss or damage occasioned by such waiving party or its property or the property of others under such waiving party's control, in each case to the extent that such loss or damage is insured against under any fire and extended coverage insurance policy that either Landlord or Tenant may have in force at the time of such loss or damage or is required to be carried under this Lease. Such waivers shall continue so long as their respective insurers so permit. Any termination of such a waiver shall be by written notice to the other party, containing a description of the circumstances hereinafter set forth in. this Section. Landlord and Tenant, upon obtaining the policies of insurance required or permitted under this Lease, shall give notice to the insurance carrier or carriers that the foregoing mutual waiver of subrogation is contained in this Lease, to the extent required by the applicable insurance policy. If such policies shall not be obtainable with such waiver or shall be so obtainable only at a premium over that chargeable without such waiver, then the party seeking such policy shall notify the other of such conditions, and the party so notified shall have [***] days thereafter to either (a) procure such insurance with companies reasonably satisfactory to the other party or (b) agree to pay such additional premium (in Tenant's case, in the proportion that the area of the Premises bears to the insured area). If the parties do not accomplish either (a) or (b), then this Section shall have no effect during such time as such policies shall not be obtainable or the party in whose favor a waiver of subrogation is desired refuses to pay the additional premium. If such policies shall at any time be unobtainable, but shall be subsequently obtainable, then neither party shall be

subsequently liable for a failure to obtain such insurance until a reasonable time after notification thereof by the other party. If the release of either Landlord or Tenant, as set forth in the first sentence of this Section, shall contravene Applicable Laws, then the liability of the party in question shall be deemed not released but shall be secondary to the other party's insurer.

23.8 Landlord may require insurance policy limits required under this Lease to be raised from time to time, provided, that, such increases shall not exceed the coverage amounts required by landlords in other Comparable Buildings.

23.9 Any costs incurred by Landlord pursuant to this Article shall constitute a portion of Operating Expenses.

24. Damage or Destruction.

24.1 In the event of a partial destruction of (a) the Premises or (b) Common Areas ((a) and (b) together, the "Affected Areas") by fire or other perils covered by extended coverage insurance not exceeding [***] percent ([***]%) of the full insurable value thereof, and provided that (x) the damage thereto is such that the Affected Areas may be repaired, reconstructed or restored within a period of twelve (12) months from the date of the happening of such casualty, (y) Landlord shall receive insurance proceeds sufficient to cover the cost of such repairs (except for any deductible amount provided by Landlord's policy, which deductible amount, if paid by Landlord, shall constitute an Operating Expense), and (z) such casualty was not intentionally caused by Tenant or its employees, then Landlord shall commence and proceed diligently with the work of repair, reconstruction and restoration of the Affected Areas and this Lease shall continue in full force and effect.

24.2 In the event of any damage to or destruction of the Premises or the Common Areas other than as described in Section 24.1, Landlord may elect to repair, reconstruct and restore the Premises or the Common Areas, as applicable, in which case this Lease shall continue in full force and effect. If Landlord elects not to repair the Building or the Project, as applicable, then this Lease shall terminate as of the date of such damage or destruction.

24.3 Landlord shall give written notice to Tenant within [***] days following the date of damage or destruction of its election not to repair, reconstruct or restore the Building or the Project, as applicable, subject to the terms of this Lease.

24.4 Notwithstanding anything to the contrary contained in this Article, in the event of any damage to or destruction of (a) the Building that materially and adversely affects Tenant's operations within the Premises; (b) the Common Areas that materially and adversely impairs Tenant's access to the Premises; or (c) [***] percent ([***]%) of Tenant's lab space or [***] percent ([***]%) of Tenant's office space in the Premises, as determined by Landlord's architect (each, a "Material Loss"), and the Premises cannot be made reasonably tenantable for Tenant's operations or access to the Premises cannot be reasonably restored within one year after date of such damage or destruction, as reasonably estimated by Landlord within [***] days after such damage or destruction occurred, then Tenant shall have the right to terminate the Lease as of the date of such damage or destruction.

24.5 Upon any termination of this Lease under any of the provisions of this Article, the parties shall be released thereby without further obligation to the other from the date possession of the Premises is surrendered to Landlord, except with regard to (a) items occurring prior to the damage or destruction and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

24.6 In the event of repair, reconstruction and restoration as provided in this Article, all Rent to be paid by Tenant under this Lease shall be abated proportionately based on the extent to which Tenant's use of the Premises is impaired during the period of such repair, reconstruction or restoration, unless Landlord provides Tenant with other space during the period of repair that, in Tenant's reasonable opinion, is suitable for the temporary conduct of Tenant's business; provided, however, that the amount of such abatement shall be reduced by the proceeds of business interruption or loss of rental income insurance actually received by Tenant with respect to the Premises.

24.7 Notwithstanding anything to the contrary contained in this Article, should Landlord be delayed or prevented from completing the repair, reconstruction or restoration of the damage or destruction to the Premises after the occurrence of such damage or destruction by Force Majeure, then the time for Landlord to commence or complete repairs shall be extended on a day-for-day basis; provided, however, after [***] days of such delay, that, at Landlord's election, Landlord shall be relieved of its obligation to make such repair, reconstruction or restoration. If Landlord elects not to make such repair, reconstruction or restoration and such damage or destruction constitutes a Material Loss, then Tenant shall have a right to terminate this Lease as of the date of such damage or destruction.

24.8 If Landlord is obligated to or elects to repair, reconstruct or restore as herein provided, then Landlord shall be obligated to make such repair, reconstruction or restoration only with regard to (a) those portions of the Premises that were originally provided at Landlord's expense or in existence at the Commencement Date and (b) the Common Area portion of the Affected Areas. The repair, reconstruction or restoration of improvements not originally provided by Landlord at Landlord's expense or in existence as of the Commencement Date shall be the obligation of Tenant. In the event Tenant has elected to upgrade certain improvements from the Building Standard, Landlord shall, upon the need for replacement due to an insured loss, provide only the Building Standard, unless Tenant again elects to upgrade such improvements and pay any incremental costs related thereto, except to the extent that excess insurance proceeds, if received, are adequate to provide such upgrades, in addition to providing for basic repair, reconstruction and restoration of the Premises, the Building and the Project.

24.9 Notwithstanding anything to the contrary contained in this Article, Landlord shall not have any obligation whatsoever to repair, reconstruct or restore the Premises if the damage resulting from any casualty covered under this Article occurs during the last [***] months of the Term or any extension hereof or to the extent that insurance proceeds are not available; provided, however, if Landlord elects not ot make such repair, reconstruction or restoration and such damage or destruction constitutes a Material Loss, then Tenant shall have the right to terminate this Lease as of the date of such damage or destruction. Notwithstanding anything to the contrary contained in this Article, in the event that any Material Loss occurs during the last [***] months of the Term and the Premises cannot be reasonably

restored within [***] months after the date of such damage or destruction, as reasonably estimated by Landlord within [***] days after such damage or destruction occurred, then Tenant shall have the right to terminate the Lease as of the date of such damage or destruction.

24.10 Landlord's obligation, should it elect or be obligated to repair or rebuild, shall be limited to the Affected Areas. Tenant shall, at its expense, replace or fully repair all of Tenant's personal property and any Alterations installed by Tenant existing at the time of such damage or destruction. If Affected Areas are to be repaired in accordance with the foregoing, Landlord shall make available to Tenant any portion of insurance proceeds it receives that are allocable to the Alterations constructed by Tenant pursuant to this Lease; provided Tenant is not then in default under this Lease, and subject to the requirements of any Lender of Landlord.

25. Eminent Domain.

25.1 In the event (a) the whole of all or either of the Affected Areas or (b) such part thereof as shall substantially interfere with Tenant's use and occupancy of the Premises for the Permitted Use shall be taken for any public or quasi-public purpose by any lawful power or authority by exercise of the right of appropriation, condemnation or eminent domain, or sold to prevent such taking, Tenant or Landlord may terminate this Lease effective as of the date possession is required to be surrendered to said authority, except with regard to (y) items occurring prior to the damage or destruction and (z) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

25.2 In the event of a partial taking of (a) the Building or the Common Areas or (b) drives, walkways or parking areas serving the Building or the Project for any public or quasi-public purpose by any lawful power or authority by exercise of right of appropriation, condemnation, or eminent domain, or sold to prevent such taking, then, without regard to whether any portion of the Premises occupied by Tenant was so taken, Landlord may elect to terminate this Lease (except with regard to (a) items occurring prior to the damage or destruction and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof) as of such taking if such taking is, in Landlord's reasonable opinion, of a material nature such as to make it uneconomical to continue use of the unappropriated portion for purposes of renting office or laboratory space and Landlord terminates all of the other leases in the Project similarly affected.

25.3 Tenant shall be entitled to any award that is specifically awarded as compensation for (a) the taking of Tenant's personal property that was installed at Tenant's expense and (b) the costs of Tenant moving to a new location. Except as set forth in the previous sentence, any award for such taking shall be the property of Landlord.

25.4 If, upon any taking of the nature described in this Article, this Lease continues in effect, then Landlord shall promptly proceed to restore the Affected Areas to substantially their same condition prior to such partial taking. To the extent such restoration is infeasible, as determined by Landlord in its reasonable discretion, the Rent shall be decreased proportionately to reflect the loss of any portion of the Premises no longer available to Tenant.

26. Surrender.

26.1 At least [***] days prior to Tenant's surrender of possession of any part of the Premises, if the Permitted Use is for other than office use, Tenant shall provide Landlord with (a) a facility decommissioning and Hazardous Materials closure plan for the Premises ("Exit Survey") prepared by an independent third party reasonably acceptable to Landlord, and (b) written evidence of all appropriate governmental releases obtained by Tenant in accordance with Applicable Laws, including laws pertaining to the surrender of the Premises. In addition, Tenant agrees to remain responsible after the surrender of the Premises for the remediation of any recognized environmental conditions set forth in the Exit Survey and compliance with any recommendations set forth in the Exit Survey. Tenant's obligations under this Section shall survive the expiration or earlier termination of the Lease.

26.2 No surrender of possession of any part of the Premises shall release Tenant from any of its obligations under Section 26.1, unless such surrender is accepted in writing by Landlord in its reasonable discretion.

26.3 The voluntary or other surrender of this Lease by Tenant shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Building, the Property or the Project, unless Landlord consents in writing, and shall, at Landlord's option, operate as an assignment to Landlord of any or all subleases.

26.4 The voluntary or other surrender of any ground or other underlying lease that now exists or may hereafter be executed affecting the Building or the Project, or a mutual cancellation thereof or of Landlord's interest therein by Landlord and its lessor shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Building or the Property and shall, at the option of the successor to Landlord's interest in the Building or the Project, as applicable, operate as an assignment of this Lease.

27. Holding Over.

27.1 If, with Landlord's prior written consent, Tenant holds possession of all or any part of the Premises after the Term, Tenant shall become a tenant from month to month after the expiration or earlier termination of the Term, and in such case Tenant shall continue to pay (a) Base Rent in accordance with Article 7, as adjusted in accordance with Article 8, and (b) any amounts for which Tenant would otherwise be liable under this Lease if the Lease were still in effect, including payments for Tenant's Pro Rata Share of Operating Expenses. Any such month-to-month tenancy shall be subject to every other term, covenant and agreement contained herein.

27.2 Notwithstanding the foregoing, if Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without Landlord's prior written consent, (a) Tenant shall become a tenant at sufferance subject to the terms and conditions of this Lease, except that the monthly rent shall be equal to [***] percent ([***]%) of the Base Rent and [***] percent ([***]%) of Additional Rent in effect during the last [***] days of the Term, and Tenant shall be liable to Landlord for any and all damages suffered by Landlord as a result of such holdover, including any lost rent or consequential, special and indirect damages.

27.3 Acceptance by Landlord of Rent after the expiration or earlier termination of the Term shall not result in an extension, renewal or reinstatement of this Lease.

27.4 The foregoing provisions of this Article are in addition to and do not affect Landlord's right of reentry or any other rights of Landlord hereunder or as otherwise provided by Applicable Laws.

28. Indemnification and Exculpation.

28.1 Tenant agrees to indemnify, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from and against any and all Claims arising from injury or death to any person or damage to any property occurring within or about the Project arising directly or indirectly out of Tenant's or Tenant's employees', agents', contractors' or invitees' use or occupancy of the Project or a breach or default by Tenant in the performance of any of its obligations hereunder, except in all cases to the extent caused by Landlord's or Landlord's employees', agents' or contractors' negligence or willful misconduct. Landlord agrees to indemnify, save, defend (at Tenant's option and with counsel reasonably acceptable to Tenant) and hold the Tenant and Tenant's affiliates, employees, agents, and contractors harmless from and against any and all Claims arising from injury or death to any person or damage to any property occurring within or about the Project arising directly out of Landlord's or Landlord's employees', agents' or contractors' gross negligence or willful misconduct, except in all cases to the extent caused by Tenant's or Tenant's employees', agents' or contractors' negligence or willful misconduct.

28.2 Notwithstanding any provision of Section 28.1 to the contrary, Landlord shall not be liable to Tenant for, and Tenant assumes all risk of, damage to personal property or scientific research, including loss of records kept by Tenant within the Premises and damage or losses caused by fire, electrical malfunction, gas explosion or water damage of any type (including broken water lines, malfunctioning fire sprinkler systems, roof leaks or stoppages of lines), unless any such loss is due to Landlord's failure to respond to written notice by Tenant of need for a repair that Landlord is responsible to make for ten (10) business days. Tenant further waives any claim for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property as described in this Section.

28.3 Landlord shall not be liable for any damages arising from any act, omission or neglect of any other tenant in the Building or the Project, or for any other third party.

28.4 Tenant acknowledges that security devices and services, if any, while intended to deter crime, may not in given instances prevent theft or other criminal acts. Landlord shall not be liable for injuries or losses caused by criminal acts of third parties, and Tenant assumes the risk that any security device or service may malfunction or otherwise be circumvented by a criminal. If Tenant desires protection against such criminal acts, then Tenant shall, at Tenant's sole cost and expense, obtain appropriate insurance coverage.

28.5 The provisions of this Article shall survive the expiration or earlier termination of this Lease.

29. Assignment or Subletting.

29.1 Except as hereinafter expressly permitted, Tenant shall not, either voluntarily or by operation of Applicable Laws, directly or indirectly sell, hypothecate, assign,

pledge, encumber or otherwise transfer this Lease, or sublet the Premises (each, a "Transfer"), without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, a Transfer shall not include and Tenant shall have the right to transfer, sublease or assign this Lease without Landlord's prior written consent the Premises or any part thereof to any person that as of the date of determination and at all times thereafter directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with Tenant or Dr. J. Craig Venter ("Tenant's Affiliate"), provided that Tenant shall notify Landlord in writing at least [***] days prior to the effectiveness of such transfer, sublease or assignment to Tenant's Affiliate (an "Exempt Transfer") and otherwise comply with the requirements of this Lease (other than this Section 29) regarding such Exempt Transfer. For purposes of Exempt Transfers, "control" requires either: (a) owning (directly or indirectly) more than [***] percent ([***]%) of the stock or other equity interests of another person or (b) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person.

29.2 Commencing promptly after the Commencement Date and continuing until the earlier of (i) the second anniversary of the Commencement Date and (ii) the date on which Landlord has entered into leases for all of the available office space in the Lower Campus, (A) Landlord and Tenant will jointly market the Lower Campus and the Building (to the extent Tenant desires to sublease the Building) to prospective tenants and subtenants, as applicable, on terms acceptable to Landlord (with respect to the Lower Campus and to Tenant (with respect to Building 1) and (B) Tenant shall not effect a Transfer to or with an entity that is a then-current tenant at the Lower Campus without Landlord's prior written consent, which consent may be withheld by Landlord in Landlord's sole and absolute discretion. Thereafter, Tenant shall have the right to market, advertise and sublease space in the Building or assign the Lease in accordance with the provisions of Section 29.1. Upon Tenant's reasonable request from time to time, Landlord shall provide documentation of the leasing status of the Lower Campus. In connection with the joint marketing of the Lower Campus and the Building, Landlord shall be solely responsible for all costs and fees associated with the leasing of the Lower Campus and Tenant shall be solely responsible for all costs and fees associated with the leasing of the Building.

29.3 In the event Tenant desires to effect a Transfer, then, at least [***] but not more than [***] day prior to the date when Tenant desires the assignment or sublease to be effective (the "Transfer Date"), Tenant shall provide written notice to Landlord (the ''Transfer Notice") containing information (including references) concerning the character of the proposed transferee, assignee or sublessee; the Transfer Date; any ownership or commercial relationship between Tenant and the proposed . transferee, assignee or sublessee; and the consideration and all other material terms and conditions of the proposed Transfer, all in such detail as Landlord shall reasonably require.

29.4 Landlord, in determining whether consent should be given to a proposed Transfer, may give consideration to (a) the financial strength of such transferee, assignee or sublessee (notwithstanding Tenant remaining liable for Tenant's performance), provided however that Landlord shall not have the right to review and approve the financial strength of any subtenant subleasing space which comprises less than all of the Premises and for a term of less than all or substantially all of the balance of the Term, and (b) any change in use that such transferee, assignee or sublessee

proposes to make in the use of the Premises. Except as set forth herein to the contrary, in no event shall Landlord be deemed to be unreasonable for declining to consent to a Transfer to a transferee, assignee or sublessee of poor reputation, lacking financial qualifications or seeking a change from the Permitted Use, or jeopardizing directly or indirectly the status of Landlord or any of Landlord's affiliates as a Real Estate Investment Trust under the Internal Revenue Code of 1986 (as the same may be amended from time to time, the "Revenue Code"). Notwithstanding anything contained in this Lease to the contrary, (w) no Transfer shall be consummated on any basis such that the rental or other amounts to be paid by the occupant, assignee, manager or other transferee thereunder would be based, in whole or in part, on the income or profits derived by the business activities of such occupant, assignee, manager or other transferee; (x) Tenant shall not furnish or render any services beyond what is typical in the market to an occupant, assignee, manager or other transferee with respect to whom consideration is required to be paid to Landlord pursuant to Section 29.5.2, or manage or operate the Premises or any capital additions so transferred, with respect to which consideration is required to be paid to Landlord pursuant to Section 29.5.2, without Landlord's consent, not to be unreasonably withheld, to ensure the Landlord Parties' compliance with applicable REIT tax rules and regulations; (y) Tenant shall not consummate a Transfer with any person in which Landlord owns an interest, directly or indirectly (by applying constructive ownership rules set forth in Section 856(d)(5) of the Revenue Code); and (z) Tenant shall not consummate a Transfer with any person or in any manner that could cause any portion of the amounts received by Landlord pursuant to this Lease or any sublease, license or other arrangement for the right to use, occupy or possess any portion of the Premises to fail to qualify as "rents from real property" within the meaning of Section 856(d) of the Revenue Code, or any similar or successor provision thereto or which could cause any other income of Landlord to fail to qualify as income described in Section 856(c)(2) of the Revenue Code.

29.5 As conditions precedent to Tenant subleasing the Premises or to Landlord considering a request by Tenant to Tenant's transfer of rights or sharing of the Premises, Landlord may require any or all of the following:

29.5.1. Tenant shall remain fully liable under this Lease during the unexpired Term;

29.5.2. If Tenant's transfer of rights or sharing of the Premises provides for the receipt by, on behalf of or on account of Tenant of any consideration of any kind whatsoever (including a premium rental for a sublease or lump sum payment for an assignment, but excluding Tenant's reasonable costs in marketing and subleasing the Premises) in excess of the rental and other charges due to Landlord under this Lease, Tenant shall pay [***] percent ([***]%) of all of such excess to Landlord, after making deductions for any reasonable marketing expenses, tenant improvement funds expended by Tenant, alterations, cash concessions, brokerage commissions, attorneys' fees and free rent actually paid by Tenant. If said consideration consists of cash paid to Tenant, payment to Landlord shall be made upon receipt by Tenant of such cash payment; and

29.5.3. Tenant shall reimburse Landlord for Landlord's actual and reasonable costs and expenses, including reasonable attorneys' fees, charges and disbursements incurred in connection with the review, processing and

documentation of such request, not in excess of [***] Dollars ($[***]) per occurrence/request.

29.6 The proposed transferee, assignee or sublessee shall agree that, in the event Landlord gives such proposed transferee, assignee or sublessee notice that, so long as Tenant is in Default under this Lease, such proposed transferee, assignee or sublessee shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments shall be received by Landlord without any liability being incurred by Landlord, except to credit such payment against those due by Tenant under this Lease, and any such proposed transferee, assignee or sublessee shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, that in no event shall Landlord or its Lenders, successors or assigns be obligated to accept such attornment, except Landlord shall provide a commercially reasonable non-disturbance agreement to any entity that subleases for greater than one-half (1/2) of the Premises or takes an assignment of the Lease;

29.7 Landlord's consent to any such Transfer shall be effected on commercially reasonable forms;

29.8 Tenant shall not be in default of any its monetary obligations or in Default of any of its non-monetary obligations hereunder.

29.9 Such proposed transferee, assignee or sublessee shall not use the Premises for any use that is not a Permitted Use;

29.10 Landlord shall not be bound by any provision of any agreement pertaining to the Transfer, except for Landlord's written consent to the same and except for the nondisturbance described above;

29.11 Tenant shall pay all transfer and other taxes (including interest and penalties) assessed or payable for any Transfer;

29.12 Landlord's consent (or waiver of its rights) for any Transfer shall not waive Landlord's right to consent to any later Transfer;

29.13 Tenant shall deliver to Landlord one executed copy of any and all written instruments evidencing the Transfer; and

29.14 Any Transfer that is not in compliance with the provisions of this Article shall be void and a default.

29.15 The consent by Landlord to a Transfer shall not relieve Tenant or proposed transferee, assignee or sublessee from obtaining Landlord's consent to any further Transfer in accordance with the terms hereof, nor shall it release Tenant or any proposed transferee, assignee or sublessee of Tenant from full and primary liability under this Lease.

29.16 Notwithstanding any Transfer, Tenant shall remain fully and primarily liable for the payment of all Rent and other sums due or to become due hereunder, and for the full performance of all other terms, conditions and covenants to be kept and performed by Tenant. The acceptance of Rent or any other sum due hereunder, or the acceptance of performance of any other term, covenant or condition thereof,

from any person or entity other than Tenant shall not be deemed a waiver of any of the provisions of this Lease or a consent to any Transfer.

