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

FORM 10-K

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

For the fiscal year ended **December 31 , 2023**

or

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

For the transition period from _____ to _____

Commission file number: **0001-38762**

BIOMX INC.
(Exact name of registrant as specified in its charter)

Delaware	**82-3364020**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
22 Einstein St ., Floor 4 , Ness Ziona , Israel	**7414003**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **+972 723942377**

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

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Units, each consisting of one share of common stock, $0.0001 par value, and one warrant exercisable for one-half of one share of common stock	PHGE.U	NYSE American
Common stock, $0.0001 par value	PHGE	NYSE American

Securities registered pursuant to Section 12(g) of the Act
Warrants, each exercisable for one-half of one share of common stock, $0.0001 par value, at an exercise price of $11.50 per share.

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

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

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

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

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

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

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

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

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

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

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

On June 30, 2023, the last day of the Registrant's most recently completed second fiscal quarter, the aggregate market value of the Registrant's shares of Common Stock held by non-affiliates of the Registrant was $ 16,530,774 based on the closing sale price of the Registrant's shares of Common Stock on June 30, 2023 (the last trading day of the fiscal quarter) of $0.36 per share.

The number of shares outstanding of the Registrant's shares of Common Stock as of March 28, 2024 was 55,220,077 .

BIOMX INC.
Annual Report on Form 10-K for the Year Ended December 31, 2023

On March 15, 2024, BiomX Inc. acquired Adaptive Phage Therapeutics, Inc., a Delaware corporation, or APT, and such acquisition, the Acquisition, pursuant to an agreement and plan of merger, or the Merger Agreement, by and among BiomX Inc., APT, BTX Merger Sub I, Inc., a Delaware corporation, and BTX Merger Sub II, LLC, a Delaware limited liability company. References in this Annual Report on Form 10-K , or the Annual Report to the "Company," "BiomX," "we," "us" or "our" mean BiomX Inc. and its consolidated subsidiaries, including APT, unless otherwise expressly stated or the context indicates otherwise, provided, however, that all financial information included in this Annual Report, including financial information as of and for the years ended December 31, 2023 and December 31, 2022 and other information as of a date before March 15, 2024, unless noted specifically, does not include APT. References in this Annual Report to BiomX Ltd. mean BiomX Ltd., our wholly owned Israeli subsidiary. The description of the Company herein describes the post Acquisition Company and reflects the integration of APT's business. As further described elsewhere in this Annual Report, on October 28, 2019, Chardan Healthcare Acquisition Corp., a special purpose acquisition company, combined with BiomX Ltd. in the Business Combination (as defined below) and changed its name to BiomX Inc.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended or the Exchange Act. The statements contained in this Annual Report that are not purely historical are forward-looking statements. Forward-looking statements include statements about our expectations, beliefs, plans, objectives, intentions, assumptions and other statements that are not historical facts. Words or phrases such as "anticipate," "believe," "continue," "estimate," "expect," "intend," "may," "ongoing," "plan," "potential," "predict," "project," "will" or similar words or phrases, or the negatives of those words or phrases, may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. Examples of forward-looking statements in this Annual Report include, but are not limited to, statements regarding our disclosure concerning our operations, cash flows, financial position and also regarding our preclinical and clinical development plans, the safety, tolerability and efficacy of our phage therapy and the conducting, design, aims and timing of its preclinical and clinical studies and announcing results thereof.

Forward-looking statements appear in a number of places in this Annual Report including, without limitation, in the sections entitled "Management's Discussion and Analysis of Financial Conditions and Results of Operations," and "Business." The risks and uncertainties include, but are not limited to:

- the ability to generate revenues, and raise sufficient financing to meet working capital requirements;
- the integration of the operations of APT into the Company;
- the receipt of our stockholders' approval to certain proposals relating to the Acquisition and related private investment transaction;
- the unpredictable timing and cost associated with our approach to developing product candidates using phage technology;
- political and economic instability, including, without limitation, due to natural disasters or other catastrophic events, such as the Russian invasion of Ukraine and world sanctions on Russia, Belarus, and related parties, terrorist attacks, hurricanes, fire, floods, pollution and earthquakes;
- obtaining U.S. Food and Drug Administration, or FDA, acceptance of any non-U.S. clinical trials of product candidates;
- our ability to enroll patients in clinical trials and achieve anticipated development milestones when expected;

- the ability to pursue and effectively develop new product opportunities and acquisitions and to obtain value from such product opportunities and acquisitions;
- penalties and market withdrawal associated with any unanticipated problems with product candidates and failure to comply with labeling and other restrictions;
- general economic conditions, our current low stock price and other factors on our operations, the continuity of our business, including our preclinical and clinical trials, and our ability to raise additional capital;
- expenses associated with compliance with ongoing regulatory obligations and successful continuing regulatory review;
- market acceptance of our product candidates and ability to identify or discover additional product candidates;

- our ability to obtain high titers for specific phage cocktails necessary for preclinical and clinical testing;
- the availability of specialty raw materials and global supply chain challenges;
- the ability of our product candidates to demonstrate requisite, safety and efficacy for drug products, or safety, purity and potency for biologics without causing adverse effects;
- the success of expected future advanced clinical trials of our product candidates;
- our ability to obtain required regulatory approvals;
- delays in developing manufacturing processes for our product candidates;
- competition from similar technologies, products that are more effective, safer or more affordable than our product candidates or products that obtain marketing approval before our product candidates;
- the impact of unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives on our ability to sell product candidates or therapies profitably;
- protection of our intellectual property rights and compliance with the terms and conditions of current and future licenses with third parties;
- infringement on the intellectual property rights of third parties and claims for remuneration or royalties for assigned service invention rights;
- our ability to acquire, in-license or use proprietary rights held by third parties necessary to our product candidates or future development candidates;
- ethical, legal and social concerns about synthetic biology and genetic engineering that may adversely affect market acceptance of our product candidates;
- reliance on third-party collaborators;
- political, economic and military instability in the State of Israel, and in particular, the war in Gaza following the October 7 attack, additional potential conflicts with other middle eastern countries and the continuation of the proposed judicial and other legislation reform by the Israeli government;
- our ability to attract and retain key employees or to enforce the terms of noncompetition agreements with employees;
- the failure to comply with applicable laws and regulations other than drug manufacturing compliance;
- potential security breaches, including cybersecurity incidents; and
- other factors discussed in the section of this report entitled “Risk Factors” beginning on page 29.

Forward-looking statements are subject to known and unknown risks and uncertainties and are based on our management’s potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements. While these statements are based upon information available to us as of the filing date of this Annual Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements. Actual results could differ materially from those anticipated in forward-looking statements for many reasons, including the factors discussed in the section of this Annual Report entitled “Risk Factors”. Except as may be required by applicable law, we undertake no obligation to publicly revise any forward-looking statement to reflect circumstances or events after the date of this Annual Report or to reflect the occurrence of unanticipated events. You should, however, review the factors and risks we describe in the reports we will file from time to time with the U.S. Securities and Exchange Commission or the SEC, after the date of this Annual Report.

RISK FACTORS SUMMARY

The summary below provides an overview of many of the risks the Company faces, and a more detailed discussion of risks can be found in Item 1A. “Risk Factors” below. You should carefully consider these risks and uncertainties when investing in our securities. The principal risks and uncertainties affecting our business include, but are not limited to, the following:

- We are a clinical-stage company with limited operating history and have incurred losses since our inception. We anticipate that we will continue to incur significant expenses, and we will continue to incur significant losses for the foreseeable future.

- We will need to raise additional capital in the future to support our operations which may not be available at terms that are favorable to us and might cause significant dilution to our stockholders or increase our debt towards third parties.

- Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern, which could prevent us from obtaining new financing on reasonable terms or at all.

- There is no guarantee that our acquisition of APT will increase stockholder value.

- We are seeking to develop product candidates using phage technology, an approach for which it is difficult to predict the potential success and time and cost of development. To our knowledge, no bacteriophage has thus far been approved as a drug in the United States or in the European Union.

- We are required to use reasonable best efforts to solicit stockholder approval for the conversion of shares of Convertible Preferred Stock (as defined below) and the exercise of the Warrants (as defined below) issued in the Acquisition (as defined below) and the March 2024 PIPE (as defined below). If we do not obtain such approval within 150 days of the initial issuance of the Convertible Preferred Stock, we could be required to cash settle the Convertible Preferred Stock.

- Our product candidates must undergo clinical testing which may fail to demonstrate the requisite safety and efficacy for drug products, or safety, purity, and potency for biologics, and any of our product candidates could cause adverse effects, which would substantially delay or prevent regulatory approval and/or commercialization.

- We have not completed composition development of our product candidates.

- We may not be successful in our efforts to identify or discover additional product candidates.

- We intend to continue to rely on our BOLT proprietary product platform to develop our phage therapies. Our competitive position could be materially harmed if our competitors develop similar platforms and develop rival product candidates.

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

- We have never generated any revenue from product sales and may never be profitable or, if achieved, may not sustain profitability.

- Results from preclinical studies of our product candidates may not be predictive of the results of clinical trials or later stage clinical development.

- Our product candidates are subject to significant regulatory approval requirements, which could delay, prevent or limit our ability to market or develop our product candidates.

- Our relationships with healthcare providers, physicians and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and other consequences.

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

- Any products that we may develop may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which could make it difficult for us to sell any product candidates or therapies profitably.

- Ongoing health care legislative and regulatory reform measures may have a material adverse effect on our business and results of operations.

- The license agreements we maintain, including the Yeda 2015 License Agreement (as defined below), are important to our business. If we or the other parties to our license agreements fail to adequately perform under the license agreements, or if we or they terminate the license agreements, the development, testing, manufacture, production and sale of our phage-based therapeutic product candidates would be delayed or terminated, and our business would be adversely affected.

- We are highly dependent on intellectual property licensed from third parties, and termination or limitation of any of these licenses could result in the loss of significant rights and materially harm our business.

- We are dependent on patents and proprietary technology. If we fail to adequately protect this intellectual property or if we otherwise do not have exclusivity for the marketing of our products, our ability to commercialize products could suffer.

- If we infringe the rights of third parties, we could be prevented from selling products, forced to pay damages and/or royalties, and forced to defend against litigation.

- We rely on our proprietary product platform to identify phage-based therapies. Our competitive position could be materially harmed if our competitors develop a similar platform and develop rival product candidates.

- We rely on trade secrets and other forms of non-patent intellectual property protection. If we are unable to protect our trade secrets, other companies may be able to compete more effectively against us.

- If we are sued for infringing intellectual property rights of third parties or if we are forced to engage in an interference proceeding, it will be costly and time-consuming, and an unfavorable outcome in that litigation or interference would have a material adverse effect on our business.

- Third-party relationships are important to our business. If we are unable to maintain our collaborations or enter into new relationships, or if these relationships are not successful, our business could be adversely affected.

- Our headquarters, research and development and other significant operations are located in Israel, and, therefore, our results may be adversely affected by political, economic and military instability in Israel, including the recent war with Hamas and other terrorist organizations from the Gaza Strip

- The Israeli government grants we have received for research and development expenditures restrict our ability to manufacture products and transfer technology outside of Israel and require us to satisfy specified conditions. If we fail to satisfy these conditions, we may be required to refund grants previously received, together with interest and penalties.

- Exchange rate fluctuations between the U.S. Dollar, the New Israeli Shekel, the Euro and other foreign currencies, may negatively affect our future revenues and expenses.

- It may be difficult to enforce a U.S. judgment against us or our officers and directors in Israel or the United States or to assert U.S. securities laws claims in Israel or serve process on our officers and directors.

- Our product candidates rely on the availability of specialty raw materials, which may not be available to us on acceptable terms or at all.

- A significant number of shares of our Common Stock are subject to issuance upon exercise of outstanding warrants and options or conversion of our Convertible Preferred Stock, which upon exercise or conversion may result in dilution to our security holders.

- We have never paid dividends on our Common Stock, and we do not anticipate paying any cash dividends on our Common Stock in the foreseeable future.

- Our Public Warrants (as defined below) have been delisted, and we may be unable to maintain the listing of our securities in the future.

- The market price of our Common Stock and other securities may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our Common Stock.

- As a “smaller reporting company” we are permitted to provide less disclosure than larger public companies, which may make our Common Stock less attractive to investors.

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

- Expectations relating to environmental, social and governance (ESG) programs may impose additional costs and expose us to new risks.

- Our business and operations would suffer in the event of computer system failures, cyber-attacks or deficiencies in our cyber-security.

PART I

ITEM 1. BUSINESS

Overview

We are a clinical stage product discovery company developing products using both natural and engineered phage technologies designed to target and kill specific harmful bacteria associated with chronic diseases, such as cystic fibrosis, or CF and diabetic foot osteomyelitis, or DFO. Bacteriophage or phage are bacterial, species-specific, strain-limited viruses that infect, amplify and kill the target bacteria and are considered inert to mammalian cells. By utilizing proprietary combinations of naturally occurring phage and by creating novel phage using synthetic biology, we develop phage-based therapies intended to address both large-market and orphan diseases.

Based on the urgency of treating the infection (whether acute or chronic), the susceptibility of the target bacteria to phage (e.g. the ability to identify a phage cocktail that would target a broad range of bacterial strains) and other considerations, we offer two phage-based product types:

(1) Fixed cocktail therapy – in this approach a single product containing a fixed number of selected phages is developed to cover a wide range of bacterial strains, thus allowing treatment of broad patient populations with the same product. Fixed cocktails are developed using our proprietary BOLT platform, in which high throughput screening, directed evolution, and bioinformatic approaches are leveraged to produce an optimal phage cocktail.

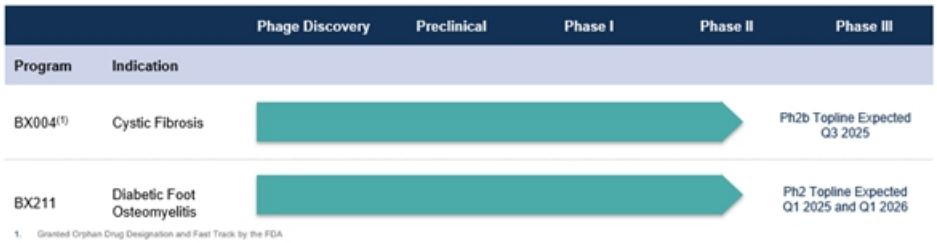
(2) Personalized therapy – in this approach a large library of phages is developed, of which single optimal phages are personally matched to treat specific patients. Matching optimal phages with patients is carried out using a proprietary phage susceptibility testing, or PST, where multiple considerations are analyzed simultaneously – allowing for an efficient screen of the phage library while maintaining short turnaround times.

In our therapeutic programs, we focus on using phage therapy to target specific strains of pathogenic bacteria that are associated with diseases. Our phage-based product candidates are developed utilizing our BOLT proprietary research and development platform. The BOLT platform is unique, employing cutting edge methodologies and capabilities across disciplines including computational biology, microbiology, synthetic engineering of phage and their production bacterial hosts, bioanalytical assay development, manufacturing and formulation, to allow agile and efficient development of natural or engineered phage combinations, or cocktails. The cocktail contains phage with complementary features and is optimized for multiple characteristics such as broad target host range, ability to prevent resistance, biofilm penetration, stability and ease of manufacturing.

Our goal is to develop multiple products based on the ability of phage to precisely target harmful bacteria and on our ability to screen, identify and combine different phage, both naturally occurring and created using synthetic engineering, to develop these treatments.

Our Product Pipeline

The chart below identifies our product candidates' pipeline, their current status and expected timing for upcoming milestones. We do not have any products approved or available for sale, our product candidates are still in the preclinical and clinical development stages, and we have not generated any revenue from product sales.



Ongoing Programs

BX004 – Treatment of Cystic Fibrosis

BX004 is our therapeutic phage product candidate under development for chronic pulmonary infections caused by *Pseudomonas aeruginosa, or P. aeruginosa,* a main contributor to morbidity and mortality in patients with CF. Enhanced resistance to antibiotics develops, particularly in CF patients, due to extensive drug use consisting of prolonged and repeated broad-spectrum antibiotic courses often beginning in childhood, and leading to the appearance of multidrug-resistant strains. In preclinical *in vitro* studies, BX004 was shown to be active against antibiotic resistant strains of *P. aeruginosa* and demonstrated the ability to penetrate biofilm, an assemblage of surface-associated microbial cells enclosed in an extracellular polymeric substance and one of the leading causes for antibiotic resistance.

The Phase 1b/2a trial in CF patients with chronic respiratory infections caused by *P. aeruginosa.* was comprised of two parts. The study design was based on recommendations from the Cystic Fibrosis Therapeutic Development Network.

In February 2023, we announced positive results from Part 1 of the Phase 1b/2a trial evaluating BX004. Part 1 evaluated the safety, tolerability, pharmacokinetics, or PK, and microbiologic activity of BX004 over a 7-day ascending treatment period in nine CF patients (7 on BX004, 2 on placebo) with chronic *P. aeruginosa* pulmonary infection in a single ascending dose and multiple dose design.

Results from Part 1 of the Phase 1b/2a trial included the following findings: No safety events related to treatment with BX004 occurred; Mean P. aeruginosa colony forming units, or CFU, at Day 15 (compared to baseline): -1.42 log (BX004) vs. -0.28 log (placebo). This reduction was seen on top of standard of care inhaled antibiotics; Phage were detected in all patients treated with BX004 during the dosing period, including in several patients up to Day 15 (one week after end of therapy); no phage were detected in patients receiving placebo; there was no evidence of treatment-related resistance to BX004 during or after treatment , compared to placebo; and as expected due to the short duration of treatment, there was no detectable effect on % predicted forced expiratory volume in 1 second, or FEV1.

In November 2023, we announced positive topline results from Part 2 of the Phase 1b/2a trial evaluating BX004. The objectives of Part 2 of the Phase 1b/2a trial were to evaluate the safety and tolerability of BX004 in a larger number of CF patients dosed for a longer treatment duration than Part 1 of the study, with the anticipation that the longer treatment might result in greater effects than in the Part 1. In Part 2, 34 CF patients were randomized in a 2:1 ratio with 23 CF patients receiving BX004 and 11 patients receiving placebo via nebulization twice daily for 10 days.

Key results from Part 2 of the Phase 1b/2a trial included the following findings:

- Study drug was safe and well-tolerated, with no related SAEs (serious adverse events) or related APEs (acute pulmonary exacerbations) to study drug.
- In the BX004 arm, 3 out of 21 (14.3%) patients with quantitative CFU at baseline converted to sputum culture negative for *P. aeruginosa* after 10 days of treatment (including 2 patients after 4 days) compared to 0 out of 10 (0%) in the placebo arm.
- BX004 vs. placebo showed a positive clinical effect in a predefined subgroup of patients with reduced baseline lung function (FEV1<70%). Difference between groups at Day 17: relative FEV1 improvement of 5.67% (change from baseline +1.46 vs. -4.21) and +8.87 points in Cystic Fibrosis Questionnaire-Revised (CFQR) respiratory symptom scale (change from baseline +2.52 vs. -6.35).
- In full population, BX004 vs. placebo *P. aeruginosa* levels were more variable in sputum, potentially driven by aligning initiation of study drug administration with the initiation of standard of care antibiotic treatment regimen. In a prespecified subgroup of patients on standard of care inhaled antibiotics on continuous regimen, BX004 vs. placebo reduced sputum P. aeruginosa levels at Day 10: difference in change from baseline between groups of -2.8 log10 CFU/g sputum (change from baseline -2.91 vs -0.11), exceeding Part 1 results.
- Alternating/cycling background antibiotic regimen likely associated with fluctuations in *P. aeruginosa* levels potentially confounding the ability to observe a P. aeruginosa reduction in this subgroup.
- During the study period, based on current available data, no evidence of treatment-related phage resistance was observed in patients treated with BX004 compared to placebo.

In August 2023, the FDA granted BX004 Fast Track designation for the treatment of chronic respiratory infections caused by *P. aeruginosa* bacterial strains in patients with CF. In addition, in December 2023, BX004 received orphan drug designation from the FDA.

BiomX expects to initiate a randomized, double blind, placebo-controlled, multi-center Phase 2b study in CF patients with chronic *P. aeruginosa* pulmonary infections in the fourth quarter of 2024. The study is designed to enroll approximately 60 patients randomized at a 2:1 ratio to BX004 or placebo. Treatment is expected to be administered via inhalation twice daily for a duration of 8 weeks. The study is designed to monitor the safety and tolerability of BX004 and is designed to demonstrate improvement in microbiological reduction of *P. aeruginosa* burden and evaluation of effects on clinical parameters such as lung function measured by FEV1 and patient reported outcomes. Study results are expected in the third quarter 2025.

BX211 – Treatment of Diabetic Foot Osteomyelitis (DFO)

BX211 is a personalized phage therapy for the treatment of DFO associated with *Staphylococcus aureus,* or *S. aureus*. The personalized phage treatment tailors a specific phage selected from a proprietary phage-bank according to the specific strain of S. aureus biopsied and isolated from each patient. DFO is a bacterial infection of the bone that usually develops from an infected foot ulcer and is a leading cause of amputation in patients with diabetes. We believe that scientific literature demonstrating the potential benefit in treating osteomyelitis using phage in animal models as well as numerous successful compassionate cases using phage therapy to treat DFO patient support our approach of using phage therapy to treat DFO.

The ongoing randomized, double-blind, placebo-controlled, multi-center phase 2 study investigating the safety, tolerability, and efficacy of BX211 for subjects with DFO associated with S. aureus is expected to enroll approximately 45 subjects randomized at a 2:1 ratio to BX211 or placebo. BX211 or placebo is designed to be administered weekly, by topical and intravenous, or IV route at week 1 and by the topical route only at each of weeks 2-12. Over the 12-week treatment period, all subjects are expected to continue to be treated in accordance with standard of care which will include antibiotic treatment as appropriate. A first readout of study topline results is expected at week 13 evaluating healing of the wound associated with osteomyelitis, followed by a second readout at week 52 evaluating amputation rates and resolution of osteomyelitis based on X-ray, clinical assessments, and established biomarkers (Erythrocyte Sedimentation Rate, or ESR, and C-Reactive Protein, or CRP). These readouts are expected in the first quarter of 2025 and the first quarter of 2026, respectively.

National Institutes of Health, or NIH study in Cystic Fibrosis

We are supporting a study conducted by the NIH and The Antibacterial Resistance Leadership Group targeting *P. Aeruginosa* infections in CF patients under FDA emergency Investigational New Drug, or eIND allowance. The Phase 1b/2, multi-centered, randomized, double-blind, placebo-controlled trial is assessing the safety and microbiological activity of a single IV dose of bacteriophage therapy in cystic fibrosis subjects colonized with *P. aeruginosa*.

Programs on hold

BX005 – Treatment of Atopic Dermatitis

BX005 is our topical phage product candidate targeting *Staphylococcus aureus,* or *S. aureus*, a bacterium associated with the development and exacerbation of inflammation in atopic dermatitis. *S. aureus* is more abundant on the skin of atopic dermatitis patients than on the skin of healthy individuals and on lesional skin than non-lesional skin. It also increases in abundance, becoming the dominant bacteria, when patients experience flares. By reducing the load of *S. aureus*, BX005 is designed to shift the skin microbiome composition to its 'pre-flare' state and potentially provide a clinical benefit. In preclinical *in vitro* studies, BX005 was shown to eradicate over 90% of strains, including antibiotic resistant strains, from a panel of *S. aureus* strains (120 strains isolated from skin of subjects from the U.S. and Europe). On April 8, 2022, the FDA approved the Company's IND application for BX005.

As of the date of this Annual Report, we have paused development efforts for BX005 due to prioritizing resources towards our CF and DFO programs, and we cannot provide guidance on resuming its development.

Prosthetic Joint Infections, or PJI

Our personalized phage therapy for treating PJI targets multiple bacterial organisms such as Staphylococcus aureus, Staphylococcus epidermidis and Enterococcus faecium. This treatment was granted Orphan-drug designation by the FDA in July 2020. As of the date of this Annual Report, we have paused development efforts of this program due to prioritizing resources towards our CF and DFO programs, and we cannot provide guidance on resuming its development.

Our Strategy

Our goal is to develop multiple products based on the ability of phage to precisely target harmful bacteria and on our ability to screen, identify and optimally combine different phage, both naturally occurring and generated using synthetic engineering, to develop these treatments. We intend to continue to:

- Investigate clinical safety and efficacy of our lead phage-based product candidates to treat CF and DFO;
- Identify new pathogenic bacteria to be targeted by phage therapy for our existing indications and possible new indications; and
- Develop and partner microbiome-based biomarker tests, based on our proprietary XMarker platform, that can be used for disease diagnosis or as companion diagnostics.

Our phage discovery platform

Our approach is driven by the convergence of several factors: a rapidly increasing understanding of phage, including the links between phage behaviors and their genomes; growing evidence that the presence of specific harmful bacteria may impact chronic diseases, such as CF, making them in principle, amenable to treatment with phage; and by a growing number of anecdotal reports from different academic centers of successful compassionate use of phage to treat seriously ill patients who were unresponsive to other therapies. We believe our phage therapeutic product candidates have the potential to treat conditions and diseases by precisely targeting pathogenic bacteria without disrupting elements of the healthy microbiota.

Our phage-based product candidates, either fixed phage cocktails or personalized phage treatments, are developed utilizing our proprietary research and development platforms, named BOLT and PST. The BOLT, platform is unique, employing cutting edge methodologies and capabilities across disciplines including computational biology, microbiology, synthetic engineering of phage and their production bacterial hosts, bioanalytical assay development, manufacturing and formulation, to allow agile and efficient development of natural or engineered phage combinations, or cocktails.

The PST platform utilizes proprietary assays to allow us to screen extensive phage libraries in search of optimal phage for treatment of the specific target bacteria isolated from a given patient.

BOLT is designed to allow the rapid development of optimized phage cocktails. These cocktails may be comprised of naturally-occurring or synthetically engineered phage. The cocktail contains phage with complementary features and is optimized for multiple characteristics such as broad target host range, ability to prevent resistance, biofilm penetration, stability and ease of manufacturing. Pre-clinical development of the optimized phage

cocktail is anticipated to require 1-2 years.

We combine multiple technologies that originate from the laboratories of our scientific founders and that were developed internally. Technologies that were developed by our scientific founders are described in leading scientific journals. One of our scientific founders, Professor Rotem Sorek, a Professor in the Department of Molecular Genetics at the Weizmann Institute of Science, or WIS, is a world leader in phage genomics and bacterial defense mechanisms. Another scientific founder, Professor Eran Elinav, a Professor in the Department of Immunology at the WIS, is an expert in investigating the link between the microbiome and human health and disease. Our third scientific founder, Professor Timothy K. Lu, is a world leader in synthetic biology approaches to engineering gene circuits and phage, leading the Synthetic Biology Group in the Department of Electrical Engineering and Computer Science and the Department of Biological Engineering at the Massachusetts Institute of Technology. In addition, through the acquisition of the privately held Israel-based company, RondinX Ltd. in 2017, we gained access to high throughput genomic analyses techniques developed by Professor Eran Segal, a leading computational biologist from the Department of Computer Science and Applied Mathematics at the WIS. The combination of the technologies and expertise from these leaders in each of their respective fields is critical in enabling us to focus on treating complex human diseases and conditions by precise manipulation of the microbiome.

Additionally, we developed proprietary assays and screening technology for robust and high throughput testing PST. The PST platform combines state of the art automation with advanced microbiology assays. The output is a reproducible conclusive decision for optimal phage matching, based on multiple factors, including success of phage infection, suppression of resistant mutants, and antibiofilm activity.

Manufacturing

We have developed manufacturing processes that utilize state of the art industrial methods for the manufacturing of our product candidates. These processes are designed to comply with current Good Manufacturing Practice, or cGMP, with the appropriate scale to meet our clinical study needs, and to fulfill the requirements of regulators for human studies.

In February 2021, we consolidated our U.S. Good Manufacturing Practice, or GMP, manufacturing, testing and development into a 6,100 square feet space in our Gaithersburg facility and in March 2021, we moved into a new 6,500 square feet manufacturing facility in our headquarters, in Ness Ziona, Israel. Both facilities are designed to produce clinical quantities of our product candidates required for early-stage clinical development with compliance suitable for this stage of development and to support eIND.

The Ness Ziona facility consists of two suites for drug substance phage production/development as well as formulation and final drug product production rooms to support topical, oral, inhaled and injectable phage-based products in a liquid, cream, semi-solid or dry form.

The Gaithersburg facility consists of three manufacturing suites, one for upstream seed banking, one for drug substance phage production, and one for formulation and fill of the final drug product. This facility is also equipped with in-house quality control testing laboratories to support the release of injectable phage-based products in a liquid form. Additional laboratory space is allocated for process development and there are laboratory and office spaces available that can be repurposed for future GMP expansion.

We currently operate a manufacturing model that combines in-house process development, manufacturing and testing with the flexibility to outsource to third-party development, manufacturing, testing, and logistics organizations, when needed. We maintain service agreements with multiple manufacturers, testing laboratories and a third-party logistics warehouse for product candidate distribution. These service agreements are generally short-term in nature and can be extended or renewed. As such, for BX004, we have engaged a third-party to supplement our in-house process development activities. We selected this organization based on its experience, capability, capacity and regulatory status. Manufacturing and development projects are managed by a team of internal staff who assure compliance with the technical aspects and regulatory requirements of the manufacturing process.

Additional phage bank product candidates collectively known as BX211 are manufactured at our in-house GMP facility in Gaithersburg. Such product candidates are produced and released by internal staff in compliance with cGMPs. We perform release testing in house for most release assays and also outsource testing to qualified laboratories. In addition, we utilize a third-party logistics warehouse for product storage and distribution to clinical sites.

We are considering consolidation of the two GMP sites into one based on future needs. While we do not have a current need for a commercial scale manufacturing capacity, at the appropriate time we intend to evaluate building large scale cGMP internal manufacturing capabilities, which may include expansion of our operations.