29.17 If Tenant sublets the Premises or any portion thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and appoints Landlord as assignee and attorneyin-fact for Tenant, and Landlord (or a receiver for Tenant appointed on Landlord's application) may collect such rent and apply it toward Tenant's obligations under this Lease; provided that Tenant shall have the right to collect such rent so long as no Default exists or is continuing.

30. Subordination and Attornment.

30.1 Subject to the provisions set forth below, this Lease shall be subject and subordinate to the lien of any mortgage, deed of trust, or lease in which Landlord is tenant now or hereafter in force against the Building and Common Areas ("Mortgage") and to all advances made or hereafter to be made upon the security thereof without the necessity of the execution and delivery of any further instruments on the part of Tenant to effectuate such subordination.

30.2 Notwithstanding the foregoing, Tenant shall execute and deliver upon demand such further instrument or instruments evidencing such subordination of this Lease to the lien of any such mortgage or mortgages or deeds of trust or lease in which Landlord is tenant as may be required by Landlord. If any such mortgagee, beneficiary or landlord under a lease wherein Landlord is tenant (each, a "Mortgagee") so elects, however, this Lease shall be deemed prior in lien to any such lease, mortgage, or deed of trust upon or including the Premises regardless of date and Tenant shall execute a statement in writing to such effect at Landlord's request. If Tenant fails to execute any document required from Tenant under this Section within [***] days after written request therefor, Tenant hereby constitutes and appoints Landlord or its special attorney-in-fact to execute and deliver any such document or documents in the name of Tenant. Such power is coupled with an interest and is irrevocable.

30.3 Landlord represents and warrants to Tenant that as of the Execution Date, there is no current mortgagee with respect to the Property. Tenant's obligation to subordinate and attorn to future Mortgagees is conditioned upon Landlord delivering to Tenant a commercially reasonable subordination, non-disturbance and attornment agreement ("SNDA"). If at any time after the date of this Lease Landlord should desire to place a Mortgage on the Building, Land or Project, Landlord agrees that it will use commercially reasonable efforts to cause the holder of such Mortgage to enter into a SNDA in connection with this Lease whereby such Mortgagee agrees that, so long as no Default shall have occurred and be continuing under this Lease, the leasehold estate granted to Tenant and the rights of Tenant pursuant to this Lease to quiet and peaceful possession of the Premises shall not be terminated, modified, affected or disturbed by any action which the Mortgagee may take to foreclose or terminate any such Mortgage, and that any successor landlord shall recognize this Lease as being in full force and effect.

30.4 In the event any proceedings are brought for foreclosure, or in the event of the exercise of the power of sale under any mortgage or deed of trust made by Landlord covering the Premises, Tenant shall at the election of the purchaser at

such foreclosure or sale attorn to the purchaser upon any such foreclosure or sale and recognize such purchaser as Landlord under this Lease.

31. Defaults and Remedies.

31.1 Late payment by Tenant to Landlord of Rent and other sums due shall cause Landlord to incur costs not contemplated by this Lease, the exact amount of which shall be extremely difficult and impracticable to ascertain. Such costs include processing and accounting charges and late charges that may be imposed on Landlord by the terms of any mortgage or trust deed covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within [***] days after the date such payment is due, Tenant shall pay to Landlord (a) an additional sum of [***] percent ([***]%) of the overdue Rent as a late charge plus (b) interest at an annual rate (the "Default Rate") equal to the lesser of (a) [***]percent ([***]%), and (b) the highest rate permitted by Applicable Laws. Tenant shall receive [***] notice of any late Rent in every [***] month period prior to the foregoing applies. The parties agree that this late charge represents a fair and reasonable estimate of the costs that Landlord shall incur by reason of late payment by Tenant and shall be payable as Additional Rent to Landlord due within [***] business days after Landlord's demand. Landlord's acceptance of any Additional Rent (including a late charge or any other amount hereunder) shall not be deemed an extension of the date that Rent is due or prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity.

31.2 No payment by Tenant or receipt by Landlord of a lesser amount than the Rent payment herein stipulated shall be deemed to be other than on account of the Rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy provided in this Lease or in equity or at law. If a dispute shall arise as to any amount or sum of money to be paid by Tenant to Landlord hereunder, Tenant shall have the right to make payment "under protest," such payment shall not be regarded as a voluntary payment, and there shall survive the right on the part of Tenant to institute suit for recovery of the payment paid under protest.

31.3 If Tenant fails to pay any sum of money required to be paid by it hereunder, or shall fail to perform any other act on its part to be performed hereunder, Landlord may, without waiving or releasing Tenant from any obligations of Tenant, but shall not be obligated to, make such payment or perform such act; provided that such failure by Tenant continues for [***] days after Landlord delivers notice to Tenant demanding performance by Tenant; or provided that such failure by Tenant unreasonably interfered with the use of the Building or the Project by any other tenant or with the efficient operation of the Building or the Project, or resulted or could have resulted in a violation of Applicable Laws or the cancellation of an insurance policy maintained by Landlord. Notwithstanding the foregoing, in the event of an emergency, Landlord shall have the right to enter the Premises and act in accordance with its rights as provided elsewhere in this Lease. In addition to the late charge described in Section 31.1, Tenant shall pay to Landlord as Additional Rent all sums so paid or incurred by Landlord, together with interest at the Default Rate, computed from the date such sums were paid or incurred.

31.4 The occurrence of any one or more of the following events shall constitute a "Default" hereunder by Tenant:

31.4.1. Tenant abandons or vacates the Premises and fails to provide for the on-going maintenance and repair of the Premises in accordance with Tenant's obligations pursuant to this Lease;

31.4.2. The failure by Tenant to make any payment of Rent, as and when due, or to satisfy its obligations under Article 19, where such failure shall continue for a period of five (5) days after written notice thereof from Landlord to Tenant;

31.4.3. The failure by Tenant to observe or perform any obligation or covenant contained herein (other than described in Subsections 31.4(a) and 31.4(b)) to be performed by Tenant, where such failure shall continue for a period often (10) business days after written notice thereof from Landlord to Tenant; provided that, if the nature of Tenant's default is such that it reasonably requires more than [***] business days to cure, Tenant shall not be deemed to be in Default if Tenant shall commence such cure within said [***] business day period and thereafter diligently prosecute the same to completion; and provided, further, that such cure is completed no later than [***] days from the date of Tenant's receipt of written notice from Landlord;

31.4.4. Tenant makes an assignment for the benefit of creditors;

31.4.5. A receiver, trustee or custodian is appointed to or does take title, possession or control of all or substantially all of Tenant's assets;

31.4.6. Tenant files a voluntary petition under the United States Bankruptcy Code or any successor statute (as the same may be amended from time to time, the "Bankruptcy Code") or an order for relief is entered against Tenant pursuant to a voluntary or involuntary proceeding commenced under any chapter of the Bankruptcy Code;

31.4.7. Any involuntary petition is filed against Tenant under any chapter of the Bankruptcy Code and is not dismissed within [***] days;

31.4.8. Tenant fails to deliver an estoppel certificate in accordance with Article 20; or

31.4.9. Tenant's interest in this Lease is attached, executed upon or otherwise judicially seized and such action is not released within [***] days of the action.

Notices given under this Section shall specify the alleged default and shall demand that Tenant perform the provisions of this Lease or pay the Rent that is in arrears, as the case may be, within the applicable period of time, or quit the Premises. No such notice shall be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice.

31.5 In the event of a Default by Tenant, and at any time thereafter, with or without notice or demand and without limiting Landlord in the exercise of any right or remedy that Landlord may have, Landlord shall be entitled to terminate Tenant's

right to possession of the Premises by written notice to Tenant or by any lawful means, in which case this Lease shall terminate and Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby. In the event that Landlord shall elect to so terminate this Lease, then Landlord shall be entitled to recover from Tenant all damages incurred by Landlord by reason of Tenant's default, including:

31.5.1. The worth at the time of award of any unpaid Rent that had accrued at the time of such termination; plus

31.5.2. The worth at the time of award of the amount by which the unpaid Rent that would have accrued during the period commencing with termination of the Lease and ending at the time of award exceeds that portion of the loss of Landlord's rental income from the Premises that Tenant proves to Landlord's reasonable satisfaction could have been reasonably avoided; plus

31.5.3. The worth at the time of award of the amount by which the unpaid Rent for the balance of the Term after the time of award exceeds that portion of the loss of Landlord's rental income from the Premises that Tenant proves to Landlord's reasonable satisfaction could have been reasonably avoided; plus

31.5.4. Any other amount necessary to compensate Landlord for all the detriment caused by Tenant's failure to perform its obligations under this Lease or that in the ordinary course of things would be likely to result therefrom, including the cost of restoring the Premises to the condition required under the terms of this Lease; plus

31.5.5. At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by Applicable Laws.

As used in Subsections 3l .5(a) and 31.5(b), "worth at the time of award" shall be computed by allowing interest at the Default Rate. As used in Subsection 31.5(c), the "worth at the time of the award" shall be computed by taking the present value of such amount, using the discount rate of the Federal Reserve Bank of San Francisco at the time of the award plus one (1) percentage point.

31.6 In addition to any other remedies available to Landlord at law or in equity and under this Lease, Landlord may continue this Lease in effect after Tenant's Default and abandonment and recover Rent as it becomes due. Landlord shall use reasonable efforts to relet the Premises, but shall not be liable in any way whatsoever for its failure to relet the Premises notwithstanding the exercise of such reasonable efforts. For purposes of this Section, the following acts by Landlord will not constitute the termination of Tenant's right to possession of the Premises:

31.6.1. Acts of maintenance or preservation or efforts to relet the Premises, including alterations, remodeling, redecorating, repairs, replacements or

painting as Landlord shall consider advisable for the purpose of reletting the Premises or any part thereof; or

31.6.2. The appointment of a receiver upon the initiative of Landlord to protect Landlord's interest under this Lease or in the Premises.

Notwithstanding the foregoing, in the event of a Default by Tenant, Landlord may elect at any time to terminate this Lease and to recover damages to which Landlord is entitled.

31.7 If Landlord does not elect to terminate this Lease as provided in Section 31.5, then Landlord may, from time to time, recover all Rent as it becomes due under this Lease. At any time thereafter, Landlord may elect to terminate this Lease and to recover damages to which Landlord is entitled.

31.8 In the event Landlord elects to terminate this Lease and relet the Premises, Landlord may execute any new lease in its own name. Tenant hereunder shall have no right or authority whatsoever to collect any Rent from such tenant. The proceeds of any such reletting shall be applied as follows:

31.8.1. First, to the payment of any indebtedness other than Rent due hereunder from Tenant to Landlord, including storage charges or brokerage commissions owing from Tenant to Landlord as the result of such reletting;

31.8.2. Second, to the payment of the costs and expenses of reletting the Premises, including (i) alterations and repairs that Landlord deems reasonably necessary and advisable and (ii) reasonable attorneys' fees, charges and disbursements incurred by Landlord in connection with the retaking of the Premises and such reletting;

31.8.3. Third, to the payment of Rent and other charges due and unpaid hereunder; and

31.8.4. Fourth, to the payment of future Rent and other damages payable by Tenant under this Lease.

31.9 All of Landlord's rights, options and remedies hereunder shall be construed and held to be nonexclusive and cumulative. Landlord shall have the right to pursue any one or all of such remedies, or any other remedy or relief that may be provided by Applicable Laws, whether or not stated in this Lease. No waiver of any default of Tenant hereunder shall be implied from any acceptance by Landlord of any Rent or other payments due hereunder or any omission by Landlord to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect defaults other than as specified in said waiver.

31.10 Landlord's termination of (a) this Lease or (b) Tenant's right to possession of the Premises shall not relieve Tenant of any liability to Landlord that has previously accrued or that shall arise based upon events that occurred prior to the later to occur of (i) the date of Lease termination or (ii) the date Tenant surrenders possession of the Premises.

31.11 To the extent permitted by Applicable Laws, Tenant waives any and all rights of redemption granted by or under any present or future Applicable Laws if Tenant

is evicted or dispossessed for any cause, or if Landlord obtains possession of the Premises due to Tenant's default hereunder or otherwise.

31.12 Landlord shall not be in default under this Lease unless Landlord fails to perform obligations required of Landlord within a reasonable time, but in no event shall such failure continue for more than [***] days after written notice from Tenant specifying the nature of Landlord's failure; provided, however, that if the nature of Landlord's obligation is such that more than [***] days are required for its performance, then Landlord shall not be in default if Landlord commences performance within such [***] day period and thereafter diligently prosecutes the same to completion. In no event shall Tenant have the right to terminate or cancel this Lease or to withhold or abate rent or to set off any Claims against Rent as a result of any default or breach by Landlord of any of its covenants, obligations, representations, warranties or promises herem1der, except as may otherwise be expressly set forth in this Lease.

31.13 In the event of any default by Landlord, Tenant shall give notice by registered or certified mail to any (a) beneficiary of a deed of trust or (b) mortgagee under a mortgage covering the Premises, the Building or the Project and to any landlord of any lease of land upon or within which the Premises, the Building or the Project is located, and shall offer such beneficiary, mortgagee or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Building or the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided that Landlord shall furnish to Tenant in writing, upon written request by Tenant, the names and addresses of all such persons who are to receive such notices.

31.14 So long as Tenant leases the entire Building, Tenant shall have the following remedies set forth in this Section 31.14. If Landlord fails to meet a material obligation of Landlord under this Lease, and (a) such failure relates to the repair of the Building or causes Tenant to be unable to use the Premises or a substantial part thereof, and (b) Landlord fails to commence a cure within [***] days after receipt of the second written notice (such second notice to be given at least [***] days after receipt of Tenant's first notice of such failure), then Tenant shall have the right to fulfill such obligation on behalf of Landlord, the cost of which shall be paid by Landlord promptly following demand therefor; provided, however, that Landlord's cure period shall be extended where the failure is not reasonably curable within [***] days after the second written notice and Landlord uses good faith efforts and works diligently and continuously to fulfill its obligations. Notwithstanding anything to the contrary in the previous sentence, in an emergency, Tenant shall have the right to fulfill Landlord's obligation on behalf of Landlord, after reasonable (in the circumstances) oral notice to Landlord, at Landlord's cost including interest thereon at the Default Rate if not reimbursed by Landlord within [***] days after written demand therefor by Tenant. In the event of an emergency requiring Tenant to exercise its self-help after oral notice, then Tenant shall provide Landlord with a follow-up written notice within [***] days after such emergency. As used in this Section 31.14, an "emergency" means an imminent threat of injury to person, damage to property or material interruption of Tenant's business operations. In the event Tenant exercises this right, then Tenant may set-off or abate the payment of Rent with any costs incurred by Tenant in connection with its exercise of this right, to the extent such costs do not constitute Operating Expenses.

32. Bankruptcy. In the event a debtor, trustee or debtor in possession under the Bankruptcy Code, or another person with similar rights, duties and powers under any other Applicable Laws, proposes to cure any default under this Lease or to assume or assign this Lease and is obliged to provide adequate assurance to Landlord that (a) a default shall be cured, (b) Landlord shall be compensated for its damages arising from any breach of this Lease and (c) future performance of Tenant's obligations wider this Lease shall occur, then such adequate assurances shall include any or all of the following, as designated by Landlord in its sole and absolute discretion:

32.1 Those acts specified in the Bankruptcy Code or other Applicable Laws as included within the meaning of "adequate assurance," even if this Lease does not concern a shopping center or other facility described in such Applicable Laws;

32.2 A prompt cash payment to compensate Landlord for any monetary defaults or actual damages arising directly from a breach of this Lease;

32.3 A cash deposit in an amount at least equal to the then-current amount of the Security Deposit; or

32.4 The assumption or assignment of all of Tenant's interest and obligations under this Lease.

33. Brokers.

33.1 Tenant represents and warrants. that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Lease other than Holliday Fenoglio Fowler, LP. ("Broker"), and that it knows of no other real estate broker or agent that is or might be entitled to a commission in connection with this Lease. Landlord shall compensate Broker in relation to this Lease pursuant to a separate agreement between Landlord and Broker.

33.2 Tenant represents and warrants that no broker or agent has made any representation or warranty relied upon by Tenant in Tenant's decision to enter into this Lease, other than as contained in this Lease.

33.3 Tenant acknowledges and agrees that the employment of brokers by Landlord is for the purpose of solicitation of offers of leases from prospective tenants and that no authority is granted to any broker to furnish any representation (written or oral) or warranty from Landlord unless expressly contained within this Lease. Landlord is executing this Lease in reliance upon Tenant's representations, warranties and agreements contained within Sections 33.1 and 33.2.

33.4 Tenant agrees to indemnify, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord) and hold the Landlord Indemnitees harmless from any and all cost or liability for compensation claimed by any broker or agent, other than Broker, employed or engaged by it or claiming to have been employed or engaged by it.

34. Definition of Landlord. With regard to obligations imposed upon Landlord pursuant to this Lease, the term "Landlord," as used in this Lease, shall refer only to Landlord or Landlord's then-current successor-in-interest. In the event of any transfer, assignment or conveyance of Landlord's interest in this Lease or in Landlord's fee title to or leasehold interest in the Property, as applicable, which Landlord may do without Tenant's consent, Landlord herein named (and in case of any subsequent transfers or conveyances, the

subsequent Landlord) shall be automatically freed and relieved, from and after the date of such transfer, assignment or conveyance, from all liability for the performance of any covenants or obligations contained in this Lease thereafter to be performed by Landlord and, without further agreement, the transferee, assignee or conveyee of Landlord's in this Lease or in Landlord's fee title to or leasehold interest in the Property, as applicable, shall be deemed to have assumed and agreed to observe and perform any and all covenants and obligations of Landlord hereunder during the tenure of its interest in the Lease or the Property. Landlord or any subsequent Landlord may transfer its interest in the Premises or this Lease without Tenant's consent but upon notice to Tenant.

35. Limitation of Landlord's Liability.

35.1 If Landlord is in default under this Lease and, as a consequence, Tenant recovers a monetary judgment against Landlord, the judgment shall be satisfied only out of (a) the proceeds of sale received on execution of the judgment and levy against the right, title and interest of Landlord in the Building and the Project, (b) rent, casualty proceeds, condemnation awards or other income from such real property receivable by Landlord or (c) the consideration received by Landlord from the sale, financing, refinancing or other disposition of all or any part of Landlord's right, title or interest in the Building or the Project.

35.2 Landlord shall not be personally liable for any deficiency under this Lease. If Landlord is a partnership or joint venture, then the partners of such partnership shall not be personally liable for Landlord's obligations under this Lease, and no partner of Landlord shall be sued or named as a party in any suit or action, and service of process shall not be made against any partner of Landlord except as may be necessary to secure jurisdiction of the partnership or joint venture. If Landlord is a corporation, then the shareholders, directors, officers, employees and agents of such corporation shall not be personally liable for Landlord's obligations under this Lease, and no shareholder, director, officer, employee or agent of Landlord shall be sued or named as a party in any suit or action, and service of process shall not be made against any shareholder, director, officer, employee or agent of Landlord. If Landlord is a limited liability company, then the members of such limited liability company shall not be personally liable for Landlord's obligations under this Lease, and no member of Landlord shall be sued or named as a party in any suit or action, and service of process shall not be made against any member of Landlord except as may be necessary to secure jurisdiction of the limited liability company. No partner, shareholder, director, employee, member or agent of Landlord shall be required to answer or otherwise plead to any service of process, and no judgment shall be taken or writ of execution levied against any partner, shareholder, director, employee, member or agent of Landlord.

35.3 Each of the covenants and agreements of this Article shall be applicable to any covenant or agreement either expressly contained in this Lease or imposed by Applicable Laws and shall survive the expiration or earlier termination of this Lease.

36. Joint and Several Obligations. If more than one person or entity executes this Lease as Tenant, then:

36.1 Each of them is jointly and severally liable for the keeping, observing and performing of all of the terms, covenants, conditions, provisions and agreements of this Lease to be kept, observed or performed by Tenant; and

36.2 The term "Tenant," as used in this Lease shall mean and include each of them, jointly and severally. The act of, notice from, notice to, refund to, or signature of any one or more of them with respect to the tenancy under this Lease, including any renewal, extension, expiration, termination or modification of this Lease, shall be binding upon each and all of the persons executing this Lease as Tenant with the same force and effect as if each and all of the parties had so acted, so given or received such notice or refund, or so signed.

37. Authority. Tenant guarantees, warrants and represents that (a) Tenant is duly incorporated or otherwise established or formed and validly existing under the laws of its state of incorporation, establishment or formation, (b) Tenant has and is duly qualified to do business in the state in which the Property is located, (c) Tenant has full corporate, partnership, trust, association or other appropriate power and authority to enter into this Lease and to perform all Tenant's obligations hereunder and (d) each person (and all of the persons if more than one signs) signing this Lease on behalf of Tenant is duly and validly authorized to do so. Landlord guarantees, warrants and represents that (w) Landlord is duly incorporated or otherwise established or formed and validly existing under the laws of its state of incorporation, establishment or formation, (x) Landlord has and is duly qualified to do business in the state in which the Property is located, (y) Landlord has full corporate, partnership, trust, association or other appropriate power and authority to enter into this Lease and to perform all Landlord's obligations hereunder and (z) each person (and all of the persons if more than one signs) signing this Lease on behalf of Landlord is duly and validly authorized to do so.

38. Confidentiality. Tenant shall keep the terms and conditions of this Lease and any non-public financial information or non-public information about Landlord's ownership structure provided to Tenant or its employees, agents or contractors pursuant to Article 9 confidential and shall not (a) disclose to any third party any terms or conditions of this Lease or any other Lease-related document (including subleases, assignments, work letters, construction contracts, letters of credit, subordination agreements, non-disturbance agreements, brokerage agreements or estoppels) or (b) provide to any third party an original or copy of this Lease (or any Lease-related document). Landlord shall not release to any third party any non-public financial information or non-public information about Tenant's ownership structure that Tenant gives Landlord. Notwithstanding the foregoing, confidential information under this Section may be released by Landlord or Tenant under the following circumstances: (x) if required by Applicable Laws or in any judicial proceeding; provided that the releasing party has given the other party reasonable notice of such requirement, if feasible, (y) to a party's attorneys, accountants, brokers and other bona fide consultants or advisers (with respect to this Lease only); provided such third parties agree to be bound by this Section or (z) to bona fide prospective assignees or subtenants of this Lease; provided they agree in writing to be bound by this Section.