Intellectual Property

We strive to protect the proprietary technology that we believe is important to our business, including seeking and maintaining patent protection in the United States and internationally for our product candidates and discovery platform. We also rely on trademarks, trade secrets, know-how, copyrights, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position. For more information regarding the risks related to our intellectual property, see "*Risk Factors — Risks Related to our Licensed and Co-Owned Intellectual Property.* "

We plan to continue to expand our intellectual property estate by filing patent applications directed to formulations, related methods of treatment, methods of manufacture or identification from our ongoing development of our product candidates, as well as discovery based on our proprietary product platform. Our success will depend on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business, defend, and enforce any patents that we may obtain, preserve the confidentiality of our trade secrets and know-how and operate without infringing the valid and enforceable patents and proprietary rights of third parties.

Because patent applications in the United States and certain other jurisdictions are 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 and patent application filings, we cannot be certain of the priority of inventions covered by pending patent applications. Accordingly, we may not have been the first to invent the subject matter disclosed in some of its patent applications or the first to file patent applications covering such subject matter, and we may have to participate in interference proceedings or derivation proceedings declared by the United States Patent and Trademark Office, or USPTO, to determine priority of invention.

Patent portfolio

Our patent portfolio consists of owned patent applications, as well as both licensed and co-owned patent applications (that are also licensed). See "*Risk Factors — Risks Related to our Licensed and Co-Owned Intellectual Property.* " For some of these applications, prosecution has not started, and others are in the early stages of prosecution in the United States and in selected jurisdictions outside of the United States. We solely own four patent families. We co-own one US patent family with Keio University in Tokyo, Japan, or Keio, one international patent family (United States, Australia, Canada, European Patent Office national filings) with Yeda Research and Development Company Limited, the technology transfer office of the WIS, or Yeda, and one international patent family (United States, Europe) with both Keio and Yeda. We have an exclusive license from Yeda and Keio for these co-owned patent applications. We have exclusive licenses from Yeda or Keio for the rest of the patents and patent applications in its portfolio.

A significant portion of our portfolio is directed to our product candidates, specifically: CF and atopic dermatitis as well as product candidates relevant to programs which we have stopped their development such as: inflammatory bowel disease, or IBD, primary sclerosing cholangitis and colorectal cancer, or CRC, as well as to our bacterial target discovery and bacteriophage discovery technology platforms. Prosecution has yet to commence for most of the pending patent applications covering our product candidates. Prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the USPTO are often significantly narrowed by the time they issue, if they issue at all. We expect this to be the case with respect to our licensed and co-owned patent applications, described briefly below.

In connection with the Acquisition, we further enhanced our intellectual property portfolio with the addition of APT's portfolio comprising of 7 issued or allowed patents, 19 patent families (including applications in United States, Europe, Australia, Canada, China, India, Japan, Korea, Israel, Brazil, and South Africa). APT's patents and patent applications consist of patents and patent applications with respect to pharmaceutical compositions and methods of treatment, methods of manufacture of such compositions and expire between June 2037 and October 2043.

CF

We solely own one patent family (United States, Australia, Canada, European Patent Office, Japan and China) containing claims directed to pharmaceutical compositions comprising combinations of bacteriophage to treat chronic Pseudomonas lung infections, especially common in CF patients, methods of use for these bacteriophage combinations, and methods of identifying patients who will respond to these bacteriophage combinations. Any United States patents issuing from the pending application covering our lead bacteriophage combination in this program, if issued, are expected to expire in 2042. Patent term adjustments or patent term extensions could result in later expiration dates.

Atopic Dermatitis

We solely own one patent family (United States, Australia, Canada, European Patent Office and Japan) containing claims directed to pharmaceutical compositions comprising combinations of bacteriophage to treat skin infections, especially common in atopic dermatitis patients, methods of use for these bacteriophage combinations, and methods of identifying patients who will respond to these bacteriophage combinations. Any United States patents issuing from the pending application covering our lead bacteriophage combination in this program, if issued, are expected to expire in 2042. Patent term adjustments or patent term extensions could result in later expiration dates.

Patent term

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file patent applications, including the United States, the base term is 20 years from the filing date of the earliest-filed non-provisional patent application from which the patent claims priority. The term of a United States patent can be lengthened by patent term adjustment, which compensates the owner of the patent for administrative delays at the USPTO. In some cases, the term of a United States patent is shortened by a terminal disclaimer that reduces its term to that of an earlier-expiring patent. The term of a United States patent may be eligible for patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act, to account for at least some of the time the drug is under development and regulatory review after the patent is granted. With regard to a drug for which FDA approval is the first permitted marketing of the active ingredient, the Hatch-Waxman Act allows for extension of the term of one United States patent that includes at least one claim covering the composition of matter of such an FDA-approved drug, an FDA-approved method of treatment using the drug and/or a method of manufacturing the FDA-approved drug. The extended patent term cannot exceed the shorter of five years beyond the non-extended expiration of the patent or fourteen years from the date of the FDA approval of the drug, and a patent cannot be extended more than once or for more than a single product. During the period of extension, if granted, the scope of exclusivity is limited to the approved product for approved uses. Some foreign jurisdictions, including Europe and Japan, have analogous patent term extension provisions, which allow for extension of the term of a patent that covers a drug approved by the applicable foreign regulatory agency.

In the future, if and when our product candidates receive FDA approval, we expect to apply, if appropriate, for patent term extension on patents directed to those product candidates, their methods of use and/or methods of manufacture. However, there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and if granted, the length of such extensions.

Trade Secrets and Know-How

In addition to patents, we rely on trade secrets and know-how to develop and maintain our competitive position. We typically rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. We protect trade secrets and know-how by establishing confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and collaborators. These agreements provide that all confidential information developed or made known during the course of an individual's or entities' relationship with us must be kept confidential during and after the relationship. These agreements also provide that all inventions resulting from work performed for us or relating to our business and conceived or completed during the period of employment or assignment, as applicable, shall be our exclusive property. In addition, we take other appropriate precautions, such as physical and technological security measures, to guard against misappropriation of its proprietary information by third parties.

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 and benefit from the exclusive use thereof. For more information regarding the risks related to our intellectual property, see "*Risk Factors — Risks Related to Our Licensed and Co-Owned Intellectual Property*."

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, strong competition and an emphasis on proprietary products. While we believe that our technology, knowledge and experience provide us with competitive advantages, we face substantial competition from many different sources, including larger pharmaceutical companies with more resources. Specialty biotechnology companies, academic research institutions, governmental agencies, as well as public and private institutions are also potential sources of competitive products and technologies. We believe that the key competitive factors affecting the success of any of our product candidates will include efficacy, safety profile, time to market, cost, level of promotional activity and intellectual property protection.

We are aware of a number of biotechnology companies developing bacteriophage products to treat diseases. To our knowledge, several biotechnology companies, such as Locus Biosciences, Inc., Armata Pharmaceuticals, Inc. and SNIPR Biome, as well as academic institutions, have discovery stage or clinical programs utilizing naturally occurring phage or synthetic biology approaches. In addition, we are aware of several investigational and marketed products to treat the indications that we are targeting with our product candidates, including, but not limited to:

- *CF:* Trikafta, Symdeco, Pulmozyme, Tobramycin, Aztreonam
- DFO: TP-102 being developed by Technophage, a phage-based product being developed by Phaxiam

Many of our competitors, either alone or with their strategic partners, have substantially greater financial, technical and human resources than ours and significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of products and the commercialization of those products. Accordingly, our competitors may be more successful than us in discovering product candidates, obtaining approval for such product candidates and achieving widespread market acceptance. Our competitors' products may be more effective, or more effectively marketed and sold, than any product we may commercialize and may render our product candidates obsolete or non-competitive before we can recover the expenses of developing and commercializing any of our product candidates. We anticipate that we will face intense and increasing competition as new drugs enter the market and advanced technologies become available.

These third parties compete with us in recruiting and retaining qualified scientific, clinical, manufacturing, sales and marketing 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 program.

Sales and Marketing

We intend to pursue the commercialization of our drug product candidates either by building internal sales and marketing capabilities or through collaborations with others.

In October 2021, we entered into a stock purchase agreement with a subsidiary of Maruho, a leading dermatology-focused pharmaceutical company in Japan, pursuant to which we issued to Maruho 375,000 shares of Common Stock, at a price of $8.00 per share for gross proceeds of $3 million. We also granted Maruho a right of first offer to license our BX005 product candidate for atopic dermatitis in Japan. The right of first offer will commence following the availability of results from a the Phase 1/2 study which is currently on hold.

Government Regulation

Government authorities in the United States and other countries regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of drug and biological products. Generally, before a new drug or biologic can be studied in human clinical trials or marketed, considerable data demonstrating its quality, safety, efficacy, purity, and/or potency must be obtained, organized into a format specific for each regulatory authority, submitted for review and approved by the regulatory authority where the product is intended to be studied or marketed.

U.S. Biological Product Development Process

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or the FDCA, and its implementing regulations under the FDCA, the Public Health Service Act, or the PHSA, and their implementing regulations. Both drugs and biologics are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state and local statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with applicable U.S. requirements at any time during the product development, approval, or post-marketing process may subject an applicant to administrative or judicial sanctions. These sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval or license revocation, a clinical hold, untitled or warning letters, product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement and civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

Certain of our current product candidates and future product candidates must be approved by the FDA through a Biologics License Application, or BLA, process before they may be legally marketed in the United States. The process generally involves the following:

- Completion of extensive preclinical studies in accordance with applicable regulations, including studies conducted in accordance with GLP requirements, if needed;
- Submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- Approval by an institutional review board, or IRB, at each clinical trial site before each trial may be initiated;
- Performance of adequate and well-controlled human clinical trials in accordance with applicable IND regulations, good clinical practice, or GCP, requirements and other clinical trial-related regulations to establish the safety, purity, potency and efficacy of the investigational product for each proposed indication;
- Submission to the FDA of a BLA;
- A determination by the FDA within 60 days of its receipt of a BLA to accept the application for review;

- Satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities where the biologic will be produced to assess compliance with cGMP requirements to assure that the facilities, methods and controls are adequate to preserve the biologic's identity, strength, quality and purity;

- Potential FDA audit of the clinical trial sites that generated the data in support of the BLA;
- Payment of user fees for FDA review of the BLA (unless a fee waiver applies); and
- FDA review and approval of the BLA, including consideration of the views of any FDA advisory committee, prior to any commercial marketing or sale of the biologic in the United States.

Preclinical Studies and IND

Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as *in vitro* and animal studies to establish a rationale for therapeutic use and in some cases to assess the potential for adverse events. The conduct of preclinical studies is subject to federal regulations and requirements, including in some cases GLP regulations for safety/toxicology studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, to the FDA as part of an IND. An IND is a request for authorization from the FDA to administer an investigational product to humans, and, must become effective before human clinical trials may begin. Some long-term preclinical testing may continue after the IND is submitted. An IND 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 trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

Clinical Trials

Clinical trials involve the administration of the drug or biological product candidate to healthy volunteers or disease-affected patients under the supervision of qualified investigators, generally physicians not employed by, or under, the trial sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety and efficacy, including stopping rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research subjects provide informed consent. Further, each clinical trial must be reviewed and approved by an IRB at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of study participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. There are also requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries. Information about certain clinical trials, including clinical trial results, must be submitted within specific timeframes for publication on the www.clinicaltrials.gov website.

Clinical trials generally are conducted in three sequential phases, known as Phase 1, Phase 2 and Phase 3, and may overlap.

- Phase 1 clinical trials generally involve a small number of healthy volunteers or disease-affected patients who are initially exposed to a single dose and then multiple doses of the product candidate. The primary purpose of these clinical trials is to assess the metabolism, pharmacologic action, side effect tolerability and safety of the product candidate.

- Phase 2 clinical trials generally involve studies in disease-affected patients to evaluate proof of concept and/or determine the dosing regimen(s) for subsequent investigations. At the same time, safety and sometimes further pharmacokinetic and pharmacodynamic information is collected, possible adverse effects and safety risks are identified and a preliminary evaluation of efficacy is conducted.
- Phase 3 clinical trials generally involve a large number of patients at multiple sites and are designed to provide the data necessary to demonstrate the effectiveness of the product for its intended use, its safety in use and to establish the overall benefit/risk relationship of the product and provide an adequate basis for labeling for new drugs.

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

Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected suspected adverse events, findings from other studies or animal or *in vitro* testing that suggest a significant risk for human subjects and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure.

It is possible for Phase 1, Phase 2, Phase 3 and other types of clinical trials not to be completed successfully within a specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biologic has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, or the Data Safety Monitoring Board. This group provides authorization for whether a trial may move forward at designated check points based on access to certain data from the trial.

Concurrent with clinical trials, companies may complete additional animal studies and also must develop additional information about the chemistry and physical characteristics of the biologic as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product and, among other things, companies must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidates do not undergo unacceptable deterioration over their shelf life.

FDA Review Process

Following completion of the clinical trials, data are analyzed to assess whether the investigational product is safe and effective for the proposed indicated use or uses, and also meets the regulatory requirements for potency and purity. The results of preclinical studies and clinical trials are then submitted to the FDA as part of a BLA, along with proposed labeling, chemistry and manufacturing information to ensure product quality and other relevant data. The BLA is a request for approval to market the biologic for one or more specified indications and must contain proof of safety, purity and potency. The application may include both negative and ambiguous results of preclinical studies and clinical trials, as well as positive findings. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy in the intended indication, purity and potency of the investigational product to the satisfaction of the FDA. FDA approval of a BLA must be obtained before a biologic may be marketed in the United States. Under the Prescription Drug User Fee Act, or PDUFA, as amended, each BLA must be accompanied by a user fee. The FDA adjusts the PDUFA user fees on an annual basis. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA reviews all submitted BLAs before it accepts them for filing and may request additional information rather than accept the BLA for filing. The FDA must make a decision on accepting a BLA for filing within 60 days of receipt, and such a decision could include a refusal to file by the FDA. Once the submission is accepted for filing, the FDA begins an in-depth review of the BLA. Under the goals and policies agreed to by the FDA under PDUFA, the FDA has 10 months, from the filing date, in which to complete its initial review of an original BLA and respond to the applicant, and six months from the filing date of an original BLA designated for priority review. The FDA does not always meet its PDUFA goal dates for standard and priority BLAs, and the review process is often extended by FDA requests for additional information or clarification.

Before approving a BLA, the FDA will conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether they comply with cGMP requirements. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. The FDA also may audit data from clinical trials to ensure compliance with GCP requirements. Additionally, the FDA may refer applications for novel products or products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions, if any. The FDA is not bound by recommendations of an advisory committee, but it considers such recommendations when making decisions on approval. The FDA likely will reanalyze the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process.

After the FDA evaluates a BLA, it will issue an approval letter, or a Complete Response Letter. An approval letter authorizes commercial marketing of the biologic with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all the specific deficiencies in the BLA identified by the FDA. The Complete Response Letter may require additional clinical data and/or other significant and time-consuming requirements related to clinical trials, preclinical studies or manufacturing. If a Complete Response Letter is issued, the applicant may either resubmit the BLA, addressing all the deficiencies identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the BLA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than the sponsor's interpretation of the same data.

Orphan Drug Designation

Under the Orphan Drug Act of 1983, or the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making the product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan drug designation for a biologic must be requested before submitting a BLA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

Orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication for seven years from the date of such approval, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity by means of greater effectiveness, greater safety or providing a major contribution to patient care, or in instances of drug supply issues. Competitors, however, may receive approval of either a different product for the same indication or the same product for a different indication but that could be used off-label in the orphan indication. Orphan drug exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval before we do for the same product, as defined by the FDA, for the same indication we are seeking approval, or if our product is determined to be contained within the scope of the competitor's product for the same indication or disease. If one of our products designated as an orphan drug receives marketing approval for an indication broader than that which is designated, it may not be entitled to orphan drug exclusivity. In December 2023, BX004, received orphan drug designation from the FDA.

Expedited Development and Review Programs

The FDA has a fast-track program that is intended to expedite or facilitate the process for reviewing new drugs and biologics that meet certain criteria. Specifically, new drugs and biologics are eligible for fast-track designation if they are intended to treat a serious or life-threatening condition and preclinical or clinical data demonstrate the potential to address unmet medical needs for the condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. Any product submitted to the FDA for marketing, including under a fast-track program, may be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A product is eligible for priority review if it treats a serious or life-threatening condition and, if approved, would provide a significant improvement in safety and effectiveness compared to available therapies. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug or biologic designated for priority review in an effort to facilitate the review.

A product may also be eligible for accelerated approval if it treats a serious or life-threatening condition and demonstrates an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, or IMM, that is reasonably likely to predict an effect on IMM or other clinical benefit. As a condition of approval, the FDA generally requires that

a sponsor of a drug or biologic receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. Products receiving accelerated approval may be subject to expedited withdrawal procedures if such clinical trials fail to verify the predicted clinical benefit or if the sponsor fails to conduct such trials in a timely manner.

Additionally, a drug or biologic may be eligible for designation as a breakthrough therapy if the product is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints. The benefits of breakthrough therapy designation include the same benefits as fast-track designation, plus intensive guidance from the FDA to ensure an efficient drug development program.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or the time period for FDA review or approval may not be shortened. Furthermore, fast track designation, priority review, accelerated approval and breakthrough therapy designation do not change the standards for approval, but may expedite the development or approval process.

Pediatric Information

Under the Pediatric Research Equity Act of 2003, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and efficacy of the biologic for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers. A sponsor who is planning to submit a marketing application for a drug that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration must submit an initial Pediatric Study Plan, or PSP, within 60 days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before the initiation of the Phase 3 or Phase 2/3 study. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials and/or other clinical development programs.

Post-marketing Requirements

Following approval of a new product, the manufacturer and the approved product are subject to continuing regulation by the FDA, including, among other things, monitoring and record-keeping activities, reporting of adverse experiences, complying with promotion and advertising requirements, which include restrictions on promoting products for unapproved uses or patient populations (known as “off-label use”) and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe legally available products for off-label uses, manufacturers may not market or promote such uses. Prescription drug and biologic promotional materials must be submitted to the FDA in conjunction with their first use. Further, if there are any modifications to the biologic, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new BLA or BLA supplement, which may require the development of additional data or preclinical studies and clinical trials.

The FDA may also place other conditions on approvals including the requirement for a Risk Evaluation and Mitigation Strategy, or REMS, to assure the safe use of the product. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS. The FDA will not approve the BLA without an approved REMS, if required. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Newly discovered or developed safety or effectiveness data may require changes to a product’s approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures, including a REMS or the conduct of post-marketing studies to assess a newly discovered safety issue. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

FDA regulations require that products be manufactured in specific approved facilities and in accordance with cGMP regulations, which require, among other things, quality control and quality assurance, the maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved drugs or biologics are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP requirements and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. The discovery of violative conditions, including failure to conform to cGMP regulations, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, manufacturer or holder of an approved BLA, including recall.

Biosimilars and Exclusivity

An abbreviated approval pathway for biological products shown to be biosimilar to, or interchangeable with, an FDA licensed reference biological product was created by the Biologics Price Competition and Innovation Act of 2009. This amendment to the PHSA, in part, attempts to minimize duplicative testing. Biosimilarity, which requires that the biological product be highly similar to the reference product notwithstanding minor differences in clinically inactive components and that there be no clinically meaningful differences between the product and the reference product in terms of safety, purity and potency, can be shown through analytical studies, animal studies and a clinical trial or trials.

Interchangeability requires that a biological product be biosimilar to the reference product and that the product can be expected to produce the same clinical results as the reference product in any given patient and, for products administered multiple times to an individual, that the product and the reference product may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biological product without such alternation or switch.

A reference biological product is granted 12 years of data exclusivity from the time of first licensure of the product, and the FDA will not accept an application for a biosimilar or interchangeable product based on the reference biological product until four years after the date of first licensure of the reference product. “First licensure” typically means the initial date the particular product at issue was licensed in the United States. Date of first licensure does not include the date of licensure of (and a new period of exclusivity is not available for) a biological product if the licensure is for a supplement for the biological product or for a subsequent application by the same sponsor or manufacturer of the biological product (or licensor, predecessor in interest,

or other related entity) for a change (not including a modification to the structure of the biological product) that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device or strength, or for a modification to the structure of the biological product that does not result in a change in safety, purity, or potency.

Pediatric exclusivity is another type of regulatory market exclusivity in the United States, available under the Best Pharmaceuticals for Children Act by way of its application to biologics through the Biologics Price Competition and Innovation Act. Pediatric exclusivity, if granted, adds six months to existing regulatory exclusivity periods, which must be in place in order for pediatric exclusivity to apply. This six-month exclusivity may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA issued "Written Request" for such a trial, although FDA may issue such a Written Request at the request of the sponsor.

Companion Diagnostics

We may employ companion diagnostics to identify the most suitable phage to treat a specific patient under our personalized phage treatments and to help more accurately identify patients sensitive to our phage cocktails, during our clinical trials and potentially also in connection with the commercialization of our product candidates that we are developing or may in the future develop. Companion diagnostics can identify patients who are most likely to benefit from a particular therapeutic product; identify patients likely to be at increased risk for serious side effects as a result of treatment with a particular therapeutic product; or monitor response to treatment with a particular therapeutic product for the purpose of adjusting treatment to achieve improved safety or effectiveness. Companion diagnostics are regulated as medical devices by the FDA and, as such, require either clearance or approval prior to commercialization. The level of risk combined with available controls to mitigate risk determines whether a companion diagnostic device requires Premarket Approval Application approval or is cleared through the 510(k) premarket notification process. For a novel therapeutic product for which a companion diagnostic device is essential for the safe and effective use of the product, the companion diagnostic device should be developed and approved or 510(k)-cleared contemporaneously with the therapeutic. The use of the companion diagnostic device will be stipulated in the labeling of the therapeutic product.

Government Regulation Outside of the United States

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials of drug products as well as the approval, manufacture and distribution of our product candidates. Because biologically sourced raw materials are subject to unique contamination risks, their use may be restricted in some countries. Whether or not we obtain FDA approval for a product candidate, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. If we 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.

Clinical Trials

Certain countries outside of the United States have a regulatory process similar to the U.S process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In the European Union, for example, a clinical trial application, or CTA, must be submitted for each clinical trial to the relevant national health authority and an independent ethics committee in each country in which the trial is to be conducted through a single EU portal for harmonized assessment, much like the FDA and an IRB, respectively. CTAs must be accompanied by an investigational medicinal product dossier with supporting information prescribed by the Clinical Trials Directive (and corresponding national laws of the member states) and further detailed in applicable guidance documents. Once the CTA is approved in accordance with a country's requirements, the clinical trial may proceed. A similar process to the one described for the European Union is required in Israel for initiation of clinical trials. The requirements and process governing the conduct of clinical trials vary from country to country. In all cases, the clinical trials must be conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

Approval Process

In order to market our products, we must obtain a marketing approval for each product and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing in comparison to the testing carried out for the U.S. approval. The time required to obtain approval in foreign countries may differ substantially from that required to obtain FDA approval. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries. The regulatory approval process outside the United States generally is subject to all of the same risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be approved for sale in that country.

To obtain marketing approval of a medicinal product under the European Union regulatory system, an applicant must submit a marketing authorization application, or MAA, under either a centralized or a decentralized procedure. The decentralized procedure is based on a collaboration among the member states selected by the applicant. In essence, the applicant chooses a 'lead' member state that will carry out the scientific assessment of the MAA and review the product information. The other member states must recognize the outcome of such assessment and review except in case of a "serious potential risk to public health." The decentralized procedure results in the grant of a national marketing authorization in each selected country. That procedure is available for all medicinal products unless they fall into the mandatory scope of the centralized procedure. In practice, it is used for OTC, not highly innovative products, generic products and, increasingly, for biosimilars.

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid for all European Union member states. The centralized procedure is compulsory for certain medicinal products, including for medicinal products produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy medicinal products, or ATMPs, and products with a new active substance and indicated for the treatment of certain diseases. For products with a new active substance and indicated for the treatment of other diseases, products that are highly innovative or for which a centralized process is in the interest of patients, the centralized procedure is optional.

Under the centralized procedure, the Committee for Medicinal Products for Human Use, or CHMP, the main scientific committee established at the European Medicines Agency, or EMA, is responsible for conducting the scientific assessment of the future medicinal product. The CHMP is also responsible for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. The maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops. The European Commission grants or refuses the marketing authorization, following a procedure that involves representatives of the member states. The European Commission's decision is in accordance with the CHMP scientific assessment except in very rare cases.

Pursuant to Regulation (EC) 1394/2007, specific rules apply to ATMPs, a category that is comprised of gene therapy medical products, somatic cell therapy medicinal products, and tissue-engineered medicinal products. Those rules have triggered the adoption of guidelines on manufacturing, clinical trials and pharmacovigilance that adapt the general regulatory requirements to the specific characteristics of ATMPs. Regulation (EC) 1394/2007 introduced a "hospital exemption", which authorizes hospitals to develop ATMP for their internal use without having obtained a marketing authorization and to complying with European Union pharmaceutical law. The hospital exemption, which is in essence a compounded ATMP, has been transposed in all Member States, sometimes in such a way that the ATMPs under the hospital exemption are competitive alternatives to ATMPs with marketing authorization. The broad use of the hospital exemption by national hospitals led the European Commission to discuss with the Member States a more reasonable application of the hospital exemption that would not undermine the common legal regime for ATMP.

Marketing authorization is valid for five years in principle and the marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or the competent authority of the authorizing member state. To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the national competent authority decides, on justified grounds relating to pharmacovigilance, to proceed with one additional renewal. Any authorization which is not followed by the actual placing of the medicinal product on the European Union market (in case of centralized procedure) or on the market of the authorizing member state within three years after authorization ceases to be valid (the so-called sunset clause).

Orphan Designation

Countries other than the United States have adopted a specific legal regime to support the development and marketing of drugs and biologics for rare diseases.

For example, in the European Union, Regulation 141/2000 organizes the grant of orphan drug designations to promote the development of products that are intended for the diagnosis, prevention or treatment of life threatening or chronically debilitating conditions affecting not more than five in 10,000 persons in the European Economic Area (the European Union, plus Iceland, Liechtenstein and Norway), or EEA, (or where it is unlikely that the development of the medicine would generate sufficient return to justify the investment) and for which no satisfactory method of diagnosis, prevention or treatment has been authorized or, if a method exists, the product would be of significant benefit to those affected. The EMA's Committee for Orphan Medicinal Products, or COMP, examines if the orphan criteria are met and gives opinions thereon, and the orphan status is granted by the European Commission. The meeting of the criteria for orphan designation is examined again by the COMP at the time of approval of the medicinal product, which typically occurs several years after the grant of the orphan designation. If the criteria for orphan designation are no longer met at that time, the European Commission withdraws the orphan status.

In the European Union, orphan drug designation entitles the sponsor to financial incentives such as reduction of fees or fee waivers and to ten years of market exclusivity granted following medicinal product approval. Market exclusivity precludes the EMA or a national regulatory authority from validating another MAA, and the European Commission or a national regulatory authority from granting another marketing authorization, for a same or similar medicinal product and a same therapeutic indication, for that time period. This 10-year period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. The orphan exclusivity may be lost vis-à-vis another medicinal product in cases the manufacturer is unable to assure sufficient quantity of the medicinal product to meet patient needs or if that other product is proved to be clinically superior to the approved orphan product. A drug is clinically superior if it is safer, more effective or makes a major contribution to patient care. Orphan drug designation must be requested before submitting a MAA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process, and it does not afford any regulatory exclusivity until a marketing authorization is granted.

Expedited Development and Approval

Mechanisms are in place in many jurisdictions that allow an earlier approval of the drug so that it reaches patients with unmet medical needs earlier. The European Union, for example, has instituted several expedited approval mechanisms including two mechanisms that are specific to the centralized procedure:

- the accelerated approval: the EMA may reduce the maximum timeframe for the evaluation of an MAA from 210 days to 150 days when the future medicinal product is of major interest from the point of view of public health, in particular from the viewpoint of therapeutic innovation.
- the conditional marketing authorization: as part of its marketing authorization process, the European Commission may grant marketing authorizations on the basis of less complete data than is normally required.

A conditional marketing authorization may be granted when the CHMP finds that, although comprehensive clinical data referring to the safety and efficacy of the medicinal product have not been supplied, all the following requirements are met:

- the risk/benefit balance of the medicinal product is positive;
- it is likely that the applicant will be in a position to provide the comprehensive clinical data;
- unmet medical needs will be addressed; and
- the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data is still required.

The granting of a conditional marketing authorization is typically restricted to situations in which only the clinical part of the application is not yet fully complete. Incomplete preclinical or quality data may however be accepted if duly justified and only in the case of a product intended to be used in emergency situations in response to public health threats.

Conditional marketing authorizations are valid for one year, on a renewable basis. The conditions to which approval is subject will typically require the holder to complete ongoing trials or to conduct new trials with a view to confirming that the benefit-risk balance is positive and to collect pharmacovigilance data. Once the conditions to which the marketing authorization is subject are fulfilled, the conditional marketing authorization is transformed into a regular marketing authorization. If, however, the conditions are not fulfilled with the timeframe set by EMA, the conditional marketing authorization ceases to be renewed.

The EMA has also implemented the so-called "PRIME" (PRIority MEdicines) status in order support the development and accelerate the approval of complex innovative medicinal products addressing an unmet medical need. PRIME status enables early dialogue with the relevant EMA scientific committees and, possibly, some payors and thus reinforces the EMA's scientific and regulatory support. It also opens accelerated assessment

of the MAA as PRIME status, is normally reserved for medicinal products that may benefit from accelerated assessment, i.e., medicines of major interest from a public health perspective, in particular from a therapeutic innovation perspective.

Finally, all medicinal products (i.e. decentralized and centralized procedures) may benefit from an MA "under exceptional circumstances." This marketing authorization is close to the conditional marketing authorization as it is reserved to medicinal products to be approved for severe diseases or unmet medical needs and the applicant does not hold the complete data set legally required for the grant of a marketing authorization. However, unlike the conditional marketing authorization, the applicant does not have to provide the missing data and will never have to. The risk-benefit of the medicinal product is reviewed annually. As a result, although the MA "under exceptional circumstances" is granted definitively, the risk-benefit balance of the medicinal product is reviewed annually and the marketing authorization is withdrawn in case the risk-benefit ratio is no longer favorable.

Pediatrics

Mandatory testing in the pediatric population is required in more and more jurisdictions. The European Union has enacted a complex and very stringent system that has inspired other jurisdictions, including the United States and Switzerland. Any application for approval of (i) a medicinal product containing a new active substance or (ii) a new therapeutic indication, pharmaceutical form or route of administration of an already authorized medicinal product which contains an active substance still protected by a supplementary protection certificate, or SPC, or a patent that qualifies for an SPC, must include pediatric data. Otherwise, the application is not validated by the competent regulatory authority. The submission of pediatric data is mandatory in those cases, even if the application concerns an adult use. Submission of pediatric data is not required or fully required if the EMA granted, respectively, a full or partial waiver to pediatric development. Moreover, that submission can be postponed if the EMA grants a deferral in order not to delay the submission of the MAA for the adult population.

The pediatric data are generated through the implementation of a pediatric investigation plan, or PIP, that is proposed by the company after completion of the PK studies in adults and agreed upon by the EMA, typically after some modifications. The PIP lists all the studies to conduct and measures to take in order to prove the safety and efficacy of the future medicinal product when used in children. The EMA may agree to modify the PIP at the company's request. The scope of the PIP is the adult therapeutic indication or the condition of which the adult application is part or even the mechanism of action of the active substance, at the EMA's quasi-discretion. This very broad discretion enables the EMA to require companies to develop children indications that are different from the adult indications.

Completion of a PIP renders the company eligible for a pediatric reward, which can be six-month extension of the term of the SPC or, in the cases of orphan medicinal products, two additional years of market exclusivity. The reward is subject, among other conditions, to the PIP being fully completed, to the pediatric medicinal product being approved in all the member states, and to the results of the pediatric studies being mentioned, in one way or another (for example, the approval of a pediatric indication), in the summary of product characteristics of the product.

Post-Marketing Requirements

Many countries impose post-marketing requirements similar to those imposed in the United States, in particular safety monitoring or pharmacovigilance. In the European Union, pharmacovigilance data are the basis for the competent regulatory authorities imposing the conduct of post-approval safety or efficacy study, including on off-label use. Non-compliance with those requirements can result in significant financial penalties as well as the suspension or withdrawal of the marketing authorization.

Supplementary Protection Certificate and Regulatory Exclusivities

In some countries other than the United States, some of our patents may be eligible for limited patent term extension, depending upon the timing, duration and specifics of the regulatory approval of our product candidates and any future product candidates. Furthermore, authorized drugs and biologics may benefit from regulatory exclusivities (in additional to patent protection resulting from patents).

In the European Union, Regulation (EC) 469/2009 institutes SPCs. An SPC is an extension of the term of a patent that compensates for the patent protection lost because of the legal requirements to conduct safety and efficacy tests and to obtain a marketing authorization before placing a medicinal product on the market. An SPC may be applied for any active substance that is protected by a "basic patent" (a patent chosen by the patent holder, which can be a product, process or application patent) and has not been placed on the market as a medicinal product before having obtained a marketing authorization in accordance with European Union pharmaceutical law. The term of the SPC is maximum five years, and the combined patent and SPC protection may not exceed fifteen years from the date of the first marketing authorization in the EEA. SPC rights are restricted by both the basic patent and the marketing authorization, i.e., the SPC grants the same rights as those conferred by the basic patent but limited to the active substance covered by the marketing authorization (and any use as medicinal product approved afterwards).

While SPC are regulated at the European level, they are granted by the national patent offices. The grant of an SPC requires a basic patent granted by the national patent office and a marketing authorization, which is the first marketing authorization for the active substance as a medicinal product in the country. Furthermore, no SPC must have already been granted to the active substance, and the application for the SPC must be filed with the national patent office within six months of the first marketing authorization in the EEA or the grant of the basic patent, whichever is the latest.

In the future, we may apply for an SPC for one or more of our currently owned or licensed European patents to add patent life beyond their current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant MAA.

Furthermore, in the European Union, medicinal products may benefit from the following regulatory exclusivities: data exclusivity, market protection, market exclusivity, and pediatric reward.

A medicinal product that contains a new active substance (reference medicinal product) is granted eight years of data exclusivity followed by two years of market protection. Data exclusivity prevents other companies from referring to the non-clinical and clinical data in marketing authorization dossier of the reference medicinal product for submission of generic MAA purposes, and market protection prevents other companies from placing generics on the market. Pursuant to the concept of global marketing authorization, any further development of that medicinal product (e.g., new indication, new form, change to the active substance) by the marketing authorization holder does not trigger any new or additional protection. The authorization of any new development is considered as "falling" into the initial marketing authorization with regard to regulatory protection; hence, the new development only benefits from the regulatory protection that remains when it is authorized. The only exception is a new therapeutic indication that is considered as bringing a significant clinical benefit in comparison to the existing therapies. Such new indication will add one-year of market protection to the global marketing authorization, provided that it is authorized within the first eight years of authorization (i.e., during the data exclusivity period). Moreover, a new

therapeutic indication of a “well-established substance” benefits from one-year data exclusivity but limited to the non-clinical and clinical data supporting the new indication. Any active substance approved for at least ten years in the EEA qualifies as well-established substance.

Biosimilars may be approved through an abbreviated approval pathway after the expiration of the eight-year data exclusivity period and may be marketed after the 10 or 11-year market protection period. The approval of biosimilars requires the applicant to demonstrate similarity between the biosimilar and the biological medicinal product and to submit the non-clinical and clinical data defined by the EMA. The biosimilar legal regime has been mainly developed through EMA’s scientific guidelines applicable to categories of biological active substances. Unlike in the United States, interchangeability is regulated by each member state.

Market exclusivity is a regulatory protection exclusively afforded to medicinal products with an orphan status. Market exclusivity precludes the EMA or a national regulatory authority from validating another MAA, and the European Commission or a national regulatory authority from granting another marketing authorization, for a same or similar medicinal product and a same therapeutic indication, for a period of ten years from approval (see above).

Pediatric reward is another regulatory exclusivity. Completion of a PIP renders the company eligible for a pediatric reward, which can be six-month extension of the term of the SPC or, in the cases of orphan medicinal products, two additional years of market exclusivity (see above). In case a PIP is completed on a voluntary basis, i.e., for an approved medicinal product that is not or no longer protected by an SPC or a basic patent, the pediatric reward takes the form of a “pediatric use marketing authorization”, or PUMA. That special authorization does not fall into the global marketing authorization and thus benefits from eight years of data exclusivity followed by two or three years of market protection.

Other U.S. Healthcare Laws and Compliance Requirements

In addition to FDA restrictions on the marketing of pharmaceutical products, we may be subject to various federal and state laws targeting fraud and abuse in the healthcare industry. These laws may impact, among other things, our business or financial arrangements and relationships through which we market, sell and distribute the products, if any, for which we obtain approval. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs; a person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act, or FCA, or federal civil money penalties statute;

- federal civil and criminal false claims laws and civil monetary penalties laws, such as the FCA, which impose criminal and civil penalties and authorize civil whistleblower or qui tam actions, against individuals or entities for, among other things: knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent; making, using or causing to be made or used, a false statement or record material to a false or fraudulent claim or obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing an obligation to pay money to the federal government;

- the civil monetary penalties law, which prohibits, among other things, the offering or giving of remuneration, which includes, without limitation, any transfer of items or services for free or for less than fair market value (with limited exceptions), to a Medicare or Medicaid beneficiary that the person knows or should know is likely to influence the beneficiary’s selection of a particular supplier of items or services reimbursable by a federal or state governmental program;

- the Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any 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) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false 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;

- the federal transparency requirements under the Affordable Care Act, or ACA, including the provision commonly referred to as the Physician Payments Sunshine Act, which requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program to report annually to the U.S. Department of Health and Human Services information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician practitioners (physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives) and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members;

- federal government price reporting laws, which require us to calculate and report complex pricing metrics in an accurate and timely manner to government programs; and

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

Additionally, we are subject to state and foreign equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply regardless of the payor. Many U.S. states have adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare services reimbursed by any source, not just governmental payors, including private insurers. In addition, some states have passed laws that require pharmaceutical companies to comply with the April 2003 Office of Inspector General Compliance Program Guidance for Pharmaceutical Manufacturers and/or the Pharmaceutical Research and Manufacturers of America’s Code on Interactions with Healthcare Professionals. Several states also impose other marketing restrictions or require pharmaceutical companies to make marketing or price disclosures to the state. There are ambiguities as to what is required to comply with these state requirements and if we fail to comply with an applicable state law requirement we could be subject to penalties. Finally, there are state and foreign laws governing the privacy and security of health information,

many of which differ from each other in significant ways and often are not pre-empted by HIPAA, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws.

Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including penalties, fines, imprisonment and/or exclusion or suspension from federal and state healthcare programs such as Medicare and Medicaid and debarment from contracting with the U.S. government. In addition, private individuals have the ability to bring actions on behalf of the U.S. government under the federal FCA, as well as under the false claims laws of several states.

Law enforcement authorities are increasingly focused on enforcing fraud and abuse laws, and it is possible that some of our practices may be challenged under these laws. Efforts to ensure that our current and future business arrangements with third parties, and our business generally, will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices, including our arrangements with physicians and other healthcare providers, some of whom receive stock options as compensation for services provided, may not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If 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 civil, criminal and administrative penalties, damages, disgorgement, monetary fines, imprisonment, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

If any of the physicians or other healthcare providers or entities with whom we expect to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs, which may also adversely affect our business.

Much like the federal Anti-Kickback Statute in the United States, the provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of medicinal products is also prohibited in the European Union. The provision of benefits or advantages to physicians is mainly governed by the national anti-bribery laws of the member states, such as the UK Bribery Act 2010, or national anti-kickback provisions (France, Belgium, etc.). Infringement of these laws could result in substantial fines and imprisonment. In certain member states, payments made to physicians must be publicly disclosed. Moreover, agreements with physicians often must be the subject of prior notification and approval by the physician's employer, his or her competent professional organization and/or the regulatory authorities of the individual member states. These requirements are provided in the national laws, industry codes or professional codes of conduct, applicable in the member states. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

U.S. Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act, to which we are subject, prohibits corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. It is illegal to pay, offer to pay or authorize the payment of anything of value to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. Similar rules apply to many other countries worldwide such as France ("*Loi Sapin*") or the United Kingdom (UK Bribery Act).

U.S. Healthcare Reform

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medical products. For example, in March 2010, the ACA was enacted, which, among other things, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; introduced a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care plans; imposed mandatory discounts for certain Medicare Part D beneficiaries as a condition for manufacturers' outpatient drugs coverage under Medicare Part D; subjected drug manufacturers to new annual fees based on pharmaceutical companies' share of sales to federal healthcare programs; created a new Patient Centered Outcomes Research Institute to oversee, identify priorities in and conduct comparative clinical effectiveness research, along with funding for such research; and established the Center for Medicare & Medicaid Innovation at the CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending.

Since its enactment, there have been a number of significant changes to the ACA. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA without specifically ruling on the constitutionality of the ACA. Prior to the U.S. Supreme Court's decision, President Biden issued an executive order initiating a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare. More recently, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, beginning January 1, 2024.

In addition, the Budget Control Act of 2011 and the Bipartisan Budget Act of 2015 led to aggregate reductions of Medicare payments to providers of 2% per fiscal year that will remain in effect through 2030, unless additional Congressional action is taken. Further, on January 2, 2013, the American

Taxpayer Relief Act was signed into law, which, among other things, reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. More recently, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which have resulted in several recent Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for pharmaceutical products. In August 2022, the Inflation Reduction Act authorized Medicare to negotiate drug prices for certain high expenditure, single source Medicare part B or D drugs. Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

We expect that additional foreign, federal and state healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in limited coverage and reimbursement and reduced demand for our products, once approved, or additional pricing pressures.

Coverage and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any products for which we obtain regulatory approval. In the United States, cosmetics are not generally eligible for coverage and reimbursement and thus any products that are marketed as cosmetics will not be covered or reimbursed. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend, in part, on the availability of coverage and reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the reimbursement rate that the payor will pay for the product. Third-party payors may limit coverage to specific products on an approved list, or formulary, which might not include all of the FDA-approved products for a particular indication. A decision by a third-party payor not to cover our products could reduce physician utilization of our products once approved and have a material adverse effect on our sales, results of operations and financial condition. Moreover, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

In addition, coverage and reimbursement for products can differ significantly from payor to payor. One third-party payor's decision to cover a particular medical product or service does not ensure that other payors will also provide coverage for the medical product or service, or will provide coverage at an adequate reimbursement rate.

As a result, the coverage determination process will require us to provide scientific and clinical support for the use of our products to each payor separately and will be a time-consuming process.

Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. In order to obtain and maintain coverage and reimbursement for any product, we may need to conduct expensive clinical trials in order to demonstrate the medical necessity and cost-effectiveness of such product, in addition to the costs required to obtain regulatory approvals. If third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover the product as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit.

Outside of the United States, the pricing of pharmaceutical products is subject to governmental control in many countries. For example, in the European Union, pricing and reimbursement schemes vary widely from member state to member state. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular therapy to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. Other countries may allow companies to fix their own prices for products, but monitor and control product volumes and issue guidance to physicians to limit prescriptions. Efforts to control prices and utilization of pharmaceutical products and medical devices will likely continue as countries attempt to manage healthcare expenditures.

Data Privacy and Security Laws

Numerous state, federal and foreign laws, including consumer protection laws and regulations, govern the collection, dissemination, use, access to, confidentiality and security of personal information, including health-related information. In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy and security laws, including HIPAA, and federal and state consumer protection laws and regulations (e.g., Section 5 of the FTC Act), that govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of our partners. In addition, certain state and non-U.S. laws, such as the California Consumer Protection Act, the California Privacy Rights Act, and the General Data Protection Regulation, or GDPR, govern the privacy and security of personal information, including health-related information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Failure to comply with these laws, where applicable, can result in the imposition of significant civil and/or criminal penalties and private litigation. Privacy and security laws, regulations, and other obligations are constantly evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings, or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

Material Agreements

License Agreements

License Agreement with Yeda

On June 22, 2015, BiomX Ltd. entered into a Research and License Agreement, with Yeda , or, as amended, the Yeda 2015 License Agreement, pursuant to which BiomX Ltd. received an exclusive worldwide license to certain know-how and research information related to the development, testing, manufacturing, production and sale of microbiome-based therapeutic product candidates, including candidates specified in the agreement, which are used in our phage discovery platform, as well as patents, research and other rights to phage product candidates resulting from the work of the consultants identified in the agreement and further research conducted at the WIS which BiomX Ltd. funded.

In connection with this license, BiomX Ltd. agreed to pay a non-refundable license fee of $10,000 per year. In addition, BiomX Ltd. contributed an aggregate of approximately $2.0 million to the research budget agreed upon in the Yeda 2015 License Agreement. BiomX Ltd is also required to pay tiered royalties in the low single digits on net sales of products and diagnostic kits covered by the Yeda 2015 License Agreement, subject to reductions as described therein. The products and diagnostic kits covered by the license agreement include those directed to CF and any other indication that may be treated by phage-based therapies, as well as related technology platforms. If BiomX Ltd. sublicenses its rights under the Yeda 2015 License Agreement,

BiomX Ltd. will be obligated to pay Yeda additional sublicense royalties expressed as a percentage of the sublicensing receipts described in the agreement received ranging from the mid-teens to the mid-twenties. BiomX Ltd. is obligated to pay filing and maintenance expenses in respect of patents licensed under the Yeda 2015 License Agreement. In connection with the Yeda 2015 License Agreement, BiomX Ltd. also issued certain ordinary shares which were subsequently converted to 193,406 shares of our Common Stock as part of the Business Combination. In the event of certain mergers and acquisitions we are party to, we are obligated to pay Yeda an amount equivalent to approximately 1% of the consideration received under such transaction.

Unless terminated earlier by either party, the license granted will remain in effect in each country and for each product developed based on the license until the later of the expiration of the last licensed patent (which is expected to be in 2039) in such country for such product, and eleven years from the date of first commercial sale of such product in such country for such product. The Yeda 2015 License Agreement terminates upon the later of the expiration of the last of the patents covered under the agreement, and the expiry of a continuous 15-year period during which there has not been a first commercial sale of any product in any country. Yeda may also terminate the agreement if BiomX Ltd. fails to observe certain diligence and development requirements and milestones as described in the Yeda 2015 License Agreement. BiomX Ltd. or Yeda may terminate the Yeda 2015 License Agreement for the material uncured breach of the other party after a notice period, or the other party's winding up, bankruptcy, insolvency, dissolution or other similar discontinuation of business. Upon termination of the Yeda 2015 License Agreement, other than due to the passage of time, BiomX Ltd. is required to grant to Yeda a non-exclusive, irrevocable, perpetual, fully paid-up, sublicensable, worldwide license in respect of our rights in know-how and research results as described in the Yeda 2015 License Agreement, provided that if Yeda subsequently grants a license to a third party that utilizes our rights, BiomX Ltd. is entitled to share in the net proceeds actually received by Yeda arising out of that license, subject to a cap based on the development expenses that BiomX incurs in connection with the Yeda 2015 License Agreement.

BiomX Ltd. consults with Yeda with respect to patent prosecution and maintenance decisions. Yeda is primarily responsible for prosecution and maintenance with respect to Licensed Information (as defined in the license) and we are responsible for prosecution and maintenance with respect to Subsequent Results (as defined in the license). BiomX Ltd. and Yeda are both entitled to consultation rights. BiomX is responsible for costs associated with prosecution and maintenance of all patents and applications.

BiomX Ltd. is entitled to enforce the patent rights under the license upon approval by Yeda. Yeda may elect to join the lawsuit, but we are responsible for all litigation-related expenses. Yeda reserves the right to bring its own actions if we do not notify Yeda of our intent to enforce a right or bring an action after we initially notified Yeda of the potential action.

Exclusive License with United States Navy

On March 16, 2017, APT entered into an exclusive license (as amended on January 10, 2019, or the USN License Agreement, with the United States of America, as represented by the Secretary of the Navy or the USN, pursuant to which APT received an exclusive license throughout the territory encompassing the United States, Canada and Europe to an invention entitled "Bacteriophage Compositions and Method of Selection of Components Against Specific Bacteria or the USN Licensed Patent, as well as associated materials, including approximately 350 phage (or collectively with the USN Licensed Patent, the USN Materials), in the field of treating and/or eliminating multi-drug resistant bacteria for all uses, including industrial or medical uses. Pursuant to the USN License Agreement, APT agreed to carry out a commercial development plan or the Commercial Development Plan, for the development and marketing of an invention claimed or disclosed in the USN Licensed Patent or a Licensed Invention, to bring a Licensed Invention to practical application consistent with the milestones provided in the Commercial Development Plan by December 31, 2022, and, thereafter, to continue to make the benefits of a Licensed Invention reasonably accessible to the public for the remainder of the term of the USN License Agreement. For the term of the license, any Licensed Invention or product produced through the use of a Licensed Invention for use or sale in the United States must be manufactured substantially in the United States. The Company uses the phage provided in connection with the USN License Agreement as a potential source of phage for the development of its phage treatments.

In connection with the USN License Agreement, APT paid the USN a license execution royalty of $5,000. We are also required to pay royalties expressed as a percentage in the high single digits on net sales of products, or Royalty-Bearing Products (i) defined by or containing a composition defined by any claim of the USN Licensed Patent, (ii) made by a method claimed in a Licensed Invention, (iii) based on, originating from or containing USN Materials, or (iv) based on, originating from or supported by USN-created information not found within the USN Licensed Patent and used to support the commercialization or regulatory approval of a Royalty-Bearing Product, including, DNA sequence data, clinical trial data and detailed laboratory methods, related to the Licensed Invention.

APT agreed to pay minimum annual royalties in the amount of $5,000 from 2018 to 2020 and $20,000 thereafter. APT also agreed to pay (a) a regulatory approval royalty in the low $100,000s within 180 days of receiving FDA approval to market a Royalty-Bearing Product and (b) a revenue milestone royalty in the low $100,000s when certain revenue thresholds have been met. Additionally, we agreed to pay royalties expressed as a percentage in the mid-twenties of all revenue received from sublicensing any Royalty-Bearing Product.

We are responsible for controlling and diligently prosecuting the USN Licensed Patent and paying all costs associated with prosecuting and maintaining the USN Licensed Patent in the United States and in foreign jurisdictions. We agreed to submit annual progress reports on our efforts to achieve a practical application of the Licensed Invention by January 1, 2021, and thereafter until such practical application has been received.

We may terminate the USN License Agreement upon 120 days' written notice, and the USN may terminate the USN License Agreement if (i) the USN determines we are not executing the Commercial Development Plan, (ii) the USN determines such termination is necessary to meet requirements for public use specified by U.S. federal regulations issued after the date of the USN License Agreement and not reasonably satisfied by us, (iii) in the event we willfully made a material false statement or omitted a material fact in our application for the USN License Agreement or any report required thereby, or (iv) we commit a substantial material breach of the USN License Agreement that has not been remedied within 30 days of written notice.

License Agreement with Walter Reed Army Institute of Research

On August 24, 2021, APT entered into a Biological Materials License Agreement (or, as modified on August 31, 2022, the WRAIR License Agreement) with Walter Reed Army Institute of Research or WRAIR, pursuant to which APT received a nonexclusive worldwide license to certain materials and information, including approximately 100 phage, or WRAIR Materials, to develop and commercialize phage products to treat/prevent *Pseudomonas aeruginosa*, *Acinebactor baumannii*, *Staphylococcus aureus*, *Klebsiella pneumonia*, wound and UTI *Escherichia coli* and *Enterobacter cloacae* bacterial infections. The Company uses the phage provided in connection with the WRAIR License Agreement as a potential source of phage for the development of its phage treatments.

In connection with the WRAIR License Agreement, APT paid WRAIR an initial execution fee in the mid-thousands of dollars and agreed to pay a maintenance fee in the mid-thousands of dollars per year. We are also required to pay royalties expressed as a percentage in the low single digits on net sales of products that incorporate the WRAIR Materials, or the WRAIR Licensed Products, subject to reductions as described in the WRAIR License Agreement. In addition, if we sublicense our rights under the WRAIR License Agreement we are obligated to pay WRAIR additional sublicense royalties expressed as a percentage in the low teens of the sublicensing receipts we receive from any such sublicense royalties. In addition, additional royalties in the low teens may be assessed on any overdue royalty payments.

We are obligated to make written annual progress reports to WRAIR, detailing our efforts to bring any inventions licensed under WRAIR License Agreement to the point of practical application, together with any additional information requested by WRAIR or as contemplated or required under the development plan. As part of our performance under the WRAIR License Agreement, we have agreed to dose the first patient in a clinical trial with a WRAIR Licensed Product within four years from the effective date of the WRAIR License Agreement.

In the event WRAIR files a non-provisional patent application covering the WRAIR Materials and/or the use thereof, provided as part of this License Agreement, WRAIR is obligated to notify us, and we and WRAIR will assess the need and/or desirability of a patent license. In such case, we will have the first right of refusal to negotiate a non-exclusive or exclusive license.

The WRAIR License Agreement will expire as to each WRAIR Material ten years from the date that such WRAIR Material was added to the WRAIR License Agreement unless earlier terminated in accordance with its terms. We may terminate the WRAIR License Agreement upon 60 days' written notice, and WRAIR may terminate if we are in default and such default has not been remedied within 90 days after written notice of such default.

Employees

As of December 31, 2023, we had 58 full-time employees and 13 part time employees. 21 of our employees have Ph.D. or M.D. degrees and 53 of our employees are currently engaged in research and development and clinical activities. None of our employees is represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be strong.

Corporate Information

The mailing address of our principal executive office is 22 Einstein St., Floor 4, Ness Ziona, Israel 7414003 and the telephone number is (972) 72-394-2377. Our corporate website address is www.biomx.com. The content of our website is not intended to be incorporated by reference into this Annual Report or in any other report or document we file and any references to these websites are intended to be inactive textual references only.

ITEM 1A. RISK FACTORS

You should carefully consider the risks and uncertainties described below and the other information in this Annual Report before making an investment in our securities. Our business, financial condition, results of operations, or prospects could be materially and adversely affected if any of these risks occurs, and as a result, the market price of our securities could decline and you could lose all or part of your investment. This Annual Report also contains forward-looking statements that involve risks and uncertainties. See "Cautionary Statement Regarding Forward-Looking Statements." Our actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors, including those set forth below.

Risks Related to Our Business, Technology and Industry

We are a clinical-stage company with limited operating history and have incurred losses since our inception. We anticipate that we will continue to incur significant expenses, and we will continue to incur significant losses for the foreseeable future.

We are a clinical-stage biopharmaceutical company with limited operating history. We have incurred losses in each year since BiomX Ltd.'s inception in 2015. As of December 31, 2023, our accumulated deficit was $163 million, and we expect to incur increasingly significant losses for the foreseeable future. Preclinical development and clinical trials and activities are costly. We have devoted, and will continue to devote for the foreseeable future, substantially all of our resources to research and development and clinical trials for our product candidates. We do not expect to generate any revenue from the commercial sales of our product candidates in the near term. In addition, as a result of the Acquisition, our future business, prospects, financial position and operating results could be significantly different than those in historical periods or projected by our management.

For the years ended December 31, 2023 and 2022, we had losses from operations of $25.3 million and $27.2 million, respectively. We anticipate that the level of our expenses is expected to increase as a result of the recent acquisition of APT, and will continue to be significant if and as we:

- initiate and continue research, preclinical and clinical development efforts for any future product candidates;
- seek to discover and develop additional product candidates and further expand our clinical product pipeline;
- seek marketing and regulatory approvals for any product candidates that successfully complete clinical trials;
- require the manufacture of larger quantities of product candidates for clinical development and, potentially, commercialization;
- maintain, expand and protect our intellectual property portfolio;
- expand our research and development infrastructure, including hiring and retaining additional personnel, such as clinical, quality control and scientific personnel;
- establish sales, marketing, distribution and other commercial infrastructure in the future to commercialize products for which we obtain marketing approval, if any; and
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization and help us comply with our obligations as a public company.

We will need to raise additional capital in the future to support our operations which may not be available at terms that are favorable to us and might cause significant dilution to our stockholders or increase our debt towards third parties.

As of December 31, 2023, we had cash, cash equivalents and restricted cash of $15.9 million, and we have had recurring losses from operations and negative operating cash flows since inception. We will need to raise additional capital in the future to support our operations and product development activities. In the near term, we expect to continue to fund our operations and other development activities relating to additional product candidates from the cash held by us, governmental and other grants and through future equity and debt financing. In addition, on December 7, 2023, we entered into an At the Market Offering Agreement, or the ATM Agreement, with H.C. Wainwright & Co., LLC, or Wainwright, as manager, pursuant to which we may issue and sell shares of our Common Stock having an aggregate offering price of up to $7.5 million from time to time through Wainwright. We are not obligated to make any sales of Common Stock under the ATM Agreement. On May 4, 2023, subsequent to the approval of the Company's stockholders, the Company completed the second closing of the February 2023 PIPE for an additional $6 million in gross proceeds. On December 7, 2023, we filed a shelf registration statement on Form S-3, which was declared effective by the SEC on January 2, 2024. Additionally, on March 15, 2024, concurrently with the consummation of the Acquisition, we consummated a private placement, or the March 2024 PIPE, pursuant to an exemption from registration requirements under the Securities Act with certain investors pursuant to which such investors purchased an aggregate of 216,417 shares of our Series X non-voting convertible preferred stock, par value $0.0001 per share, or the Convertible Preferred Stock, and warrants, or Private Placement Warrants, to purchase up to an aggregate of 108,208,500 shares of the Company's Common Stock, for aggregate gross proceeds of approximately $50 million. Each share of Convertible Preferred Stock is convertible into an aggregate of 1,000 shares of Common Stock.

Subject to restrictions pursuant to the March 2024 PIPE, we may continue to sell shares under the ATM Agreement and otherwise to use our shelf registration statement to raise additional funds from time to time. We may also raise funds privately, as we did in February 2023 and the March 2024 PIPE. We may also seek funds through arrangements with collaborators or others that may require us to relinquish rights to the product candidates that we might otherwise seek to develop or commercialize independently.

If we enter into a collaboration for one or more of our current or future product candidates at an earlier development stage, the terms of such a collaboration will likely be less favorable than if we were to enter the collaboration in later stages or if we commercialized the product independently. If we raise additional funds through equity offerings, the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights or cause significant dilution to our stockholders. If we raise additional capital through debt financing, it would be subject to fixed payment obligations and may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, declaring dividends or acquiring or licensing intellectual property rights.

Developing drugs and conducting clinical trials is expensive. Our future funding requirements will depend on many factors, including:

- the costs, timing and progress of our research and development and clinical activities;
- manufacturing costs associated with our targeted bacteriophage, or phage, therapies strategy and other research and development activities;
- the terms and timing of any collaborative, licensing, acquisition or other arrangements that we may establish;
- employee-related expenses, as well as external costs such as fees paid to outside consultants;
- the costs and timing of seeking regulatory approvals and related to compliance with regulatory requirements; and
- the costs of filing, prosecuting, defending and enforcing any patent applications, claims, patents and other intellectual property rights.