39. Notices. Any notice, consent, demand, bill, statement or other communication required or permitted to be given hereunder shall be in writing and shall be given by personal delivery, overnight delivery with a reputable nationwide overnight delivery service, or certified mail (return receipt requested), and if given by personal delivery, shall be deemed delivered upon receipt; if given by overnight delivery, shall be deemed delivered [***] after deposit with a reputable nationwide overnight delivery service; and, if given by certified mail (return receipt requested), shall be deemed delivered [***] after the time the notifying party deposits the notice with the United States Postal Service. Any notices given pursuant to this Lease shall be addressed to Landlord or Tenant at the addresses shown in Sections 2.9 and 2.10, respectively. Either party may, by notice to the other

given pursuant to this Section, specify additional or different addresses for notice purposes.

40. Rooftop Installation Area.

40.1 Landlord hereby approves any existing equipment on the rooftop of the Building which serves the Premises. In addition, Tenant may use those portions of the Building identified as a "Rooftop Installation Area" on Exhibit A attached hereto (the "Rooftop Installation Area") solely to operate, maintain, repair and replace rooftop antennae, mechanical equipment, communications antennas and other equipment installed by Tenant in the Rooftop Installation Area in accordance with this Article ("Tenant's Rooftop Equipment"). Tenant's Rooftop Equipment shall be only for Tenant's (or its subtenant's or assignee's) use of the Premises for the Permitted Use.

40.2 Tenant shall install Tenant's Rooftop Equipment at its sole cost and expense, at such times and in such manner as Landlord may reasonably designate, and in accordance with this Article and the applicable provisions of this Lease regarding Alterations. Tenant's Rooftop Equipment and the installation thereof shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. Among other reasons, Landlord may withhold approval if the installation or operation of Tenant's Rooftop Equipment could reasonably be expected to damage the structural integrity of the Building or to transmit vibrations or noise or cause other adverse effects beyond the Premises to an extent not customary in Comparable. Buildings, unless Tenant implements measures that are acceptable to Landlord in its reasonable discretion to avoid any such damage or transmission.

40.3 Tenant shall comply with any roof or roof-related warranties. Tenant shall obtain a letter from Landlord's roofing contractor within [***] days after completion of any Tenant work on the rooftop stating that such work did not affect any such warranties. Tenant, at its sole cost and expense, shall inspect the Rooftop Installation Area at least annually, and correct any loose bolts, fittings or other appurtenances and repair any damage to the roof caused by the installation or operation of Tenant's Rooftop Equipment. Tenant shall not permit the installation, maintenance or operation of Tenant's Rooftop Equipment to violate any Applicable Laws or constitute a nuisance. Tenant shall pay Landlord within [***] days after demand (a) all applicable taxes, charges, fees or impositions imposed on Landlord by Governmental Authorities as the result of Tenant's use of the Rooftop Installation Areas in excess of those for which Landlord would otherwise be responsible for the use or installation of Tenant's Rooftop Equipment and (b) the amount of any increase in Landlord's insurance premiums as a result of the installation of Tenant's Rooftop Equipment. Upon Tenant's written request to Landlord, Landlord shall use commercially reasonable efforts to cause other tenants to remedy any interference in the operation of Tenant's Rooftop Equipment caused by any such tenants' equipment installed after the applicable piece of Tenant's Rooftop Equipment; provided, however, that Landlord shall not be required to request that such tenants waive their rights under their respective leases.

40.4 If Tenant's Equipment (a) causes physical damage to the structural integrity of the Building, (b) interferes with any telecommunications, mechanical or other systems located at or near or servicing the Building or the Project that were installed prior to the installation of Tenant's Rooftop Equipment, (c) interferes

with any other service provided to other tenants in the Building or the Project by rooftop or penthouse installations that were installed prior to the installation of Tenant's Rooftop Equipment or (d) interferes with any other tenants' business, in each case in excess of that permissible under Federal Communications Commission regulations, then Tenant shall cooperate with Landlord to determine the source of the damage or interference and promptly repair such damage and eliminate such interference, in each case at Tenant's sole cost and expense, within [***] days after receipt of notice of such damage or interference (which notice may be oral: provided that Landlord also delivers to Tenant written notice of such damage or interference within [***] hours after providing oral notice).

40.5 Landlord reserves the right to cause Tenant to relocate Tenant's Rooftop Equipment to comparably functional space on the roof or in the penthouse of the Building by giving Tenant prior written notice thereof. Landlord agrees to pay the reasonable costs thereof. Tenant shall arrange for the relocation of Tenant's Rooftop Equipment within [***] days after receipt of Landlord's notification of such relocation. In the event Tenant fails to arrange for relocation within such [***] period, Landlord shall have the right to arrange for the relocation of Tenant's Rooftop Equipment in a manner that does not unnecessarily interrupt or interfere with Tenant's use of the Premises for the Permitted Use.

41. Miscellaneous.

41.1 So long as Tenant leases the entire Building, Landlord shall not have the right to change the name of the Building without the prior written consent of Tenant, which consent may be withheld by Tenant in its sole and absolute discretion.

41.2 Landlord hereby approves the location, design, and operation of any and all generators, storage tanks and other specialized equipment or systems located on the land, on the exterior of the Building, on the roof or in adjacent parking structures. Tenant shall maintain, operate as currently operated and replace from time to time the two generators currently located on the Lower Campus. In addition, Tenant shall have the right to move such generators from the Lower Campus to the Land and Tenant shall have the right to place new generators on the Land during the Term, subject to Landlord's prior written consent, which consent shall not be unreasonable withheld, conditioned or delayed.

41.3 To induce Landlord to enter into this Lease, Tenant agrees that it shall promptly furnish to Landlord, from time to time, upon Landlord's written request, the most recent audited year-end financial statements reflecting Tenant's current financial condition. Tenant shall, within [***] days after the end of Tenant's financial year, furnish Landlord with a draft of Tenant's audited year-end financial statements for the previous year and shall, within [***] days after the end of Tenant's financial year, furnish Landlord with a certified copy of Tenant's audited year-end financial statements for the previous year. Tenant represents and warrants that all financial statements, records and information furnished by Tenant to Landlord in connection with this Lease are true, correct and complete in all material respects. If audited financials are not otherwise prepared, unaudited financials certified by the chief financial officer of Tenant as true, correct and complete in all material respects shall suffice for purposes of this Section.

41.4 Where applicable in this Lease, the singular includes the plural and the masculine or neuter includes the masculine, feminine and neuter. The words "include," "includes," "included" and "including" shall mean "'include,' etc., without

limitation." The section headings of this Lease are not a part of this Lease and shall have no effect upon the construction or interpretation of any part hereof.

41.5 If either party commences an action against the other party arising out of or in connection with this Lease, then the substantially prevailing party shall be reimbursed by the other party for all reasonable costs and expenses, including reasonable attorneys' fees and expenses, incurred by the substantially prevailing party in such action or proceeding and in any appeal in connection therewith.

41.6 Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease or otherwise until execution by and delivery to both Landlord and Tenant.

41.7 Time is of the essence with respect to the performance of every provision of this Lease in which time of performance is a factor.

41.8 Each provision of this Lease performable by Tenant shall be deemed both a covenant and a condition.

41.9 Whenever consent or approval of either party is required, that party shall not unreasonably withhold, condition or delay such consent or approval, except as may be expressly set forth to the contrary.

41.10 The terms of this Lease are intended by the parties as a final expression of their agreement with respect to the terms as are included herein, and may not be contradicted by evidence of any prior or contemporaneous agreement.

41.11 Any provision of this Lease that shall prove to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision hereof, and all other provisions of this Lease shall remain in full force and effect and shall be interpreted as if the invalid, void or illegal provision did not exist.

41.12 Landlord or Tenant may, but shall not be obligated to, record a short form or memorandum hereof without the other party's consent but such other party shall execute such short form or memorandum if requested to do so. Upon either party's request, Landlord and Tenant shall execute, deliver and record such short form or memorandum in such form as mutually agreed to by the parties, along with an instrument signed by Tenant acknowledging the termination of this Lease to be held by Landlord until such termination actually occurs. Landlord shall not record the instrument acknowledging the termination of this Lease until the expiration or earlier termination of this Lease. Neither party shall record this Lease. The party asking to record such short form or memorandum shall be responsible for the cost of recording the same, including any transfer or other taxes incurred in connection with said recordation.

41.13 The language in all parts of this Lease shall be in all cases construed as a whole according to its fair meaning and not strictly for or against either Landlord or Tenant.

41.14 Each of the covenants, conditions and agreements herein contained shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs; legatees; devisees; executors; administrators; and permitted successors, assigns, sublessees. Nothing in this Section shall in any way alter the provisions of this Lease restricting assignment or subletting.

41.15 This Lease shall be governed by, construed and enforced in accordance with the laws of the state in which the Premises are located, without regard to such state's conflict of law principles.

41.16 Tenant guarantees, warrants and represents that the individual or individuals signing this Lease on its behalf have the power, authority and legal capacity to sign this Lease on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf said individual or individuals have signed. Landlord guarantees, warrants and represents that the individual or individuals signing this Lease on its behalf have the power, authority and legal capacity to sign this Lease on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf said individual or individuals have signed.

41.17 This Lease may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.

41.18 No provision of this Lease may be modified, amended or supplemented except by an agreement in writing signed by Landlord and Tenant. The waiver by Landlord or Tenant of any breach by Tenant or Landlord of any term, covenant or condition herein contained shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant or condition herein contained.

41.19 To the extent permitted by Applicable Laws, the parties waive t1ial by jury in any action, proceeding or counterclaim brought by the other party hereto related to matters arising out of or in any way connected with this Lease; the relationship between Landlord and Tenant; Tenant's use or occupancy of the Premises; or any claim of injury or damage related to this Lease or the Premises.

41.20 As between Landlord and Tenant, Tenant shall have the exclusive right to its name: the J. Craig Venter Institute, Inc.

42. Options to Extend Term. Tenant shall have two options (each, an "Option") to extend the Term, in each case by an additional [***] year period (i.e., for a total, if both such options are exercised as provided herein, of [***] successive years beyond the original [***] year Term) as to the entire Premises and no less than the entire Premises (each [***] year period being referred to herein as an "Extension Term") upon the following terms and conditions. All provisions of this Lease shall be applicable during each such Extension Term except that: (i) Tenant shall have no option to extend the Term of this Lease beyond the second Extension Term; (ii) the Base Rent for each Extension Term shall be determined in accordance with this Section 42); and (iii) as otherwise provided in this Section 42.

42.1 On the first (1st) day of each Extension Term, Base Rent shall be equal to [***]%) of the Fair Market Rent (as defined below) of the Premises, as determined in accordance with Sections 42.7 through 42.10, inclusive, below, provided in no event shall the Base Rent be less than the Base Rent in effect immediately prior to such date, and shall thereafter be adjusted on each annual anniversary date thereof in accordance with Article 8.

42.2 No Option is assignable separate and apart from this Lease.

42.3 Bach Option is conditional upon Tenant giving Landlord written notice of its election to exercise such Option at least [***] months prior to the end of the expiration of the then-current Term. Time shall be of the essence as to Tenant's exercise of an Option. Tenant assumes full responsibility for maintaining a record of the deadlines to exercise an Option. Tenant acknowledges that it would be inequitable to require Landlord to accept any exercise of an Option after the date provided for in this Section.

42.4 Notwithstanding anything contained in this Article to the contrary, Tenant shall not have the right to exercise an Option or to commence an Extension Term unless Tenant is not then in Default.

42.5 The period of time within which Tenant may exercise an Option shall not be extended or enlarged by reason of Tenant's inability to exercise such Option because of the provisions of Section 42.4.

42.6 Landlord may reject either or both of Tenant's Options hereunder if; within the twenty four (24) months immediately preceding the date that a notice of Option is due, Tenant has Defaulted under this Lease three (3) or more times, whether or not Tenant has cured such Defaults.

42.7 Subject to the provisions of Section 42.9 and 42.10 below, in order to determine the Fair Market Rent for purposes of calculating the Base Rent for an Extension Term, Tenant and Landlord shall each deliver to the other their respective determinations of the Fair Market Rent (hereinafter respectively referred to as the "Landlord's Determination" and "Tenant's Determination") no later than the date that is [***] days prior to the scheduled commencement date of the applicable Extension Term. If Tenant's Determination is lower than Landlord's Determination, then Landlord and Tenant shall attempt in good faith to agree upon the Fair Market Rent for a period of [***] days after the date on which both the Landlord's Determination and the Tenant's Determination have been duly delivered (the "Determination Delivery Date"). If Tenant's Determination is higher than Landlord's Determination, then the Fair Market Rent for the Premises shall be the Landlord's Determination. If Landlord and Tenant do not agree on the Fair Market Rent for the Premises within [***] days after the Determination Delivery Date, then Tenant shall have the tight to rescind the exercise of the Option by written notice to Landlord on or before the date that is [***] Business Days following the expiration of such [***] day period. In the event Tenant does not deliver a rescission notice to Landlord, Landlord and Tenant shall jointly select an independent real estate appraiser that (a) neither Landlord nor Tenant, nor any of their respective affiliates, has engaged during the immediately preceding period of [***] years; and (b) has at least ten (10) years of experience in leasing first-class office properties located in the Rockville, Maryland area (such appraiser being referred to herein as the "Appraiser"). Landlord and Tenant shall each pay [***] percent ([***]%) of the Appraiser's fee. If Landlord and Tenant do not agree on the Appraiser within [***] days after the last day of such period of [***] days, then the parties shall request that the American Arbitration Association select the Appraiser.

42.8 The parties shall instruct the Appraiser to (a) conduct the hearings and investigations that he or she deems appropriate, and (b) choose either Landlord's Determination or Tenant's Determination as the better estimate of Fair Market Rent for the Premises, within [***] days after the date that the Appraiser is designated. The Appraiser's aforesaid choice shall be conclusive and binding

upon Landlord and Tenant. Each party shall pay its own counsel fees and expenses, if any, in connection with the procedure described in this Section 42.8. The Appraiser shall not have the power to supplement or modify any of the provisions of this Lease:

42.9 For purposes of calculating the Fair Market Rent, the following presumptions shall apply: the Premises is free and clear of all leases and tenancies (including this Lease), the Premises is available for the purposes permitted by this Lease in the then rental market, that Landlord has had a reasonable time to locate a tenant, and that neither Landlord nor the prospective tenant is under any compulsion to rent, and taking into account all relevant factors.

42.10 For purposes of this Lease, "Fair Market Rent'' for the Premises shall be based on a [***] year extension term and shall be equal to the monthly base rental rate (on a per square foot of rentable area basis) agreed to by willing sophisticated tenants and willing sophisticated landlords in leasing transactions (the "Comparable Transactions"), as of a particular time, in arms-length transactions for non-sublease, non-encumbered, non equity, non-expansion, non-renewal space comparable in size, location, height and quality to the Premises, with a commencement date not more than [***] months prior to the commencement date of the extension term, or if there are no Comparable Transactions, in other first-class combined office/laboratory facilities containing located in the Rockville, Maryland area, with appropriate adjustments to account for differences in the Adjustment Factors (as defined below) and all other factors reasonably relevant to a fair market rent determination. In any determination of Fair Market Rent, appropriate consideration should be given to any reasonably relevant factor (or difference in the subject transaction or Comparable Transactions used for purposes of comparison), including without limitation, the following factors (the "Adjustment Factors"): (a) monthly base rental rates per rentable square foot; (b) abatement provisions reflecting free rent or early occupancy during the lease term; (c) the size, location and floor height of the premises being leased; (d) the condition and market value of the existing tenant improvements, if any (from a general marketing perspective and without regard to their value, usability or function to Tenant or to any tenant in any Comparable Transaction), and the existence and amount of any tenant improvement or comparable allowance; (e) the existence and amount of any other cash payment or other equivalent concession, including, without limitation, moving allowances, lease takeover allowances (or where a lease assumption is applicable, the value thereof), and any comparable tenant inducement; (f) the existence of favorable expansion and/or extension options, and the value thereof; (g) any special parking rights, rates or concessions; (h) whether the lease transaction in question grants to the tenant any protection from increases in real property taxes and/or operating expenses, and if so, the amount,. value or cost associated therewith; and (i) the credit standing of the tenant in question and/or the amount of letters of credit, cash security deposits, and/or other credit enhancements required to be made available by the tenant in question.

43. Tenant's Maintenance of Building; Turnover Election. Tenant shall have the right, no more than once during the Term of this Lease, to elect to turnover Tenant's obligations pursuant to Section 43.1(a) through (c), inclusive, to Landlord (the "Turnover"), by delivery of written notice to Landlord, together with copies of all Service Contracts, warranties and any other documentation related to the maintenance of the Building then in effect and in the possession or control of Tenant (the ''Turnover Notice"), subject to and in accordance with the following provisions:

43.1 Notwithstanding any provision to the contrary in this Lease, as of the Term Commencement Date and continuing until the earlier to occur of (a) the expiration of the Term or (b) the Turnover Date, the following provisions shall apply:

43.1.1. Tenant shall repair, replace and maintain in accordance with standards for comparable first-class buildings in the Rockville, Maryland area and in accordance with all Applicable Laws the Building, including the Building System Improvements (except for the Structural Building Improvements capital repairs or replacements of the Building System Improvements, which both shall remain the responsibility of Landlord throughout the Term).

43.1.2. Tenant shall make all arrangements for and pay for all utilities, including water, electricity, air, sewer, refuse, gas, heat, light, power, telephone service and any other service or utility Tenant required at the Premises.

43.1.3. Tenant shall, at Tenant's sole cost and expense, procure and maintain (i) contracts, with copies furnished promptly to Landlord after execution thereof, in customary form and substance for, and with contractors specializing and experienced in, the maintenance and repair of the Building System Improvements including, without limitation, the (a) HVAC equipment, (b) boilers and pressure vessels, (c) fire and life safety systems, including fire alarm and smoke detection devices, (d) roof coverings and drains, (e) clarifiers, and (f) basic utility feeds to the perimeter of the Building (collectively, the "Service Contracts") and (ii) warranties for any Building improvements.

43.1.4. Landlord shall not be required to provide the following services to the Building: cleaning and trash removal; hot and cold water; gas; heat, ventilation and air conditioning; light; telephone; fire and life safety; electricity; sewer; other utilities; security system services or elevator service.

43.1.5. Landlord shall, at all times regardless of whether or not the Turnover has occurred, have the right to inspect the Premises in accordance with the provisions of Section 14.4.

43.1.6. In addition to all of Landlord's remedies under this Lease, if (a) Tenant does not maintain the Building as required under this Lease or (b) repairs or replacement of any portion of the Building or the Project is made necessary by any act, omission or negligence of Tenant or its agents, employees or invitees, then Landlord may make such repairs or provide such maintenance without liability to Tenant for any loss or damage to Tenant or its merchandise, fixtures or other property, or to Tenant's business by reason of such repairs or maintenance (except to the extent such loss or damage is caused by the gross negligence or willful misconduct of Landlord, its agents, employees or contractors) provided that such failure by Tenant continues for three (3) business days after Landlord delivers notice to Tenant demanding performance by Tenant; or that such failure by Tenant unreasonably interfered with the use of the Buildings by any other tenant or with the efficient operation of the Project, or resulted or could have resulted in a violation of Applicable Laws or the cancellation of an insurance policy maintained by Landlord, or cancellation of any warranty on the Building. Further, upon completion of

any such repairs or maintenance and provided advance written notice has been given to Tenant by Landlord, Tenant shall pay upon demand, as Additional Rent, Landlord's costs for making such repairs or providing such maintenance, together with interest thereon, from the date that such sums were paid or incurred, at the Default Rate or the highest rate permitted by Applicable Laws, whichever is less.

43.2 Subject to the provisions of Section 43.1, on the date that is [***] days following Landlord's receipt of Tenant's Turnover Notice (the "Turnover Date"), Landlord shall be obligated to maintain and repair the Building System Improvements and to provide the utilities and services set forth in Sections 16.1, 16.7 and 16.9, subject to and in accordance with the provisions of such Sections. Within thirty (30) calendar days following Landlord's receipt of Tenant's Turnover Notice Landlord shall provide Tenant with written notice of those Service Contracts that Landlord has agreed to assume as of the Turnover Date (collectively, the "Assumed Service Contracts") and Tenant shall be obligated to terminate all of the Service Contracts other than the Assumed Service Contracts and shall be solely responsible for all termination fees and penalties associated with such termination(s). Within [***] days after the Turnover Date, Landlord and Tenant shall execute an amendment to this Lease acknowledge the terms of the Turnover Prior to the Turnover Date; Tenant shall deliver an assignment of the Service Contracts, duly executed by Tenant; assigning all of Tenant's right, title and interest in and to the Assumed Service Contracts, and Landlord shall accept such assignment and assume all obligations under such Assumed Service Contracts for the period commencing on the Turnover Date.

43.3 For purposes of clarification, Landlord and Tenant's maintenance and service obligations, prior to and following a Turnover, are further detailed on Exhibit J attached hereto and incorporated herein by reference.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the date first above written.

LANDLORD:

BMR-MEDICAL CENTER DRIVE LLC,
a Delaware limited liability company

By: _____

Name: _____

Title: _____

TENANT:

J. CRAIG VENTER INSTITUTE, INC.,
successor in interest to The Institute
for Genomic Research, Inc.,
a Maryland non-stock corporation

By: /s/ J. Craig Venter

Name: J. Craig Venter

Title: President

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the date first above written.

LANDLORD:

BMR-MEDICAL CENTER DRIVE LLC,
a Delaware limited liability company

By: /s/ Kevin M. Simonsen

Name: Kevin M. Simonsen

Title: VP, Real Estate Counsel

TENANT:

J. CRAIG VENTER INSTITUTE, INC.,
successor in interest to The Institute
for Genomic Research, Inc.,
a Maryland non-stock corporation

By: _____

Name: _____

Title: _____

CERTAIN PORTIONS OF THIS EXHIBIT (INDICATED BY [***]) HAVE BEEN EXCLUDED PURSUANT TO ITEM 601(B)(10) OF REGULATION S-K BECAUSE THEY ARE BOTH NOT MATERIAL AND ARE THE TYPE THAT THE COMPANY TREATS AS PRIVATE AND CONFIDENTIAL.