Domestic and international equity and debt markets have experienced and may continue to experience heightened volatility and turmoil based on domestic and international economic conditions and concerns. In the event these economic conditions and concerns continue or worsen and the markets continue to remain volatile, or a bear market, or recession, ensues in the U.S. stock market, or the markets are negatively impacted by factors such as the Israel-Hamas War, the Russian invasion of Ukraine and the resulting world sanctions on Russia, Belarus, and related parties or other sources of geopolitical uncertainty and instability, our operating results and liquidity could be affected adversely by those factors in many ways, including making it more difficult for us to raise funds if necessary and our stock price may decline.

There can be no assurance that sufficient funds will be available to us when required or on acceptable terms, if at all. Our inability to obtain additional funds could have a material adverse effect on our business, financial condition and results of operations. Moreover, if we are unable to obtain additional funds on a timely basis, there will be substantial doubt about our ability to continue as a going concern and increased risk of insolvency and up to a total loss of investment by our stockholders.

Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern, which could prevent us from obtaining new financing on reasonable terms or at all.

Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern. We have concluded that there is substantial doubt about our ability to continue as a going concern. We have accumulated a deficit of $163 million since our inception. To date, we have not generated revenue from our operations and we do not expect to generate any significant revenues from sales of products in the next twelve months. Our cash needs may increase in the foreseeable future. As of December 31, 2023, we had $15.9 million of cash and cash equivalents.

We believe our cash and cash equivalents and short-term deposits on hand will be sufficient to meet our working capital and capital expenditure requirements for at least 12 months. However, since there is a risk of our stockholders not approving the conversion of the Convertible Preferred Stock that was issued in connection with the March 2024 PIPE and the Acquisition, which could result in us being required to cash settle the Convertible Preferred Stock, there is substantial doubt about our ability to continue as a going concern for at least 12 months from April 3, 2024. Our continuation as a going concern is dependent upon many factors, including our ability to receive the approval of our shareholders to convert the Convertible Preferred Stock within 5 months, raise additional funds, the success of our clinical trial for CF, our ability to successfully integrate the business of APT and our ability to repay our obligations when due. We cannot be sure that we will be able to obtain any future funding, and any such funding we may obtain may not be sufficient to finance our operations. If we are unable to obtain sufficient funds, we may be unable to continue as a going concern.

There is no guarantee that our acquisition of APT will increase stockholder value.

In March 2024, we acquired APT in the Acquisition. We cannot guarantee that implementing the Acquisition and related transactions will not impair stockholder value or otherwise adversely affect our business. The Acquisition could result in integration challenges between our businesses and management teams which could cause management and business disruptions, any of which could impact our results of operation and business prospects and impair the value of such acquisition to our stockholders.

We are required to use reasonable best efforts to solicit stockholder approval for the conversion of shares of Convertible Preferred Stock and Warrants issued in the Acquisition and the March 2024 PIPE. If we do not obtain such approval within 150 days of the initial issuance of the Convertible Preferred Stock, we could be required to cash settle the Convertible Preferred Stock.

Pursuant to the Merger Agreement, we are required to hold a meeting of stockholders (the "Stockholder Meeting") for the purpose of obtaining stockholder approval of (i) the conversion of the Convertible Preferred Stock and the exercise of the Warrants (as defined below) into shares of Common Stock in excess of 19.9% of the outstanding shares of Common Stock for purposes of the NYSE American Stock Market Rules, (ii) adoption of a new stock incentive plan or amendment of the Company's current stock incentive plan (the "2024 Incentive Plan"), and (iii) if necessary, the amendment of our certificate of incorporation to authorize sufficient additional shares of Common Stock to allow for conversion of the Convertible Preferred Stock and exercise of the Warrants. If such stockholder approval is not received, we are required to convene additional stockholder meetings at least every 90 days thereafter until such approval is obtained, which could result in substantial costs and be a distraction to management. Furthermore, if our stockholders do not approve the conversion of the Convertible Preferred Stock within 150 days of the initial issuance of the Convertible Preferred Stock, then upon written request by the holders of 70% of the Convertible Preferred Stock, we will be required to pay to each holder of Convertible Preferred Stock an amount in cash equal to the fair value of the shares of Convertible Preferred Stock held by such holder, as described in the Certificate of Designation for the Convertible Preferred Stock. We do not expect that we would have sufficient liquidity to settle a significant amount of the Convertible Preferred Stock if required to do so. The cash settlement is not in our control and raises substantial doubt about our ability to continue as a going concern.

We are seeking to develop product candidates using phage technology, an approach for which it is difficult to predict the time and cost of development. To our knowledge, as of the date of this Annual Report, no bacteriophage has thus far been approved as a drug in the United States or in the European Union.

We are developing our product candidates with phage technology. We have not, nor to our knowledge has any other company, received regulatory approval from the FDA, or equivalent foreign regulatory agencies for a product candidate based on this approach. While *in vitro* and *in vivo* studies have characterized the behavior of phage in cell cultures and animal models and there exists a body of literature regarding the use of phage therapy in humans, the safety and efficacy of phage therapy in humans has not been extensively studied in well-controlled modern clinical trials. Most of the prior research on phage-based therapy was conducted in the former Soviet Union prior to and immediately after World War II and lacked appropriate control group design or lacked control groups at all. Furthermore, the standard of care has changed substantially during the ensuing decades since those studies were performed, diminishing the relevance of prior claims of improved cure rates. Any product candidates that we develop may not demonstrate in patients the therapeutic properties ascribed to them in laboratory and other preclinical studies, and they may interact with human biological systems in unforeseen, ineffective or even harmful ways. We cannot be certain that our approach will lead to the development of approvable or marketable products. Furthermore, the bacterial targets of phage may develop resistance to our product candidates over time, which we may or may not be able to overcome with the development of new phage cocktails or we may not be able to construct a cocktail with sufficient coverage of our target pathogen universe.

If our product candidates receive regulatory approval but do not achieve an adequate level of acceptance by physicians, healthcare payors and patients, we may not generate product revenue sufficient to attain profitability. Our success will depend upon physicians who specialize in the treatment of diseases targeted by our product candidates that we pursue as drugs, prescribing potential treatments that involve the use of our product candidates in lieu of, or in addition to, existing treatments with which they are more familiar and for which greater clinical data may be available. Our success will also depend on consumer acceptance and adoption of our products that we commercialize. Adverse events in preclinical studies and clinical trials of our product candidates or in clinical trials of others developing similar products and the resulting publicity, as well as any other adverse events in the field of phage therapeutics, could result in a decrease in demand for any product that we may develop. The degree of market acceptance of any approved products will depend on a number of factors, including:

- the effectiveness of the product;
- the prevalence and severity of any side effects;
- potential advantages or disadvantages over alternative treatments;
- relative convenience and ease of administration;
- the strength of marketing and distribution support;
- the price of the product, both in absolute terms and relative to alternative treatments; and
- sufficient third-party coverage or reimbursement.

Developing our product candidates on a commercial scale will require substantial technical, financial and human resources. We and our third-party collaborators may experience delays in developing manufacturing capabilities for our product candidates, and may not be able to do so at the scale required to efficiently conduct the clinical trials required to obtain regulatory approval of those of our product candidates that require it, or to manufacture commercial quantities of our products, if approved or otherwise permitted to be marketed.

Our product candidates must undergo clinical testing which may fail to demonstrate the requisite safety and efficacy for drug products, or safety, purity, and potency for biologics, and any of our product candidates could cause adverse effects, which would substantially delay or prevent regulatory approval and/or commercialization.

Before we can obtain regulatory approval for a product candidate or otherwise obtain evidence allowing us to market the product as a drug or biologic, we must undertake extensive preclinical and clinical testing in humans to demonstrate safety and efficacy or in the case of biologics, safety, purity, and potency, to the satisfaction of the FDA or other regulatory agencies. Clinical trials of product candidates sufficient to obtain regulatory marketing approval or otherwise demonstrate safety prior to marketing, are expensive and take years to complete. Furthermore, results from these clinical trials may not show safety or efficacy of our product candidates sufficient to lead to approval, or to warrant further development. Our approach is intended to design phage combinations, or cocktails, to target specific strains of pathogenic bacteria in order to alter microbiome composition and confer potential therapeutic or cosmetic benefit to patients. However, there can be no assurance that the eradication of the selected targets will result in a clinically meaningful effect on the underlying disease, such as in cases where the pathology of the disease is not well-defined. In addition, the bacteria that we target may be associated with the disease, but may not be causative or contributive to the pathology of the disease, or there may be other bacteria that our product candidates do not target that are more meaningful drivers of the underlying disease. In addition, our product candidates require the use of

effective delivery vehicles to reach the target organ or tissue, and there can be no assurance that our intended delivery systems will allow our product candidates to reach the desired locations in a patient. Safety must first be established through preclinical testing and early clinical trials, before efficacy can be evaluated and established and thereby lead to FDA or other regulatory agencies marketing approval. Our clinical trials may produce undesirable side effects or negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical and/or preclinical testing or to abandon programs.

Ongoing geopolitical instability have adversely affected and may continue to adversely affect our business, including our clinical trials.

General economic, political, demographic and business conditions worldwide, including geopolitical uncertainty and instability, such as the Israel-Hamas War and the Russia-Ukraine conflict, might adversely affect our business, through indirect disruption to our supply chain, harming our ability to raise funds at terms acceptable to us among other affects. We may further experience additional disruptions that could severely impact our business, preclinical studies and clinical trials, including:

- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems; and
- interruptions or delays to our sourced discovery and clinical activities.

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals for our product candidates for therapeutic indications, we will not be able to commercialize, or will be delayed in commercializing, our product candidates, and our future ability to generate revenue will be materially impaired.

Our product candidates and the activities associated with their development and commercialization for therapeutic indications, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export are subject to regulation by the FDA and other regulatory agencies in the United States and by equivalent foreign regulatory authorities. Before we can commercialize any of our product candidates for therapeutic indications, we must obtain marketing approval. We have not received approval to market any of our product candidates from regulatory authorities in any jurisdiction, and it is possible that none of our product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

The process of obtaining regulatory approvals for therapeutic indications, both in the United States and in other countries, is expensive, may take many years if additional clinical trials are required, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted IND, or equivalent application types, may cause delays in the approval or rejection of an application. The FDA and equivalent foreign regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data is insufficient for approval and require additional preclinical, clinical or other studies. Our product candidates could be delayed in receiving, or fail to receive, regulatory approval for many reasons, including the following:

- the FDA or equivalent foreign regulatory authorities may disagree with the design, including study population, dose level, dose regimen, and bioanalytical assay methods, or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or equivalent foreign regulatory authorities that a drug candidate is safe and effective for its proposed indication or a related companion diagnostic is suitable to identify appropriate patient populations;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or equivalent foreign regulatory authorities for approval, such as was the case with our acne product candidate;
- we may be unable to demonstrate that a product candidate’s clinical and other benefits outweigh its safety risks;
- the FDA or equivalent foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a marketing application or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or equivalent foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or equivalent foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Of the large number of drugs in development, only a small percentage successfully complete the FDA or equivalent foreign regulatory approval processes and are commercialized. The lengthy approval process as well as the unpredictability of future clinical trial results may result in us failing to obtain regulatory approval to market its product candidates, which would significantly harm our business, results of operations and prospects.

The FDA may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data to support approval for therapeutic indications. The opinion of the Advisory Committee, although not binding, may have a significant impact on our ability to obtain approval of any product candidates that we develop based on the completed clinical trials. In the European Union, the safety and efficacy data of any product candidate considered by the EMA to qualify as an advanced therapy medicinal product must be reviewed by the EMA’s, Committee for Advanced Therapies, a group of experts in advanced therapy medicinal products.

Moreover, under PREA, in the United States, and the Pediatric Regulation, in the European Union, the FDA or equivalent foreign regulatory authority could require mandatory testing in the pediatric population. Applications for approval in the United States or in the European Union must contain

data to assess the safety and efficacy of the biologic for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA or equivalent foreign regulatory authority may, in its discretion, grant full or partial waivers, or deferrals, for submission of data in pediatric subjects. If the FDA requires data in pediatric patients, significantly more capital will have to be invested in order to conduct the mandatory pediatric clinical trials and studies, but the approval of the medicinal products for the adult population should normally not be affected. If the results of such pediatric studies are not positive, our product candidates will not be approved for children.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited therapeutic indications than our requests, may include limitations for use or contraindications that limit the suitable patient population, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

If we experience delays in obtaining approval or if we fail to obtain approval of our product candidates, the commercial prospects for our product candidates may be harmed and our future ability to generate revenues will be materially impaired.

We have never generated any revenue from product sales and may never be profitable or, if achieved, may not sustain profitability.

Our ability to generate meaningful revenue and achieve profitability depends on our ability, and the ability of any third party with which we may partner, to successfully complete the development of, and meet regulatory requirements, including (but not limited to) obtaining any necessary regulatory approvals, to commercialize our product candidates. We do not currently meet regulatory requirements or have the required approvals to market our product candidates and may never meet or receive them. We do not anticipate generating revenue from product sales for the foreseeable future, if ever. If any of our product candidates fail in clinical trials or if any of our product candidates do not meet regulatory requirements, including gaining regulatory approval when needed, or if any of our product candidates, if marketed, fail to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our ability to generate future revenue from product sales depends heavily on our success in:

- completing research and preclinical and clinical development of our product candidates;
- seeking and obtaining regulatory and marketing approvals for product candidates for which we complete clinical trials;
- meeting regulatory requirements for marketing the products;
- developing a sustainable, scalable, reproducible and transferable manufacturing process for our product candidates;

- launching and commercializing product candidates for which we obtain regulatory and marketing approval or are otherwise permitted to market, either by establishing a sales force, marketing and distribution infrastructure or by collaborating with a partner;
- obtaining market acceptance of any approved products;
- addressing any competing technological and market developments;
- implementing additional internal systems and infrastructure, as needed;
- identifying and validating new product candidates;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and
- attracting, hiring and retaining qualified personnel.

Even if one or more of the product candidates that we develop is approved for commercial sale or otherwise permitted for marketing, we anticipate incurring significant costs associated with commercializing any approved product. Our expenses could increase beyond expectations if we are required by the FDA, or the EMA, or other equivalent foreign regulatory agencies to perform clinical trials and other studies in addition to those that we currently anticipate. Even if we are able to generate revenue from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations. If we fail to become profitable, or if we are unable to fund our continuing losses, our business, financial condition and results of operations may be materially adversely impacted.

We are seeking to develop product candidates to treat medical conditions related to the presence of certain bacteria. Our success is largely dependent on a broad degree of market acceptance, and in the case of drug products, physician adoption and use, which are necessary for commercial success.

Even if we obtain FDA or foreign regulatory approvals for our drug product candidates, the commercial success of our product candidates will depend on consumer acceptance and adoption of products that we commercialize. Adverse events in preclinical studies and clinical trials of our product candidates or in clinical trials of others developing similar products and the resulting publicity could result in a decrease in demand for any product that we may develop.

In addition, the commercial success of our drug product candidates will depend significantly on their broad adoption and use by pediatricians and other physicians for approved therapeutic indications, as well as any other indications for which we may seek approval. We cannot be certain that our approach will lead to the development of approvable or marketable products.

Obtaining high titers for specific phage cocktails necessary for our preclinical and clinical testing may be difficult and time-consuming.

Our product candidates are phage cocktails that we have designed to meet specific characteristics. We and our contract manufacturers produce a cocktail of multiple phage and it may be difficult or time-consuming to achieve high titers, or levels, of phage sufficient for our preclinical and clinical testing. In some cases, it may require multiple product runs in order for us to obtain the amounts necessary for its clinical testing. This may result in delays in our clinical trial timelines, and it may increase production costs and associated expenses. Also, it may be difficult to reproduce the manufacturing process to the extent that more significant quantities are required as our product candidates advance through the clinical development process.

Results from preclinical studies of our product candidates may not be predictive of the results of clinical trials or later stage clinical development.

Preclinical studies of our product candidates, such as BX004 and BX005, including studies in animal disease models may not accurately predict the safety of the product candidate such that further human clinical trials would be allowed to proceed. In particular, promising preclinical testing suggesting the potential efficacy of prototype phage products may not predict the ability of these products to address conditions in the human clinical settings. For example, while we have studied phage activity *in vitro* and *in vivo*, these results may not be replicated when our phage cocktails are administered to human subjects. Despite promising data in any preclinical studies, our phage technology may be found not to be efficacious when studied in clinical trials.

To satisfy FDA or equivalent foreign regulatory approval standards, we must demonstrate in adequate and well controlled clinical trials that our drug product candidates are safe and effective for their intended use. Success in preclinical testing and early-stage clinical trials does not ensure that later clinical trials will be successful. Our initial results from preclinical testing also may not be confirmed by later analysis or subsequent larger clinical trials. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials, even after obtaining promising results in earlier clinical trials, and most product candidates that commence clinical trials are never approved for commercial sale.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

Completion of clinical trials depends, among other things, on our ability to enroll a sufficient number of patients, which is a function of many factors, including:

- the therapeutic endpoints chosen for evaluation;
- the eligibility criteria defined in the protocol;
- the perceived benefit of the product candidate under study;
- the size of the patient population required for analysis of the clinical trial's therapeutic endpoints;
- our ability to recruit clinical trial investigators and sites with the appropriate competencies and experience;
- our ability to obtain and maintain patient consents; and
- competition for patients from clinical trials for other treatments.

We have experienced and may continue to experience difficulties in enrolling patients in our clinical trials, which could increase the costs or affect the timing or outcome of these clinical trials. This is particularly true with respect to diseases with relatively small patient populations. In addition, potential patients for our trials may not be adequately diagnosed or identified with the diseases that we are targeting or may not meet the entry criteria for our studies.

We may not be able to initiate or continue clinical trials if we are unable to locate a sufficient number of eligible patients to participate in the clinical trials required by the FDA or equivalent foreign regulatory agencies. In addition, the process of finding and diagnosing patients may prove costly. Our inability to enroll a sufficient number of patients for any of our clinical trials would result in significant delays or may require us to abandon one or more clinical trials.

Delays in our clinical trials could result in us not achieving anticipated developmental milestones when expected, increased costs and delays in our ability to obtain regulatory approval for and commercialization of our product candidates.

Delays in our clinical trials could result in us not meeting anticipated clinical milestones and could materially impact our product development costs and delay regulatory approval of our product candidates. Planned clinical trials may not be commenced or completed on schedule, or at all.

Clinical trials can be delayed for a variety of reasons, including:

- delays in the development of manufacturing capabilities for our product candidates to enable their consistent production at clinical trial scale;
- failures in our internal manufacturing operations that result in our inability to consistently and timely produce bacteriophage in sufficient quantities to support our clinical trials;
- the availability of financial resources to commence and complete our planned clinical trials;
- delays in reaching a consensus with clinical investigators on study design;
- delays in reaching a consensus with regulatory agencies on trial design or in obtaining regulatory approval to commence a trial;
- delays in obtaining clinical materials;
- slower than expected patient recruitment for participation in clinical trials;
- regulatory constraints or injunctions (for example, from supervisory authorities in case of noncompliance with cybersecurity and data privacy laws);
- failure by clinical trial sites, other third parties or us to adhere to clinical trial agreements and/or the trial protocol;
- delays in reaching agreement on acceptable clinical trial agreement terms with prospective sites or obtaining IRB or independent ethics committee approval; and

- adverse safety events experienced during our clinical trials.

If we do not successfully commence or complete our clinical trials on schedule, the price of our securities may decline. Significant preclinical or clinical trial delays could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, potentially impairing our ability to successfully commercialize our product candidates and harming our business and results of operations.

Our current or future product candidates may cause adverse effects that could halt their clinical development, prevent their approval or marketing, limit their commercial potential or result in significant negative consequences.

Adverse effects could occur and cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of marketing approval by the FDA or equivalent foreign regulatory agencies. Results of our trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics.

If adverse effects arise in the development of our product candidates, we, the FDA or equivalent foreign regulatory agencies, the IRBs or independent ethics committees at the institutions in which our studies are conducted, or the Data Safety Monitoring Board could suspend or terminate our clinical trials or the FDA or equivalent foreign regulatory agencies could deny approval of our product candidates for any or all targeted indications.

We intend to continue to evaluate our product candidates for safety and tolerability in the form of Phase 1 clinical trials. While our current and future product candidates will undergo safety testing to the extent possible and, where applicable, under such conditions discussed with regulatory authorities, not all adverse effects of drugs can be predicted or anticipated. Unforeseen adverse effects could arise either during clinical development or, if such adverse effects are more rare, after our products have been approved by regulatory authorities and the approved product has been marketed, resulting in the exposure of additional patients. For example, while we screen our phage in attempts to minimize safety issues, there can be no assurance that we will eliminate the risk of the appearance of virulence genes, antibiotic resistance genes, lysogenic genes, integrase genes, or other toxic genes in our phage, or of adverse reactions to our phage in a patient's immune system. So far, we have not demonstrated, and we cannot predict, if ongoing or future clinical trials will demonstrate that any of our product candidates are safe in humans. Moreover, clinical trials of our product candidates are conducted in carefully defined sets of patients who have agreed to enter into clinical trials. Consequently, it is possible that our clinical trials may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any, or alternatively fail to identify undesirable adverse effects.

Ultimately, some or all of our product candidates may prove to be unsafe for human use. Moreover, we could be subject to significant liability if any volunteer or patient suffers, or appears to suffer, adverse health effects as a result of participating in our clinical trials. Any of these events could prevent us from achieving or maintaining market acceptance of our product candidates and could substantially increase commercialization costs.

We have not completed composition development of our product candidates.

The development of our product candidates requires that we isolate, select, optimize and combine a number of phage that target the desired bacteria for that product candidate. The selection of phage for any of our product candidates is based on a variety of factors, including, without limitation, the ability of the selected phage, in combination, to successfully kill the targeted bacteria, the degree of cross-reactivity of the individual phage with the same part of the bacterial targets, the ability of the combined phage to satisfy regulatory requirements, our ability to manufacture sufficient quantities of the phage, intellectual property rights of third parties, and other factors. While we have selected an initial formulation of BX004, there can be no assurance that this initial formulation will be the final formulations of this product candidate for commercialization if approved. If we are unable to complete formulation development of our product candidates in the time frame that we have anticipated, then our product development timelines, and the regulatory approval of our product candidates, could be delayed.

We must continue to develop manufacturing processes for our product candidates, and any delay in doing so, or our inability to do so, would result in delays in our clinical trials.

The manufacturing processes for our product candidates, and the scale-up of such processes for clinical trials, may present challenges, and there can be no assurance that we will be able to complete this work in a timely manner, if at all. Any delay in the development or scale-up of these manufacturing processes could delay the start of clinical trials and harm our business. In order to scale-up our manufacturing capacity, we need to either build additional internal manufacturing capacity, contract with one or more partners, or both. Our technology and the production process for our equipment and tools are complex and we may encounter unexpected difficulties in manufacturing our product candidates. For example, the manufacturing hosts that we use to produce our phage may contain one or more integrated phage in their genomes that, if we are unable to remove, can present challenges in manufacturing of the produced phage. There is no assurance that we will be able to continue to build manufacturing capacity internally or find one or more suitable partners, or both, to meet the necessary volume and quality requirements. Manufacturing and product quality issues may arise as we increase the scale of our production. Any delay or inability in establishing or expanding our manufacturing capacity could diminish our ability to develop our product candidates.

In the third quarter of 2019, we established our own manufacturing facility at our headquarters in Ness Ziona, Israel and we have executed cGMP manufacturing for our first in human clinical study. In February 2021, APT consolidated its GMP manufacturing, testing and development in its Gaithersburg facility. In March 2021, we moved into a new manufacturing facility at our headquarters in Ness Ziona, Israel. Our new facility undergoes ongoing internal inspections to verify proper manufacturing for Phase I and II clinical studies in accordance with cGMP requirements. In the event these facilities do not comply with cGMP standards for the manufacture of our product candidates, we may need to fund additional modifications to our manufacturing process, conduct additional validation studies or find alternative manufacturing facilities, any of which would result in significant cost to us as well as a delay of up to several years in obtaining approval for such product candidate.

If we submit marketing applications for any of our product candidates manufactured at this facility, this manufacturing facility will be subjected to ongoing periodic inspection for compliance with European, FDA and cGMP regulations. Compliance with these regulations and standards is complex and costly, and there can be no assurance that we will be able to comply. Any failure to comply with applicable regulations could result in sanctions being imposed (including fines, injunctions and civil penalties), failure of regulatory authorities to grant marketing approval of our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecution.

If our competitors are able to develop and market products that are more effective, safer or more affordable than ours, or obtain marketing approval before we do, our commercial opportunities may be limited.

Competition in the biotechnology and pharmaceutical industries is intense and continues to increase. Some companies that are larger and have significantly more resources than us are aggressively pursuing development programs for indications that we are pursuing, including traditional therapies and therapies with novel mechanisms of action. In addition, other companies are developing phage-based products for therapeutic and non-therapeutic uses, and may elect to use their expertise in phage development and manufacturing to try to develop products that would compete with our products.

We also face potential competition from academic institutions, government agencies and private and public research institutions engaged in the discovery and development of drugs and therapies. Many of our competitors have significantly greater financial resources and expertise in research and development, preclinical testing, conducting clinical trials, obtaining regulatory approvals, manufacturing, sales and marketing than we do. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established pharmaceutical companies.

In the European Union, potential competition also comes from medicinal preparations made by hospitals or pharmacists and administered without marketing authorizations, generally referred to as “compounding.” In some member states, national authorities generally promote compounding in order to reduce healthcare expenses.

Our competitors may succeed in developing products that are more effective, have fewer side effects and are safer or more affordable than our product candidates, which would render our product candidates less competitive or noncompetitive and would prevent the granting or maintenance of an orphan designation. These competitors also compete with us to recruit and retain qualified scientific and management personnel, establish clinical trial sites and patient registration for clinical trials, as well as to acquire technology and technology licenses complementary to our programs or advantageous to our business. Moreover, competitors that are able to achieve patent protection, obtain regulatory approvals and commence commercial sales of their products before we do, and competitors that have already done so may enjoy a significant competitive advantage.

We may not be successful in our efforts to identify or discover additional product candidates.

Although we intend to utilize our technology to evaluate other therapeutic opportunities in addition to the product candidates that we are currently developing, we may fail to identify other product candidates for clinical development for a number of reasons. For example, our research methodology may not be successful in identifying potential product candidates, or those we identify may be shown to have harmful side effects or other characteristics that make them unmarketable or unlikely to receive regulatory approval. In addition, we may not be able to identify phage that eradicate the target bacteria, including due to sourcing difficulties such as lack of diversity, inability to obtain samples in a timely manner or at all, or contamination in the samples. We may also encounter difficulties in designing phage cocktails that meet the requirements of an investigational therapy, including due to the build-up of resistances in bacteria to our phage, the range of host bacteria that are affected by our phage, the variety of activity on different bacteria growth states, issues with toxicity in our phage, and the stability, robustness and ease of manufacturing of our product candidates. In addition, the designing of synthetically engineered phage may fail to result in the development of phage with the desired characteristics or behaviors that are suitable for use as viable therapies, or may result in phage that contain undesired features such as immunogenicity, toxicity and other safety concerns.

A key part of our strategy is to utilize our screening technology to identify product candidates to pursue in clinical development. If we fail to identify and develop additional potential product candidates, we may be unable to grow our business and our results of operations could be materially harmed. Such product candidates will require additional, time-consuming development efforts prior to commercial sale, including preclinical studies, clinical trials and approval by the FDA and/or applicable foreign regulatory agencies. All product candidates are prone to the risks of failure that are inherent in pharmaceutical product development.

Legal requirements as well as ethical and social concerns about synthetic biology and genetic engineering could limit or prevent the use of our technologies and limit our revenues.

Our technology may include the use of synthetic biology and genetic engineering. In some countries, drugs made using genetically modified organisms may be subject to a more stringent legal regime, which could prove to be complex and very challenging, especially for a small life sciences company. For example, in the European Union, the rules on genetically modified organisms would apply in addition to the general rules on medicinal products or cosmetic products. The rules on advanced therapy medicinal products may also apply.

Additionally, public perception about the safety and environmental hazards of, and ethical concerns over, synthetic biology and genetic engineering could influence public acceptance of our technologies, product candidates and processes. If we and our collaborators are not able to overcome the legal challenges as well as the ethical and social concerns relating to synthetic biology and genetic engineering, our technologies, product candidates and processes may not be accepted. These challenges and concerns could result in increased expenses, regulatory scrutiny and increased regulation, trade restrictions on imports of our product candidates, delays or other impediments to our programs or the public acceptance and commercialization of our products. We design and produce product candidates with characteristics comparable or superior to those found in naturally occurring organisms or enzymes in a controlled laboratory; however, the release of such organisms into uncontrolled environments could have unintended consequences. Any adverse effect resulting from such a release could have a material adverse effect on our business, financial condition or results of operations, and we may have exposure to liability for any resulting harm.

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.

Because we have limited financial and managerial resources, we intend to focus on developing product candidates for specific indications that we identify as most likely to succeed, in terms of both their potential for marketing approval and commercialization. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that may prove to have greater commercial potential. For example, we spent significant time and resources developing BX001, which we discontinued, and our BX005 product candidates and CRC development efforts, which we have paused indefinitely.

Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to the product candidate.

We intend to continue to rely on our BOLT proprietary product platform to develop our phage therapies. Our competitive position could be materially harmed if our competitors develop similar platforms and develop rival product candidates.

Our BOLT platform enables us to rapidly develop, manufacture and formulate phage therapy candidates targeting particular pathogenic bacteria

and incorporates our experience over the past six years with process refinement and implementation of technological advancements. For a given indication, the platform will typically allow for the completion of a clinical proof of concept study in patients, meaning Phase 2 results, within approximately 12-18 months from project initiation; however in certain indications the length of clinical proof of concept may be longer depending on the indication, identity of target bacteria, recruitment rate, cohort size and other factors, and we may not achieve clinical proof of concept on that timeline, or at all. We are initially aiming to complete a clinical proof of concept study in patients within approximately 12-18 months from project initiation in our CF program. We have limited experience with our BOLT platform and may not achieve the benefits we anticipate. To the extent we utilize our resources to further develop our BOLT platform, we may become more dependent on its success.