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "Amendment") is entered into as of this [***]day of [***] March, 2014, by and between BMR-MEDICAL CENTER DRIVE LLC, a Delaware limited liability company ("Landlord"), and J. CRAIG VENTER INSTITUTE, INC., successor in interest to The Institute for Genomic Research, Inc., a Maryland non-stock corporation ("Tenant").

RECITALS

A. WHEREAS, Landlord and Tenant entered into that certain Lease dated as of May 3, 2010 (as the same may have been amended, supplemented or modified from time to time, the "Existing Lease"), whereby Tenant leases certain premises (the "Premises") from Landlord at 9704 Medical Center Drive in Rockville, Maryland (the "Building");

B. WHEREAS, Landlord and Tenant desire to revise Base Rent for the Premises; and

C. WHEREAS, Landlord and Tenant desire to modify and amend the Existing Lease only in the respects and on the conditions hereinafter stated.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Definitions. For purposes of this Amendment, capitalized terms shall have the meanings ascribed to them in the Existing Lease unless otherwise defined herein. The Existing Lease, as amended by this Amendment, is referred to collectively herein as the "Lease."

2. Base Rent. Effective as of [***] (the "Rent Adjustment Date"), initial monthly and annual installments of Base Rent for the Premises shall be as set forth in the chart below, subject to adjustment under the Lease:

Dates	Square Feet of Rentable Area	Base Rent Per Square Foot of Rentable Area	Monthly Base Rent	Annual Base Rent
[***]	[***]	[***]	[***]	[***]

3. Rent Adjustments. Effective as of the Rent Adjustment Date, Article 8 of the Existing Lease is hereby deleted in its entirety and replaced with the following:

”8. Rent Adjustments. Base Rent shall be subject to an annual upward adjustment of [***] percent ([***]%) of the then-current Base Rent. The first such adjustment shall become effective commencing on the first (1st) annual anniversary of the Rent Adjustment Date, and subsequent adjustments shall become effective on every successive annual anniversary for so long as this Lease continues in effect.”

4. Broker. Tenant represents and warrants that it has not dealt with any broker or agent in the negotiation for or the obtaining of this Amendment and agrees to reimburse, indemnify, save, defend (at Landlord’s option and with counsel reasonably acceptable to Landlord, as Broker’s sole cost and expense) and hold harmless the Landlord Indemnitees for, from and against any and all cost or liability for compensation claimed by any such broker or agent employed or engaged by it or claiming to have been employed or engaged by it.

5. Additional Definitions. “Landlord Indemnitees,” as used in the Lease, means, collectively, Landlord and its affiliates, employees, agents, contractors and Lenders. “Lender,” as used in the Lease, means any lender, mortgagee or beneficiary.

6. No Default. Tenant represents, warrants and covenants that, to the best of Tenant’s knowledge, Landlord and Tenant are not in default of any of their respective obligations under the Lease and no event has occurred that, with the passage of time or the giving of notice (or both) would constitute a default by either Landlord or Tenant thereunder.

7. Notices. Tenant confirms that, notwithstanding anything in the Lease to the contrary, notices delivered to Tenant pursuant to the Lease should be sent to:

J. Craig Center Institute, Inc.
9704 Medical Center Drive
Rockville, Maryland 20859
Attn: Vice President, General Counsel;

with a copy to:

Arnold & Porter LLP
555 12th Street, NW
Washington, DC 20004
Attn: Kenneth Schwartz.

8. Effect of Amendment. Except as modified by this Amendment, the Existing Lease and all the covenants, agreements, terms, provisions and conditions thereof shall remain in full force and effect and are hereby ratified and affirmed. In the event of any conflict between the terms contained in this Amendment and the Existing Lease, the terms herein contained shall supersede and control the obligations and liabilities of the parties. From and after the dat hereof, the term “Lease” as used in the Lease shall mean the Existing Lease, as modified by this Amendment.

9. Successors and Assigns. Each of the covenants, conditions and agreements contained in this Amendment shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns and sublessees. Nothing in this section shall in any way alter the provisions of the Lease restricting assignment or subletting.

10. Miscellaneous. This Amendment becomes effective only upon execution and delivery hereof by Landlord and Tenant. The captions of the paragraphs and subparagraphs in this Amendment are inserted and included solely for convenience and shall not be considered or given any effect in construing the provisions hereof. All exhibits hereto are incorporated herein by reference. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease, lease amendment or otherwise until execution by and delivery to both Landlord and Tenant.

11. Authority. Tenant guarantees, warrants and represents that the individual or individuals signing this Amendment have the power, authority and legal capacity to sign this Amendment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

12. Counterparts; Facsimile and PDF Signatures. This Amendment may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document. A facsimile or portable document format (PDF) signature on this Amendment shall be equivalent to, and have the same force and effect as, an original signature.

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IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment as of the date and year first above written.

LANDLORD:

BMR-MEDICAL CENTER DRIVE LLC,
a Delaware limited liability company

By: */s/ Jonathan P. Klassen*
Name: Jonathan P. Klassen
Title: Senior Vice President

TENANT:

J. CRAIG VENTER INSTITUTE, INC.,
successor in interest to The Institute for Genomic Research, Inc.,
a Maryland non-stock corporation

By: */s/ Robert J. Walden*
Name: Robert J. Walden
Title: Vice President Finance

CERTAIN PORTIONS OF THIS EXHIBIT (INDICATED BY [***]) HAVE BEEN EXCLUDED PURSUANT TO ITEM 601(B)(10) OF REGULATION S-K BECAUSE THEY ARE BOTH NOT MATERIAL AND ARE THE TYPE THAT THE COMPANY TREATS AS PRIVATE AND CONFIDENTIAL.

SECOND AMENDMENT TO LEASE

THIS SECOND AMENDMENT TO LEASE (this "Second Amendment") is entered into as of this [***] day of [***], [***] (the "Execution Date"), by and between BMR-MEDICAL CENTER DRIVE LLC, a Delaware limited liability company ("Landlord"), and MACROGENICS, INC., a Delaware corporation ("Tenant").

RECITALS

A. WHEREAS, pursuant to that certain Assignment and Assumption Agreement dated as of [***] (the "Assignment Agreement") between J. Craig Venter Institute, Inc. ("JCVI"), as assignor, and Tenant, as assignee, and that certain Landlord Consent attached to the Assignment Agreement and executed by Landlord ("Landlord Consent"), as of the Effective Date (as defined below), Landlord and Tenant are parties to that certain Lease dated as of [***] (as amended by that certain First Amendment to Lease dated as of [***], the "Existing Lease"), whereby Tenant leases certain premises (the "Premises" from Landlord at 9704 Medical Center Drive in Rockville, Maryland (the "Building");

B. WHEREAS, effective as of the Effective Date, Landlord and Tenant desire to revise the Base Rent for the Premises, extend the Term of the Existing Lease and modify certain other provisions of the existing Lease on the terms and conditions set forth in this Second Amendment; and

C. WHEREAS, effective as of the Effective Date, Landlord and Tenant desire to modify and amend the Existing Lease only in the respects and on the conditions hereinafter stated.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Effective Date. This Second Amendment shall be effective concurrently with the effectiveness of the assignment of JCVI's interest in, to and under the Existing Lease to Tenant pursuant to the Assignment Agreement. The "Effective Date" for purposes of this Second Amendment shall mean the "Assignment Date" as such term is defined in the Assignment Agreement [***] Landlord and Tenant shall execute and deliver the Acknowledgment of Second Amendment Effective Date in substantially the form attached as Exhibit A to this Second Amendment.

2. Definitions. For purposes of this Second Amendment, capitalized terms shall have the meanings ascribed to them in the Existing Lease unless otherwise defined herein. The Existing Lease, as amended by this Second Amendment, is referred to collectively herein as the "Lease." From and after the date hereof, the term "Lease," as used in the Existing Lease, shall mean the Existing Lease, as amended by this Second Amendment. To the extent terms are defined in both the Existing Lease and the Second Amendment, the defined terms in this Second Amendment shall control for the entire Lease, as amended.

3. Revised Term. Landlord and Tenant have agreed to extend the Term of the Existing Lease and to modify certain terms and provisions of the Existing Lease in connection therewith on the terms and conditions set forth in this Second Amendment. Notwithstanding any provision in the Existing Lease to the contrary, the Term shall be extended [***] and shall be subject to further extension pursuant to Section 14 of this Second Amendment. The "Revised Term Commencement Date" shall be the later of (a) [***] and (b) the day Landlord tenders possession of the Premises to Tenant. The "Term" in the Lease and the "Revised Term" in this Second Amendment shall mean and refer to the period of time commencing on the Revised Term Commencement Date and continuing through the Term Expiration Date, as extended by this Second Amendment, and as the same may be extended pursuant to Section 14 of this Second Amendment, and subject to the earlier termination of the Lease as therein provided. Landlord and Tenant shall execute and deliver to the other written acknowledgment of the actual Revised Term Commencement Date and the Term Expiration Date [***] in the form provided by Landlord, which form shall be consistent with the form attached as Exhibit B to this Second Amendment. Notwithstanding anything to the contrary contained in this Second Amendment, in the event that (i) the Effective Date does not occur or (ii) Landlord fails to deliver the Premises to Tenant [***] for any reason, except for any delay caused by Tenant or an event of Force Majeure (however, Force Majeure shall not include holdover in the Premises by JCVI), then Tenant shall receive either (y) a day-for-day abatement [***] of the initial Monthly Base Rent [***] if such failure to deliver is due to holdover in the Premises by JCVI or (z) a day-for-day abatement of one hundred percent 100% of the amount of the initial Monthly Base Rent [***] if such failure to deliver the Premises is not due to holdover in the Premises by JCVI, in each case for each day after [***] that the Effective Date does not occur or Landlord fails to deliver possession of the Premises to Tenant, which abatement shall be applied against the first and subsequent accruing Monthly Base Rent due for the Premises following the Revised Term Commencement Date until exhausted. To the extent not delivered by JCVI directly to Tenant pursuant to the Assignment Agreement, Landlord shall deliver all keys, security codes and electronic access cards to the Premises and all offices and restrooms therein received by Landlord from JCVI.

4. Revised Term: Amended Lease Provisions. Effective as of the Effective Date, the Existing Lease shall be amended as follows:

a. Deleted Provisions. Effective as of the Effective Date, Articles 5, 8, 42, 43, Sections 9.9, 12.10, 14.2, 16.1 (except that Landlord shall remain responsible for the external cleaning of the Building and snow removal obligations set forth in Section 16.1 of the Existing Lease), 16.6, 16.8, 17.2, 18.1(c), 29.2, 33, 41/ and 41.20 and Exhibits C and J of the Existing Lease are hereby deleted in their entirety and replaced with the following: "Intentionally Omitted". In addition to the foregoing, all references to the "Turnover" in the Existing Lease, the words "So long as Tenant has not assigned the Lease" in Section 9.8, the first sentence of Section 17.4, the second sentence of Section 17.5 are hereby deleted in their entirety. The following is hereby added to the end of the first sentence of Section 12.5: "without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed." The following is hereby added to the end of the second sentence of Section 12.5: "which consent shall not be unreasonably withheld, conditioned or delayed." Exhibit H is hereby replaced with Exhibit H attached hereto. Notwithstanding the foregoing, Tenant may submit an updated Exhibit H to the Lease pursuant to the terms and conditions set forth in Section 17.6 of the Existing Lease, and, for clarity, bioreactors, centrifuges, media and buffer preparation tanks, manufacturing skids (such as for depth filtration, ultrafiltration and clean-in-place processes) and similar types of equipment used for biologics manufacturing in the Premises that are purchased by Tenant will be deemed to be "equipment" owned by Tenant and not "fixtures" regardless of whether such equipment is physically anchored to the Building.

b. Revised Term Base Rent. From and after the Revised Term Commencement Date, the monthly and annual installments of Base Rent for the Premises during the Revised Term shall be as set forth in the chart below, subject to adjustment under the Lease:

Dates	**Square Feet of Rentable Area**	**Base Rent per Square Foot of Rentable Area**	**Monthly Base Rent**	**Annual Base Rent**
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

c. Security Deposit. The Security Deposit [***] shall be deposited by Tenant with Landlord on or before the Revised Term Commencement Date and otherwise in accordance with the Existing Lease.

d. ADA Compliance. Notwithstanding any other provision herein or in the Lease to the contrary, Tenant shall be responsible for all liabilities, costs and expenses arising out of or in connection with the compliance of the Premises with the Americans with Disabilities Act, 42 U.S.C. § 12101, et seq., and any state and local accessibility laws, codes, ordinances and rules (collectively, and together with regulations promulgated pursuant thereto, the "ADA"), provided that: (i) if ADA compliance requires alteration of the Premises from its condition as of the Revised Term Commencement Date due to a change in the ADA or the enforcement thereof which takes effect after the Revised Term Commencement Date; (ii) such ADA compliance is not required as the result of any Alterations (including any Tenant Improvements) made by Tenant; and (iii) such alteration of the Premises is considered capital in nature in accordance with generally accepted accounting principles, then Landlord shall be responsible for performing such alterations, the cost of which shall be considered an Operating Expense and shall be amortized in accordance with Article 9; further, provided, that if ADA compliance requires alteration of the Premises from its condition as of the Revised Term Commencement Date due to a violation in the ADA which exists as of the Revised Term Commencement Date or the enforcement thereof (provided such enforcement is not the result of any Alterations (including any Tenant Improvements) made by Tenant), then Landlord shall be responsible for performing such

alterations, the cost of which shall not be considered an Operating Expense. The provisions of this Section shall survive the expiration or earlier termination of the Lease.

e. Signage. The first two sentence of Section 12.6 of the Existing Lease are hereby deleted in their entirety and replaced with the following:

"No sign, advertisement or notice ("Signage") shall be exhibited, painted or affixed by Tenant on any part of the Premises or the Building without Landlord's prior written consent, not to be unreasonably withheld, conditioned or delayed, provided that Tenant shall have the right, without obligation, to install and maintain a Building top signage and a monument sign at the entry to the driveway of the parking lot serving the Building, in each case, with Tenant's logo at a location and in a manner to be reasonably approved by Landlord, subject to all Applicable Laws. Upon the expiration or earlier termination of the Term, Tenant shall be responsible for removing all of Tenant's Signage, including any monument sign installed by Tenant pursuant to this Section, and restoring the Premises, Building or other portions of the Project damaged by the installation or removal of such Tenant's Signage to their condition prior to such damage at Tenant's sole cost and expense."

f. Assignment or Subletting. Section 29.1 of the Existing Lease is hereby deleted in its entirety and replaced with the following:

"29.1 Except as hereinafter expressly permitted, none of the following (each, a "Transfer"), either voluntarily or by operation of Applicable Laws, shall be directly or indirectly performed without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed: (a) Tenant selling, hypothecating, assigning, pledging, encumbering or otherwise transferring this Lease or subletting the Premises or (b) a controlling interest in Tenant being sold, assigned or otherwise transferred (other than as a result of shares in Tenant being sold on a public stock exchange). For purposes of the preceding sentence, "control" means (i) owning (directly or indirectly) more than [***] of the stock or other equity interests of another person or (ii) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person. Notwithstanding the foregoing, Tenant shall have the right to Transfer, without Landlord's prior written consent, Tenant's interest in this Lease or the Premises or any part thereof to (x) any person that as of the date of determination and at all times thereafter directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with Tenant, (y) the surviving corporation or other entity in a merger or consolidation in accordance with applicable statutory provisions, provided that the liabilities of the corporations or other business entities participating in such merger or consolidation are assumed by the corporation or other business entity surviving such merger or consolidation, or (z) a bona fide purchaser of all or substantially all of the stock, membership interests or partnership interests (as applicable) or assets of Tenant ((x), (y) and (z), each, a "Tenant's Affiliate"); provided that Tenant shall notify Landlord in writing at least ten (10) days before such Transfer (in which case, Landlord shall comply (during the period of time prior to the effective date of the Exempt Transfer) with any reasonable and appropriate confidentiality requirements with respect to such notification as may be requested in writing by Tenant) (each an "Exempt Transfer" and the assignee or transferee being an "Exempt Transferee") and otherwise comply with the requirements of this Lease regarding such Transfer; and provided, further, that the Exempt Transferee has a net worth (as of both the day immediately prior to and the day

immediately after the Exempt Transfer) that is equal to or greater than the net worth (as of both the Revised Term Commencement Date and the date of the Exempt Transfer) of the transferring Tenant. Section 29.5.2 shall not apply to any Exempt Transfer to an Exempt Transferee, nor are such provisions intended to, nor shall they be interpreted to extend or apply to, the consideration given or the purchase price paid by a bona fide purchaser for all of the stock, membership interests or partnership interests (as applicable) or assets of Tenant, regardless of whether such a Transfer to Tenant's Affiliate constitutes an Exempt Transfer pursuant to this Section. In no event shall Tenant perform a Transfer to or with an entity that is a tenant at the Project or that is or has been in discussions or negotiations with Landlord or an affiliate of Landlord within the last six (6) months to lease premises at the Project or a property owned by Landlord or an affiliate of Landlord in Rockville or Gaithersburg, Maryland. Notwithstanding anything in this Lease to the contrary, if (a) Tenant or any proposed transferee, assignee or sublessee of Tenant has been required by any prior landlord, Lender or Governmental Authority to take material remedial action in connection with Hazardous Materials contaminating a property if the contamination resulted from such party's action or omission or use of the property in question or (b) Tenant or any proposed transferee, assignee or sublessee is subject to a material enforcement order issued by any Governmental Authority in connection with the use, disposal or storage of Hazardous Materials, then Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion (with respect to any such matter involving Tenant), and it shall not be unreasonable for Landlord to withhold its consent to any proposed transfer, assignment or subletting (with respect to any such matter involving a proposed transferee, assignee or sublessee)."

Section 29.5.3 of the Existing Lease is hereby amended to replace [***] per occurrence/request" with [***]"

g. Loading Dock. During the Revised Term, and notwithstanding Section 13 of the Lease, Tenant shall have the exclusive right to use the warehouse/receiving and loading dock adjacent to the Building as depicted on Exhibit K attached hereto ("**Loading Dock**"). Tenant, Landlord and the tenants of 9708 Medical Center Drive shall have non-exclusive access to use the area adjacent to the Loading Dock, provided such access and use of the area adjacent to the Loading Dock by Landlord and tenants of 9708 Medical Center Drive shall be limited to maneuvering vehicles to gain access to the loading dock adjacent to 9708 Medical Center Drive. Landlord shall not unreasonably interfere with Tenant's use of or access to the Loading Dock, provided, however, that the foregoing restriction shall not apply in the event of any emergency. Landlord acknowledges that Tenant desires to construct a utility space in the area adjacent to the Loading Dock and that Landlord is amenable to such a request, provided that the construction of any such utility space shall be subject to all of the requirements in the Lease relating to Alterations, including Landlord's prior consent to such proposed Alteration.

h. Holding Over. The holdover rent payable by Tenant pursuant to Section 27.2 of the Lease shall be prorated on a daily basis for each day that Tenant remains in
possession of the Premises after the expiration or earlier termination of the Term without Landlord's prior written consent. In addition, notwithstanding Section 27.2 of the Existing
Lease, Tenant shall not be liable to Landlord for any damages suffered by Landlord as a result of such holdover (including lost rent or consequential, special or indirect damages) [***] and thereafter, Tenant shall be liable to Landlord for any and all damages suffered by Landlord as a result of such holdover, including any lost rent or consequential, special and indirect damages.

i. Subordination and Attornment. Landlord represents and warrants to Tenant that as of the Effective Date there is no current mortgagee with respect to the Property. To the extent that a short form or memorandum of this Lease has not been recorded, Landlord shall provide any future Mortgagee with written notice of the existence of the Lease prior to the recordation of any Mortgage. Notwithstanding anything to the contrary contained in the Lease, the Assignment or the Landlord Consent, Tenant's obligation to subordinate and attorn to a future Mortgagee shall be conditioned upon Landlord delivering to Tenant a SNDA whereby such Mortgagee agrees, in the event of sale or transfer of the Building or any interest therein (including by foreclosure), to recognize the Lease and abide by the provisions in at least Sections 14, 15 and 16 of this Second Amendment, provided Tenant is not in uncured default of the Lease.

j. Operating Expenses. Any references to the Execution Date in Section 9.1.2 shall hereafter be a reference to the Revised Term Commencement Date. Notwithstanding any other provision herein or in the Lease to the contrary, Landlord shall not include in Operating Expenses (i) any costs incurred to remove any Hazardous Materials from the Project, the Building or the Premises which were the result of a another tenant's default under its lease; or (ii) any costs incurred to remedy any enforceable violation of Applicable Law existing at the Premises, the Building or the Project as of the Revised Commencement Date; In addition, to the extent that the Property Management Fee, any Operating Expenses or other costs under the Lease are computed based upon the Base Rent payable by Tenant under the Lease such computations shall be determined as though the Base Rent paid by Tenant is as follows:

Dates	**Square Feet of Rentable Area**	**Base Rent per Square Foot of Rentable Area**	**Monthly Base Rent**	**Annual Base Rent**
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

k. Taxes on Tenant's Property. Upon Tenant's written request, Landlord shall provide Tenant with reasonable supporting documentation for any determination of value attributable to Tenant's personal property or trade fixtures under Section 10.2 of the Lease.

l. Intentionally Omitted.

m. Landlord Maintenance and Repair. In addition to the repairs and maintenance obligations of Landlord set forth in Section 18.1, Landlord shall provide window washing services for the Building in accordance with standards for comparable first-class buildings in the Rockville, Maryland area, the cost of which shall be included as an Operating Expense.

n. Alterations. Section 17.1 of the Existing Lease is hereby deleted in its entirety and replaced with the following:

"Tenant shall make no alterations, additions or improvements in or to the Premises or engage in any construction, demolition, reconstruction, renovation, or other work (whether major or minor) of any kind in, at, or serving the Premises ("Alterations") without Landlord's prior written approval, which approval Landlord shall not unreasonably withhold, condition or delay; provided, however, that in the event any proposed Alteration (a) any structural portions of the Building, including exterior walls, roof, foundation, foundation systems (including barriers and subslab systems), or core of the Building, (b) the exterior of the Building or (c) any Building systems, including elevator, plumbing, air conditioning, heating, electrical, security, life safety and power (each, a "Material Alteration"), then Landlord may withhold its approval with respect thereto in its sole and absolute discretion. Notwithstanding the foregoing, with respect to any Material Alterations that are critical or essential for biologics manufacturing as intended by Tenant, Landlord shall not unreasonably withhold, condition or delay its consent with respect to any such Material Alterations. Tenant shall, in making any such Alterations, use only those architects, general contractors and material suppliers and mechanics of which Landlord has given prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. In seeking Landlord's approval, Tenant shall provide Landlord, at least fourteen (14) days in advance of any proposed construction, with plans, specifications, bid proposals, certified stamped engineering drawings and calculations by Tenant's engineer of record or architect of record, (including connections to the Building's structural system, modifications to the Building's envelope, non-structural penetrations in slabs or walls, and modifications or tie-ins to life safety systems), work contracts, requests for laydown areas and such other information concerning the nature and cost of the Alterations as Landlord may reasonably request (collectively, the "Alterations Submittals"). With respect to any Alterations that require Landlord's prior consent relating to the maintenance, repair, replacement or upgrade of any systems or equipment or the Building structure (including the floor load) involved in Tenant's manufacturing operations which are required to comply with Applicable Laws, Landlord shall use commercially reasonable efforts to respond to a notice for approval of such Alterations within ten (10) days of Landlord's receipt of Tenant's request therefor and the applicable Alterations Submittals and Landlord shall not unreasonably withhold, condition or delay its consent with respect to any such Alterations. Notwithstanding the foregoing, Tenant may make strictly cosmetic changes to the Premises "Cosmetic Alterations" without Landlord's consent; provided that [***] such Cosmetic Alterations do not (i) require any structural modifications to the Premises, (ii) require any changes to, or adversely affect, the Building systems, (iii) affect the exterior of the Buildings or (iv) trigger any requirement under Applicable Laws that would require Landlord to make any alteration or improvement to the Premises, the Building or the Project. Tenant shall give Landlord [***] prior written notice of any Cosmetic Alterations involving a third party contractor or

supplier which could give rise to a mechanic's lien. Promptly after the end of each calendar quarter of the Revised Term, Tenant shall give Landlord a written summary of any other Cosmetic Alterations made by Tenant at the Premises during such calendar quarter. To the extent that Tenant fails to give the required prior notice for Cosmetic Alterations that could give rise to a mechanic's lien, Tenant may cure such default by providing Landlord with notice of such Cosmetic Alterations at the end of the applicable calendar quarter. Any notice of Cosmetic Alterations required to be delivered by Tenant to Landlord may be delivered by electronic mail to Landlord's authorized recipients, which recipients shall initially be Kevin Reap and Erin Travis, subject to change by written notice from Landlord to Tenant." Tenant shall [***] pay Landlord for additional premiums charged under Section 12.3 of the Lease.

o. Surrender. Notwithstanding any other provision herein or in the Lease to the contrary, Tenant shall have no obligation to remove any Alterations, fixtures, equipment, additions, improvements, signage or Tenant's Rooftop Equipment installed by or on behalf of JCVI at the Premises or the Building prior to the Revised Term Commencement Date. In addition, Landlord shall not be permitted to require that Tenant remove any Alterations at the end of the Revised Term other than Alterations which, at the time that Landlord granted its consent to such Alterations, Landlord advised Tenant, in writing with reasonable specificity, that such Alterations would be required to be removed at the end of the Revised Term.

p. Financial Statements. Notwithstanding Section 41.3 of the Existing Lease to the contrary, so long as (i) Tenant (or, if Tenant's financial statement is consolidated with its parent, Tenant's parent) is a publicly traded company on an "over-the-counter" market or any recognized national or international securities exchange, and (ii) Tenant's (or, if Tenant's financial statement is consolidated with its parent, Tenant's parent's) current public annual report (in compliance with applicable securities laws) for such applicable year is available to Landlord in the public domain, then, Tenant shall have no obligation to provide financial statements to Landlord.

q. Landlord's Access. Notwithstanding anything in Section 14.4 or any other provision of the Existing Lease to the contrary, neither Landlord nor its agents or employees may enter the portions of the Premises, unless accompanied by a representative of Tenant, provided that Tenant makes such a representative reasonably available to Landlord and further, provided that if a bona-fide health or safety emergency or an imminent risk of damage to the Premises or the Project or to persons or property necessitates immediate entry to the Premises, Landlord or any emergency response or service provider contacted by Landlord (e.g., the fire department or utility providers) may use whatever force is necessary to enter the Premises, and any such entry to the Premises in accordance with the preceding clauses shall not constitute a forcible or unlawful entry to the Premises, a detainer of the Premises or an eviction of Tenant from the Premises or any portion thereof or result in any liability to Landlord. In the event of an emergency, Landlord will use reasonable efforts to notify Tenant of the emergency situation as soon as reasonably practicable after Landlord becomes aware of such emergency.

r. Use. Without limitation of Section 2.7 of the Existing Lease, Tenant may use the Premises for biologics manufacturing, laboratory and vivarium uses, provided such uses are conducted in accordance with all Applicable Laws and the terms and provisions of the Lease. Landlord hereby acknowledges and agrees that Landlord and its affiliates and their respective employees will not assert that the biologics manufacturing, laboratory and vivarium uses constitute a "waste" or "nuisance" under the Lease, provided such uses are conducted in accordance with all Applicable Laws and the terms and provisions of the Lease.

s. Confidentiality. Section 38(z) of the Existing Lease shall include all bona fide prospective purchasers of Tenant or its assets. Notwithstanding anything in Section 38 of the Existing Lease or otherwise herein to the contrary, Tenant shall be entitled to make any disclosure of the Lease that Tenant, in its good faith judgment, believes is required by Applicable Law or by any stock exchange on which its securities or those of its affiliates are listed.

t. Hazardous Materials. The second sentence of Section 21.5 of the Existing Lease is hereby amended and restated as follows: "If during any period of time needed by Tenant or Landlord after the expiration or earlier termination of this Lease to complete the removal from the Premises of any such Hazardous Materials, Landlord is prevented from or delayed in (a) performing work in the Premises or the Building necessary or desirable in order to prepare the Premises to be marketed or to be delivered to a subsequent tenant or occupant, and/or (b) delivering the Premises to a subsequent tenant or occupant, then Tenant shall be deemed a holdover tenant and subject to the provisions of Section 27.2; provided, however, that, in such event, the monthly holdover rent under Section 27.2(a) shall be calculated to exclude any portion of the monthly holdover rent that is allocable to any floor or floors of the Building (if any) that do not contain Hazardous Material in violation of this Lease."

5. Early Access to Premises. Subject to JCVI's compliance with its obligation to allow Tenant early access to the Premises under Section 2 of the Assignment Agreement, [***] Landlord shall use commercially reasonable efforts to grant Tenant access to the Premises and Common Areas prior to the Revised Term Commencement Date for the purpose of constructing improvements, installing furniture, fixtures and equipment or the placement of personal property, but not for the purpose of conducting Tenant's business, provided Tenant shall furnish to Landlord evidence satisfactory to Landlord in advance that insurance coverages required of Tenant under the provisions of Article 23 of the Existing Lease are in effect, and such entry shall be subject to all the terms and conditions of the Lease other than the payment of Base Rent or Tenant's Share of Operating Expenses.

6. TI Allowance; Construction of Tenant Improvements.

a. TI Allowance. In accordance with the terms and conditions of this Second Amendment, Landlord shall make available to Tenant (i) a tenant improvement allowance [***] (the "Base TI Allowance") plus (ii) if properly requested by Tenant pursuant to this Section 6.a, an additional tenant allowance [***] the "Additional TI Allowance"), [***] for use for any purpose elected by Tenant, in Tenant's sole discretion, which may include, among others, improvements to the Premises (the "Tenant Improvements") as described in the Work Letter attached to this Amendment as Exhibit C (the "Work Letter") and as otherwise provided in this Section 6.a. The Base TI Allowance, together with Additional TI Allowance (if properly requested by Tenant pursuant to this Section 6.a), shall be referred to herein as the "TI Allowance." Landlord shall disburse the Base TI Allowance to Tenant [***] by wire transfer of immediately available funds to an account specified by Tenant. If Tenant desires all or any portion of the Additional TI Allowance, then Tenant shall deliver to Landlord a written request for such Additional TI Allowance, in the form attached to this Amendment as Exhibit D, executed by an authorized officer of Tenant (an "Additional TI Allowance Request"), and, provided that no monetary or material non-monetary Default has occurred and is then continuing, Landlord shall disburse the requested amount of the Additional TI Allowance b wire transfer of immediate) available funds [***]. Tenant may make multiple draws against the Additional TI Allowance until such time as the entire Additional TI Allowance has been disbursed or the occurrence of the TI Deadline (as defined below), whichever occurs first. Tenant may use the Base TI Allowance (and Additional TI Allowance, if properly requested by Tenant pursuant to this Section 6.a) in Tenant's sole discretion for, among other things, financing hard and soft costs of the Tenant Improvements, purchasing furniture, fixtures and equipment for Tenant's use at the Premises or defraying the cost of moving expenses and costs incurred by Tenant for any other

lease obligations, or for any other purpose desired by Tenant. Landlord shall not be obligated to disburse any portion of the Additional TI Allowance unless and until Landlord shall have received from Tenant an Additional TI Allowance Request. In no event shall any portion of the TI Allowance not properly requested by Tenant pursuant to this Section 6.a entitle Tenant to a credit against Rent payable under this Lease.

b. TI Deadline; TI True-Up Date. Tenant shall [***] request disbursement of any portion of the Additional TI Allowance not previously disbursed, after which date Landlord's obligation to fund such costs shall expire. Upon disbursement of any portion of the Additional TI Allowance, Base Rent shall be increased to include such amount of the Additional TI Allowance then disbursed by Landlord in accordance with this Lease amortized over the Revised Term [***]. The amount by which Base Rent shall be increased with respect to any disbursement of the Additional IT Allowance shall be determined (and Base Rent shall be increased accordingly) as of the date of such disbursement, with Tenant paying (on the next succeeding day that Base Rent is due under this Lease (the "TI True-Up Date")) any underpayment of the further adjusted Base Rent for the period beginning on the Revised Term Commencement Date and ending on the TI True-Up Date.

c. Completion Evidence. Tenant shall deliver to Landlord the following (collectively, the "Completion Evidence") on or before the TI Deadline (time being of the essence): (i) a statement setting forth the total cost of the Tenant Improvements, including supporting invoices (paid or presently due and payable) for Tenant's costs; (ii) all of the TI Submittals (as defined in the Work Letter); and (iii) such other deliveries as Landlord or one of its lenders reasonably requests. Notwithstanding the TI Deadline, Tenant shall cooperate with Landlord's reasonable requests for portions of the Completion Evidence from time to time as the same become available. Tenant's failure to deliver the Completion Evidence on or before the TI Deadline shall constitute a Default under Section 31.4 of the Existing Lease, and in addition to all other remedies available to Landlord under the Lease, at law and in equity, shall permit Landlord to obtain such Completion Evidence on Tenant's behalf and Tenant shall immediately reimburse Landlord for the reasonable costs thereof as Additional Rent.

d. Insurance Coverage. Prior to entering upon the Premises, Tenant shall furnish to Landlord evidence satisfactory to Landlord that insurance coverages required of Tenant under the provisions of Article 23 of the Existing Lease are in effect, and such entry shall be subject to all the terms and conditions of this Lease other than the payment of Base Rent or Tenant's Share of Operating Expenses.

e. Construction of Tenant Improvements. Tenant shall select the architect, engineer, and general contractor for the construction of the Tenant Improvements, subject to Landlord's approval, such approval not to be unreasonably withheld, conditioned or delayed. Notwithstanding anything to the contrary set forth in the Lease, Tenant shall not be obligated to pay Landlord a construction management fee or any similar construction oversight fee with respect to the Tenant Improvements. Upon Substantial Completion (as hereinafter defined) of the Tenant Improvements, Tenant shall deliver to Landlord (i) a certificate of occupancy for the Premises suitable for the Permitted Use and (ii) a Certificate of Substantial Completion in the form of the American Institute of Architects document G704, executed by the project architect and the general contractor. The term "Substantially Complete" or "Substantial Completion" means that the Tenant Improvements are substantially complete in accordance with the Approved Plans (as defined in the Work Letter), except for punch list items.

7. Controllable Operating Expenses. Notwithstanding anything to the contrary set forth in the Lease, during the Revised Term, Tenant shall not be obligated to pay any increase in Controllable Operating Expenses (as hereinafter defined) on a non-cumulative basis by more than [***] in any calendar year over the amount of Controllable Operating Expenses chargeable

to Tenant for the immediately preceding calendar year, beginning with Controllable Operating Expenses from the calendar year immediately succeeding the calendar year in which the Revised Term Commencement Date occurs. The term "Controllable Operating Expenses" shall mean all Operating Expenses except for taxes, assessments or impositions, Capital Expenditures, costs for repairs and maintenance (excluding preventative maintenance), utility charges, sewer fees, license, permit or inspection fees imposed by a Governmental Authority, insurance premiums, mandatory payments under CC&R's or to an owners' association, costs for snow removal, costs associated with repairs due to casualty, vandalism, costs for snow removal or other costs outside of Landlord's reasonable control or costs that Landlord reasonably determines are necessary to prevent an adverse effect on the Building structure.

8. Project Amenities. [***] Tenant shall be entitled to use the large conference areas and exercise/fitness areas located at 9714 Medical Center Drive in the Lower Campus and the parking spaces serving such areas (the "Amenities") at no additional charge (except as provided in this Section), provided such use shall be subject to the use of such Amenities by other tenants of the Project on a first come, first served basis, as well as any temporary closures of the Amenities (or any portion thereof) by Landlord in connection with any maintenance, repair, alterations or improvements to be performed. During the Revised Term, Tenant shall be required to pay its proportionate share of the operating costs paid or incurred by Landlord in connection with the operation or maintenance of such Amenities, to the extent considered Operating Expenses under Section 9 of the Lease. During the Revised Term, Landlord shall continue to operate and maintain the Amenities in a manner substantially consistent with its current practices, subject to temporary closures for maintenance and repairs, alterations or additions necessitated by Applicable Laws and events of Force Majeure.

9. Condition of Premises. Landlord shall deliver to Tenant a copy of each final Exit Survey submitted by JCVI pursuant to the Assignment Agreement ("JCVI Exit Survey") upon Landlord's receipt, without any representation or warranty, express or implied, including but not limited to any representation or warranty regarding the accuracy or completeness of the JCVI Exit Survey. The delivery of such JCVI Exit Survey shall not be deemed to be a representation or warranty regarding the physical or environmental condition of the Premises. On the Revised Term Commencement Date, Landlord shall deliver possession of the Premises to Tenant in broom clean condition. Tenant acknowledges that (a) except as expressly provided in this Second Amendment or the Lease, Tenant agrees to take the Premises in its condition "as is" as of the first day of the Revised Term, and (b) Landlord shall have no obligation to alter, repair or otherwise prepare the Premises for Tenant's continued occupancy for the Revised Term or to pay for any improvements to the Premises, except as expressly provided in this Second Amendment or the Lease. Tenant's taking of possession of the Premises on the Revised Term Commencement Date shall, except as otherwise agreed to in writing by Landlord and Tenant, conclusively establish that the Premises, the Building, the Building systems and the Project were at such time in good, sanitary and satisfactory condition and repair. Notwithstanding the foregoing, at any time during the first twenty-four (24) months of the Revised Term (the "Warranty Period"), if any standard HVAC units (but specifically excluding any specialized HVAC units added by Tenant, such as those units that may be required for manufacturing) serving the Premises shall fail to be in good working order, then Tenant may deliver written notice to Landlord describing in reasonable detail such failure, and Landlord will perform the work necessary to put the HVAC unit in good working order with reasonable promptness and at Landlord's sole cost as Tenant's sole remedy for any such failure (and Tenant shall not be entitled to damages or any other remedy as a result of such failure, except as provided in Section 16.2 of the Lease); provided, however, that Landlord's obligations pursuant to the foregoing shall be limited to necessary repairs and/or replacements, as determined by Landlord in its reasonable discretion, and Tenant shall remain responsible for the standard preventative maintenance and upkeep of such HVAC units in the ordinary course. During the Warranty Period, all costs which are the obligation of Landlord pursuant to this Section 9 shall be borne

solely by Landlord and not included as Operating Expenses, provided Tenant (and not Landlord) shall be responsible for all costs, in whole or in part, that are incurred to the extent attributable to the negligence or willful misconduct of Tenant or any of its employees, contractors or subcontractors.

10. Utilities and Services. During the Revised Term, Tenant shall, at its sole cost and expense, promptly and properly observe and comply with (including in the making by Tenant of any Alterations to the Premises) all orders, regulations, directions, rules, laws, ordinances, and requirements of all Governmental Authorities from the use or occupancy of, or applicable to, the Premises or any portion thereof, except as otherwise provided under this Second Amendment or the Lease, and subject to the terms and conditions of the Landlord Consent. During the Revised Term, Tenant shall, at Tenant's sole cost and expense, procure and maintain standard preventative maintenance contracts, with copies of the same, in customary form and substance for, and with contractors specializing and experienced in, the maintenance of the following equipment and improvements, if any, if and when installed on the Premises: (i) heating, ventilating and air conditioning ("HVAC") equipment, (ii) boilers and pressure vessels, (iii) fire extinguishing systems, including fire alarm and smoke detection devices, (iv) roof coverings and drains, (v) clarifiers, (vi) basic utility feeds to the perimeter of the Building, (vii) hoods, and (viii) any other equipment located in the Premises reasonably required by Landlord. Tenant shall make all arrangements for and pay for all water, electricity, air, sewer, refuse, gas, heat, light, power, telephone service and any other service or utility Tenant required at the Premises. Tenant shall not be liable for the cost of utilities supplied to the Premises attributable to the time period prior to the Revised Term Commencement Date; provided, however, that, if Landlord shall permit Tenant possession of the Premises prior to the Revised Term Commencement Date and Tenant uses the Premises for any purpose other than the installation of furniture, fixtures and equipment and the placement of personal property as set forth in Section 5 above, then Tenant shall be responsible for the actual out-of-pocket cost of utilities supplied to the Premises from such earlier date of possession.

11. Repairs and Maintenance. Except to the extent required to be performed by Landlord pursuant to Section 18.1 of the Existing Lease, and subject to Landlord's obligations under Section 9 above, Tenant shall repair, replace and maintain in accordance with standards for comparable first-class buildings in the Rockville, Maryland area and in accordance with all Applicable Laws the Premises, including the elevators and the base Building plumbing, fire and life safety, HVAC, electrical, security and mechanical systems (collectively, the "Building System Improvements"). Notwithstanding anything to the contrary in the Lease, in the event that Tenant's performance of any of its repair, replacement or maintenance obligations under the Lease requires prior notice to Landlord, in an emergency, Tenant shall have the right to perform such repair, replacement or maintenance obligations after reasonable (in the circumstances) oral notice to Landlord, followed by written notice to Landlord within three (3) days after such emergency. As used in this Section 11, "emergency" shall have the meaning ascribed thereto in Section 31.14 of the Existing Lease.

12. Generator. Landlord acknowledges that JCVI has conveyed ownership of the existing 1000 kw generator serving the Premises (the "Generator") to Tenant pursuant to a separate agreement between JCVI and Tenant and Tenant has accepted the Generator in its existing condition "as is" as of the Revised Term Commencement Date. Tenant shall be entitled to use the Generator and, if so desired by Tenant, to replace such Generator. Tenant shall maintain, repair and (if necessary) replace the Generator at its sole cost and expense. Landlord expressly disclaims any warranties, whether express or implied, with regard to the Generator or the installation thereof, including any warranty of merchantability, suitability or fitness for a particular purpose. Tenant expressly assumes all risks arising from Tenant's failure to perform (or properly perform) the maintenance, repair and/or or replacement of the Generator, the Generator's malfunction, any failure or interruption of power to the Premises attributable to the

Generator or any election by Tenant to remove the Generator, and Landlord expressly disclaims any liability or responsibility therefor, except as expressly provided in Section 16.2 of the Existing Lease. In the event of any malfunction or failure of the Generator, Tenant shall not be entitled to any termination of the Lease or any abatement or reduction of Rent, and Tenant shall not be relieved from the operation of any covenant, obligation or agreement of this Lease. Tenant may remove the Generator from the Premises at any time at Tenant's sole cost and expense. In addition, Tenant shall have the right to place new generators on the Land during the Term, subject to Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

13. Environmental Indemnification. Notwithstanding anything in the Existing Lease to the contrary, (i) Tenant shall not be responsible for (A) any recognized environmental conditions set forth in any JCVI Exit Survey or (B) the presence of Hazardous Materials at the Premises or the Building as of the Revised Term Commencement Date, unless placed at the Premises or the Building by a Tenant Party, or the presence of Hazardous Materials at the Premises or the Building placed at the Premises or the Building by Landlord or Landlord's affiliates, employees, agents, contractors or invitees and (ii) Landlord shall indemnify, save, defend (at Tenant's option and with counsel reasonably acceptable to Tenant) and hold the Tenant and Tenant's affiliates, employees, agents, contractors or invitees (each, a "Tenant Party" and collectively, the "Tenant Parties") harmless from and against any and all Claims resulting from (y) the presence of Hazardous Materials at the Premises or the Building as of the Revised Term Commencement Date, unless such Hazardous Materials were placed at the Premises or the Building by a Tenant Party or Tenant agreed to permit such Hazardous Materials to remain at the Premises for use and operation of the Premises following JCVI's surrender of the Premises in accordance with the Assignment Agreement, and (z) the presence of Hazardous Materials at the Premises or the Building placed at the Premises or the Building by Landlord or Landlord's affiliates, employees, agents, contractors or invitees.

14. Option to Extend. Tenant shall have two (2) options (each, an "Option") to extend the Revised Term by seven (7) years each as to the entire Premises (and no less than the entire Premises) upon the following terms and conditions (each seven (7) year period being referred to herein as an "Extension Term"). Any extension of the Revised Term pursuant to an Option shall be on all the same terms and conditions as this Lease, except as follows:

a. Base Rent at the commencement of each Extension Term shall equal (i) if there are no brokerage commissions payable by Landlord to Tenant's broker in connection with the Option, ninety-five percent (95%) of the then-current FMV (as defined below), or (ii) if there are brokerage commissions payable by Landlord to Tenant's broker in connection with the Option, one hundred percent (100%) of the then-current FMV, and in each case shall be further increased on each annual anniversary of the Extension Term commencement date by two and one-half percent (2.5%). Tenant may, no more than fifteen (15) months prior to the date the then-current Term is then scheduled to expire, request Landlord's estimate of the FMV for the next Extension Term. Landlord shall, within fifteen (15) days after receipt of such request, give Tenant a written proposal of such FMV. If Tenant gives written notice to exercise an Option ("Extension Notice"), such Extension Notice shall specify whether Tenant accepts Landlord's proposed estimate of FMV. If Tenant does not accept the FMV, then the parties shall endeavor to agree upon the FMV, taking into account all relevant factors. In the event that the parties are unable to agree upon the FMV within thirty (30) days after Landlord's receipt of the Extension Notice, then same shall be determined as follows: (i) Landlord and Tenant shall each appoint one broker who shall, by profession, be a licensed real estate broker, of good reputation, and who shall have been active over the ten (10) year period ending on the date of Landlord's receipt of the Extension Notice in the leasing of similar properties within the Rockville, Maryland laboratory/research and development leasing market. Each such broker shall be appointed within thirty (30) days after the date of Landlord's receipt of the applicable Extension Notice. (ii) The

two brokers so appointed shall, within ten (10) days of the date of the appointment of the last appointed broker, agree upon and appoint a third broker who shall be qualified based upon the same criteria set forth hereinabove for the qualification of the initial two brokers and shall not have been employed or retained by either Landlord or Tenant or any affiliate of either for a period of at least ten (10) years prior to appointment pursuant hereto. The third broker shall be paid for jointly by Landlord and Tenant. If Landlord and Tenant are unable to agree upon the third broker, then the same shall be designated by the Washington, D.C. local chapter of the Judicial Arbitration and Mediation Services or any successor organization thereto (the "JAMS"). (iii) The three brokers shall within ten (10) business days of the appointment of the third broker reach a decision regarding the determination of the FMV, and shall notify Landlord and Tenant thereof. (iv) The decision of the majority of the three brokers shall be binding upon Landlord and Tenant and shall serve as the basis for determination of Base Rent payable for the applicable Extension Term. Failure of a majority of such brokers to reach agreement shall result in the FMV being designated by averaging the appraisals of the three brokers, ignoring for the purposes of such averaging the high and/or low appraisal which is more than ten percent (10%) in excess of or less than the middle appraisal, if applicable. (v) If either Landlord or Tenant fails to appoint a broker within the time period specified in subparagraph (i) hereinabove, the broker appointed by one of them shall reach a decision and notify Landlord and Tenant thereof, and such broker's decision shall be binding upon Landlord and Tenant. (vi) The cost of the three-broker determination shall be paid by Landlord and Tenant equally. (vii) If, as of the commencement date of an Extension Term, the amount of Base Rent payable during the Extension Term shall not have been determined, then, pending such determination, Tenant shall pay Base Rent equal to the Base Rent payable with respect to the last year of the then-current Term. After the final determination of Base Rent payable for the Extension Term, the parties shall promptly execute a written amendment to this Lease specifying the amount of Base Rent to be paid during the applicable Extension Term. Any failure of the parties to execute such amendment shall not affect the validity of the FMV determined pursuant to this Section 14.a or the extension of the Revised Term for such Extension Term.

b. No Option is assignable separate and apart from this Lease. Tenant's rights under this Section 14 shall be transferable in connection with an assignment of this Lease to an Exempt Transferee, but shall not be transferable to any other assignee without the prior written consent of Landlord, which consent Landlord may withhold in its sole and absolute discretion.

c. Each Option is conditional upon Tenant giving Landlord written notice of its election to exercise such Option at least twelve (12) months prior to the expiration of the then-current Term. Time shall be of the essence as to Tenant's exercise of an Option. Tenant assumes full responsibility for maintaining a record of the deadlines to exercise an Option. Tenant acknowledges that it would be inequitable to require Landlord to accept any exercise of an Option after the date provided for in this Article 14.

d. Notwithstanding anything contained in this Article 14 to the contrary, Tenant shall not have the right to exercise an Option or to commence an Extension Term unless Tenant is not then in Default.

e. For purposes of this Lease, "FMV" for the Premises shall be based on a seven (7) year extension term and shall be equal to the monthly base rental rate (on a per square foot of rentable area basis) agreed to by willing sophisticated tenants and willing sophisticated landlords in leasing transactions (the "Comparable Transactions"), as of a particular time, in arms-length transactions for non-sublease, non-encumbered, non-equity, non-expansion, non-renewal space comparable in size, location, height and quality to the Premises, with a commencement date not more than eighteen (18) months prior to the commencement date of the extension term, or if there are no Comparable Transactions, in other first-class combined office/

laboratory facilities containing located in the Rockville, Maryland area, with appropriate adjustments to account for differences in the Adjustment Factors (as defined below) and all other factors reasonably relevant to a fair market rent determination. In any determination of FMV, appropriate consideration should be given to any reasonably relevant factor (or difference in the subject transaction or Comparable Transactions used for purposes of comparison), including without limitation, the following factors (the "Adjustment Factors"): (a) monthly base rental rates per rentable square foot; (b) abatement provisions reflecting free rent or early occupancy during the lease term; (c) the size, location and floor height of the premises being leased; (d) the condition and market value of the existing tenant improvements, if any (from a general marketing perspective and without regard to their value, usability or function to Tenant or to any tenant in any Comparable Transaction), and the existence and amount of any tenant improvement or comparable allowance; (e) the existence and amount of any other cash payment or other equivalent concession, including, without limitation, moving allowances, lease takeover allowances (or where a lease assumption is applicable, the value thereof), and any comparable tenant inducement; (f) the existence of favorable expansion and/or extension options, and the value thereof; (g) any special parking rights, rates or concessions; (h) whether the lease transaction in question grants to the tenant any protection from increases in real property taxes and/or operating expenses, and if so, the amount, value or cost associated therewith; and (i) the credit standing of the tenant in question and/or the amount of letters of credit, cash security deposits, and/or other credit enhancements required to be made available by the tenant in question.

f. For purposes of calculating the FMV, the following presumptions shall apply: the Premises is free and clear of all leases and tenancies (including this Lease), the Premises is available for the purposes permitted by this Lease in the then rental market, that Landlord has had a reasonable time to locate a tenant, and that neither Landlord nor the prospective tenant is under any compulsion to rent, and taking into account all relevant factors.

15. Right of First Offer to Lease. For so long as MacroGenics, Inc. and/or an Exempt Transferee of MacroGenics, Inc. pursuant to an Exempt Transfer (a "MacroGenics Exempt Transferee") leases the entire Premises and personally occupies at least ninety percent (90%) of the entire Premises and subject to any other parties' pre-existing rights with respect to Available ROFO Premises (as defined below), Tenant shall have a right of first offer to lease ("Lease ROFO") as to any rentable premises in the buildings located at 9708, 9712 and 9714 Medical Center Drive which Landlord is marketing and for which Landlord is seeking a tenant ("Available ROFO Premises"); provided, however, that in no event shall Landlord be required to lease any Available ROFO Premises to Tenant for any period past the date on which this Lease expires or is terminated pursuant to its terms (including available Options). To the extent that Landlord renews or extends a then-existing lease with such then existing tenant for the same premises pursuant to a contractual extension option existing as of the date hereof, the affected space shall not be deemed to be Available ROFO Premises. In the event Landlord intends to market Available ROFO Premises, Landlord shall provide written notice thereof to Tenant (the "Notice of Marketing to Lease").

a. Within fifteen (15) days following its receipt of a Notice of Marketing to Lease (time being strictly of the essence), Tenant shall advise Landlord in writing whether Tenant elects to lease all (not just a portion) of the Available ROFO Premises and on what terms and conditions. If Tenant fails to notify Landlord of Tenant's election within such fifteen (15) day period (time being strictly of the essence), then Tenant shall be deemed to have elected not to lease the Available ROFO Premises.

b. If Tenant notifies Landlord that Tenant elects to lease all of the Available ROFO Premises and of the terms and conditions therefore ("Tenant's Leasing Offer") within the [***] period described above (provided that Tenant shall be required to lease the Available

ROFO Premises for at least the remainder of the then-current Revised Term), then Landlord shall have [***] days after receipt of Tenant's Leasing Offer to respond to Tenant in writing whether Landlord elects to lease the Available ROFO Premises to Tenant on the terms and conditions set forth in Tenant's Leasing Offer. If Tenant delivers Tenant's Leasing Offer within the [***] period described above and Landlord elects to lease the Available ROFO Premises to Tenant on the terms and conditions set forth in Tenant's Leasing Offer, then Landlord shall lease the Available ROFO Premises to Tenant upon the terms and conditions set forth in Tenant's Leasing Offer. If Landlord fails to deliver notice of Landlord's election to lease the Available ROFO Premises to Tenant within such [***] period, then Landlord shall be deemed to have elected not to lease the Available ROFO Premises to Tenant upon the terms and conditions set forth in Tenant's Leasing Offer.

c. If (i) Tenant notifies Landlord that Tenant elects not to lease the Available ROFO Premises, (ii) Tenant fails to notify Landlord of Tenant's election within the [***] period described above (time being strictly of the essence), (iii) Landlord declines (or is deemed to have declined) to lease the Available ROFO Premises to Tenant on the terms and conditions set forth in Tenant's Leasing Offer or (iv) Landlord fails to notify Tenant of Landlord's election to lease the Available ROFO Premises to Tenant on the terms and conditions set forth in Tenant's Leasing Offer within the [***] period described above (time being strictly of the essence), then Landlord shall have the right to consummate a lease of the Available ROFO Premises [***].

d. Notwithstanding anything in this Article 15 to the contrary, Tenant shall not have the right to exercise the Lease ROFO during such period of time that there exists a monetary default or material non-monetary default by Tenant under any provision of this Lease for which notice has been given to Tenant by Landlord (to the extent notice is required under this Lease). Any attempted exercise of the Lease ROFO during a period of time in which Tenant is so in default shall be void and of no effect. Notwithstanding anything in this Lease to the contrary, Tenant shall not assign or transfer the Lease ROFO, except in conjunction with an assignment or transfer of Tenant's interest in the Lease to an Exempt Transferee pursuant to an Exempt Transfer, without Landlord's prior written consent, which consent Landlord shall not unreasonably withhold, condition or delay.

e. If Tenant exercises the Lease ROFO, Landlord does not guarantee that the Available ROFO Premises will be available on the anticipated commencement date for the Lease as to such Premises due to a holdover by the then-existing occupants of the Available ROFO Premises or for any other reason beyond Landlord's reasonable control, so long as Landlord acts in good faith to promptly and diligently pursue all reasonable means to obtain possession of such space, including the commencement of eviction proceedings when appropriate, as soon as reasonably practicable, but Tenant shall not be liable for any rent until the time when Landlord can deliver possession of the ROFO Premises to Tenant.

f. Tenant's rights under this Section 15 shall be transferable in connection with an assignment of this Lease to an Exempt Transferee, but shall not be transferable to any other assignee without the prior written consent of Landlord, which consent Landlord may withhold in its sole and absolute discretion.

16. Right of First Offer to Purchase. For so long as MacroGenics and/or a MacroGenics Exempt Transferee leases all, and personally occupies at least ninety percent (90%), of the entire Premises, Tenant shall have a right of first offer to purchase the fee interest ("Purchase ROFO") in the Building and underlying parcel of land (the "ROFO Real Property"). Landlord shall not sell the entire Building in fee simple unless Landlord shall first offer the Building to Tenant as follows: (i) Landlord shall give to Tenant an irrevocable written notice ("Landlord's Purchase ROFO Notice") specifying the Basic Sale Terms (as hereinafter defined) upon which Landlord desires to sell the Building; and (ii) Tenant shall then have the one-time

right to purchase the Building (the "Purchase ROFO") by notifying Landlord in writing of the exercise of such Purchase ROFO [***] and delivering one-half of the deposit required pursuant to the Additional Sale Terms (as hereinafter defined), time being of the essence.

a. If Tenant exercises the Purchase ROFO [***] (time being strictly of the essence), then Tenant shall have the one-time right and obligation (subject to Landlord and Tenant entering into a Purchase Agreement pursuant to the Additional Sale Terms) to purchase the Building upon the Basic Sale Terms and the Additional Sale Terms to the extent such Additional Sale Terms are not inconsistent with the Basic Sale Terms.

b. Notwithstanding anything to the contrary herein, Tenant's rights under this Article 16 shall not apply to:

(i) any sale/leaseback transaction made in connection with a bona fide financing;

(ii) any sale or transfer of less than eighty percent (80%) of all of the direct and indirect interests in Landlord (but, whether or not in excess of eighty percent (80%), in no event shall Tenant's rights apply to a sale or transfer among then-existing direct or indirect interest holders in Landlord, sales or transfers of beneficial interests in direct or indirect interest holders in Landlord that are part of a portfolio transaction that includes properties other than the Building, and mergers, acquisitions, sales or transfers of or in entities with a direct or indirect interest in Landlord that own direct or indirect interests in properties other than the Building, in each case unless such transfers are made with the intention of allowing a transfer of the Building in avoidance of Tenant's rights under this Article 16);

(iii) any sale or transfer of the Building to a partnership, corporation, limited liability company, trust or other entity that is under control by, common control with, or controls Landlord or any direct or indirect owner of Landlord, but any such transferee shall hold title subject to Tenant's rights under this Article 16;

(iv) any transfer in the nature of a financing transaction with a financial institution that is made for a bona fide business purpose (i.e., other than in order to allow a transfer of the Building in avoidance of Tenant's rights under this Article 16), including without limitation the granting of, or foreclosure or deed-in-lieu of foreclosure, under a mortgage; and

(v) any portfolio transaction that includes at least one other real estate asset consisting of a building with at least 40,000 square feet in gross floor area or land capable of accommodating a new building of at least 40,000 rentable square feet in area. In connection with any portfolio transaction that includes only the Building and a related asset, and, therefore, is subject to the provisions of this Article 16, Tenant must exercise its election to purchase, if at all, with respect to the entire portfolio transaction offered in Landlord's Purchase ROFO Notice.

c. If Tenant either rejects the Landlord's Purchase ROFO Notice or does not exercise the Purchase ROFO within the [***] period described above (time being strictly of the essence), then Landlord shall be free to sell the Building to a third-party person or entity upon terms and conditions no less favorable to Landlord in any material respect than the Basic Sale Terms without further obligation to Tenant, except that the purchase price may be as much as ten percent (10%) less than that reflected in the Basic Sale Terms. If after Tenant either rejects the Landlord's Purchase ROFO Notice or does not exercise the Purchase ROFO within the [***] period described above, and Landlord desires to offer the Building for sale upon terms that are materially less favorable to Landlord than the Basic Sale Terms and/or at a purchase price that is more than ten percent (10%) less than the purchase price stated in the Basic Sale Terms, then Landlord must resubmit a Landlord's Purchase ROFO Notice in accordance with the procedures

set forth above. However, if the new notice to Tenant is given not more than [***] after the previous notice to Tenant, then Tenant's time to exercise its Right of First Offer pursuant to such new notice shall be reduced to [***].

d. Upon (i) any sale of the Building, (ii) any portfolio transaction sale that includes the Building and is not subject to the rights of Tenant under this Article 16, or (iii) any foreclosure of a mortgage on the Building or conveyance by deed-in-lieu of foreclosure, in each case to a third-party person or entity in accordance with the terms of this Article 16, Tenant's Purchase ROFO shall forever terminate.

e. As used herein: "Basic Sale Terms" shall mean the purchase price and terms of any seller financing offered by Landlord; and "Additional Sale Terms" shall mean those terms set forth on Exhibit E attached to this Amendment. The Lease shall terminate upon transfer of title to Tenant pursuant to this Article 16.

f. Notwithstanding any provision of this Article 16 to the contrary, Tenant's rights under this Article shall be void (i) at Landlord's election, if a Default is then continuing at the time Tenant makes any election with under this Article or at the time the closing under the purchase contemplated by this Article 16 is scheduled to occur, and (ii) [***] prior to the then-scheduled expiration of the term of this Lease unless Tenant has properly exercised its right to extend the term of this Lease pursuant to an Option (if any such right remains). If Tenant asserts any rights in the Building by means of lis pendens or similar notice, or any method claiming any rights or interest in any space in the applicable building (as opposed to a claim strictly for monetary damages, for which the indemnity set forth in this sentence will not apply), and fails to prevail in such proceeding, then Tenant shall indemnify, defend and hold harmless Landlord for any loss, cost, damage or injury that Landlord suffers or incurs on account of the delay caused by such proceeding, including without limitation any lost sale transaction or tenant leases for space in the Building or change in market conditions directly affecting a sale or lease for tenant space in the Building. Furthermore, the provisions of this Article 16 are personal to MacroGenics, Inc. and may not be assigned except to a MacroGenics Exempt Transferee in connection with an Exempt Transfer of this Lease to such MacroGenics Exempt Transferee without Landlord's prior written consent, which consent may be withheld in Landlord's sole and absolute discretion.

g. Any Landlord's Purchase ROFO Notice and information in connection therewith, and any information regarding a sale of the Building, provided to Tenant by Landlord pursuant to this Article 16 shall be held confidential by Tenant and not disclosed to any third party except as required by Applicable Laws or in connection with any dispute between Landlord and Tenant regarding this Article 16 and for disclosures to Tenant's attorneys and third-party consultants to the extent such attorneys and consultants are reasonably required for Tenant to evaluate such information and, in each case, provided that such attorneys and consultants are made subject to the provisions of this paragraph. Any such information shall be returned by Tenant to Landlord in the event that Tenant's rights under this Article 16 terminate in accordance with the terms hereof.

h. Any disputes regarding the provisions of this Article 16 shall be resolved by arbitration as follows: the parties shall promptly meet and confer to attempt in good faith to resolve such dispute, and if such dispute is not resolved within thirty (30) days after Landlord or Tenant delivers written notice of such dispute to the other, the parties shall direct the Washington, DC office of the JAMS to appoint an arbitrator who shall have a minimum of ten (10) years' experience in commercial real estate disputes and who shall not be affiliated with either Landlord or Tenant and has not worked for either party or its affiliates at any time during the prior five (5) years. Both Landlord and Tenant shall have the opportunity to present evidence and outside consultants to the arbitrator. The arbitration shall be conducted in accordance with the expedited commercial arbitration rules of the JAMS insofar as such rules are not inconsistent

with the provisions of this Lease (in which case the provisions of this Lease shall govern). The cost of the arbitration (exclusive of each party's witness and attorneys' fees, which shall be paid by such party) shall be borne equally by the parties. The arbitrator's decision shall be final and binding on the parties.

i. Upon Tenant's request, Landlord agrees to execute and deliver to Tenant a memorandum of Tenant's Purchase ROFO, in form and substance reasonably acceptable to Landlord and Tenant (the "Purchase ROFO Memorandum"), provided that Tenant executes and delivers to Landlord or a third party escrow agent reasonably acceptable to Landlord and Tenant an instrument acknowledging the termination of Tenant's Purchase ROFO, in form and substance reasonably acceptable to Landlord and Tenant, to be held in escrow and recorded upon the earlier to occur of the termination of this Lease or the termination of Tenant's Purchase ROFO in accordance with the terms of this Second Amendment. Tenant may, but shall not be obligated to, record the Purchase ROFO Memorandum, provided Tenant shall be obligated to pay all costs and expenses relating thereto, including any taxes assessed as a result of such recording.

17. Broker. Tenant and Landlord each represents and warrants that it has not dealt with any broker or agent in the negotiation for or the obtaining of this Second Amendment, other than CBRE, Inc. ("Broker"), and agrees to reimburse, indemnify, save, defend (at the indemnified party's option and with counsel reasonably acceptable to the indemnified party, at the indemnifying party's sole cost and expense) and hold harmless the indemnified party for, from and against any and all cost or liability for compensation claimed by any such broker or agent, other than Broker, employed or engaged by it or claiming to have been employed or engaged by it. Broker is entitled to a leasing commission in connection with the making of the Assignment Agreement, the Landlord Consent and this Second Amendment, and Landlord shall pay such commission to Broker pursuant to a separate agreement between Landlord and Broker and Tenant shall have no obligation to pay Broker a leasing commission in connection with the making of the Assignment Agreement, the Landlord Consent and this Second Amendment.

18. Notices. Tenant confirms that, notwithstanding anything in the Lease to the contrary, notices delivered to Tenant pursuant to the Lease should be sent to:

MacroGenics, Inc.
9704 Medical Center Drive
Rockville, Maryland 20850
Attn: General Counsel

with a copy to (which copy shall not constitute notice):

Covington & Burling LLP
One CityCenter
850 Tenth Street, NW
Washington, DC 20001
Attention: Heather G. Haberl

19. Effect of Amendment. Except as modified by this Second Amendment and the Assignment Agreement and Landlord Consent, the Existing Lease and all the covenants, agreements, terms, provisions and conditions thereof shall remain in full force and effect and are hereby ratified and affirmed. In the event of any conflict between the terms contained in this Second Amendment and the Existing Lease, the terms herein contained shall supersede and control the obligations and liabilities of the parties.

20. Successors and Assigns. Each of the covenants, conditions and agreements contained in this Second Amendment shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns and sublessees. Nothing in this section shall in any way alter the provisions of the Lease restricting assignment or subletting.

21. Miscellaneous. This Second Amendment becomes effective only upon execution and delivery hereof by Landlord and Tenant. The captions of the paragraphs and subparagraphs in this Second Amendment are inserted and included solely for convenience and shall not be considered or given any effect in construing the provisions hereof. All exhibits hereto are incorporated herein by reference. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease, lease amendment or otherwise until execution by and delivery to both Landlord and Tenant.