There is a substantial risk of product liability claims in our business. If we do not obtain sufficient liability insurance, a product liability claim could result in substantial liabilities to us.

Our business exposes us to significant potential product liability risks that are inherent in the development, manufacturing and marketing of human therapeutic products. Regardless of merit or eventual outcome, product liability claims may result in:

- delay or failure to complete our clinical trials;
- withdrawal of clinical trial participants;
- decreased demand for our product candidates;
- injury to our reputation;
- litigation costs;
- substantial monetary awards against us; and
- diversion of management or other resources from key aspects of our operations.

If we succeed in marketing products, product liability claims could result in an FDA or equivalent foreign regulatory agency investigation of the safety or efficacy of our products, our manufacturing processes and facilities or our marketing programs. Such investigation could also potentially lead to a recall of our products or more serious enforcement actions, or limitations on the indications, for which they may be used, or suspension or withdrawal of approval.

We currently only have limited clinical trials insurance policies that cover clinical trials in certain territories. We intend to expand our insurance coverage to include the sale of commercial products if marketing approval is obtained for our product candidates or any other compound that we may develop. However, insurance coverage is expensive, and we may not be able to maintain insurance coverage at a reasonable cost or at all, and the insurance coverage that we have or obtain may not be adequate to cover potential claims or losses.

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

We are exposed to the risk of employee fraud or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that fails to comply with the laws of the FDA and other similar foreign regulatory bodies, provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies, comply with manufacturing standards we have established, comply with healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain FDA approval of any of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, our current activities with principal investigators and research patients, as well as proposed and future sales, marketing and education programs.

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

Since inception in 2015, BiomX Ltd. has devoted substantially all of its resources to developing product candidates with phage technology through its preclinical programs, building its intellectual property portfolio, developing a supply chain, planning its business, raising capital and providing general and administrative support for these operations. We have not yet demonstrated our ability to successfully complete any clinical study or other pivotal clinical trials, obtain regulatory approvals, manufacture a commercial-scale product, or arrange for a third-party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, any predictions made about our future success or viability may not be as accurate as they could be if we had a longer operating history.

In addition, as an early-stage company, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown circumstances. As we advance our product candidates, we will need to transition from a company with a research focus to a company capable of supporting clinical development and, if successful, commercial activities. We may not be successful in such a transition.

We may need to grow the size of our organization and may experience difficulties in managing this growth.

As our research, development, manufacturing and commercialization plans and strategies, we may need additional managerial, operational, sales, marketing, financial and other personnel. Future growth would impose significant added responsibilities on members of management, including:

- identifying, recruiting, compensating, integrating, maintaining and motivating additional employees;
- managing our internal research and development efforts effectively, including identification of clinical candidates, scaling our manufacturing process and navigating the clinical and FDA review process for our product candidates; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to commercialize our product candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of our attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

If we are not able to effectively expand our organization by hiring additional employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize our product candidates and, accordingly, may not achieve our research, development and commercialization goals.

Risks Related to Government Regulation

Our product candidates are subject to significant regulatory approval requirements, which could delay, prevent or limit our ability to market or develop our product candidates.

Our research and development activities, preclinical studies, clinical trials and the anticipated manufacturing and marketing of our drug product candidates are subject to extensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in Europe and elsewhere. To satisfy FDA or equivalent foreign regulatory approval standards, we must demonstrate in adequate and well controlled clinical trials that our drug product candidates are safe and effective for their intended use. The regulatory approval process is expensive and time-consuming, and the timing of receipt of regulatory approval is difficult to predict. Given the uncertainties around phage therapy, our product candidates could require a significantly longer time to gain regulatory approval than expected or may never gain approval. We cannot be certain that, even after expending substantial time and financial resources, we will obtain regulatory approval for any of our product candidates. A delay or denial of regulatory approval could delay or prevent our ability to generate product revenue and to achieve profitability.

Regulatory requirements for development of our product candidates are uncertain and evolving. Changes in these laws or the current interpretation or application of these laws would have a significant adverse impact on our ability to develop and commercialize our product candidates. The legal and regulatory status of phage therapy remains unclear in many countries, including the European Union. Changes in regulatory approval policies during the development period of any of our product candidates, changes in, or the enactment of, additional regulations or statutes, or changes in regulatory review practices for a submitted product application may cause a delay in obtaining approval or result in the rejection of an application for regulatory approval.

Regulatory approval, if obtained, may be made subject to limitations on the indicated uses for which we may market a product, as well as the approved labeling for the product. These limitations could adversely affect our potential product revenue. Regulatory approval may also be conditioned on costly post-marketing follow-up studies. In addition, the labeling, packaging, adverse event reporting, storage, advertising, promotion and recordkeeping related to the product will be subject to extensive ongoing regulatory requirements. Furthermore, for any marketed product, our manufacturer and our manufacturing facilities will be subject to registration and listing requirements and continual review and periodic inspections by the FDA or other regulatory authorities. Failure to comply with applicable regulatory requirements may, among other things, result in fines, suspensions of regulatory approvals, product recalls, product seizures, operating restrictions and criminal prosecution.

Breakthrough Therapy Designation or Fast Track Designation by the FDA, even if granted for any of our product candidates developed for therapeutic indications, may not lead to a faster development, regulatory review or approval process, and it does not increase the likelihood that any of our product candidates will receive marketing approval in the United States.

In the United States, we may seek a Breakthrough Therapy Designation for some of our product candidates, including BX004 or another product candidate under development. A breakthrough therapy is defined as a therapy that is intended, alone or in combination with one or more other therapies, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the therapy may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For therapies that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Breakthrough designation also provides sponsors with the potential for rolling review of a BLA. Designation as a breakthrough therapy is within the discretion of the FDA.

In the European Union, the PRIME (PRIority MEdicines) status is similar to the Breakthrough Therapy Designation. The EMA has implemented the PRIME status to support the development and accelerate the approval of complex, innovative medicinal products addressing an unmet medical need. The PRIME status enables early dialogue with the relevant EMA scientific committees and, possibly, some payors and thus reinforces the EMA's scientific and regulatory support. The PRIME status, which is granted at the EMA's discretion, focuses on medicinal products the marketing authorization of which qualifies for accelerated assessment (medicinal products of major interest from a public health perspective, in particular from a therapeutic innovation perspective).

Accordingly, even if we believe one of our product candidates meets the criteria for designation as a breakthrough therapy or for PRIME status, the FDA or EMA, respectively, may disagree and instead determine not to make such designation. In any event, the receipt of a Breakthrough Therapy Designation or PRIME status for a product candidate may not actually result in a faster development process, review or approval compared to therapies considered for approval under conventional procedures and does not assure ultimate approval. In addition, even if one or more of our product candidates qualify as breakthrough therapies or is granted PRIME status, the FDA or EMA, respectively, may later decide that such product candidates no longer meet the conditions for qualification or decide that the time period for review or approval will not be shortened.

In the United States, we may seek Fast Track Designation for some of our product candidates for therapeutic indications. If a therapy is intended for the treatment of a serious or life-threatening condition and the therapy demonstrates the potential to address unmet medical needs for this condition, the therapy sponsor may apply for Fast Track Designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular product candidate is eligible for this designation; we cannot assure you that the FDA would decide to grant it. In August 2023, we obtained Fast Track Designation for BX004 in the United States. Although we received Fast Track Designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw Fast Track Designation if they believe that the designation is no longer supported by data from our clinical development program. Fast Track Designation alone does not guarantee qualification for the FDA's priority review procedures.

Other countries may have adopted schemes designed to ensure an accelerated approval of drugs that are especially important for patients. For example, in the European Union, the EMA may agree to an accelerated assessment (150 days instead of 210 days) for medicinal products of major

interest from a public health perspective, in particular from a therapeutic innovation perspective). Furthermore, competent regulatory authorities may grant market authorizations "under exceptional circumstances," in cases where all the required safety and efficacy data have not been and will not be collected, to medicinal products designed for unmet needs or orphan medicinal products. Although a marketing authorization under exceptional circumstances is definitive, the risk-benefit balance of the medicinal product must be reviewed annually and the marketing authorization is withdrawn if it becomes negative. Moreover, under the centralized procedure, the European Commission may grant "conditional marketing authorizations" in cases where all the required safety and efficacy data are not yet available. The conditional marketing authorization is subject to conditions to be fulfilled for generating the missing data or ensuring increased safety measures. It is valid for one year and has to be renewed annually until fulfillment of all the conditions. If the conditions are not fulfilled within the timeframe set by the EMA, the marketing authorization ceases to be renewed. As with Fast Track Designation, the competent regulatory authorities in the European Union have broad discretion whether or not to grant such an accelerated assessment or approval and, even if such assessment or approval is granted, we may not experience a faster development process, review or approval compared to conventional procedures.

We may fail to obtain and maintain orphan drug designations from the FDA or equivalent foreign regulatory agencies for our current and future therapeutic product candidates, as applicable.

In the United States, under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug or biologic will be recovered from sales in the United States. In December 2023, we obtained orphan drug designation for BX004 in the United States. In the United States, the orphan drug designation entitles a party to financial incentives, such as opportunities for grant funding toward clinical trial costs, tax advantages and user-fee waivers. In addition, if a product that has the orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including an NDA, to market the same drug or biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the original manufacturer is unable to assure sufficient product quantity.

In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective, or if we are unable to assure sufficient quantities of the product to meet the needs of patients with the orphan-designated disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties may receive and be approved for the same condition. Even after an orphan-designated product is approved, the FDA can subsequently approve a later drug with the same active moiety for the same condition if the FDA concludes that the later drug is clinically superior if it is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process. In addition, while we may seek the orphan drug designation for our product candidates, we may never receive such designation.

An orphan drug legal regime also exists in the European Union. The EMA's Committee for Orphan Medicinal Products, or COMP, gives opinions, and the European Commission takes decisions, on the granting of the orphan drug designation to the development of products that are intended for the diagnosis, prevention or treatment of (i) a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Economic Area (comprising the European Union, Iceland, Liechtenstein and Norway); or (ii) a life-threatening, seriously debilitating or serious and chronic condition when, without incentives, it is unlikely that sales of the drug in the European Economic Area would be sufficient to justify the necessary investment in developing the drug or biological product. The granting of the orphan designation requires that there is no satisfactory method of diagnosis, prevention or treatment, or, if such a method exists, that the future medicine is to be of significant benefit to those affected by the condition. The test for that later condition is stringent, because the future product must be compared with all existing therapies for the rare condition, including surgical operations, already authorized medicinal products and compounded preparations (subject to certain conditions). At the time of marketing authorization, the orphan designation is reviewed again by the COMP in view of the maintenance of the orphan status. If the designation criteria are no longer met, the European Commission withdraws the orphan designation. Maintenance of the orphan designation at the time of marketing authorization means that all the drugs/biologicals authorized since the granting of the designation become relevant for determining the lack of satisfactory therapy or the significant benefit.

If obtained, the orphan drug designation would entitle us to financial incentives, such as reductions of fees or fee waivers and 10 years of market exclusivity. Market exclusivity precludes the EMA or the national competent authorities from validating a marketing authorization application, and the European Commission or a national competent authority from granting a marketing authorization, for a same or similar drug/biological and the same therapeutic indication. The 10-year period may be reduced to six years if the orphan designation criteria are no longer met, including where it is shown that the product is not sufficiently profitable to justify maintenance of market exclusivity. The orphan exclusivity may also be lost vis-à-vis another drug/biological in cases where the manufacturer is unable to assure sufficient quantity of the drug to meet patient needs or if that other product is proved to be clinically superior to the approved orphan product. A drug/biological is clinically superior if it is safer, more effective or makes a major contribution to patient care.

Failure to comply with health and data protection laws and regulations could lead to claims, government enforcement actions (which could include civil or criminal penalties), regulatory actions, private litigation and/or adverse publicity and could negatively affect our operating results and business.

We may be subject to federal, state and foreign data protection laws and regulations (i.e., laws and regulations that address privacy and security). In the United States, numerous federal and state laws and regulations, including federal health information privacy laws, state consumer privacy laws, state data breach notification laws, state health information privacy laws and federal and state consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), that govern the collection, use, disclosure and protection of health-related and other personal information could apply to our operations or the operations of our collaborators. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health of 2009. Depending on the facts and circumstances, we could be subject to criminal penalties if we knowingly obtain, use or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

Additional requirements may also be imposed by international data protection laws. In this context, Regulation 2016/679 of the GDPR (in addition to many other international data protection laws) may have an impact on our operations when we collect and/or process personal data of individuals located in the European Union. The GDPR has applied since May 25, 2018 (replacing previously applicable data protection frameworks) and has an extraterritorial reach. The GDPR allows members states to introduce specific requirements in relation to certain areas, including processing of special categories of data, and we may face further restrictions and non-compliance risks under such national frameworks. We have not yet assessed whether its activities might be caught by the GDPR.

Because of the types of data we collect and process, which may involve health, biometric and genetic data, we may face high risks for non-compliance with the GDPR rules (or local declinations of GDPR-rules across the different European Union Member States), as these types of data are

considered as special categories of data and are granted higher protection. The risks are further increased considering the diverging approach in the European Union as to the rules, requirements and frameworks in relation to the processing of personal data in clinical trials (in matters such as the choice of the legal basis for the processing of data, the possible uses of the personal data collected, etc.) and the interplay with other relevant frameworks. The GDPR introduced stringent data protection requirements in the European Union, as well as potential fines for noncompliant companies of up to the greater of €20 million or 4% of annual worldwide turnover. Supervisory authorities also have the ability to restrict our processing activities if those are deemed not to be in compliance with the GDPR (or local declinations); this may significantly impact the way we conduct our activities. The GDPR imposes numerous requirements for the collection, use and disclosure of personal data, including high standards for consent to be valid, and specific information to be provided to individuals about how their personal data is used, the obligation to notify regulators and (in some cases) to communicate to affected individuals of personal data breaches, extensive new internal privacy governance requirements and obligations to allow individuals to exercise their strengthened privacy rights (e.g., the right to access, correct and delete their personal data, to withdraw their consent, etc.), and obligations when contracting with third parties such as service providers, CROs, etc. In addition, the GDPR includes restrictions on data transfers outside the EEA. The actual mechanisms made available under GDPR to transfer such personal data have received heightened regulatory and judicial scrutiny. If we cannot rely on existing mechanisms for transferring personal data from the EEA, the United Kingdom, or other jurisdictions, we may be unable to transfer personal data in those regions. Further, the United Kingdom's vote in favor of exiting the European Union, often referred to as "Brexit," has created uncertainty as to whether or not the United Kingdom data protection legislation will depart from the GDPR and how data transfers to and from the United Kingdom will be regulated.

Compliance with U.S. and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Such laws and regulations could limit our ability to use and share personal or other data, thereby increasing our costs and harming our business and financial condition. Failure to comply with U.S. and international data protection laws and regulations could result in claims, government enforcement actions (which could include civil or criminal penalties), regulatory actions, private litigation and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects about whom we or our potential collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend and could result in adverse publicity that could harm our business. Finally, we may be required to disclose personal data pursuant to demands from government agencies, from law enforcement agencies, and from intelligence agencies. This disclosure may result in a failure or perceived failure by us to comply with data privacy laws, rules, and regulations and could result in proceedings or actions against us in the same or other jurisdictions, and could have an adverse impact on our reputation and brand.

Our relationships with healthcare providers, physicians and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors in the United States and elsewhere play a primary role in the recommendation and prescription of pharmaceutical products. Arrangements with third-party payors and customers can expose pharmaceutical manufacturers to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti-Kickback Statute and the FCA, and foreign equivalent legislation, which may constrain the business or financial arrangements and relationships through which such companies sell, market and distribute pharmaceutical products. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commissions, certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials. The applicable federal, state and foreign healthcare laws and regulations laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity can be found guilty of violating the statute without actual knowledge of the statute or specific intent to violate it. In addition, 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 FCA. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other hand. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution;

- federal civil and criminal false claims laws, including the FCA, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, false or fraudulent claims for payment to, or approval by Medicare, Medicaid or other federal healthcare programs, knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim or an obligation to pay or transmit money to the federal government, or knowingly concealing or knowingly and improperly avoiding or decreasing or concealing an obligation to pay money to the federal government. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims. The FCA also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery;

- HIPAA, which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any 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) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false 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 can be found guilty of violating HIPAA without actual knowledge of the statute or specific intent to violate it;

- the federal Physician Payment Sunshine Act, created under the Patient Protection and Affordable Care Act and its implementing regulations, which require manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the United States Department of Health and Human Services information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician practitioners (physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by nongovernmental third-party payors, including private insurers, and may be broader in scope than their federal equivalents; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; and state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and

- European Union and other foreign provisions.

The distribution of pharmaceutical products is subject to additional requirements and regulations, including extensive recordkeeping, licensing, storage, security requirements intended to prevent the unauthorized sale of pharmaceutical products and, in some foreign countries, including the European Union countries, mandatory anti-counterfeit features.

The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. Ensuring business arrangements comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource-consuming and can divert a company's attention from the business.

It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent inappropriate conduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. The failure to comply with any of these laws or regulatory requirements could subject us to possible legal or regulatory action. Depending on the circumstances, failure to meet applicable regulatory requirements can result in civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprisonment, possible exclusion from participation in federal and state funded healthcare programs, contractual damages and the curtailment or restricting of our operations, as well as additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of noncompliance with these laws. Any action for violation of these laws, even if successfully defended, could cause a pharmaceutical manufacturer to incur significant legal expenses and divert management's attention from the operation of the business. Prohibitions or restrictions on sales or withdrawal of future marketed products could materially affect business in an adverse way.

In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

The FDA and other equivalent foreign regulatory agencies may implement additional regulations or restrictions on the development and commercialization of products which act on the microbiome, which may be difficult to predict.

The FDA and equivalent foreign regulatory agencies in other countries have each expressed interest in further regulating biotechnology products and product candidates, such as those that act on the human microbiome. Agencies at both the federal and state level in the United States, as well as the U.S. congressional committees and other governments or governing agencies, have also expressed interest in further regulating the biotechnology industry. Such action may delay or prevent commercialization of some or all of our product candidates. Adverse developments in non-IND human clinical studies or clinical trials of microbiome products conducted by others may cause the FDA or other oversight bodies to change the requirements for approval of any of our product candidates. These regulatory review agencies and committees and the new requirements or guidelines they promulgate may lengthen the regulatory review process, require us to perform additional studies or trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. As we advance our product candidates, we will be required to consult with these regulatory agencies and comply with applicable requirements and guidelines. If we fail to do so, we may be required to delay or discontinue development of such product candidates. These additional processes may result in a review and approval process that is longer than we otherwise would have expected. Delays as a result of an increased or lengthier regulatory approval process or further restrictions on the development of our product candidates can be costly and could negatively impact our ability to complete clinical trials and commercialize our current and future product candidates in a timely manner if at all.

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

If any of our product candidates is approved for therapeutic indications, we will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, distribution, advertising, promotion, sampling, recordkeeping, export, import, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of equivalent foreign regulatory agencies. In addition, we will be subject to continued compliance with cGMP and GCP requirements for any clinical trials that we conduct post-approval.

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

The FDA or equivalent foreign regulatory agencies have significant post-marketing authority, including, for example, the authority to require labeling changes based on new safety information and to require post-marketing studies or clinical trials to evaluate serious safety risks related to the use of a drug. Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the product candidate. The FDA or equivalent foreign regulatory agencies may also require a REMS program as a condition of approval of our product candidates, which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or an equivalent foreign regulatory agency approves our product candidates, we will have to comply with requirements, including submissions of safety and other post-marketing information and reports and registration.

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

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

The FDA or equivalent foreign regulatory agencies strictly regulate the marketing, labeling, advertising and promotion of drug products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label or other regulatory marketing pathway. The FDA and equivalent foreign regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability. The policies of the FDA or equivalent foreign regulatory agencies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and the ability to achieve or sustain profitability.

The policies of the FDA or equivalent foreign regulatory agencies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may be subject to enforcement action, and we may not achieve or sustain profitability.

Noncompliance by us or any future collaborator with regulatory requirements, including safety monitoring or pharmacovigilance requirements, can also result in significant financial penalties.

We may conduct clinical trials for our product candidates outside the United States, and the FDA may not accept data from such trials.

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

Any products that we may develop may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which could make it difficult for us to sell any product candidates or therapies profitably.

The regulations that govern pricing for new medical products vary widely from country to country. As a result, we might obtain regulatory approval for a product in a particular country but then be subject to pricing regulations in that country that delay the commercial launch of the product and negatively impact the revenue we are able to generate from the sale of the product in that country. In addition, our ability to commercialize any approved products successfully will depend in part on the extent to which reimbursement for these products will be available from government health administration authorities, private health insurers and other organizations. Even if we succeed in bringing one or more therapeutic products to market, these products may not be considered cost-effective, and the amount reimbursed for any products may be insufficient to allow us to sell them on a competitive basis. If the price we are able to charge for therapeutic products is inadequate in light of our development and other costs, our future profitability could be adversely affected.

Ongoing health care legislative and regulatory reform measures may have a material adverse effect on our business and results of operations.

Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example, (i) changes to our manufacturing arrangements, (ii) additions or modifications to product labeling, (iii) the recall or discontinuation of our products, or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

In the United States, there have been and continue to be a number of legislative initiatives to contain health care costs. For example, in March 2010, the ACA was passed, which substantially changed the way health care is financed by both governmental and private insurers and significantly impacted the United States pharmaceutical industry. The ACA, among other things, subjected biological products to potential competition by lower-cost biosimilars; addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program; and extended the rebate program to individuals enrolled in Medicaid managed care organizations. It also established annual fees and taxes on manufacturers of certain branded prescription drugs and creates a new Medicare Part D coverage gap discount program in which manufacturers must now agree to offer 50% point of sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

Since its enactment, there have been judicial, executive and Congressional challenges to certain aspects of the ACA. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden issued an executive order initiating a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare. More recently, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, beginning January 1, 2024. It is unclear how other healthcare reform measures of the Biden administration, if any, will impact our business.

These laws and future state and federal health care reform measures may be adopted in the future, any of which may result in additional reductions in Medicare and other health care funding and otherwise affect the prices we may obtain for any of our product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

A similar movement is observed in the European Union countries. Criteria for pricing and reimbursement, which vary from country to country, are regularly amended and tightened in order to reduce the draw on the budget allocated to national health insurance systems. Moreover, the system of reference pricing (the price in a country calculated on the basis of prices in other countries with typically lower prices) leads to price reductions in countries that traditionally granted high prices.

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

The ability of the FDA to review and or approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other regulatory authorities may also slow the time necessary for new drugs and biologics to be reviewed and/or approved by necessary regulatory authorities, 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 authorities, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

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

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

Risks Related to our Licensed and Co-Owned Intellectual Property

The license agreements we maintain, including the Yeda 2015 License Agreement, with Yeda are important to our business. If we or the other parties to our license agreements fail to adequately perform under the license agreements, or if we or they terminate the license agreements, the development, testing, manufacture, production and sale of our phage-based therapeutic product candidates would be delayed or terminated, and our business would be adversely affected.

The Yeda 2015 License Agreement provides for an exclusive worldwide license to certain know-how and research information related to the development, testing, manufacture, production and sale of phage-based therapeutic product candidates, including candidates specified in the agreement, which are used in our phage discovery platform, as well as patents, research and other rights to phage product candidates resulting from the work of the consultants identified in the agreement and further research that we funded. The Yeda 2015 License Agreement terminates upon the later of the expiration of the last of the patents covered under the Yeda 2015 License Agreement and the expiry of a continuous 15-year period during which there has not been a first commercial sale of any product in any country. Yeda may also terminate the agreement if we fail to observe certain diligence and development requirements and milestones as described in the Yeda 2015 License Agreement. We or Yeda may terminate the agreement for the material

uncured breach of the other party after a notice period or the other party's winding up, bankruptcy, insolvency, dissolution or other similar discontinuation of business. Upon termination of the agreement, other than due to the passage of time, we are required to grant to Yeda a nonexclusive, irrevocable, perpetual, fully paid-up, sublicensable, worldwide license in respect of our rights in know-how and research results as described in the Yeda 2015 License Agreement, provided that, if Yeda subsequently grants a license to a third party that utilizes our rights, we are entitled to share in the net proceeds actually received by Yeda arising out of that license, subject to a cap based on the development expenses that we incur in connection with the Yeda 2015 License Agreement. For more information on the Yeda 2015 License Agreement, see "*Business—Material Agreements—License Agreements—License Agreement with Yeda.*"

Termination of our license agreements could cause significant delays in our product and commercialization efforts that could prevent us from commercializing our product candidates, including our phage-based therapeutic product candidates, without first expanding our internal capabilities or entering into other agreements with third parties. Any alternative collaboration or license could also be on less favorable terms to us.

We are highly dependent on intellectual property licensed from third parties, and termination or limitation of any of these licenses could result in the loss of significant rights and materially harm our business.

We currently rely on licenses from third-party collaborators for certain aspects of our technology and for certain of our existing programs. In particular, we received exclusive, royalty-bearing licenses to certain patents held by third parties, including Yeda. The Yeda 2015 License Agreement provide license to certain know-how and research information related to the development, testing, manufacture, production and sale of phage-based therapeutic product candidates that are used in our phage discovery platform, as well as patents, research and other rights to phage product candidates resulting from the work of the consultants identified in the agreement and further research that we funded.

If we fail to comply with our obligations under our license agreements, including payment terms, our licensors may have the right to terminate our license agreements, in which event we may not be able to develop, manufacture, market or sell the products covered by those license agreements. We may also face other penalties under our license agreements if we do not meet our contractual obligations. Such an occurrence could materially adversely affect the value of our products being developed under any such license agreements. Termination of one or more of our license agreements, or reduction or elimination of our rights under these license agreements, may result in us having to negotiate new or reinstated license agreements, which may not be available to us on equally favorable terms, or at all, which may mean we are unable to commercialize the affected product candidates.

In the future, we may rely upon additional licenses to certain patent rights and proprietary technology from third parties that are important or necessary to the development of our product candidates and proprietary product platform. Patent rights that we in-license in the future may be subject to a reservation of rights by one or more third parties. As a result, any such third party may have certain rights to such intellectual property.

In addition, subject to the terms of any such license agreements, we may not have the right to control the preparation, filing, prosecution and maintenance, and we may not have the right to control the enforcement and defense, of patents and patent applications covering the technology that we license from third parties. We cannot be certain that our in-licensed patent applications (and any patents issuing therefrom) that are controlled by our licensors will be prepared, filed, prosecuted, maintained, enforced and defended in a manner consistent with the best interests of our business. If our licensors fail to prosecute, maintain, enforce and defend such patents rights, or lose rights to those patent applications (or any patents issuing therefrom), the rights we have licensed may be reduced or eliminated, our right to develop and commercialize any of our product candidates and proprietary product platform technology that are subject of such licensed rights could be adversely affected, and we may not be able to prevent competitors from making, using and selling competing products. Moreover, we cannot be certain that such activities by our potential future licensors will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents or other intellectual property rights. In addition, even where we may have the right to control the prosecution of patents and patent applications that we may license to and from third parties, we may still be adversely affected or prejudiced by actions or inactions of our potential future licensees, licensors and their counsel that took place prior to the date of assumption of control over patent prosecution.

The patent position of biopharmaceutical companies, including ours and our licensors', is generally uncertain and involves complex legal and factual considerations and, therefore, validity and enforceability cannot be predicted with certainty. Our licensed and co-owned intellectual property may be challenged, deemed unenforceable, invalidated or circumvented. We and our licensors will be able to protect our intellectual property rights from unauthorized use by third parties only to the extent that these rights (and the products and services they cover) are protected by valid and enforceable patents, copyrights or trademarks, or are effectively maintained as trade secrets.

Any patents obtained by our licensors or us, may be challenged by re-examination or otherwise invalidated or eventually found unenforceable. Both the patent application process and the process of managing patent disputes can be time consuming and expensive. If we or one of our licensors were to initiate legal proceedings against a third party to enforce a patent relating to one of our products, the defendant in such litigation could counterclaim that the asserted patents are invalid and/or unenforceable. In patent litigation in the U.S., defendant counterclaims alleging invalidity or unenforceability are common, as are validity challenges by the defendant against the subject patent or related patents before the USPTO. Grounds for a validity challenge could be an alleged failure to meet any of several statutory patentability requirements, including lack of novelty, obviousness, non-enablement, failure to meet the written description requirement, indefiniteness, and/or failure to claim patentable subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected to prosecution of the patent/s at issue intentionally withheld material information from the USPTO or made a misleading statement during prosecution. Additional grounds for an unenforceability assertion include an allegation of misuse or anticompetitive use of patent rights, and an allegation of incorrect inventorship with deceptive intent. Third parties may also raise similar claims before the USPTO, even outside the context of litigation. The outcome of any assertion of invalidity and/or unenforceability is unpredictable. If a defendant or third party were to prevail on a legal assertion of invalidity and/or unenforceability, we and our licensors would lose at least part, and perhaps all, of the claims of the challenged patent/s. Such a loss of patent protection could have a material adverse impact on our business.

We are dependent on patents and proprietary technology. If we fail to adequately protect this intellectual property or if we otherwise do not have exclusivity for the marketing of our products, our ability to commercialize products could suffer.

Our commercial success will depend in part on our ability to obtain and maintain patent protection sufficient to prevent others from marketing our product candidates, as well as to defend and enforce these patents against infringement and to operate without infringing the proprietary rights of others. Protection of our product candidates from unauthorized use by third parties will depend on having valid and enforceable patents that cover our product candidates or their manufacture or use or on having effective trade secret protection. If our patent applications do not result in issued patents or if our patents are found to be invalid, we will lose the ability to exclude others from making, using or selling the inventions claimed therein. We have a limited number of patents and pending patent applications.