22. Landlord Representations, Warranties and Covenants. Landlord hereby represents and warrants to Tenant that, as of date hereof and as of the Revised Term Commencement Date: (i) the Existing Lease attached hereto as Exhibit L is the true, complete and correct copy of the Existing Lease and the Existing Lease has not been amended or modified except as otherwise set forth in this Second Amendment and as set forth in Exhibit L hereto; (ii) the Existing Lease is valid, binding and in full force and effect, and enforceable in accordance with its terms by Landlord and Tenant; (iv) to Landlord's knowledge, no party is in breach or default under the Existing Lease (whether monetary or otherwise) or has given or received any notice of breach or default or termination under the Existing Lease; (v) to Landlord's knowledge, JCVI did not made any assignment, sublease, transfer, conveyance or other disposition of the Existing Lease or any interest therein, or grant any sublease, license, occupancy agreement or other use or occupancy right to any other person or entity, except for JCVI's grant of the Early Access Rights (as defined in the Assignment Agreement) pursuant to the Assignment Agreement; and (vi) to Landlord's knowledge, there are no parties in possession of the Premises other than Tenant. Each Party guarantees, warrants and represent to the other and to Landlord that the execution and consummation of this Assignment have been duly authorized by all appropriate company action, and the individual or individuals signing this Assignment have the power, authority and legal capacity to sign this Assignment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint ventures or other organizations and entities on whose behalf such individual or individuals have signed. Notwithstanding anything to the contrary contained in the Lease, the Assignment or the Landlord Consent, Landlord hereby covenants that Landlord shall not exercise Landlord's remedy to terminate the Lease or Tenant's possession of the Premises, nor shall Tenant be prohibited from exercising an Option, the Lease ROFO or the Purchase ROFO, nor shall Landlord (a) refuse to fund the Base TI Allowance or Additional TI Allowance, (b) fail to deliver any SNDA required by the Lease, (c) fail to make casualty insurance proceeds available under Section 24.10 of the Lease, (d) refuse to permit a Transfer or allow Tenant to collect rents directly from a transferee under Section 29 of the Lease, (e) charge Additional Rent under Section 7.2 of the Lease, (f) draw against the Security Deposit or (g) fail to recognize Tenant's quiet enjoyment rights under Section 15 of the Lease, solely by reason of any breach or default of JCVI under the Existing Lease existing as of the Revised Term Commencement Date, provided that the foregoing shall in no way be deemed to limit Landlord's ability to exercise any remedies under the Lease, including without limitation the termination of the Lease or Tenant's possession of the Premises, due to any Default caused by Macrogenics, Inc. as the Tenant during its early access to the Premises pursuant to Section 5 of this Second Amendment or any Default resulting from its exacerbation of a breach or default of JCVI under the Existing Lease existing as of the Revised Term Commencement Date. In no event shall Tenant be required to make any certification in an estoppel certificate about the existence of tenant defaults under the Lease as of the Revised Term Commencement Date. In addition, notwithstanding any provision to the contrary contained in the Existing Lease, Landlord agrees

to look solely to JCVI for satisfaction of any default of the tenant's obligations under the Lease occurring prior to or existing as of the Revised Commencement Date and for satisfaction of all obligations of the tenant under the Lease to the extent accruing prior to or existing as of the Revised Commencement Date, including, without limitation, the obligation to pay any amount payable by the tenant under the Lease to the extent accruing prior to or existing as of the Revised Commencement Date, and the recovery of any losses accruing to Landlord and recoverable under the Lease, at law or in equity, to the extent arising under the Lease prior to or existing as of the Revised Commencement Date, provided that the foregoing shall in no way be deemed to limit Landlord's ability to exercise any remedies under the Lease due to any Default caused by Macrogenics, Inc. as the Tenant during its early access to the Premises pursuant to Section 5 of this Second Amendment or any Default resulting from Tenant's exacerbation of a breach or default of JCVI under the Existing Lease existing as of the Revised Term Commencement Date.

23. Authority. Tenant guarantees, warrants and represents that the individual or individuals signing this Second Amendment have the power, authority and legal capacity to sign this Second Amendment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed. Landlord guarantees, warrants and represents that the individual or individuals signing this Second Amendment have the power, authority and legal capacity to sign this Second Amendment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

24. Counterparts; Facsimile and PDF Signatures. This Second Amendment may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document. A facsimile or portable document format (PDF) signature on this Second Amendment shall be equivalent to, and have the same force and effect as, an original signature.

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IN WITNESS WHEREOF, Landlord and Tenant have executed this Second Amendment as of the date and year first above written.

LANDLORD:

BMR-MEDICAL CENTER DRIVE LLC,
a Delaware limited liability company

By: */s/ Jonathan P. Klassen*
Name: Jonathan P. Klassen
Title: Executive Vice President

TENANT:

MACROGENICS, INC.,
a Delaware corporation

By: */s/ Scott Koenig*
Name: Scott Koenig
Title: CEO

CERTAIN PORTIONS OF THIS EXHIBIT (INDICATED BY [***]) HAVE BEEN EXCLUDED PURSUANT TO ITEM 601(B)(10) OF REGULATION S-K BECAUSE THEY ARE BOTH NOT MATERIAL AND ARE THE TYPE THAT THE COMPANY TREATS AS PRIVATE AND CONFIDENTIAL.

THIRD AMENDMENT TO LEASE

THIS THIRD AMENDMENT TO LEASE (this "Third Amendment") is entered into as of this [***] day of [***], [***] (the "Third Amendment Execution Date"), by and between BMR-MEDICAL CENTER DRIVE LLC, a Delaware limited liability company ("Landlord"), and MACROGENICS, INC., a Delaware corporation ("Tenant").

RECITALS

A. WHEREAS, pursuant to that certain Assignment and Assumption Agreement dated as of [***] (the "Original Assignment Agreement", as amended by that certain First Amendment to Assignment and Assumption Agreement dated as of [***] (the "First Amendment to Assignment" and collectively with the Original Assignment Agreement, the "Assignment Agreement") between J. Craig Venter Institute, Inc. ("JCVI"), as assignor, and Tenant, as assignee, and that certain Landlord Consent dated as of [***] attached to the Original Assignment Agreement and executed by Landlord (the "Original Landlord Consent"), as amended by that certain First Amendment to Landlord Consent dated as of [***] attached to the First Amendment to Assignment and executed by Landlord (the "First Amendment to Landlord Consent" and collectively with the Original Landlord Consent, the "Landlord Consent"), Landlord and Tenant are parties to that certain Lease dated as of [***], as amended by that certain First Amendment to Lease dated as of [***] and that certain Second Amendment to Lease dated as of [***] (the "Second Amendment") (collectively, the "Existing Lease"), whereby Tenant leases certain premises (the "Premises") from Landlord at 9704 Medical Center Drive in Rockville, Maryland (the "Building");

B. WHEREAS, Landlord and Tenant desire to modify certain provisions of the existing Lease on the terms and conditions set forth in this Third Amendment; and

C. WHEREAS, Landlord and Tenant desire to modify and amend the Existing Lease only in the respects and on the conditions hereinafter stated.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Definitions. For purposes of this Third Amendment, capitalized terms shall have the meanings ascribed to them in the Existing Lease unless otherwise defined herein. The Existing Lease, as amended by this Third Amendment, is referred to collectively herein as the "Lease." From and after the date hereof, the term "Lease," as used in the Existing Lease, shall mean the Existing Lease, as amended by this Third Amendment. To the extent terms are defined in both the Existing Lease and the Third Amendment, the defined terms in this Third Amendment shall control for the entire Lease, as amended.

2. Early Access to Premises. Section 5 of the Second Amendment is hereby deleted. Subject to JCVI's compliance with its obligation to allow Tenant early access to the Premises under Section 2 of the Assignment Agreement, from and after the Third Amendment Execution Date, with respect to the Premises (excluding the Second Floor Premises (as defined in the First

Amendment to Assignment)), Landlord shall use commercially reasonable efforts to grant Tenant access to the Premises and Common Areas prior to the Revised Term Commencement Date for the purposes of conducting design phase inspections, constructing improvements, installing furniture, fixtures and equipment or the placement of personal property, but not for the purpose of conducting Tenant's business, provided Tenant shall furnish to Landlord evidence satisfactory to Landlord in advance that insurance coverages required of Tenant under the provisions of Article 23 of the Existing Lease are in effect, and such entry shall be subject to all the terms and conditions of the Lease other than the payment of Base Rent or Tenant's Share of Operating Expenses.

3. Loading Dock. Exhibit K attached hereto shall replace Exhibit K attached to the Second Amendment, and shall hereafter be the Exhibit K referenced in Section 4(g) of the Second Amendment.

4. Broker. Tenant and Landlord each represents and warrants that it has not dealt with any broker or agent in the negotiation for or the obtaining of this Third Amendment, and agrees to reimburse, indemnify, save, defend (at the indemnified party's option and with counsel reasonably acceptable to the inclemnified party, at the indemnifying party's sole cost and expense) and hold harmless the indemnified party for, from and against any and all cost or liability for compensation claimed by any such broker or agent employed or engaged by it or claiming to have been employed or engaged by it.

5. Effect of Amendment. Except as modified by this Third Amendment and the Assignment Agreement and Landlord Consent, each as amended through the date hereof, the Existing Lease and all the covenants, agreements, terms, provisions and conditions thereof shall remain in full force and effect and are hereby ratified and affirmed. In the event of any conflict between the terms contained in this Third Amendment and the Existing Lease, the terms herein contained shall supersede and control the obligations and liabilities of the parties.

6. Successors and Assigns. Each of the covenants, conditions and agreements contained in this Third Amendment shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns and sublessees. Nothing in this section shall in any way alter the provisions of the Lease restricting assignment or subletting.

7. Miscellaneous. This Third Amendment becomes effective only upon execution and delivery hereof by Landlord and Tenant. The captions of the paragraphs and subparagraphs in this Third Amendment are inserted and included solely for convenience and shall not be considered or given any effect in construing the provisions hereof. All exhibits hereto are incorporated herein by reference. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease, lease amendment or otherwise until execution by and delivery to both Landlord and Tenant.

8. Authority. Tenant guarantees, warrants and represents that the individual or individuals signing this Third Amendment have the power, authority and legal capacity to sign this Third Amendment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed. Landlord guarantees, warrants and represents that the individual or individuals signing this Third Amendment have the power, authority and legal capacity to sign this Third Amendment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

9. Counterparts; Facsimile and PDF Signatures. This Third Amendment may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document. A facsimile or portable document format (PDF) signature on this Third Amendment shall be equivalent to, and have the same force and effect as, an original signature.

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IN WITNESS WHEREOF, Landlord and Tenant have executed this Third Amendment as of the date and year first above written.

LANDLORD:

BMR-MEDICAL CENTER DRIVE LLC,
a Delaware limited liability company

By: */s/ Jonathan P. Klassen*
Name: Jonathan P. Klassen
Title: Executive Vice President

TENANT:

MACROGENICS, INC.,
a Delaware corporation

By: */s/ Atul Saran*
Name: Atul Saran
Title: SVP & GC

CERTAIN PORTIONS OF THIS EXHIBIT (INDICATED BY [***]) HAVE BEEN EXCLUDED PURSUANT TO ITEM 601(B)(10) OF REGULATION S-K BECAUSE THEY ARE BOTH NOT MATERIAL AND ARE THE TYPE THAT THE COMPANY TREATS AS PRIVATE AND CONFIDENTIAL.

FOURTH AMENDMENT TO LEASE

THIS FOURTH AMENDMENT TO LEASE (this "Amendment") is entered into as of this [***] day of [***] (the "Execution Date"), by and between BMR-MEDICAL CENTER DRIVE LLC, a Delaware limited liability company ("Landlord"), and MACROGENICS, INC., a Delaware corporation ("Tenant").

RECITALS

A. WHEREAS, pursuant to that certain Assignment and Assumption Agreement dated as of [***] (the "Original Assignment Agreement", as amended by that certain First Amendment to Assignment and Assumption Agreement dated as of [***] (the "First Amendment to Assignment" and collectively with the Original Assignment Agreement, the "Assignment Agreement") between J. Craig Venter Institute, Inc. "JCVI" as assignor, and Tenant, as assignee, and that certain Landlord Consent dated as of [***] attached to the Original Assignment Agreement and executed by Landlord (the "Original Landlord Consent"), as amended by that certain First Amendment to Landlord Consent dated as of [***] attached to the First Amendment to Assignment and executed by Landlord (the "First Amendment to Landlord Consent" and collectively with the Original Landlord Consent the "Landlord Consent"), Landlord and Tenant are parties to that certain Lease dated as of [***], as amended by that certain First Amendment to Lease dated as of [***] that certain Second Amendment to Lease dated as of [***] (the "Second Amendment") and that certain Third Amendment to Lease dated as of [***] (collectively, and as the same may have been further amended, amended and restated, supplemented or modified from time to time, the "Existing Lease"), whereby Tenant leases certain premises (the "Premises") from Landlord at 9704 Medical Center Drive in Rockville, Maryland (the "Building");

B. WHEREAS, Landlord and Tenant desire to extend the Term of the Existing Lease and modify certain other provisions of the existing Lease on the terms and conditions set forth in this Amendment; and

C. WHEREAS, Landlord and Tenant desire to modify and amend the Existing Lease only in the respects and on the conditions hereinafter stated.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Definitions. For purposes of this Amendment, capitalized terms shall have the meanings ascribed to them in the Existing Lease unless otherwise defined herein. The Existing Lease, as amended by this Amendment, is referred to collectively herein as the "Lease." From and after the date hereof, the term "Lease," as used in the Existing Lease, shall mean the Existing Lease, as amended by this Amendment.

2. Further Revised Term. The Revised Term of the Lease is hereby extended through the end of the ten (10)-year period commencing on [***] and expiring on [***] (the "Further Revised Term" and the Term Expiration Date is hereby extended from [***] to [***]. From and after the Execution Date, any references in the Lease to the "Term Expiration Date" shall mean [***] and any references in the Lease to "Term" shall mean the Revised Term, as extended by this Amendment, and as the same may be further extended pursuant to Section 14 of the Second Amendment, and subject to the earlier termination of the Lease as therein provided.

3. Condition of Premises. Tenant acknowledges that (a) as of the Execution Date it is in possession of and is fully familiar with the condition of the Premises and, notwithstanding anything contained in the Lease to the contrary, except as otherwise expressly provided in the Existing Lease, the Assignment Agreement or the Landlord Consent, agrees to take the same in its condition "as is" as of the first day of the Further Revised Term, subject to Landlord's delivery of the Fourth Amendment TI Allowance, and (b) Landlord shall have no obligation to alter, repair or otherwise prepare the Premises for Tenant's continued occupancy for the Further Revised Term or to pay for any improvements to the Premises, except, in each case, as may be expressly provided in the Lease, the Assignment Agreement, the Landlord Consent or this Amendment.

4. Base Rent. Effective as of [***] the chart in Section 4(b) of the Second Amendment is hereby amended for the period commencing on [***] and ending on [***] to be as set forth below and monthly and annual installments of Base Rent for the Premises during the Further Revised Term (as extended by this Amendment) shall be as set forth in the chart below, subject to adjustment under the Lease.

Dates	Square Feet of Rentable Area	Base Rent per Square Foot of Rentable Area	Monthly Base Rent	Annual Base Rent
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

5. Operating Expenses. Effective as of [***] the last clause of Section 4(j) of the Second Amendment, commencing with the words "In addition, to the extent..." and including the chart set forth at the end of Section 4(j), shall be deleted and shall be of no further force or effect.

6. TI Allowance.

6.1 Effective as of the Execution Date, (a) Landlord shall have no further obligation to fund, and Tenant shall have no further right receive, the Additional TI Allowance and (b) any rights and/or obligations with respect to such Additional TI Allowance shall be null and void and of no force or effect. As of the Execution Date, Landlord confirms that: (x) it has not disbursed any of the Additional TI Allowance to Tenant and (y) therefore, Landlord has not increased, and shall have no further right from and after the Execution Date to increase, Base Rent upon any disbursement of any Additional TI Allowance pursuant to Section 6(b) of the Second Amendment. From and after the Execution Date, Section 6(b) shall have no further force and effect, with the exception of the definition of "TI Deadline," which shall be amended and restated to mean [***] for all purposes under the Lease.

6.2 In accordance with the terms and conditions of this Amendment, Landlord shall make available to Tenant an additional tenant improvement allowance in the amount of [***] Dollars ($[***]) (the "Fourth Amendment TI Allowance") to be applied to the cost of the Tenant

Improvements (as defined below) performed by Tenant in the Premises within the [***] period immediately prior to the Execution Date or to be performed by Tenant after the Execution Date, pursuant to Section 6 of the Second Amendment and the Work Letter attached to the Second Amendment as Exhibit C (the "Work Letter"), as the same may be amended by this Amendment. Landlord shall disburse the Fourth Amendment TI Allowance to Tenant on the Execution Date (provided that Tenant delivers its duly executed counterpart of this Amendment no later than 12:00 pm Pacific time on the Execution Date, otherwise Landlord shall disburse the Fourth Amendment TI Allowance to Tenant no later than one (1) business day after the Execution Date) by wire transfer of immediately available funds to an account specified by Tenant. Tenant shall apply the Fourth Amendment TI Allowance to finance hard and soft costs of the Tenant Improvements, including costs of commissioning of any mechanical, electrical and plumbing systems and preparation and review of any related commissioning report, building permits and other taxes, fees, charges and levies charged by Governmental Authorities for permits for or inspections of the Tenant Improvements, and costs and expenses for labor, material, equipment and fixtures. For purposes of this Amendment, "Tenant Improvements" shall mean the first floor, second floor and fifth floor renovations to be performed by Tenant in the Premises, as substantially described in the documents entitled "MacroGenics 9704 MCD Level 1 & 2 Renovation Construction Set" dated May 18, 2016 prepared by CRB Architects-Engineers P.C. and consisting of 76 pages and approved by Landlord by a letter from Landlord to Tenant dated [***] with certain conditions stated therein, and "MacroGenics 9704 MCD Level 1 & 2 Renovation Construction Set, Bulletin #1" dated [***] prepared by CRB Architects-Engineers P.C. and consisting of 130 pages, and approved by a letter from Landlord to Tenant dated [***], with certain conditions stated therein, and as each of the same may be modified or narrowed by Tenant from time to time, in its sole discretion, but subject to Landlord's approval or consent, to the extent that Landlord's approval or consent is required under the Work Letter.

6.3 Tenant shall perform the Tenant Improvements in accordance with Section 6 of the Second Amendment and the Work Letter, as the same may be modified by this Amendment. Without limiting the generality of the foregoing:

(a) Tenant shall deliver to Landlord the Completion Evidence for the Tenant Improvements on or before the TI Deadline (time being of the essence), and any failure to do so shall constitute a Default under Section 31.4 of the Lease. Landlord and Tenant hereby agree that Completion Evidence" shall consist of the following for purposes of this Amendment: (i) a statement setting forth the total cost of the Tenant Improvements, including supporting invoices (paid or presently due and payable) for Tenant's costs of the Tenant Improvements, and certifying that the Fourth Amendment TI Allowance was applied to the Tenant Improvements in accordance with this Amendment; and (ii) all of the TI Submittals. Landlord and Tenant hereby agree that "TI Submittals" shall consist of the following for purposes of this Amendment: (t) commercially reasonable evidence satisfactory to Landlord that (i) all Tenant Improvements have been completed and paid for in full (an architect's certificate of completion and the general contractor's and each subcontractor's and material supplier's final unconditional waivers and releases of liens, each in a form acceptable to Landlord and complying with Applicable Laws, and a Certificate of Substantial Completion in the form of the American Institute of Architects document G704, executed by the project architect and the general contractor, together with a statutory notice of substantial completion from the general contractor shall be deemed evidence of completion of all Tenant Improvements and the same are paid in full), and (ii) any and all liens related to the Tenant Improvements have either been discharged of record (by payment, bond, order of a court of competent jurisdiction or otherwise) or waived by the party filing such lien; (u) certificates of insurance required by the Lease to be purchased and maintained by Tenant; (v) an affidavit from Tenant's architect certifying that all work performed in, on or about the Premises is in accordance with the Approved Plans; (w) complete "as built" drawing print sets, project specifications and shop drawings and electronic CADD files on disc (showing the Tenant Improvements as an overlay on the Building "as built" plans (provided that Landlord

provides the Building "as-built" plans provided to Tenant) of all contract documents for work performed by their architect and engineers in relation to the Tenant Improvements, together with a consent by Tenant's architects and engineers to Landlord's use of such plans and specifications, as revised (if and to the extent such consent is granted following Tenant's request therefor from Tenant's architects and engineers, provided, that Tenant have no liability to Landlord, nor be in breach or default under the Lease or this Amendment, if Tenant's architects or engineers fail to consent to Landlord's use of such plans and specifications, as revised), upon the expiration or earlier termination of the Lease, in such form as Landlord shall reasonably require; and (x) a commissioning report prepared by a licensed, qualified commissioning agent hired by Tenant and approved by Landlord for all new or affected mechanical, electrical and plumbing systems (which report Landlord may hire a licensed, qualified commissioning agent to peer review, and whose reasonable recommendations Tenant's commissioning agent shall perform and incorporate into a revised report).

(b) If not previously selected by Tenant and approved by Landlord, Tenant shall select the architect, engineer, and general contractor for the construction of the Tenant Improvements, subject to Landlord's approval, such approval not to be unreasonably withheld, conditioned or delayed. Landlord hereby approves the following architect and for design of the Tenant Improvements: CRB Architects-Engineers P.C. Landlord hereby approves the following general contractor for construction of the Tenant Improvements: CRB Builders, LLC.

(c) Tenant's Authorized Representatives shall continue to be Thomas Spitznagel and Chris Holmes.

(d) Tenant shall perform the Tenant Improvements in accordance with the Schedule and Approved Plans, and any changes to the Approved Plans required for the Tenant Improvements shall be requested and instituted in accordance with Article 2 of the Work Letter.

(e) Upon Substantial Completion of any Tenant Improvements in any portion of the Premises in which Tenant is not currently in occupancy and conducting business, prior to occupying and commencing to conduct business in such portion of the Premises (but without limitation of Tenant's right to conduct installation, qualification and validation of equipment in such portion of the Premises at any time and without the Required Occupancy Approvals), Tenant shall deliver to Landlord any certifications and approvals with respect to the Tenant Improvements from any Governmental Authority and any board of fire underwriters or similar body for the use and occupancy of the Premises, to the extent required by Applicable Laws (including a certificate of occupancy for the Permitted Use, if such certificate of occupancy is required by Applicable Law) (collectively, the "Required Occupancy Approvals"); provided, that, the Required Occupancy Approvals shall be not be considered Completion Evidence; further, provided, that, Tenant shall not be obligated to refund or repay any of the Fourth Amendment TI Allowance by reason of Tenant's failure to deliver such Required Occupancy Approvals to Landlord (but Tenant may not occupy or commence to conduct business in the applicable portion of the Premises until Tenant delivers the Required Occupancy Approvals, and the failure to deliver to Required Occupancy Approvals shall not excuse, waive, postpone or constitute any defense to Tenant's obligations under the Lease, including the obligation to pay Rent).

(f) Landlord confirms that Tenant shall not be obligated to pay Landlord a construction management fee or any similar construction oversight fee with respect to the Tenant Improvements.

7. SNDA. Landlord agrees to request a subordination and non-disturbance agreement (an "SNDA") from its current Mortgagees in the form attached hereto as Exhibit A (which is consistent with the form of SNDA attached to that certain Loan Agreement dated as of [***], as

amended by that certain First Amendment to Loan Agreement and Other Loan Documents dated as of [***] (collectively, as the same may be amended, restated and/or replaced from time to time, the "Loan Agreement"), by and among Landlord, as mortgagor, the current Mortgagees and certain other parties thereto (the "Required Form of SNDA")) with such changes requested by Tenant, within thirty (30) days after the Execution Date. Landlord agrees to use reasonable efforts, at no cost to Landlord, to obtain the SNDA substantially in the form attached hereto as Exhibit A from such Mortgagees. Landlord will not obstruct Tenant's negotiations with the Mortgagees regarding Tenant's requested changes to such SNDA. Tenant acknowledges that, while Tenant may request changes to the Required Form of SNDA from the current Mortgagees, the current Mortgagees have no contractual or other obligation to deliver any SNDA other than the Required Form of SNDA, and there is no definite time period during which such Mortgagees are required to respond to any request for or to deliver a Required Form of SNDA under the Loan Agreement, and therefore, any refusal or failure to deliver or delay in delivering any SNDA to Tenant shall not constitute a default of Landlord under the Lease. For purposes of clarity, using "reasonable efforts" to obtain the Required Form of SNDA from the Mortgagees shall not require Landlord to assert any default of Mortgagees or otherwise take any enforcement actions under the Loan Agreement or any other loan documents affecting the Premises. Within [***] days after Landlord's written demand therefor, together with reasonable supporting documentation, Tenant shall reimburse any fees charged by the Mortgagees or their legal counsel pursuant to the Loan Agreement and any other third party out-of-pocket costs incurred by Landlord in connection with the request for, drafting or negotiation of and/or delivery of any SNDA requested by Tenant under this Amendment, regardless of whether the current Mortgagees agree to or actually execute and deliver such SNDA.

8. Security Deposit. Landlord acknowledges that pursuant to Section 4(c) of the Second Amendment, as of the Execution Date, it is currently holding a Security Deposit in the amount of [***] Dollars ($[***]).

9. ROFO. Upon Tenant's request, Landlord agrees to execute and deliver to Tenant an amended and restated Purchase ROFO Memorandum, with the sole change to being to reflect the execution of this Amendment and the Further Revised Term, as the same may be further extended pursuant to Section 14 of the Second Amendment. Tenant may, but shall not be obligated to, record the amended and restated Purchase ROFO Memorandum, provided that Tenant shall be obligated to pay all costs and expenses relating thereto, including any taxes assessed as a result of such recording.

10. Broker. Tenant and Landlord each represents and warrants that it has not dealt with any broker or agent in the negotiation for or the obtaining of this Amendment, other than CBRE, Inc. ("Broker"), and agrees to reimburse, indemnify, save, defend (at the indemnified party's option and with counsel reasonably acceptable to the indemnified party, at the indemnifying party's sole cost and expense) and hold harmless the indemnified party for, from and against any and all cost or liability for compensation claimed by any such broker or agent, other than Broker, employed or engaged by it or claiming to have been employed or engaged by it. Landlord shall pay any commission to the extent required to be paid to Broker in connection with making of this Amendment pursuant to a separate agreement between Landlord and Broker. Tenant shall have no obligation to pay Broker a leasing commission in connection with the making of this Amendment.

11. No Default. Tenant represents, warrants and covenants that, to the best of Tenant's knowledge, Landlord and Tenant are not in default of any of their respective obligations under the Existing Lease beyond applicable notice and cure periods. Landlord represents, warrants and covenants that, to the best of Landlord's knowledge, Landlord and Tenant are not in default of any of their respective obligations under the Existing Lease beyond applicable notice and cure periods.

12. Notices. Tenant confirms that, notwithstanding anything in the Lease to the contrary, notices delivered to Tenant pursuant to the Lease should be sent to:

MacroGenics, Inc.
9704 Medical Center Drive
Rockville, Maryland 20850
Attn: General Counsel;

with a copy to:

Covington & Burling LLP
One CityCenter
850 Tenth Street, NW
Washington, DC 20001
Attention: Heather G. Haberl

13. Effect of Amendment. Except as modified by this Amendment, the Existing Lease and all the covenants, agreements, terms, provisions and conditions thereof shall remain in full force and effect and are hereby ratified and affirmed. In the event of any conflict between the terms contained in this Amendment and the Existing Lease, the terms herein contained shall supersede and control the obligations and liabilities of the parties.

14. Successors and Assigns. Each of the covenants, conditions and agreements contained in this Amendment shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns and sublessees. Nothing in this section shall in any way alter the provisions of the Lease restricting assignment or subletting.

15. Miscellaneous. This Amendment becomes effective only upon execution and delivery hereof by Landlord and Tenant and Tenant's receipt of the Fourth Amendment TI Allowance from Landlord. The captions of the paragraphs and subparagraphs in this Amendment are inserted and included solely for convenience and shall not be considered or given any effect in construing the provisions hereof. All exhibits hereto are incorporated herein by reference. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease, lease amendment or otherwise until execution by and delivery to both Landlord and Tenant.

16. Authority. Tenant guarantees, warrants and represents that the individual or individuals signing this Amendment have the power, authority and legal capacity to sign this Amendment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

17. Counterparts; Facsimile and PDF Signatures. This Amendment may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document. A facsimile or portable document format (PDF) signature on this Amendment shall be equivalent to, and have the same force and effect as, an original signature.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment as of the date and year first above written.

LANDLORD:

BMR-MEDICAL CENTER DRIVE LLC,
a Delaware limited liability company

By: /s/ Marie Lewis
Name: Marie Lewis
Title: Vice President, Legal

TENANT:

MACROGENICS, INC.,
a Delaware corporation

By: /s/ Scott Koenig
Name: Scott Koenig
Title: CEO

CERTAIN PORTIONS OF THIS EXHIBIT (INDICATED BY [***]) HAVE BEEN EXCLUDED PURSUANT TO ITEM 601(B)(10) OF REGULATION S-K BECAUSE THEY ARE BOTH NOT MATERIAL AND ARE THE TYPE THAT THE COMPANY TREATS AS PRIVATE AND CONFIDENTIAL.

FIFTH AMENDMENT TO LEASE

THIS FIFTH AMENDMENT TO LEASE (this "**Amendment**") is entered into as of this [***], [***] ("**Execution Date**"), by and between ARE-MARYLAND NO. 45, LLC, a Delaware limited liability company ("**Landlord**"), and MACROGENICS, INC., a Delaware corporation ("**Tenant**").

RECITALS

A. Pursuant to that certain Assignment and Assumption Agreement dated as of [***] ("**Original Assignment Agreement**"), as amended by that certain First Amendment to Assignment and Assumption Agreement dated as of [***] ("**First Amendment to Assignment**" and collectively with the Original Assignment Agreement, the "**Assignment Agreement**" between J. Craig Venter Institute, Inc., ("**JCVI**"), as assignor, and Tenant, as assignee, and that certain Landlord Consent dated as of [***] attached to the Original Assignment Agreement and executed by BMR-Medical Center Drive LLC, a Delaware limited liability company ("**BMR**") ("**Original Landlord Consent**"), as amended by that certain First Amendment to Landlord Consent dated as of [***] attached to the First Amendment to Assignment and executed by BMR First Amendment to Landlord Consent and collectively with the Original Landlord Consent, the "**Landlord Consent**"), BMR and Tenant are parties to that certain Lease dated as of [***] ("**Original Lease**"), as amended by that certain First Amendment to Lease dated as of [***] ("**First Amendment**"), that certain Second Amendment to Lease dated as of [***] ("**Second Amendment**"), that certain Third Amendment to Lease dated as of [***] ("**Third Amendment**"), and that certain Fourth Amendment to Lease dated as of [***] ("**Fourth Amendment**"); together with the Original Lease, the First Amendment, the Second Amendment, and the Third Amendment, the "**Existing Lease**"), whereby Tenant leases certain premises ("**Premises**") from Landlord at 9704 Medical Center Drive in Rockville, Maryland ("**Building**").

B. Landlord and Tenant desire to extend the Term of the Existing Lease, provide an abatement of certain of the Base Rent for the Premises, modify the existing options to extend the Term, and modify certain other provisions of the Existing Lease on the terms and conditions set forth in this Amendment.

C. Landlord and Tenant desire to modify and amend the Existing Lease only in the respects and on the conditions stated in this Amendment.

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Definitions. For purposes of this Amendment, capitalized terms shall have the meanings ascribed to them in the Existing Lease unless otherwise defined herein. The Existing Lease, as amended by this Amendment, is referred to collectively herein as the "**Lease,**" From and after the Execution Date, this term "**Lease,**" as used in the Existing Lease, shall mean the Existing Lease, as amended by this Amendment.

2. Second Revised Term. The Further Revised Term of the Lease for the Premises (which was added to the Existing Lease pursuant to the Fourth Amendment) expires on [***]. The Further Revised Term for the Premises is hereby extended for the period beginning on [***] and, unless earlier terminated or extended as provided in the Lease, expiring on [***] Second Revised Term, and the Term Expiration Date for the Premises is hereby extended from [***] to [***]. From and after the Execution Date, any references in the Lease to the "**Term Expiration Date**" shall mean [***] (and, if the Term is extended for the First Extension Term, [***], and if the Term is extended for the Second Extension Term, [***]), and any references in the Lease to "**Term**" shall mean the Revised Term, the Further Revised Term, all as extended by the Second Revised Term, and as the same may be further extended pursuant to **Section 6** of this Amendment.

3. Condition of Premises. Tenant acknowledges that (a) as of the Execution Date it is in possession of and is fully familiar with the condition of the Premises and, except as otherwise expressly provided in the Existing Lease, the Assignment Agreement, the Landlord Consent, or this Amendment, agrees to take the Premises in its condition "**as is**" as of the first day of the Second Revised Term, and (b) Landlord shall have no obligation to alter, repair, or otherwise prepare the Premises for Tenant's continued occupancy for the Second Revised Term or to pay for any improvements to the Premises, except, in each case under clauses (a) and (b), as may be expressly provided in the Existing Lease or this Amendment.

4. Base Rent for Premises. Effective as of the Execution Date, the table in Section 4 of the Fourth Amendment setting forth the Base Rent for the Premises is hereby amended for the period commencing on [***] and ending on [***] as set forth in the table below:

Dates	Square Feet of Rentable Area For Premises	Annual Base Rent per Square Foot of Rentable Area†	Monthly Base Rent	Annual Base Rent
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

†The calculation of the Annual Base Rent and Monthly Base Rent in this table is based on escalating the Annual Base Rent per square foot of rentable area amount each year by [***]% and multiplying that amount by the rentable square footage of the Premises (i.e., [***] rentable square feet).

5. Abatement of Base Rent for Premises. Notwithstanding anything to the contrary contained in the Lease or this Amendment, Landlord hereby grants Ten ant an abatement of [***] of the Base Rent payable for the Premises during the period beginning on the Execution Date and ending [***] months after the Execution Date ("**Base Rent Abatement**"): provided, however, that during any period in which Tenant is in Default, Landlord may, upon prior written notice to Tenant accompanied by a rent invoice, suspend the Base Rent Abatement day for day, effective as of the first day of such Default until the day Tenant cures such Default, at which time the Base Rent Abatement shall be reinstituted for the full number of days that remained in the Base Rent Abatement period on the first day of such Default. For the avoidance of doubt, if the Execution Date occurs on the first day of a month, the Base Rent Abatement will be measured from that date. If the Execution Date occurs on a day other than the first day of a month, the Base Rent Abatement will be measured from the first day of the following month. Except as provided in the preceding sentences, Tenant shall pay the full amount of Base Rent for the Premises due in accordance with the provisions of the Lease. The Property Management Fee shall not be abated

and shall be based on the amount of Base Rent for the Premises that would have been payable but for the Base Rent Abatement.

6. Option to Extend. Section 14 of the Second Amendment is hereby deleted in its entirely and replaced with the words "**Intentionally Deleted.**" Tenant shall have the right to extend the Term of the Lease for the Premises upon the following terms and conditions:

a. Extension Rights. Tenant shall have 2 consecutive rights (each an "**Extension Right**") to extend the Term of the Lease for the Premises for 5 years each (the "**First Extension Term**" and the "**Second Extension Term**" as applicable; collectively, the "**Extension Term**") on the same terms and conditions as the Lease (other than Base Rent) by giving Landlord written notice of its election to exercise the Extension Right at least 12 months prior, and no earlier than 18 months prior, to the expiration of the Second Revised Term (with respect to the First Extension Term) or the First Extension Term (with respect to the Second Extension Term). The First Extension Term shall commence on [***] and, unless earlier terminated or extended in accordance with the terms and conditions of the Lease, expire on [***], and the Second Extension Term shall commence on [***] and, unless earlier terminated in accordance with the terms and conditions of the Lease, expire on [***]. For ease of reference, set forth in the table below are the dates for the Further Revised Term, Second Revised Term, First Extension Term, and Second Extension Term:

[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

b. Base Rent. Base Rent at the commencement of the applicable Extension Term shall equal the greater of (i) the Market Rate (as defined below), and (ii) the Base Rent payable immediately before the commencement of the applicable Extension Term multiplied by [***]%. Base Rent shall thereafter be adjusted on each anniversary of the commencement of the applicable Extension Term by a percentage as determined by Landlord and agreed to by Tenant at the time the Market Rate is determined. As used herein, "**Market Rate**" shall mean the then market base rental rate and annual escalations thereof for comparable space for a comparable term in buildings in the Rockville, Maryland submarket comparable in age, location, and quality to the Building, taking into account the existence and amount of any tenant improvement allowance or any other cash payment or other equivalent concession, including, without limitation, lease allowances, and any other comparable tenant inducement and market concession, leasehold improvements, and brokerage fees.

Tenant may, [***], request Landlord's proposed Market Rate for the next Extension Term. Landlord shall, [***], give Tenant a written and binding proposal for the Market Rate. If, [***] Landlord and Tenant have not agreed on the determination of the Market Rate and the rent escalations during such subsequent Extension Term after negotiating in good faith, Tenant may by written notice to Landlord [***] elect arbitration as described in Section 6.c below. If Tenant does not elect such arbitration, Tenant shall be deemed to have waived any right to extend the Term of the Lease and the Extension Right shall terminate.

c. Arbitration

i. [***] each party shall deliver to the other a proposal containing the Market Rate and escalations that the submitting party believes to be correct ("**Extension Proposal**"). If either party fails to timely submit an Extension Proposal, the other party's submitted proposal shall determine the Base Rent and escalations for the applicable Extension Term. If both parties submit Extension Proposals, then Landlord and Tenant shall meet [***] and make a good faith attempt to mutually appoint a single Arbitrator (as defined below) to determine the Market Rate and escalations. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other [***], select an Arbitrator. If either party fails to timely give notice of its selection for an Arbitrator, the other party's submitted proposal shall be used to determine the Base Rent for the applicable Extension Term.

The 2 Arbitrators so appointed shall [***] appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located [***].

ii. The decision of the Arbitrator(s) shall be made [***]. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Rate and escalations are not determined by the first day of the applicable Extension Term, then Tenant shall pay Landlord Base Rent in an amount equal to the Base Rent in effect immediately prior to the applicable Extension Term and increased by [***]% until such determination is made. After the determination of the Base Rent and escalations, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute and deliver an amendment recognizing the Base Rent (as determined in the first sentence of Section 6.b. above) and escalations for the applicable Extension Term.

iii. An "**Arbitrator**" shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and: (1) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech industrial real estate in the greater Rockville, Maryland metropolitan area, or (B) a licensed commercial real estate broker with not less than 15 years' experience representing landlords and/or tenants in the leasing of high tech or life sciences space in the greater Rockville, Maryland metropolitan area, (2) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (3) be in all respects impartial and disinterested.

d. Assignment of Extension Right. The Extension Right is not assignable separate and apart from the Lease. Tenant's rights under this Section 6 shall be transferable in connection with an assignment of the Lease to an Exempt Transferee, but shall not be transferable to any other assignee without the prior written consent of Landlord, which consent Landlord may withhold in its sole and absolute discretion.

e. Exceptions. Notwithstanding anything set forth above to the contrary, the Extension Right shall not be in effect and Tenant may not exercise the Extension Right: (i) during any period of time that Tenant is in Default under any provision of the Lease; or (ii) if Tenant has been in Default under any provision of the Lease 3 or more times, regardless of whether the Defaults are cured, during the [***] period immediately prior to the date that Tenant intends to exercise the Extension Right, regardless of whether the Defaults are cured.

f. No Extension. The period of time within which the Extension Right may be exercised shall not be extended or

g. Termination. The Extension Right shall terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but before the commencement date of the applicable Extension Term, Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, regardless of whether such Defaults are cured.

7. Miscellaneous.

a. Entire Agreement. The Lease, as amended by this Amendment, is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. The Lease, as so amended by this Amendment, may be amended only by an agreement in writing, signed by the parties hereto.

b. Binding Effect. This Amendment is binding upon and shall inure to the benefit of the parties hereto, their respective agents, employees, members, representatives, officers, directors, divisions, subsidiaries, affiliates, assigns, heirs, successors in interest and shareholders.

c. Counterparts. This Amendment may be executed in 2 or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying with the U.S. federal ESIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

d. Broker. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent, or other person (collectively, "**Broker**") in connection with this Amendment and that no Broker brought about this transaction, other than Tenant's broker, Jones Lang LaSalle Brokerage, Inc. ("**JLL**"). JLL shall be paid by Landlord pursuant to a separate agreement between Landlord and JLL. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than JLL, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this Amendment.

e. Ratification; Conflicts. Except as amended and/or modified by this Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this Amendment. In the event of any conflict between the provisions of this Amendment and the provisions of the Lease, the provisions of this Amendment shall prevail. Regardless of whether specifically amended by this Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this Amendment.

[END OF PAGE; SIGNATURES APPEAR ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as a document under seal as of the day and year first above written.

LANDLORD:

ARE-MARYLAND NO. 45, LLC,
a Delaware limited liability company

By: Alexandria Real Estate Equities, LP.,
a Delaware limited partnership,
managing member

By: ARE-ORS CORP.,
a Maryland corporation,
general partner

By: *Gregory Kay* (SEAL)
Name: Gregory Kay
Title: Senior Vice President
Real Estate Legal Affairs

TENANT:

MACROGENICS, INC.,
a Delaware corporation

By: *Scott Koenig* (SEAL)
Name: Scott Koenig
Title: CEO

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as a document under seal as of the day and year first above written.

LANDLORD:

ARE-MARYLAND NO. 45, LLC,
a Delaware limited liability company

By: Alexandria Real Estate Equities, LP.,
a Delaware limited partnership,
managing member

By: ARE-ORS CORP.,
a Maryland corporation,
general partner

By: *Gregory Kay* (SEAL)
Name: Gregory Kay
Title: Senior Vice President
Real Estate Legal Affairs

TENANT:

MACROGENICS, INC.,
a Delaware corporation

By: *Scott Koenig* (SEAL)
Name: Scott Koenig
Title: CEO

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 (Form S-8 No. 333-192277) pertaining to the 2000 Stock Option and Incentive Plan, the 2003 Equity Incentive Plan, and 2013 Equity Incentive Plan of MacroGenics, Inc.,
2. Registration Statements (Form S-8 No. 333-202470) pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc.,
3. Registration Statements (Form S-8 No. 333-209812) pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc.,
4. Registration Statements (Form S-8 No. 333-217620) pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc.,
5. Registration Statements (Form S-8 No. 333-223682) pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc.,
6. Registration Statements (Form S-8 No. 333-230292) pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc.,
7. Registration Statements (Form S-8 No. 333-237127) pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc.,
8. Registration Statements (Form S-8 No. 333-253502) pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc.,
9. Registration Statements (Form S-8 No. 333-262967) pertaining to the 2013 Equity Incentive Plan of MacroGenics, Inc.,
10. Registration Statement (Form S-8 No. 333-214386) pertaining to the 2016 Employee Stock Purchase Plan of MacroGenics, Inc., and
11. Registration Statement (Form S-3 No. 333-249851) of MacroGenics, Inc.;

of our reports dated March 15, 2023, with respect to the consolidated financial statements of MacroGenics, Inc. and the effectiveness of internal control over financial reporting of MacroGenics, Inc. included in this Annual Report (Form 10-K) of MacroGenics, Inc. for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Tysons, Virginia
March 15, 2023

EXHIBIT 31.1

I, Scott Koenig, certify that:

1. I have reviewed this Annual Report on Form 10-K for the period ended December 31, 2022 of MacroGenics, 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.

/s/ Scott Koenig
Scott Koenig, M.D., Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

Dated: March 15, 2023

EXHIBIT 31.2

I, James Karrels, certify that:

1. I have reviewed this Annual Report on Form 10-K for the period ended December 31, 2022 of MacroGenics, 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.

/s/ James Karrels

James Karrels

Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

Dated: March 15, 2023

EXHIBIT 32.1

Certification of Principal Executive Officer Pursuant to 18 U.S.C. 1350 (Section 906 of the Sarbanes-Oxley Act of 2002)

I, Scott Koenig, President and Chief Executive Officer (principal executive officer) of MacroGenics, Inc. (the "Registrant"), certify, to the best of my knowledge, based upon a review of the Annual Report on Form 10-K for the period ended December 31, 2022 of the Registrant (the "Report"), that:

1. 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 Registrant.

/s/ Scott Koenig
Name: Scott Koenig, M.D., Ph.D.
Date: March 15, 2023

EXHIBIT 32.2

Certification of Principal Financial Officer Pursuant to 18 U.S.C. 1350 (Section 906 of the Sarbanes-Oxley Act of 2002)

I, James Karrels, Senior Vice President and Chief Financial Officer (principal financial officer) of MacroGenics, Inc. (the "Registrant"), certify, to the best of my knowledge, based upon a review of the Annual Report on Form 10-K for the period ended December 31, 2022 of the Registrant (the "Report"), that:

1. 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 Registrant.

/s/ James Karrels
Name: James Karrels
Date: March 15, 2023