The patent positions of biotechnology companies can be uncertain and involve complex legal and factual questions. This is due to inconsistent application of policies and changes in policy relating to the examination and enforcement of biotechnology patents to date on a global scale. The laws of some countries may not protect intellectual property rights to the same extent as the laws of countries having well-established patent systems, and those countries may lack adequate rules and procedures for defending our intellectual property rights. Also, changes in either patent laws or in the interpretations of patent laws may diminish the value of our intellectual property. We are not able to guarantee that all of our patent applications will result in the issuance of patents, and we cannot predict the breadth of claims that may be allowed in our patent applications or in the patent applications we may license from others.

The Leahy-Smith America Invents Act provides for proceedings involving post-issuance patent review procedures, such as inter partes review, or IPR, and post-grant review, that allow third parties to challenge the validity of an issued patent in front of the USPTO Patent Trial and Appeal Board. Each proceeding has different eligibility criteria and different patentability challenges that can be raised. IPRs permit any person (except a party who has been litigating the patent for more than a year) to challenge the validity of the patent on the grounds that it was anticipated or made obvious by prior art. Patents covering pharmaceutical products have been subject to attack in IPRs from generic drug companies and from hedge funds. If it is within nine months of the issuance of the challenged patent, a third party can petition the USPTO for post-grant review, which can be based on any invalidity grounds and is not limited to prior art patents or printed publications.

In post-issuance proceedings, USPTO rules and regulations generally tend to favor patent challengers over patent owners. For example, unlike in district court litigation, claims challenged in post-issuance proceedings are given their broadest reasonable meaning, which increases the chance a claim might be invalidated by prior art or lack support in the patent specification. As another example, unlike in district court litigation, there is no presumption of validity for an issued patent, and thus a challenger's burden to prove invalidity is by a preponderance of the evidence, as opposed to the heightened clear and convincing evidence standard. As a result of these rules and others, statistics released by the USPTO show a high percentage of claims being invalidated in post-issuance proceedings. Moreover, with few exceptions, there is no standing requirement to petition the USPTO for inter partes review or post-grant review. In other words, companies that have not been charged with infringement or that lack commercial interest in the patented subject matter can still petition the USPTO for review of an issued patent. Thus, even where we have issued patents, our rights under those patents may be challenged and ultimately not provide us with sufficient protection against competitive products or processes.

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:

- we might not be the first to file patent applications for our inventions;
- others may independently develop similar or alternative product candidates to any of our product candidates that fall outside the scope of our patents;
- our pending patent applications may not result in issued patents;
- our issued patents may not provide a basis for commercially viable products or may not provide us with any competitive advantages or may be challenged by third parties;
- others may design around our patent claims to produce competitive products that fall outside the scope of our patents;
- we may not develop additional patentable proprietary technology related to our product candidates; and
- we are dependent upon the diligence of our appointed agents in national jurisdictions, acting for and on our behalf, which control the prosecution of pending domestic and foreign patent applications and maintain granted domestic and foreign patents.

An issued patent does not guarantee us the right to practice the patented technology or commercialize the patented product. Third parties may have blocking patents that could be used to prevent us from commercializing our patented products and practicing our patented technology. Our issued patents and those that may be issued in the future may be challenged, invalidated or circumvented, which could limit our ability to prevent competitors from marketing the same or related product candidates or could limit the length of the term of patent protection of our product candidates. Moreover, because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any of our product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent. Patent term extensions may not be available for these patents.

Our rights to develop and commercialize our product candidates and proprietary product platform may be subject, in part, to the terms and conditions of current and future licenses granted to us by others.

Some of our licensed rights could provide us with freedom to operate for aspects of our products and services. We may need to obtain additional licenses from others to advance our research, development and commercialization activities.

Disputes may arise between us and our licensors regarding intellectual property subject to a license agreement, including:

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

If we do not prevail in such disputes, we may lose any or all of our rights under such license agreements.

In addition, the agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology or could increase what we believe to be our

financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize any affected products or services, which could have a material adverse effect on our business, financial conditions, results of operations and prospects.

Absent the license agreements, we may infringe patents subject to those agreements, and, if the license agreements are terminated, we may be subject to litigation by the licensor. Litigation could result in substantial costs to us and distract our management. If we do not prevail, we may be required to pay damages, including treble damages, attorneys' fees, costs and expenses and royalties. We may also be enjoined from selling our products or services, which could adversely affect our ability to offer products or services, our ability to continue operations, and our financial condition.

If we infringe the rights of third parties, we could be prevented from selling products, forced to pay damages and/or royalties, and forced to defend against litigation.

We do not believe that the products we are currently developing infringe upon the rights of any third parties or are infringed upon by third parties. However, there can be no assurance that our technology will not be found in the future to infringe upon the rights of others or be infringed upon by others. Moreover, patent applications are in some cases maintained in secrecy until patents are issued. The publication of discoveries in the scientific or patent literature frequently occurs much later than the date on which the underlying discoveries were made and patent applications were filed. Because patents can take many years to issue, there may be currently pending applications of which we are unaware that may later result in issued patents that our products or product candidates infringe. For example, pending patent applications may exist that provide support or can be amended to provide support for a claim that results in an issued patent that is infringed by one or more of our products. In such a case, others may assert infringement claims against us, and should we be found to infringe these patents or impermissibly use their intellectual property, we might be forced to pay damages, potentially including treble damages, if we are found to have willfully infringed on such third parties' patent rights.

In addition to any damages we might have to pay, we may also be required to obtain licenses from the holders of this intellectual property, enter into royalty agreements, or redesign our products so as not to use this intellectual property. Each of these penalties may prove to be uneconomical or otherwise impossible. We may fail to obtain any such licenses or intellectual property rights on commercially reasonable terms. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same licensed technologies. In that event, we may be required to spend significant time and resources to develop or license replacement technologies. If we are unable to do so, we may be unable to develop or commercialize the affected products, which could materially harm our business. Conversely, we may not be able to pursue claims against third parties that infringe on our licensed or co-owned technology. Thus, our licensed and co-owned technology may not provide adequate protection against competitors.

The pharmaceutical industry is characterized by extensive litigation regarding patents and other intellectual property rights. Moreover, the cost to us of any litigation or other proceeding relating to our licensed and/or co-owned intellectual property rights, even if resolved in our favor, could be substantial. Any such litigation would divert our management efforts, and we may not have sufficient resources to bring any such action to a successful conclusion. Uncertainties resulting from the initiation and continuation of any litigation could limit our ability to continue operations.

Additionally, because our pipeline may involve additional development candidates that could require the use of proprietary rights held by third parties, the growth of our business could depend in part on our ability to acquire, in-license or use these proprietary rights. In addition, our development candidates may require specific formulations to work effectively and efficiently and these rights may be held by others. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources, and greater clinical development and commercialization capabilities.

For example, we sometimes collaborate with U.S. and foreign academic institutions to accelerate our preclinical research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such right of first negotiation for intellectual property, we may be unable to negotiate a license within the specified time frame or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program.

In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment. If we are unable to successfully obtain rights to require third-party intellectual property rights, our business, financial condition and prospects for growth could suffer.

We may not be successful in obtaining, through acquisitions, in-licenses or otherwise, necessary rights to our product candidates, proprietary product platform technologies or other technologies.

We currently have rights to certain intellectual property, through licenses from third parties, to develop our product candidates and proprietary product platform technologies. Some healthcare companies and academic institutions are competing with us in the field of phage-based therapies and may have patents and/or have filed and are likely filing patent applications potentially relevant to our business. In order to avoid infringing these third-party patents, we may find it necessary or prudent to obtain licenses to such patents from such third-party intellectual property holders. We may also require licenses from third parties for certain technologies that we may be evaluating for use with our current or future product candidates. However, we may be unable to secure such licenses or otherwise acquire or in-license any compositions, methods of use, processes or other intellectual property rights from third parties that we identify as necessary for our current or future product candidates and our proprietary product platform at a reasonable cost or on reasonable terms, if at all. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all.

In the event that we try to obtain rights to required third-party intellectual property rights and are ultimately unsuccessful, we may be required to expend significant time and resources to redesign our technology, product candidates or the methods for manufacturing them or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or

commercialize the affected product candidates or continue to utilize our existing proprietary product platform technology, which could significantly harm our business, financial condition, results of operations and prospects.

We rely on our proprietary product platform to identify phage-based therapies. Our competitive position could be materially harmed if our competitors develop a similar platform and develop rival product candidates.

We rely on know-how, inventions and other proprietary information to strengthen our competitive position. We consider know-how to be our primary intellectual property with respect to our proprietary product platform. Our clinical trials allow us to collect clinical data, which we use as a feedback loop to make improvements to our proprietary product platform. In particular, we anticipate that, with respect to this proprietary product platform, this data may over time be disseminated within the industry through independent development, the publication of journal articles describing the method and the movement of skilled personnel.

We cannot rule out that our competitors may have or obtain the knowledge necessary to analyze and characterize similar data to our known data for the purpose of identifying and developing products that could compete with any of our product candidates. Our competitors may also have significantly greater financial, product development, technical and human resources access to date. Further, our competitors may have significantly greater experience in using translational science methods to identify and develop product candidates.

We may not be able to prohibit our competitors from using technology or methods that are the same as or similar to our proprietary product platform to develop their own product candidates. If our competitors develop associated therapies, our ability to develop and market a promising product or product candidate may diminish substantially, which could have a material adverse effect on our business, financial condition, prospects and results of operations.

We rely on trade secrets and other forms of non-patent intellectual property protection. If we are unable to protect our trade secrets, other companies may be able to compete more effectively against us.

We rely on trade secrets to protect certain aspects of our technology, including our proprietary processes for manufacturing and purifying bacteriophage. Trade secrets are difficult to protect, especially in the pharmaceutical industry, where much of the information about a product must be made public during the regulatory approval process. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secret information is expensive and time-consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to or may not protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

If we are sued for infringing intellectual property rights of third parties or if we are forced to engage in an interference proceeding, it will be costly and time-consuming, and an unfavorable outcome in that litigation or interference would have a material adverse effect on our business.

Our ability to commercialize our product candidates depends on our ability to develop, manufacture, market and sell our product candidates without infringing the proprietary rights of third parties. Numerous U.S. and foreign patents and patent applications, which are owned by third parties, exist in the general field of anti-infective products or in fields that otherwise may relate to our product candidates. If we are shown to infringe, we could be enjoined from the use or sale of the claimed invention if we are unable to prove that the patent is invalid. In addition, because patent applications can take many years to issue, there may be currently pending patent applications, unknown to us, that may later result in issued patents that our product candidates may infringe or that may trigger an interference proceeding regarding one of our owned or licensed patents or applications. There could also be existing patents of which we are not aware that our product candidates may inadvertently infringe or that may become involved in an interference proceeding.

The biotechnology and pharmaceutical industries are characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement. For so long as our product candidates are in clinical trials, we believe our clinical activities fall within the scope of the exemptions provided by 35 U.S.C. Section 271(e) in the United States, which exempts from patent infringement liability activities reasonably related to the development and submission of information to the FDA. As our clinical investigational drug product candidates progress toward commercialization, the possibility of a patent infringement claim against us increases. While we attempt to ensure that our active clinical investigational drugs and the methods we employ to manufacture them, as well as the methods for their use we intend to promote, do not infringe other parties' patents and other proprietary rights, we cannot be certain they do not, and competitors or other parties may assert that we infringe their proprietary rights in any event.

We may be exposed to future litigation based on claims that our product candidates, the methods we employ to manufacture them or the uses for which we intend to promote them infringe the intellectual property rights of others. Our ability to manufacture and commercialize our product candidates may depend on our ability to demonstrate that the manufacturing processes we employ and the use of our product candidates do not infringe third-party patents. If third-party patents were found to cover our product candidates or their use or manufacture, we could be required to pay damages or be enjoined and therefore unable to commercialize our product candidates, unless we obtained a license. A license may not be available to us on acceptable terms, if at all.

We may become subject to claims for remuneration or royalties for assigned service invention rights by our employees, which could result in litigation and adversely affect our business.

A significant portion of our intellectual property has been developed by our employees in the course of their employment for us. Under the Israeli Patent Law, 5727-1967, or the Patent Law, inventions conceived by an employee during the term and as part of the scope of his or her employment with a company are regarded as "service inventions," which belong to the employer, absent a specific agreement between the employee and employer giving the employee service invention rights. The Patent Law also provides that, if there is no such agreement between an employer and an employee, the Israeli Compensation and Royalties Committee, a body constituted under the Patent Law, shall determine whether the employee is entitled to remuneration for his or her inventions. We generally enter into assignment of invention agreements with our employees pursuant to which such individuals assign to us all rights to any inventions created in the scope of their employment or engagement with us. Although our employees have agreed to assign to our service invention rights, we may face claims demanding remuneration in consideration for assigned inventions. As a consequence of such claims, we could be required to pay additional remuneration or royalties to our current or former employees or be forced to litigate such claims, which could negatively affect our business.

Risks Related to Our Reliance on Third Parties

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

We continue to rely on third parties, such as contract research organizations, or CROs, and clinical investigators, to conduct and manage our clinical trials.

Our reliance on these third parties for research and development activities will reduce our control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with GCPs for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, safety and welfare of trial participants are protected. Other countries' regulatory agencies also have requirements for clinical trials with which we must comply. We are also required to register ongoing clinical trials and post the results of completed clinical trials in a government-sponsored database, clinicaltrials.gov, within specified time frames. Failure to do so can result in fines, adverse publicity, and civil and criminal sanctions.

Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, do not meet expected deadlines, experience work stoppages, terminate their agreements with us or need to be replaced, or do not conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we may need to enter into new arrangements with alternative third parties, which could be difficult, costly or impossible, and our clinical trials may be extended, delayed, terminated or need to be repeated. If any of the foregoing occurs, we may not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and may not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates.

We also rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our product candidates or commercialization of our products, producing additional losses and depriving us of potential product revenue.

Third-party relationships are important to our business. If we are unable to maintain our collaborations or enter into new relationships, or if these relationships are not successful, our business could be adversely affected.

We have limited capabilities for product development and do not yet have any capability for sales, marketing or distribution. Accordingly, we enter into relationships with other companies and academic institutions to provide us with important technology, and we may receive additional technology and funding under these and other collaborations in the future. The relationships we enter into may pose a number of risks, including the following:

- third parties have, and future third-party collaborators may have, significant discretion in determining the efforts and resources that they will apply;
- current and future third parties may not perform their obligations as expected;
- current and future third parties 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 third parties' strategic focus or available funding, or external factors, such as a strategic transaction that may divert resources or create competing priorities;

- third parties 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;
- current and future third parties could independently develop, or develop with third parties, products that compete directly or indirectly with our products and product candidates if the third parties believe that the 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 current or future third parties as competitive with their own product candidates or products, which may cause such third parties to cease to devote resources to the commercialization of our product candidates;
- current and future third parties may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution or marketing of a product candidate or product;
- current and future third parties 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 current or future third parties, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or terminations 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;
- current and future third parties 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;
- current and future third parties may infringe the intellectual property rights of others, which may expose us to litigation and potential liability;
- current and future third parties may infringe regulatory frameworks (such as but not limited to cybersecurity and/or privacy frameworks), which may expose us to litigation and potential liability or require or lead us to terminate relationships with them;
- if a current or future third party is involved in a business combination, the collaborator might deemphasize or terminate the development or commercialization of any product candidate licensed to it by us; and
- current and future relationships may be terminated by the collaborator, and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

If our relationships do not result in the successful discovery, development and commercialization of products or if one of our third-party collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. If we do not receive the funding we expect under these agreements, our development of our technology and product candidates could be delayed, and we may need additional resources to develop product candidates and our technology. Additionally, if any of our current or future third-party collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators, and our reputation in the business and financial communities could be adversely affected.

Relationships 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. 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 a collaborator's resources and expertise, the terms and conditions of a proposed collaboration and a proposed collaborator's evaluation of a number of factors.

We may not be successful in maintaining or establishing collaborations, which could adversely affect our ability to develop and, if required regulatory approvals are obtained, commercialize our product candidates.

In the future, in order to advance our clinical development, or in connection with any potential out-licensing of product candidates or technologies, we may seek to enter into collaboration agreements. In addition, we may consider entering into collaboration arrangements with medical technology, pharmaceutical or biotechnology companies and/or seek to establish strategic relationships with marketing partners for the development, sale, marketing and/or distribution of our product candidates within or outside of the United States. If we are unable to reach agreements with potential collaborators, then we may fail to meet our business objectives for the affected product candidates or programs. Collaboration arrangements are complex and time-consuming to negotiate, document and implement, and we may not be successful in our efforts, if any, to establish and implement collaborations or other alternative arrangements. The terms of any collaboration or other arrangements that we establish may not be favorable to us, and the success of any such collaboration will depend heavily on the efforts and activities of our collaborators. Moreover, our collaboration agreement could be terminated or not renewed by a third party at a time that is costly or damaging to us. Any failure to engage successful collaborators could cause delays in our product development and/or commercialization efforts, which could harm our financial condition and operational results.

Risks Related to Our Operations in Israel

Our headquarters, research and development and other significant operations are located in Israel, and, therefore, our results may be adversely affected by political, economic and military instability in Israel, including the recent war with Hamas and other terrorist organizations from the Gaza Strip.

Our executive offices and research and development facilities are located in Israel. In addition, the majority of our key employees and all of our officers are residents of Israel. Accordingly, political, geopolitical, economic and military conditions in Israel may directly affect our business. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its neighboring Arab countries, the Hamas (an Islamist terrorist militia and political group that controls the Gaza strip), the Hezbollah (an Islamist terrorist militia and political group based in Lebanon) and other terrorist organizations active in the region. These conflicts have involved missile strikes, hostile infiltrations and terrorism against civilian targets in various parts of Israel, which have negatively affected business conditions in Israel. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could negatively affect business conditions in Israel in general and our business in particular, and adversely affect our product development, operations and results of operations.

In October 2023, Hamas terrorists infiltrated Israel's southern border from the Gaza Strip and conducted a series of attacks on civilian and military targets. Hamas also launched extensive rocket attacks on Israeli population and industrial centers located along Israel's border with the Gaza Strip and in other areas within the State of Israel. These attacks resulted in extensive deaths, injuries and kidnapping of civilians and soldiers. Following the attack, Israel's security cabinet declared war against Hamas and a military campaign against these terrorist organizations commenced in parallel to their continued rocket and terror attacks. In addition, since the commencement of these events, there have been continued hostilities along Israel's northern border with Lebanon (with the Hezbollah terror organization) and southern border (with the Houthi movement in Yemen, as described below). It is possible that hostilities with Hezbollah in Lebanon will escalate, and that other terrorist organizations, including Palestinian military organizations in the West Bank as well as other hostile countries, such as Iran, will join the hostilities. Such clashes may escalate in the future into a greater regional conflict.

In connection with the Israeli security cabinet's declaration of war against Hamas and possible hostilities with other organizations, several hundred thousand Israeli military reservists were drafted to perform immediate military service, including 9 employees, none of whom are management or key employees, who were called up for reserve service, of which 4 have since returned to work full time and their pre-war military reserve duty. So long as the war continues, our personnel may be called up for reserve service, whether for an extended periods or periodically for short-term periods. Military service call ups that result in absences of personnel for an extended period of time may materially and adversely affect our business, prospects, financial condition and results of operations.

Since the war broke out on October 7, 2023, our operations have not been adversely affected by this situation, and we have not experienced disruptions to our business operations. As such, our product and business development activities remain on track. However, the intensity and duration of Israel's current war against Hamas is difficult to predict at this stage, as are such war's economic implications on our business and operations and on Israel's economy in general. If the war extends for a long period of time or expands to other fronts, such as Lebanon, Syria and the West Bank, our operations may be adversely affected.

Any armed conflicts, terrorist activities or political instability in the region could adversely affect business conditions, could harm our results of operations and the market price of our Common Stock, and could make it more difficult for us to raise capital.

Our commercial insurance does not cover losses that may occur as a result of an event associated with the security situation in the Middle East. Although the Israeli government has in the past covered the reinstatement value of certain damages that were caused by terrorist attacks or acts of war, we cannot assure you that this government coverage will be maintained or, if maintained, will be sufficient to compensate us fully for damages incurred. Any losses or damages incurred by us could have a material adverse effect on our business.

Finally, political conditions within Israel may affect our operations. Israel has held five general elections between 2019 and 2022, and prior to October 2023, the Israeli government pursued extensive changes to Israel's judicial system, which sparked extensive political debate and unrest. To date, these initiatives have been substantially put on hold. Actual or perceived political instability in Israel or any negative changes in the political environment,

may individually or in the aggregate adversely affect the Israeli economy and, in turn, our business, financial condition, results of operations and growth prospects.

Our operations may be disrupted as a result of the obligation of management or key personnel to perform military service.

As of the date hereof, we currently have 99 full-time employees, of which 64 are located in Israel, including 5 members of our senior management. Certain of our employees and consultants in Israel, including members of our senior management, may be obligated to perform military reserve duty generally until they reach the age of 40 (or older, for officers or other citizens who hold certain positions in the Israeli armed forces reserves) and, in the event of a military conflict, may be called to active duty. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists. It is possible that there will be similar large-scale military reserve duty call-ups in the future. Our operations could be disrupted by the absence of a significant number of our officers, directors, employees and consultants. Such disruption could materially adversely affect our business and operations.

The Israeli government grants we have received for research and development expenditures restrict our ability to manufacture products and transfer technology outside of Israel and require us to satisfy specified conditions. If we fail to satisfy these conditions, we may be required to refund grants previously received, together with interest and penalties.

Our research and development efforts have been financed, in part, through the grants that we have received from the Israeli Innovation Authority, or the IIA. We, therefore, must comply with the requirements of Israel's Law for the Encouragement of Research and Development in Industries, or the Research Law. For the years ended December 31, 2023 and 2022, we recorded grants totaling $1.0 million and $1.1 million, from the IIA, respectively. The grants represented 7.3% and 6.1% of our gross research and development expenditures for the years ended December 31, 2023 and 2022, respectively.

Under the Research Law, we are required to manufacture the major portion of each of our products developed using these grants in the State of Israel or otherwise ask for special approvals. We may not receive the required approvals for any proposed transfer of manufacturing activities. Even if we receive approval to manufacture products developed with government grants outside of Israel, the royalty rate may be increased, and we may be required to pay up to 300% of the grant amounts, plus interest, depending on the manufacturing volume that is performed outside of Israel. This restriction may impair our ability to outsource manufacturing or engage in our own manufacturing operations for those products or technology.

Additionally, under the Research Law, we are prohibited from transferring, including by way of license, the IIA-financed technology and related intellectual property rights and know-how outside of the State of Israel, except under limited circumstances and only with the approval of the IIA Research Committee. We may not receive the required approvals for any proposed transfer, and, even if received, we may be required to pay the IIA a portion, to be set by the IIA, in its discretion and taking into account the circumstances, upon its approval of such transaction, of the consideration or milestone and royalty payments that we receive upon any sale or out-licensing of such technology to a non-Israeli entity, up to 600% of the grant amounts plus interest.

These restrictions may impair our ability to sell our technology assets or to perform or outsource manufacturing outside of Israel or otherwise transfer our know-how outside of Israel and may require us to obtain the approval of the IIA for certain actions and transactions and pay additional royalties and other amounts to the IIA. In addition, any change of control and any change of ownership of our Common Stock that would make a non-Israeli citizen or resident an "interested party," as defined in the Research Law, requires prior written notice to the IIA, and our failure to comply with this requirement could, under certain circumstances, result in criminal liability.

These restrictions will continue to apply even after we have repaid the full amount of royalties on the grants.

We have received, and may continue to receive, Israeli governmental grants to assist in the funding of our research and development activities. If we lose our funding from these research and development grants, we may encounter difficulties in the funding of future research and development projects and implementing technological improvements, which would harm our operating results.

Through December 31, 2023, we had received an aggregate of $8.0 million in the form of grants from the IIA. BiomX Ltd. was formed as an incubator company as part of the FutuRx incubator, and, until 2017, the majority of our funding was from IIA grants and funding by the incubator, which is supported by the IIA. We continued to apply for and receive IIA grants after we left the incubator. The requirements and restrictions for such grants are found in the Research Law. Under the Research Law, royalties of 3% to 3.5% on the revenue derived from sales of products or services developed in whole or in part using these IIA grants are payable to the Israeli government. We developed both of our platform technologies, at least in part, with funds from these grants, and, accordingly, we would be obligated to pay these royalties on sales of any of our product candidates that achieve regulatory approval. As long as the manufacturing of our product candidates takes place in Israel and no technology funded with IIA grants is sold or out licensed to a non-Israeli entity, the maximum aggregate royalties paid generally would not exceed 100% of the grants made to us, plus annual interest equal to the 12-month Secured Overnight Financing Rate, or SOFR, applicable to dollar deposits, as published on the first trading day of each calendar year. As of December 31, 2023, the balance of the principal and interest in respect of our commitments for future payments to the IIA totaled approximately $7.9 million. As part of funding our current and planned product development activities, we may submit follow-up grant applications for additional grants.

These grants have funded some of our personnel, development activities with subcontractors, and other research and development costs and expenses. However, if these awards are not funded in their entirety or if additional grants are not awarded in the future, due to, for example, IIA budget constraints or governmental policy decisions, our ability to fund future research and development and implement technological improvements would be impaired, which would negatively impact our ability to develop our product candidates.

Exchange rate fluctuations between the U.S. Dollar, the New Israeli Shekel, the Euro and other foreign currencies, may negatively affect our future expenses.

Our proceeds from sales of our securities are generally received in U.S. Dollars. Our headquarters are located in Israel, where the majority of our general and administrative expenses and research and development costs are incurred in the New Israeli Shekel, or NIS. Future expenses may be incurred in foreign currencies such as the Euro or British Pound. As a result, our financial results may be affected by fluctuations in the exchange rates of currencies in the countries. For example, during 2020, we witnessed a strengthening of the average exchange rate of the NIS against the U.S. Dollar, which increased the U.S. Dollar value of Israeli expenses. If the NIS strengthens against the U.S. Dollar, as it did in 2020 and 2021, the U.S. Dollar value of our Israeli expenses, mainly personnel and facility-related, will increase. We use foreign exchange contracts (mainly option and forward contracts) to hedge balance sheet items from currency exposure. However, these foreign exchange contracts are not designated as hedging instruments for accounting purposes and they may not be effective. Although exposure to currency fluctuations to date has not had a material adverse effect on our

business, there can be no assurance that fluctuations in the future will not have a material adverse effect on our operating results and financial condition.

Under applicable employment laws, we may not be able to enforce covenants not to compete.

We generally enter into noncompetition agreements with our employees. These agreements prohibit our employees, if they cease working for us, from competing directly with us or working for our competitors or clients for a limited period. We may be unable to enforce these agreements under the laws of the jurisdictions in which our employees work, and it may be difficult for us to restrict our competitors from benefitting from the expertise our former employees or consultants developed while working for us. For example, Israeli labor courts have required employers seeking to enforce noncompete undertakings of a former employee to demonstrate that the competitive activities of the former employee will harm one of a limited number of material interests of the employer that have been recognized by the courts, such as the protection of a company's trade secrets or other intellectual property.

The tax benefits that are available to us if and when we generate taxable income require us to meet various conditions and may be prevented or reduced in the future, which could increase our costs and taxes.

If and when we generate taxable income, we would be eligible for certain tax benefits provided to "Technologic Preferred Enterprise" and/or "Preferred Enterprise" as defined under the Encouragement of Capital Investment Law -1959, the Law, and its regulations, as amended and, accordingly, could be subject to a reduced corporate tax rate on its income that will meet the provisions of the Law (ranging between 7.5%-16%). To the extent that we are not eligible to obtain such statuses, our Israeli taxable income would be subject to regular Israeli corporate tax rates. The standard corporate tax rate for Israeli companies is 23%. The benefits available to us in accordance to the Law and its regulations are subject to the fulfillment of conditions stipulated in the Law and the regulations. Further, in the future, these tax benefits may be reduced or discontinued.

It may be difficult to enforce a U.S. judgment against us or our officers and directors in Israel or the United States or to assert U.S. securities laws claims in Israel or serve process on our officers and directors.

Not all of our directors or officers are residents of the United States, and most of their and our assets are located outside the United States. Service of process upon us or our non-U.S. resident directors and officers may be difficult to obtain within the United States. Israeli courts may refuse to hear a claim based on a violation of U.S. securities laws against us or our non-U.S. officers and directors, because Israel may not be the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law, and not U.S. law, is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel addressing the matters described above. Additionally, Israeli courts might not enforce judgments obtained in the United States against us or our non-U.S. directors and executive officers, which may make it difficult to collect on judgments rendered against us or our non-U.S. officers and directors.

Moreover, an Israeli court will not enforce a non-Israeli judgment if it was given in a state whose laws do not provide for the enforcement of judgments of Israeli courts (subject to exceptional cases), if its enforcement is likely to prejudice the sovereignty or security of the State of Israel, if it was obtained by fraud or in the absence of due process, if it is at variance with another valid judgment that was given in the same matter between the same parties, or if a suit in the same matter between the same parties was pending before a court or tribunal in Israel at the time the foreign action was brought.

Risks Related to Manufacturing and Supply

We rely on third parties to manufacture our clinical supply of product candidates and we intend to rely on third parties to produce and process our products, if approved.

We currently rely on outside vendors to supply raw materials and other important components, such as lab equipment. We have not yet caused any product candidates to be manufactured or processed on a commercial scale and may not be able to do so for any of our product candidates. We will make changes as it works to optimize the manufacturing process for our product candidates, and we cannot be sure that even minor changes in the process will result in therapies that are safe and effective.

The facilities used to manufacture our product candidates must be approved by the FDA or equivalent foreign regulatory agencies pursuant to inspections that will be conducted after we submit a marketing application to the FDA or equivalent foreign regulatory agency. Additionally, any facilities used for the manufacture of product candidates commercialized for non-therapeutic uses will be subject to inspection by the FDA and foreign regulatory agencies. We do not currently control all aspects of the manufacturing process of, and are currently largely dependent on, our contract manufacturing partners for compliance with regulatory requirements, known as cGMP requirements, for manufacture of our product candidates. If and when our manufacturing facility becomes operational, we will be responsible for compliance with cGMP requirements. If we or our contract manufacturers cannot successfully manufacture in conformance with our specifications and the strict regulatory requirements of the FDA or other regulatory authorities, we and they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities with respect to the manufacture of our product candidates. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or an equivalent foreign regulatory agency does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

We have limited experience manufacturing our product candidates for purposes of clinical trials for therapeutic indications or for non-therapeutic clinical studies or trials. We opened our own manufacturing facility at our headquarters in Ness Ziona, Israel in 2019. We cannot assure you that we can manufacture our product candidates in compliance with regulations at a cost or in quantities necessary to make them commercially viable.

Our product candidates rely on the availability of specialty raw materials, which may not be available to us on acceptable terms or at all.

Our product candidates require certain specialty raw materials, some of which we obtain from small companies with limited resources and experience to support a commercial product. These third-party suppliers may be ill-equipped to support our needs, especially in non-routine circumstances like an FDA inspection or medical crisis, such as widespread contamination. We do not currently have contracts in place with all of the suppliers that we may need at any point in time and, if needed, may not be able to contract with them on acceptable terms or at all. Accordingly, we may experience delays in receiving key raw materials to support clinical or commercial manufacturing.

Risks Related to Our Common Stock

A significant number of shares of our Common Stock are subject to issuance upon exercise of outstanding warrants and options or conversion of our Convertible Preferred Stock, which upon such exercise or conversion, as applicable, may result in dilution to our security holders.

As of December 31, 2023, we had an aggregate of 25,363,688 warrants outstanding to purchase an aggregate of up to 20,926,189 shares of Common Stock with a weighted average exercise price of $2.60, certain of which, or the Unit Warrants are included in our outstanding units, each consisting of one share of Common Stock and one warrant exercisable for one-half of one share of Common Stock, or the Units, certain of which were issued in private placements, or Private Warrants, certain of which, or the Pre-funded Warrants, were issued in the February 2023 PIPE, and certain of which, or the Public Warrants, were previously traded on NYSE American under the symbol "PHGE.WS," and are currently quoted on OTC Pink under the symbol "PHGEW". Unit Warrants, Private Warrants, Pre-funded Warrants and Public Warrants, collectively, or the Outstanding Warrants, in each case subject to adjustment. To the extent such Outstanding Warrants are exercised, additional shares of our Common Stock will be issued, which will result in dilution to the then existing holders of Common Stock and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could adversely affect the market price of our Common Stock.

In addition, as of December 31, 2023, we had outstanding vested and unvested options to purchase 5,280,711 shares of our Common Stock. To the extent any of these options are exercised, additional shares of Common Stock will be issued that will generally be eligible for resale in the public market (subject to limitations under Rule 144 under the Securities Act with respect to shares held by our affiliates), which will result in dilution to our security holders.

Furthermore, (i) in connection with the Acquisition, in addition to issuance of Common Stock, we issued (a) an aggregate of 40,470 shares of Convertible Preferred Stock, which, in the event our stockholders approve the conversion of the Convertible Preferred Stock at the Stockholder Meeting, will be convertible into an aggregate of up to 40,470,000 shares of our Common Stock, and (b) warrants, or Merger Warrants, which, in the event our stockholders approve the exercise of the Merger Warrants at the Stockholder Meeting, will be exercisable for an aggregate of 2,416,497 shares of Common Stock, and (ii) in connection with the March 2024 PIPE, we issued (x) an aggregate of 216,417 shares of Convertible Preferred Stock, which, in the event our stockholders approve the conversion of the Convertible Preferred Stock at the Stockholder Meeting, will be convertible into an aggregate of up to 216,417,000 shares of Common Stock, and (y) Private Placement Warrants, which, in the event our stockholders approve the exercise of the Private Placement Warrants at the Stockholder Meeting, will be exercisable for an aggregate of 108,208,500 shares of our Common Stock. Additionally, as partial compensation to the placement agents for the March 2024 PIPE, we issued warrants, or Placement Agent Warrants, and collectively with the Merger Warrants and the Private Placement Warrants, the Warrants, which, in the event our stockholders approve the conversion of the Placement Agent Warrants at the Stockholder Meeting, will be exercisable for up to an aggregate of 9,523,809 shares of Common Stock. To the extent any of the Convertible Preferred Stock is converted or any of the Warrants are exercised, additional shares of Common Stock will be issued that, subject to applicable securities laws, will generally be eligible for resale in the public market (subject to limitations under Rule 144 under the Securities Act with respect to shares held by our affiliates). Sales of substantial numbers of such shares in the public market could adversely affect the market price of our Common Stock.

We plan to grant additional options, subject to stockholder approval at the Stockholder Meeting and may issue additional warrants and shares of preferred stock in the future. Furthermore, the issuance of additional shares of our Common Stock upon exercise of such securities, as applicable, will result in dilution to the then existing holders of Common Stock and could also have an adverse effect on the market price of our Common Stock.

We have never paid dividends on our Common Stock, and we do not anticipate paying any cash dividends on our Common Stock in the foreseeable future.

We have never declared or paid cash dividends on our Common Stock. We do not anticipate paying any cash dividends on our Common Stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our Common Stock will be our stockholders' sole source of gain for the foreseeable future.

Our Public Warrants have been delisted, and we may be unable to maintain the listing of our securities in the future.

Our Common Stock and Units trade on NYSE American. Our Public Warrants previously traded on NYSE American but were delisted in June 2023 and since then have been quoted on OTC Pink. As a result of the delisting of our Public Warrants, the holders thereof have experienced a limited availability of market quotations and reduced liquidity with respect to their Public Warrants. If our Common Stock or Units are subsequently delisted, we could face significant material adverse consequences, including:

- a limited availability of market quotations for our securities;
- reduced liquidity with respect to our securities;
- a determination that our shares are a "penny stock," which will require brokers trading in our securities to adhere to more stringent rules, possibly resulting in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and analyst coverage for the Company; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

The market price of our Common Stock and other securities may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our Common Stock.

The stock markets in general and the markets for biotechnology stocks have experienced extreme volatility. The market for the common stock of smaller companies such as ours is characterized by significant price volatility when compared to the shares of larger, more established companies that trade on a national securities exchange and have large public floats, and our share price is more volatile than the shares of such larger, more established companies for the indefinite future.

In addition to the factors discussed in this "Risk Factors" section, price declines in our Common Stock (and other securities) could also result from general market and economic conditions and a variety of other factors, including:

- adverse results or delays in our clinical trials;
- adverse actions taken by regulatory agencies with respect to our product candidates, clinical trials or the manufacturing processes of our product candidates;

- announcements of technological innovations, patents or new products by our competitors;
- regulatory developments in the United States and foreign countries;
- any lawsuit involving us or our product candidates;
- announcements concerning our competitors, or the biotechnology or pharmaceutical industries in general;
- developments concerning any strategic alliances or acquisitions we may enter into;
- actual or anticipated variations in our operating results;
- changes in recommendations by securities analysts or lack of analyst coverage;
- deviations in our operating results from the estimates of analysts;
- our inability, or the perception by investors that we will be unable, to continue to meet all applicable requirements for continued listing of our Common Stock on NYSE American, and the possible delisting of our Common Stock;
- sales of our Common Stock by our executive officers, directors and principal stockholders or sales of substantial amounts of Common Stock; and
- loss of any of our key scientific or management personnel.

Additionally, market prices for securities of biotechnology companies historically have been very volatile. The market for these securities has from time to time experienced significant price and volume fluctuations for reasons unrelated to the operating performance of any one company. Furthermore, our business may be adversely impacted by risks, or the public perception of the risks, related to a pandemic or other health crisis, such as the COVID-19 or as a result of the Israel-Hamas War or the Russian invasion of Ukraine and the resulting world sanctions on Russia, Belarus, and related parties. A significant outbreak of contagious diseases could result in a widespread health crisis that could adversely affect the economies and financial markets of many countries, resulting in an economic downturn.

In the past, following periods of volatility in the market price of a particular company's securities, litigation has often been brought against that company. Any such lawsuit could consume resources and management time and attention, which could adversely affect our business.

As a "smaller reporting company" we are permitted to provide less disclosure than larger public companies, which may make our Common Stock less attractive to investors.

We are currently a "smaller reporting company," as defined by Rule 12b-2 of the Exchange Act. As a smaller reporting company, we are eligible to take advantage of certain exemptions from various reporting requirements applicable to other public companies. Consequently, it may be more challenging for investors to analyze our results of operations and financial prospects which may result in less investor confidence. Investors may find our Common Stock less attractive as a result of our smaller reporting company status. If some investors find our Common Stock less attractive, there may be a less active trading market for our Common Stock and our stock price may be more volatile.

General Risk Factors

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

We are highly dependent on Jonathan Solomon, our chief executive officer, as well as the other principal members of our management, scientific and clinical team. Although we have entered into employment agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees. The loss of the services of any of our executive officers, other key employees, and other scientific and medical advisors, and our inability to find suitable replacements could result in delays in product development and harm our business. Additionally, our recent acquisition of APT and its integration into the Company's business may increase the likelihood that employees depart in the foreseeable future.

Our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel and our ability to develop and maintain important relationships with leading academic institutions, clinicians and scientists is critical to our success. Competition for qualified personnel in the biotechnology field is intense, particularly in Israel where our headquarters are located. We face competition for personnel from other biotechnology and pharmaceutical companies, universities, public and private research institutions and other organizations. We also face competition from other more well-funded and well-established businesses, and we may also be viewed as a riskier choice from a job stability perspective due to our relatively newer status than longer existing biotech and pharmaceutical companies. We may not be able to attract and retain qualified personnel on acceptable terms given the competition for such personnel. If we are unsuccessful in our retention, motivation and recruitment efforts, we may be unable to execute our business strategy.

Expectations relating to environmental, social and governance (ESG) programs may impose additional costs and expose us to new risks.

There is an increasing focus from certain investors and other key stakeholders concerning corporate responsibility, specifically related to environmental, social and governance, or ESG, factors. As a result, there is an increased emphasis on corporate responsibility ratings and a number of third parties provide reports on companies in order to measure and assess corporate responsibility performance. In addition, the ESG factors by which companies' corporate responsibility practices are assessed may change, which could result in greater expectations of us and cause us to undertake costly initiatives to satisfy such new criteria. Alternatively, if we are unable to satisfy such new criteria, investors may conclude that our policies with respect to corporate responsibility are inadequate. We risk damage to our brand and reputation if our corporate responsibility procedures or standards do not meet the standards set by various constituencies. We may be required to make investments in matters related to ESG, which could be significant and adversely impact our results of operations. Furthermore, if our competitors' corporate responsibility performance is perceived to be greater than ours, potential or current investors may elect to invest with our competitors instead. In addition, if we communicate certain initiatives and goals regarding ESG matters, we could fail, or be perceived to fail, in our achievement of such initiatives or goals, or we could be criticized for the scope of such initiatives or goals. If we fail to satisfy the expectations of investors and other key stakeholders or our initiatives are not executed as planned, our reputation and financial results could be materially and adversely affected.

If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.

On March 15, 2024, we acquired APT. We may evaluate various additional acquisition opportunities and strategic partnerships, including licensing or acquiring complementary products, intellectual property rights, technologies or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- the issuance of our equity securities;
- assimilation of operations, intellectual property and products of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing product programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and marketing approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

Our business and operations would suffer in the event of computer system failures, cyber-attacks or deficiencies in our cyber-security.

Despite the implementation of security measures, our internal computer systems, and those of third parties on which we rely, are vulnerable to damage from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyber-attacks or cyber-intrusions over the Internet, attachments to emails, persons inside our organization, or persons with access to systems inside our organization. The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our product development programs. For example, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our clinical trial efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach was to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur material legal claims and liability, and damage to our reputation, and the further development of our product candidates could be delayed. We also maintain compliance programs to address the potential applicability of restrictions against trading while in possession of material, nonpublic information generally and in connection with a cyber-security breach. However, a breakdown in existing controls and procedures around our cyber-security environment may prevent us from detecting, reporting or responding to cyber incidents in a timely manner and could have a material adverse effect on our financial position and value of our stock.

We incur significant costs operating as a public company.

As a public company, we incur significant costs in connection with our directors and officers insurance, paying for service providers such as legal and accounting as well as other expenses. We are subject to the reporting requirements of the Exchange Act, which require, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and NYSE American to implement provisions of the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and the Public Company Accounting Oversight Board impose significant requirements on public companies, including requiring the establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. These expenses will likely increase in the future, particularly if we cease to be a "smaller reporting company", as a result of additional corporate governance and disclosure requirements under the Sarbanes-Oxley Act, the Dodd-Frank Act, and SEC rules and regulations.

The rules and regulations applicable to public companies result in us continuing to incur substantial legal and financial compliance costs. These costs increase our net loss or decrease any net income and may require us to reduce costs in other areas of our business.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 1C. CYBERSECURITY

We recognize the critical importance of developing, implementing, and maintaining cybersecurity measures to safeguard our information systems and protect the confidentiality, integrity, and availability of our data. We address cybersecurity risks by implementing security measures on our internal computer systems and ensuring that third parties and business partners implement similar measures. These security measures include firewalls, intrusion prevention and detection systems, antimalware functionality and access controls, which are evaluated by our external IT consultant and improved through vulnerability assessments and cybersecurity threat intelligence.

Our senior director of operation is responsible for day-to-day assessment and management of risks from cybersecurity threats, including the prevention, mitigation, detection, and remediation of cybersecurity incidents.

The Audit Committee is responsible for reviewing our policies with respect to cybersecurity risks and relevant contingent liabilities and risks that may be material to the Company, including risks from third parties and business partners. The Audit Committee receives quarterly updates from management with respect to risks from cybersecurity threats. Such updates cover the Company's information technology security program, including its current status, capabilities, changes during the last quarter, objectives and plans, as well as the evolving cybersecurity threat landscape.

To date, risks from cybersecurity threats have not materially affected us and we do not currently believe any risks from cybersecurity threats are reasonably likely to affect the Company, including our business strategy, results of operations or financial condition. For further information, see "*Risk Factors — Our business and operations would suffer in the event of computer system failures, cyber-attacks or deficiencies in our cyber-security.*" in Item 1A of this Annual Report. We maintain a cyber liability insurance policy. However, our cyber liability insurance policy may not cover all claims made against us, and defending a suit, regardless of its merit, could be costly and divert management's attention from our business and operations.

ITEM 2. PROPERTIES

Our corporate headquarters are located in Ness Ziona, Israel. During the second quarter of 2021, we moved into a new 28,610 square feet facility of office and laboratory space, including a new 6,500 square feet manufacturing facility. The lease agreement expires in November 2025, with an option to extend the term by five years. This facility has been designed with the capacity to produce clinical quantities of our product candidates required for clinical development. In August 2022, BiomX Israel entered into a sublease agreement for a portion of its office space in Ness Ziona, Israel. The agreement is for a period of two years beginning on August 15, 2022.

In addition to our premises in Israel, we are leasing a 25,894 square feet facility of office and laboratory space in Gaithersburg, Maryland, including 6,100 square feet manufacturing facility. The lease agreement expires in July 2034, with an option to terminate in February 2029, subject to 12 months' notice and early termination fee.

We believe our facilities are sufficient to meet our current needs.

ITEM 3. LEGAL PROCEEDINGS

We may be subject to legal proceedings, investigations and claims incidental to the conduct of our business from time to time. We are not currently a party to any material litigation or other material legal proceedings brought against us.

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

Our shares of Common Stock, and Units, are traded on NYSE American under the symbols PHGE, and PHGE.U, respectively. Our Public Warrants are quoted on the OTC Pink under the symbol "PHGEW".

Holders of Record

As of March 28, 2024, there were 55,220,707 issued and outstanding shares of our Common Stock held by 75 stockholders of record. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of shares of Common Stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies.

Dividends

We have not paid any cash dividends on our Common Stock to date and do not intend to pay cash dividends. The payment of cash dividends in the future will be dependent upon our revenues and earnings, if any, capital requirements and general financial condition. The payment of any cash dividends will be within the discretion of our Board of Directors at such time. Further if we incur indebtedness, our ability to declare dividends may be further limited by restrictive covenants we may agree to in connection therewith.

ITEM 6. [RESERVED.]

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and the notes thereto contained elsewhere in this Annual Report. The analysis of the financial condition and results of operations excludes APT as it was acquired after December 31, 2023. Certain information contained in the discussion and analysis set forth below includes forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed in any forward-looking statement because of various factors, including those described in the sections titled "Cautionary Statement Regarding Forward-Looking Statements" and "Risk Factors" in this Annual Report.

Overview

We are a clinical stage product discovery company developing products using both natural and engineered phage technologies designed to target and kill specific harmful bacteria associated with chronic diseases, such as CF and DFO. Bacteriophage or phage are bacterial, species-specific, strain-limited viruses that infect, amplify and kill the target bacteria and are considered inert to mammalian cells. By utilizing proprietary combinations of naturally occurring phage and by creating novel phage using synthetic biology, we develop phage-based therapies intended to address both large-market and orphan diseases.

Since BiomX Ltd.'s inception in 2015, we have devoted substantially all our resources to organizing and staffing our company, raising capital, acquiring rights to or discovering product candidates, developing our technology platforms, securing related intellectual property rights, and conducting discovery, research and development and clinical activities for our product candidates. We do not have any products approved for sale, and we have not generated any revenue from product sales. As we advance our product candidates, we expect our expenses to remain significant. To date, we have funded our operations with proceeds from sales of our Common Stock, preferred shares and warrants, governmental grants, collaboration agreements

and debt. As of December 31, 2023, we had received gross proceeds of approximately $154 million from sales of our securities. In addition, as of December 31, 2023, we have received $2.0 million from our collaboration agreements and recorded a reduction from research and development expenses of $2.2 million. The remainder of $0.2 million was received in January 2024. In addition, through December 31, 2023, we had received an aggregate of $8.0 million in the form of grants from the IIA, of which $1.1 million had been received as of December 31, 2023.

In addition, we have incurred significant operating losses. Our ability to generate revenue from product sales sufficient to achieve profitability will depend on the successful development of, the receipt of regulatory approval for, and eventual commercialization of one or more of our product candidates. Our net losses were approximately $26.2 million and $28.3 million for the years ended December 31, 2023 and 2022, respectively. As of December 31, 2023, we had an accumulated deficit of $163 million and expect that for the foreseeable future we will continue to incur significant expenses as we advance our product candidates from discovery through preclinical development and clinical trials and seek regulatory approval of our product candidates. In addition, if we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. We may also incur expenses in connection with in-licensing or acquiring additional product candidates.

Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations. We may implement cost reduction strategies, which may include amending, delaying, limiting, reducing or terminating one or more of our programs or ongoing or planned clinical trials of our product candidates. In May 2022, we announced, as part of our corporate restructuring plan (the “Corporate Restructuring”), our intention to reduce our operating costs, including a 50% reduction in personnel, while prioritizing our ongoing CF program.

On December 31, 2023, we had cash, cash equivalents and restricted cash of $15.9 million. Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern for at least one year until April 3, 2025, as discussed further below under “-Liquidity and Capital Resources”.

On March 6, 2024 we entered into a merger agreement with APT and certain other parties, as a result of which APT became our wholly-owned subsidiary, effective as of March 15, 2024, or the Acquisition. The Acquisition was structured as a stock-for-stock transaction whereby all outstanding equity interests of APT were exchanged in a merger for an aggregate of 9,164,968 shares of BiomX common stock, 40,470 shares of Series X Preferred Stock, convertible upon stockholder approval into 40,470,000 shares of BiomX common stock, and warrants, or the Merger Warrants, exercisable for 2,166,497 shares of BiomX common stock. Upon the consummation of the Acquisition, a successor-in-interest of APT became a wholly-owned subsidiary of BiomX. The Merger Warrants will be exercisable at any time after the date of the receipt of BiomX stockholder approval of their exercise at an exercise price of $5.00 per share and will expire on January 28, 2027.

Concurrently with the consummation of the Acquisition, BiomX consummated a private placement financing, or the March 2024 PIPE, with existing and new investors, resulting in aggregate gross proceeds of approximately $50 million, in which the investors purchased (i) an aggregate of 216,417 shares of Series X Preferred Stock, convertible upon stockholder approval into an aggregate of up to 216,417,000 shares of BiomX common stock, and (ii) warrants, or the Private Placement Warrants, to purchase up to an aggregate of 108,208,500 shares of BiomX common stock, at a combined purchase price of $231.10 per share of Series X Preferred Stock and an accompanying Private Placement Warrant to purchase 500 shares of BiomX common stock. The Private Placement Warrants will be exercisable any time after the date of the receipt of BiomX stockholder approval, at an exercise price of $0.2311 per share, and will expire on the 24-month anniversary of the initial exercisability date.

Immediately following the Acquisition, and without taking into account the shares of Convertible Preferred Stock issued in the March 2024 PIPE, and assuming conversion of all of the Convertible Preferred Stock into Common Stock, our stockholders (including holders of the Pre-Funded Warrants, as defined below) prior to the Acquisition owned approximately 55% of the share capital of the Company and APT’s stockholders prior to the Acquisition owned approximately 45% of the share capital of the Company.

Components of Our Consolidated Results of Operations

Revenue

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from product sales in the near future. If development efforts for our product candidates are successful and result in any necessary regulatory approvals or otherwise lead to any commercialized products or additional license agreements with third parties, we may generate revenue in the future from product sales or payments from collaboration or license agreements with third parties.

Operating Expenses

Research and Development Expenses, net

Research and development expenses consist primarily of costs incurred in connection with the discovery and development of our product candidates. We expense research and development costs as incurred, offset by IIA grants and, to a lesser degree, income from research and development collaboration agreements. These expenses include:

- development and operation of our proprietary platform;
- expenses incurred in connection with the preclinical and clinical development of our product candidates, including under agreements with third parties, such as CROs and contract manufacturing organizations, as well as consultants, subcontractors and key opinion leaders providing scientific development services;
- manufacturing scale-up expenses and the cost of acquiring and manufacturing preclinical and clinical trial materials;
- license maintenance fees and milestone fees incurred in connection with various license agreements;
- employee-related expenses, including salaries, related benefits, travel and stock-based compensation expenses for employees engaged in research and development functions, as well as external costs, such as fees paid to outside consultants engaged in such activities;
- costs related to compliance with regulatory requirements and legal fees relating to patent matters; and
- depreciation and other expenses.

We recognize external development costs based on an evaluation of the progress to completion of specific tasks using information provided to us by our service providers.

We do not allocate employee costs or facility expenses, including depreciation or other indirect costs, to specific programs because these costs are deployed across multiple programs and, as such, are not separately classified. We use internal resources primarily to oversee the research and discovery as well as for managing our preclinical development, process development, manufacturing and clinical development activities. These employees work across multiple programs and, therefore, we do not track their costs by program.

The table below summarizes our research and development expenses incurred by program:

	Year Ended December 31,	
	2023	2022
	USD In thousands	
BX004	8,853	3,499
BX005	81	1,011
Salaries and related benefits (including stock-based compensation)	6,004	9,130
Depreciation	782	909
Rent and related expenses	905	1,101
Infrastructure & other unallocated or R&D expenses	2,410	2,017
Less grants from the IIA and consideration from collaboration agreements	(2,337)	(1,423)
Total research and development expenses, net	16,698	16,244

Research and development activities are central to our business. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. Our research and development expenses reflect, among other things, programs that were discontinued or put on hold as well as new development programs. As a result, we expect that our research and development expenses will increase substantially over the next several years, particularly as we increase personnel costs, including stock-based compensation, contractor costs and facilities costs, as we continue to advance the development of our product candidates. We also may incur additional expenses related to milestone and royalty payments payable to third parties with whom we have entered into license agreements to acquire the rights to our product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries, related benefits and stock-based compensation expenses for personnel in executive, finance, corporate, business development and administrative functions. General and administrative expenses also include legal fees relating corporate and securities matters; professional fees for accounting, tax and audit services; insurance costs; travel expenses; and facility-related expenses, including rent, as well as operating related costs.

We believe that our general and administrative expenses may increase in the future as we integrate the APT operations and support our continued research activities and development of our product candidates. We also anticipate that we will continue to incur significant accounting, audit, legal, regulatory, compliance, directors' and officers' insurance costs as well as investor and public relations expenses associated with being a public company. We anticipate the additional costs for these services will increase our general and administrative expenses in the future. Additionally, if and when we believe a regulatory approval of a product candidate appears likely, we anticipate an increase in payroll and expenses as a result of our preparation for commercial operations, especially as it relates to the sales and marketing of our product candidate.

Amortization of intangible assets

Intangible assets consist of in-process research and development, amortized for a period of three years, that started on January 1, 2020 and ended on December 31, 2022.

Other income

Other income consists of proceeds from sub-leasing a portion of our office space in Ness Ziona, Israel starting in August 2022.

Interest expenses

Interest expense consists of interest incurred under the Hercules Loan Agreement (as defined below(. We entered into a Loan and Security Agreement with Hercules Capital, Inc., or Hercules, with respect to a venture debt facility, or the Hercules Loan Agreement. Under the Hercules Loan Agreement, Hercules provided the Company with access to a term loan with an aggregate principal amount of up to $30 million, or the Term Loan Facility. On March 19, 2024, the Company prepaid all of the remaining loan under the Term Loan Facility in a total of $10,428 thousands. The prepayment included an end of term charge of $983 thousands and accrued interest of $69 thousands.

Financial expenses, net

Financial expenses, net consist primarily of income or expenses related to revaluation of foreign currencies and interest income on our bank deposits and money market funds.

Results of Operations

Comparison of the Years Ended December 31, 2023 and 2022

The following table summarizes our consolidated results of operations for the years ended December 31, 2023 and 2022:

	Year ended December 31,	
	2023	2022
	USD In thousands	
R&D expenses, net	16,698	16,244
Amortization of intangible assets	-	1,519
General and administrative expenses	8,650	9,456
Operating loss	25,348	27,219
Interest expenses	2,404	2,069
Finance income, net	(1,249)	(902)
Other income	(357)	(134)
Tax expenses	23	65
Net Loss	26,169	28,317

R&D expenses, net (net of grants received from the IIA, and consideration from research collaborations) were $16.7 million for the year ended December 31, 2023, compared to $16.2 million for the year ended December 31, 2022. The increase of $0.5 million, or 3%, in the year ended December 31, 2023 compared to the prior year, is primarily due to the following:

- an increase of $5.3 million primarily due to increased expenses related to conducting the clinical trial of our CF product candidate, BX004;
- a decrease of $3.1 million in salaries and related expenses and stock-based compensation expenses mainly due to the workforce reduction resulting from the Corporate Restructuring ,as well as, the appreciation of the U.S. dollar against the NIS, which led to reduced salaries and related expenses in our Israeli subsidiary;
- a decrease of $0.9 million due to pausing in the development of BX005, the product candidate for the treatment of AD; and
- a decrease of $1.0 million due to increased consideration from research collaborations, which resulted in reduced expenses;

We recorded grants from the IIA totaling $1.1 million for each of the years ended December 31, 2023 and December 31, 2022.

Amortization of intangible assets ended on December 31, 2022, as the intangible asset was fully amortized.

General and administrative expenses were $8.7 million for the year ended December 31, 2023, compared to $9.5 million for the year ended December 31, 2022. The decrease of $0.8 million, or 8%, is primarily due to a decrease of $0.9 million in the Company's directors' and officers' insurance premium.

Interest expenses were $2.4 million for the year ended December 31, 2023, compared to $2.1 million for the year ended December 31, 2022. The increase of $0.3 million, or 14%, is due to the increase of the U.S. prime rate, which led to increased interest payments under the Hercules Loan Agreement.

Finance income, net was $1.2 million for the year ended December 31, 2023, compared to $0.9 million for the year ended December 31, 2022. The increase of $0.3 million, or 33% is primarily due to rising interest rates, leading to an increase in interest income on our bank deposits. Such increase was partly offset by a decrease due to the appreciation of the U.S. dollar against the NIS, which resulted in higher exchange rate expenses.

Other income was $0.4 million for the year ended December 31, 2023, compared to $0.1 million for the year ended December 31, 2022. The increase of $0.3 million, or 300%, is due to receipt of proceeds from a sublease agreement for a portion of our office space in Ness Ziona, Israel entered into in August 2022 following our Corporate Restructuring.

Liquidity and Capital Resources

Sources of Liquidity

We have never generated any revenue from sales of our products and have incurred significant operating losses and negative cash flows from our operations. We have funded our operations to date primarily with proceeds from the sale of our Common Stock, preferred shares and warrants, venture debt, IIA grants and funds from collaboration agreements and through the business combination between Chardan Healthcare Acquisition Corp., a special purpose acquisition company, and BiomX Ltd., pursuant to which Chardan Healthcare Acquisition Corp. changed its name to BiomX Inc. Through December 31, 2023, we had received gross cash proceeds of approximately $154 million from sales of our Common Stock and preferred shares. In August 2021, we borrowed $15.0 million under the Hercules Loan Agreement. In addition, we received approximately $1.9 million from our collaboration agreements and grants from the IIA for each of the years ended December 31, 2023 and December 31, 2022.

Cash in excess of immediate requirements is invested primarily with a view to liquidity and capital preservation.

On December 4, 2020, we filed a shelf registration statement on Form S-3, which was declared effective by the SEC on December 11, 2020. In addition, on December 4, 2020, we entered into an Open Market Sale Agreement^{SM}, or the Sale Agreement, with Jefferies LLC Jefferies, pursuant to which we could issue and sell shares of our Common Stock having an aggregate offering price of up to $50 million from time to time through Jefferies. We were not obligated to make any sales of Common Stock under the Sale Agreement. Through December 31, 2023, we sold an aggregate of 983,384 shares of Common Stock pursuant to the Sale Agreement for aggregate gross proceeds of $5.8 million. We terminated the Sale Agreement on December 7, 2023.

On August 16, 2021 we entered into the Hercules Loan Agreement with Hercules, with respect to a venture debt facility. Under the Hercules Loan Agreement, Hercules provided the us with access to a term loan with an aggregate principal amount of up to $30 million, available in three tranches, subject to certain terms and conditions. The first tranche of $15 million was advanced to us on the date the Hercules Loan Agreement was executed. The milestones for the second and third tranches were not reached and have expired. and accordingly we never received additional amounts under the Hercules Loan Agreement. We were required to make interest-only payments through March 1, 2023, and we were required to repay the principal balance and interest in monthly installments through September 1, 2025. On March 19, 2024, we voluntarily prepaid the outstanding amount under the Hercules Loan Agreement and such agreement expired.

On February 22, 2023, we entered into a securities purchase agreement to issue and sell an aggregate of 15,997,448 shares of our Common Stock and 14,610,714 pre-funded warrants, or the Pre-Funded Warrants, and collectively, the Securities, at a price of $0.245 per share and $0.244 per

Pre-Funded Warrant, through a private placement pursuant to an exemption from registration requirements under the Securities Act, or the February 2023 PIPE. The gross proceeds from the February 2023 PIPE were approximately $7.5 million, before deducting issuance costs. The offering closed in two parts. The first closing, which resulted in the issuance of 3,199,491 shares of Common Stock and 2,776,428 Pre-Funded Warrants for gross proceeds of $1.5 million, occurred on February 27, 2023. Such Pre-Funded Warrants became exercisable on February 27, 2023, at an exercise price of $0.001 per share of Common Stock and have no expiration date. At the first closing, we raised net proceeds of $1.3 million, after deducting issuance costs of $0.2 million. On April 24, 2023, our stockholders approved the issuance of up to 24,632,243 shares of Common Stock, including shares underlying Pre-Funded Warrants, in accordance with NYSE American rules. On May 4, 2023, we completed the second closing of the February 2023 PIPE and issued an aggregate of 12,797,957 shares of Common Stock and 11,834,286 Pre-Funded Warrants. Such Pre-Funded Warrants became exercisable on May 4, 2023, at an exercise price of $0.001 per share of Common Stock and have no expiration date. At the second closing, we raised net proceeds of $5.9 million, after deducting issuance costs of $0.1 million. As of December 31, 2023, no Pre-Funded Warrants had been exercised.

On December 7, 2023, we filed a shelf registration statement on Form S-3, which was declared effective by the SEC on January 2, 2024. In addition, on December 7, 2023, we entered into the ATM Agreement, with Wainwright, as manager, pursuant to which we may issue and sell shares of our Common Stock having an aggregate offering price of up to $7.5 million from time to time through Wainwright. We are not obligated to make any sales of Common Stock under the ATM Agreement. From January 1, 2024 through March 26, 2024, we issued 75,179 shares of Common Stock pursuant to the ATM Agreement for aggregate gross proceeds of $19 thousand.

On March 15, 2024, in connection with the Acquisition, we consummated the March 2024 PIPE, pursuant to which we sold an aggregate of 216,417 shares of Convertible Preferred Stock and Private Placement Warrants to purchase up to an aggregate of 108,208,500 shares of Common Stock for aggregate gross proceeds of approximately $50 million.

Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern for at least one year until April 3, 2025. In the future, we will likely require or desire additional funds to support our operating expenses and capital requirements or for other purposes, such as acquisitions, and may seek to raise such additional funds through public or private equity or debt financings or collaborative agreements or from other sources, as we are doing now with the ATM Agreement and as we did with the Hercules Loan Agreement. If certain disruptions due to, for instance, the Israel-Hamas War, or Israeli political instability persists and deepens, we could experience an inability to access additional capital, which could in the future negatively affect our capacity to support our operating expenses and capital requirements or to make investments for other purposes, such as acquisitions.

We have no other commitments to obtain additional financing and cannot assure you that additional financing will be available at all or, if available, that such financing would be obtainable on terms favorable to us and would not be dilutive. Our future liquidity and cash requirements will depend on numerous factors, including the introduction of new products as well as the ability to continue to maintain controls over our operating expenditures.

Cash Flows

The following table summarizes our cash flows for each of the periods presented:

	Year Ended December 31,	
	2023	2022
	USD In thousands	
Net cash used in operating activities	(21,286)	(29,092)
Net cash provided by (used in) investing activities	1,951	(2,107)
Net cash provided by financing activities	2,899	292
Effect of exchange rate changes on cash and cash equivalents and restricted cash	6	106
Net increase (decrease) in cash and cash equivalents	(16,430)	(30,801)

Operating Activities

During the year ended December 31, 2023, operating activities used $21.3 million of net cash, primarily due to a net loss of $26.2 million and by net cash used by changes in our operating assets and liabilities of $2.5 million and non-cash charges of $2.4 million. Non-cash charges for the year ended December 31, 2023, mainly consisted of stock-based compensation expenses of $1.0 million, depreciation and amortization of $0.9 million and amortization of debt issuance costs of $0.6 million. Net changes in our operating assets and liabilities for the year ended December 31, 2023, consisted primarily of an increase in trade account payables of $0.6 million and an increase in other account payables of $1.2 million, partially offset by a decrease in other current assets of $0.8 million.

During the year ended December 31, 2022, operating activities used $29.1 million of net cash, primarily due to a net loss of $28.3 million and by net cash used by changes in our operating assets and liabilities of $4.4 million and non-cash charges of $3.7 million. Non-cash charges for the year ended December 31, 2022, mainly consisted of stock-based compensation expenses of $1.5 million and depreciation and amortization of $2.5 million. Net changes in our operating assets and liabilities for the year ended December 31, 2022, consisted primarily of a decrease in trade account payables of $2.0 million and a decrease in other account payables of $3.3 million, partially offset by a decrease in other current assets of $1.0 million.

Investing Activities

During the year ended December 31, 2023, investment activities used in net cash of $2.0 million, proceeds from withdrawal of short-term deposits of $2.0 million.

During the year ended December 31, 2022, investing activities used in net cash of $2.1 million, mainly consisting of investment in short-term deposits of $13.5 million, partially offset by proceeds from withdrawal of short-term deposits of $11.5 million.

We have invested, and plan to continue to invest, our existing cash in short-term investments in accordance with our investment policy. These investments may include money market funds and investment securities consisting of U.S. Treasury notes, and high quality, marketable debt instruments of corporations and government sponsored enterprises. We use foreign exchange contracts (mainly option and forward contracts) to hedge balance sheet

items from currency exposure. These foreign exchange contracts are not designated as hedging instruments for accounting purposes. In connection with these foreign exchange contracts, we recognize gains or losses that offset the revaluation of the balance sheet items also recorded under financial expenses, net. As of December 31, 2023, we had outstanding foreign exchange contracts in the amount of approximately $4.1 million with a fair value asset of $0.3 million. As of December 31, 2022, we had outstanding foreign exchange contracts in the amount of approximately $4.5 million, with a fair value liability of $55,000.

Financing Activities

During the year ended December 31, 2023, financing activities provided net cash of $3.0 million, mainly consisting of $7.2 million due to issuances of Common Stock under the February 2023 PIPE, net of issuance costs, partially offset by the repayment of long-term debt of $4.3 million under the Hercules Loan Agreement.

During the year ended December 31, 2022, financing activities provided net cash of $0.3 million, mainly consisting of $0.3 million due to issuances of Common Stock under the Sale Agreement.

Contractual Obligations, Commitments and Contingencies

Our contractual obligations and commitments relate primarily to our Hercules Loan Agreement, operating leases and non-cancelable purchase obligations under agreements with various research and development organizations and suppliers in the ordinary course of business. In September 2020, we entered into a lease agreement for new office and laboratory space in Ness Ziona, Israel.

In the normal course of business, we enter into contracts and agreements that contain a variety of representations and warranties and provide for general indemnifications. Our exposure under these agreements is unknown because it involves claims that may be made against us in the future but have not yet been made. To date, we have not paid any claims or been required to defend any action related to our indemnification obligations. However, we may record charges in the future as a result of these indemnification obligations.

In accordance with our certificate of incorporation and bylaws, as well as contractual indemnification agreements, we have potential indemnification obligations to our officers and directors for specified events or occurrences, subject to some limits, while they are serving at our request in such capacities. There have been no claims to date, and we have director and officer insurance that may enable us to recover a portion of any amounts paid for future potential claims.

Government Grants and Related Royalties

The Government of Israel, through the IIA, encourages research and development projects by providing grants. We may receive grants from the IIA at the rates that range from 20% to 50% of the research and development expenses, as prescribed by the research committee of the IIA. Through December 31, 2023, we had received an aggregate of $8.0 million in the form of grants from the IIA. BiomX Ltd was formed as an incubator company as part of the FutuRx incubator, and, until 2017, the majority of its funding was from IIA grants and funding by the incubator, which is supported by the IIA. We continued to apply for and receive IIA grants after we left the incubator. The requirements and restrictions for such grants are found in the Research Law. Under the Research Law, royalties of 3% to 3.5% on the revenue derived from sales of products or services developed in whole or in part using these IIA grants are payable to the Israeli government. We developed both of our platform technologies, at least in part, with funds from these grants, and, accordingly, we would be obligated to pay these royalties on sales of any of our product candidates that achieve regulatory approval.

Below is a description of our obligations in connection with the grants received from the IIA under the Research Law:

Local Manufacturing Obligation

As long as the manufacturing of our product candidates takes place in Israel and no technology funded with IIA grants is sold or out licensed to a non-Israeli entity, the maximum aggregate royalties paid generally would not exceed 100% of the grants made to us, plus annual interest equal to the 12-month SOFR applicable to U.S. dollar deposits, as published on the first business day of each calendar year.

Under the terms of the Research Law, the products may be manufactured outside of Israel by us or by another entity only if prior approval is received from the IIA (such approval is not required for the transfer of up to 10% of the manufacturing capacity in the aggregate, in which case a notice must be provided to the IIA and not be objected to by the IIA within 30 days of such notice).

Know-How Transfer Limitation

The Research Law restricts the ability to transfer know-how funded by the IIA outside of Israel. Transfer of IIA funded know-how outside of Israel requires prior approval of the IIA and may be subject to payments to the IIA, calculated according to formulae provided under the Research Law. The redemption fee is subject to a cap of six times the total amount of the IIA grants, plus interest accrued thereon (i.e. the total liability to the IIA, including accrued interest, multiplied by six). If we wish to transfer IIA funded know-how, the terms for approval will be determined according to the nature of the transaction and the consideration paid to us in connection with such transfer.

Approval of transfer of IIA funded know-how to another Israeli company may be granted only if the recipient abides by the provisions of the Research Law and related regulations, including the restrictions on the transfer of know-how and manufacturing rights outside of Israel.

Change of Control

Any non-Israeli citizen, resident or entity that, among other things, (i) becomes a holder of 5% or more of our share capital or voting rights, (ii) is entitled to appoint our directors or our chief executive officer or (iii) serves as one of our directors or as our chief executive officer (including holders of 25% or more of the voting power, equity or the right to nominate directors in such direct holder, if applicable) is required to notify the IIA and undertake to comply with the rules and regulations applicable to the grant programs of the IIA, including the restrictions on transfer described above.

Approval to manufacture products outside of Israel or consent to the transfer of IIA funded know-how, if requested, is within the discretion of the IIA. Furthermore, the IIA may impose certain conditions on any arrangement under which it permits us to transfer IIA funded know-how or manufacturing out of Israel.

The consideration available to our shareholders in a future transaction involving the transfer outside of Israel of know-how developed with IIA funding (such as a merger or similar transaction) may be reduced by any amounts that we are required to pay to the IIA.

As of December 31, 2023, no sales were generated and the balance of the principal and interest in respect of our commitments for future payments to the IIA totaled approximately $7.9 million, as compared to $6.6 million as of December 31, 2022. As part of funding our current and planned

product development activities, we may submit follow-up grant applications for new grants.

Outlook

We expect our expenses to remain substantially in the same level in connection with our ongoing activities. Our expenses will remain substantial and may also increase as we:

- continue the development of our product candidates;
- complete IND-enabling activities and prepare to initiate clinical trials for our product candidates;
- work to integrate the business of APT;
- initiate additional clinical trials and preclinical studies for product candidates in our pipeline;
- seek to identify and develop or in-license or acquire additional product candidates and technologies;
- seek regulatory approvals for our product candidates that successfully complete clinical trials, if any;
- establish a sales, marketing and distribution infrastructure to commercialize any product candidates for which we may obtain regulatory approval;
- hire and retain additional personnel, such as clinical, quality control, commercial and scientific personnel; and
- expand our infrastructure and facilities to accommodate our growing employee base, including adding equipment and physical infrastructure to support our research and development.

Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern for at least one year until April 3, 2025. We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. If we receive regulatory approval for our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution, depending on where we choose to commercialize.

Until such time, if ever, that we can generate product revenue sufficient to achieve profitability, we expect to finance our cash needs through public or private sales of our equity, including under the ATM Agreement, loans, milestone payments, possibly additional grants from the IIA or other government or non-profit institutions and other outside funding sources. Our ability to raise additional capital in the equity and debt markets is dependent on a number of factors including, but not limited to, market volatility resulting from the, Israel-Hamas War, other armed conflicts such as in Ukraine or other disruptions, and market demand for our securities, which itself is subject to a number of development and business risks and uncertainties, as well as the uncertainty that we would be able to raise such additional capital at a price or on terms that are favorable to the Company. To the extent that we raise additional capital through the sale of equity or convertible debt securities, our stockholders' ownership interests may be materially diluted, and the terms of such securities could include liquidation or other preferences that adversely affect their rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through government and other third-party funding, collaboration agreements, strategic alliances, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market products or product candidates that we would otherwise prefer to develop and market by ourselves. For more information regarding the risks related to our outlook, see "*Risk Factors — Risks Related to Our Business, Technology and Industry.*"

Foreign Exchange Contracts

We entered into forward and option contracts to hedge against the risk of overall changes in future cash flow from payments of salaries and related expenses, as well as other expenses denominated in NIS. As of December 31, 2023 and 2022, we had outstanding foreign exchange contracts in the nominal amount of approximately $4.1 million and $4.5 million, respectively.

Critical Accounting Estimates

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

While our significant accounting policies are described in more detail in note 2 to our consolidated financial statements, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Accrued research and development expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing open contracts and purchase orders, communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in the consolidated financial statements based on facts and circumstances known to us at that time. We periodically confirm the

accuracy of these estimates with the service providers and make adjustments, if necessary. Examples of estimated accrued research and development expenses include fees paid to:

- vendors in connection with preclinical development activities;
- CROs and investigative sites in connection with preclinical and clinical trials; and
- subcontractors in connection with the manufacturing of materials for preclinical and clinical trials.

We measure the expense recognized based on our estimates of the services received and efforts expended pursuant to quotes and contracts with multiple CROs and subcontractors that supply, conduct and manage preclinical studies, human clinical studies and clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of certain milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust the accrual or the amount of prepaid expenses accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in changes in estimates that increase or decrease amounts recognized in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

Stock-Based Compensation

We apply ASC 718-10, “Stock-Based Payment,” which requires the measurement and recognition of compensation expenses for all stock-based payment awards made to employees and directors, including employee stock options under our stock plans based on estimated fair values.

ASC 718-10 requires that we estimate the fair value of equity-based payment awards on the date of grant using an option-pricing model. The fair value of the award is recognized as an expense over the requisite service periods in our Consolidated Statements of Operations. We recognize stock-based award forfeitures as they occur, rather than estimate by applying a forfeiture rate.

We recognize compensation expenses for the fair value of non-employee awards over the requisite service period of each award.

We estimate the fair value of stock options granted as equity awards using a Black-Scholes options pricing model. The option-pricing model requires a number of assumptions, of which the most significant are share price, expected volatility and the expected option term (the time from the grant date until the options are exercised or expire). We determine the fair value per share of the underlying stock by taking into consideration our most recent sales of stock. BiomX Ltd. has historically been a private company and lacks company-specific historical and implied volatility information of its stock. We used an average historical stock price volatility based on a combined weighted average of our historical average volatility and that of a selected peer group of comparable public companies within the biotechnology and pharmaceutical industry that were deemed to be representative of future stock price trends as we do not have a sufficient historical trading history of our Common Stock. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our stock price becomes available. We have historically not paid dividends and has no foreseeable plans to issue dividends. The risk-free interest rate is based on the yield from governmental zero-coupon bonds with an equivalent term. The expected option term is calculated for all stock option grants using the “simplified” method. Changes in the determination of each of the inputs can affect the fair value of the options granted and the results of our operations.

Intangible assets

In-process research and development acquired in a business combination were recognized at fair value as of the acquisition date and subsequently accounted for as indefinite-lived intangible assets until completion or abandonment of the associated research and development efforts.

We accounted for the acquisition of RondinX Ltd. using the acquisition method of accounting, which required us to estimate the fair values of the assets acquired and liabilities assumed. This included acquired in-process research and development and contingent consideration. Adjustments to the fair value of contingent consideration are recorded in earnings. On January 1, 2020, the in-process R&D efforts were completed. The Company had determined the useful life of the R&D assets for three years and began amortizing these assets accordingly in the financial statements. During the year ended on December 31, 2022 we recorded amortization expenses of $1.5 million. As of December 31, 2022, the intangible asset was fully amortized.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company, we are not required to make disclosures under this Item.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Our financial statements and the notes thereto begin on page F-1 of this Annual Report.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Interim Chief Financial Officer (our principal executive officer and principal financial officer, respectively), performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2023. Based on the aforementioned evaluation, our management has concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of December 31, 2023.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting has been 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 in the United States of America.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of our assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles in the United States of America, and that receipts and expenditures are being made only in accordance with authorization of our management and directors; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting on December 31, 2023. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission 2013 framework, in *Internal Control—Integrated Framework*. Based on that assessment under those criteria, management has determined that, as of December 31, 2023, our internal control over financial reporting was effective.

We are exempt from this requirement to provide an attestation report of our independent registered public accounting firm regarding internal control over financial reporting due to our status under the Exchange Act as a non-accelerated filer as of the current time **Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fourth quarter of fiscal year 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Trading Arrangements

During the three months ended December 31, 2023, none of our directors or officers adopted or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement", as each term is defined in Item 408(a) of Regulation S-K.

Ratification of Stock Issuance

On April 2, 2024, our Board of Directors adopted resolutions, or the Resolutions, approving the ratification of the issuance of one share of Common Stock issued in connection with the consummation of the Acquisition pursuant to Section 204 of the Delaware General Corporation Law, or the Ratification. A copy of the Resolutions adopted by our Board of Directors setting forth the information with respect to the Ratification required under Section 204 of the Delaware General Corporation Law is set forth in Exhibit 99.1 to this Annual Report. Any claim that any defective corporate act or putative stock ratified pursuant to the Ratification is void or voidable due to the failure of authorization specified in the Resolutions, or that the Delaware Court of Chancery should declare in its discretion that the Ratification in accordance with Section 204 of the Delaware General Corporation Law not be effective, or be effective only on certain conditions, must be brought within 120 days from the giving of this notice (which is deemed to be given on the date that this Annual Report is filed with the SEC).

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICITIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Set forth below are the names, ages and positions of each of the individuals who serve as our executive officers and member of the Board of Directors, or Board, as of April 3, 2024.

Name	Age	Position
Executive Officers		
Jonathan Solomon	47	Chief Executive Officer and Director
Assaf Oron	49	Chief Business Officer
Marina Wolfson	39	Chief Financial Officer
Avraham Gabay	39	Interim Chief Financial Officer
Dr. Merav Bassan	58	Chief Development Officer
Non-Employee Directors		
Dr. Russell Greig(1)(2)(3)	71	Director and Chairman of the Board of Directors
Jonathan Leff(2)	55	Director
Dr. Alan Moses(2)	74	Director
Gregory Merril (3)	58	Director
Edward Williams(1)	67	Director
Dr. Jesse Goodman(3)	72	Director

(1) Member of the audit committee

(2) Member of the compensation committee

(3) Member of the nominating and corporate governance committee

Executive Officers

Jonathan Solomon has served as the Chief Executive Officer and as a director of the Company since October 2019. Mr. Solomon served as Board member of BiomX Ltd., or BiomX Israel, from February 2016 and also as Chief Executive Officer from February 2017 to October 2019. From July 2007 to December 2015, Mr. Solomon was a co-founder, President, and Chief Executive Officer of ProClara Biosciences Inc. (formerly NeuroPhage Pharmaceuticals Inc.), a biotechnology company pioneering an approach to treating neurodegenerative diseases. Prior to joining ProClara, he served for ten years in a classified military unit of the Israeli Defense Forces. Mr. Solomon holds B.Sc. magna cum laude in Physics and Mathematics from the Hebrew University, an M.Sc. summa cum laude in Electrical Engineering from Tel Aviv University, and an MBA with honors from the Harvard Business School.

We believe that Mr. Solomon's qualifications to sit on our Board include his extensive board and management experience in the biotech industry.

Assaf Oron has served as the Chief Business Officer of the Company since October 2019. Mr. Oron served as Chief Business Officer of BiomX Ltd. from January 2017 to October 2019. Prior to this position, he served in various roles at Evogene Ltd. (Nasdaq:EVGN), an agriculture biotechnology company, which utilizes a proprietary integrated technology infrastructure to enhance seed traits underlying crop productivity, from March 2006 to December 2016, including Executive Vice President of Strategy and Business Development and Executive Vice President of Corporate Development. Prior to joining Evogene, Mr. Oron served as Chief Executive Officer of ChondroSite Ltd., a biotechnology company that develops engineered tissue products in the field of orthopedics and as a senior project manager and strategic consultant at Israeli management consulting company POC Ltd. Mr. Oron holds an M.Sc. in Biology (bioinformatics) and a B.Sc. in Chemistry and Economics, both from Tel Aviv University.

Marina Wolfson has served as the Chief Financial Officer of the Company since April 2022 and is currently on a maternity leave. Ms. Wolfson served in several finance and operations roles in the Company from December 2019 to March 2022. Ms. Wolfson's experience includes working with large pharmaceutical and hi-tech companies, as well as venture capital funds. Prior to joining the Company, Ms. Wolfson worked as Vice President of Finance at BioView Ltd. (TASE:BIOV) from 2010 to 2019 and a senior auditor at Ernst & Young, from 2007 to 2010. Ms. Wolfson is a certified public accountant in Israel and holds a B.A in Economics and Accounting (with honors) and an MBA (with honors, specializing in finance) from Ben-Gurion University.

Avraham Gabay has served as the Company's interim Chief Financial Officer, since the commencement of the maternity leave of Ms. Wolfson, the Company's Chief Financial Officer, in November 2023, and will serve in that role for as long as Ms. Wolfson is on such leave. Prior to his appointment, from 2021 until 2023, Mr. Gabay served as the chief financial officer at Oravax Inc., a biotechnology company focusing on research and development of an oral vaccine. Prior to that, from 2019 until 2021, Mr. Gabay was the chief financial officer at Oramed Pharmaceuticals Inc. (Nasdaq: ORMP), which is developing an oral delivery platform for proteins and focusing on oral insulin. From 2015 to 2019, Mr. Gabay served as a corporate controller at Orcam Technologies Ltd., a company which develops, manufactures and sells a wearable assistive technology device for people who are blind, visually impaired or have reading or other disabilities. From 2014 to 2015, Mr. Gabay provided economic services in the advisory department of KPMG Israel, a certified public accounting firm, and from 2013 to 2014, he worked in the tax department of the law firm, Gornitzky & Co. In addition, Mr. Gabay serves as a director on the board of Nala Digital Ltd., a public company whose shares are listed for trading on the Tel Aviv Stock Exchange. Mr. Gabay holds a bachelor's degree in law and accounting (magna cum-laude) from Tel-Aviv University and is a certified public accountant in Israel and a member of the Israeli Bar Association.

Dr. Merav Bassan has served as the Chief Development Officer of the Company since October 2019. Prior to this position, she served in various development roles at Teva Pharmaceutical Industries Limited between 2005 and 2019, including Vice President, Head of Translational Sciences, Specialty Clinical Development R&D from 2017 to 2019, Vice President, Pain and Global Internal Medicine, Project Leadership, Innovative Product Development, Global IR&D from 2015 to 2017, and Project Champion, Senior Director, Innovative Product Development, Global IR&D from 2009 to 2015. Dr. Bassan holds a B.Sc. in Biology, a M.Sc. in Human Genetics and a Ph.D. in Neurobiology from Tel Aviv University, and she completed a Post-Doctoral Fellowship in Neuroscience at Harvard Medical School at Harvard University.

Directors

The biography of Mr. Solomon is set forth above under the header "Executive Officers." The biographies of our non-employee directors are set forth below:

Dr. Russell Greig has served as a director and chairman of the Board of the Company since October 2019. Dr. Greig has more than 44 years of experience in the pharmaceutical industry, with knowledge and expertise in research and development, business development and commercial operations. He spent the majority of his career at GlaxoSmithKline, or GSK, where he held a number of positions including GSK's President of Pharmaceuticals International from 2003 to 2008 and Senior Vice President Worldwide Business Development. From 2008 to 2010, Dr. Greig was also President of SR One, GSK's corporate venture group. He is currently Chairman of Cardior (Germany), Nucleome Therapeutics (UK) and BiomX (NYSE). In addition, Dr. Greig previously served on the boards of Sanifit (Spain) (acquired by Vifor Pharma AG (SWX: VIFN), Tigenix N.V. (acquired by Takeda Pharmaceutical Company Limited), Ablynx N.V. (acquired by Sanofi, France) and Merus N.V. (Nasdaq: MRUS). He was previously Chairman of Syntaxin Ltd (UK) (acquired by Ipsen), Novagali Pharma S.A. (France) (acquired by Santen Pharmaceutical Co., Ltd.), and Isconova AB (Sweden) (acquired by Novavax, Inc. (Nasdaq: NVAX). He served as acting Chief Executive Officer at Genocea Biosciences (Nasdaq: GNCA) and Isconova AB for an interim period. He was also a member of the Scottish Scientific Advisory Committee, reporting to the First Minister of Scotland.

We believe that Dr. Greig's qualifications to sit on our Board include his extensive board and leadership experience in business development and in drug research and development in the pharmaceutical industry.

Jonathan Leff has served as a director of the Company since March 2024. Mr. Leff is a Partner at Deerfield Management Company, L.P., or Deerfield and Chairman of the Deerfield Institute. He joined Deerfield in 2013 and focuses on venture capital and structured investments in biotechnology and pharmaceuticals. Prior thereto, Mr. Leff served as Managing Director at Warburg Pincus LLC from 2000 to 2012, where he led the firm's investment

efforts in biotechnology and pharmaceuticals. Mr. Leff also previously served as a member of the Executive Committee of the Board of the National Venture Capital Association, or NVCA, and led NVCA's life sciences industry efforts as Chair of NVCA's Medical Innovation and Competitiveness Coalition. He also served on the Emerging Companies Section Board of the Biotechnology Industry Organization. Mr. Leff is involved in the governance of several not-for-profit organizations, including serving as a member of the board of directors of the Spinal Muscular Atrophy Foundation and sitting on the Columbia University Medical Center Board of Advisors. He currently serves on the board of directors of Larimar Therapeutics, Inc., a publicly traded biotechnology company. Mr. Leff also previously served on the boards of several other publicly traded biotechnology and pharmaceutical companies, including ARS Pharmaceuticals, Inc., from 2022 to 2023, Proteon Therapeutics, Inc. from 2017 to 2019, AveXis, Inc. from 2014 to 2017 and Nivalis Therapeutics, Inc. from 2014 to 2016. He currently serves on the boards of several private biopharmaceutical companies and has previously served on the boards of other privately held biopharmaceutical companies. Mr. Leff received his A.B. from Harvard University, MBA from the Stanford University Graduate School of Business and M.S. in Biotechnology from Johns Hopkins University.

We believe that Mr. Leff's qualifications to sit on our Board include his extensive board and leadership experience in capital markets and the pharmaceutical and biotech industries.

Dr. Alan Moses has served as a director of the Company since October 2020. Dr. Moses has been a Board member of Chemomab Therapeutics, Ltd. (Nasdaq: CMMB) since March 2021. Dr. Moses served as the Global Chief Medical Officer of Novo Nordisk A/S from 2013 until his retirement in 2018. Prior to that he served in various roles at Novo Nordisk A/S since 2004, beginning as Associate Vice President of Medical Affairs in the United States. Throughout his career, Dr. Moses has specialized in developing novel therapeutics and diagnostics for diabetes mellitus. He co-founded and directed the Clinical Investigator Training Program at Beth Israel Deaconess-Harvard Medical School-MIT. From 1998 to 2004, Dr. Moses served as Senior Vice President and Chief Medical Officer of the Joslin Diabetes Center with specific responsibility for the Joslin Clinic. He now serves as a member of the Board of Joslin Diabetes Center since December 2021. He also serves as Chairman of the Board of the nonprofit diaTribe Foundation and is a member of the Board of the Greater New England Chapter of the Juvenile Diabetes Research Foundation. Dr. Moses earned his MD from the Washington University School of Medicine in St. Louis, worked for three years at the National Institutes of Health, completed his clinical endocrine/diabetes training at Tufts New England Medical Center, and studied Health Care Strategy at Harvard Business School.

We believe that Dr. Moses's qualifications to sit on our Board include his extensive leadership experience in clinical development in the pharmaceutical industry.

Gregory Merril has served as a director of the Company since March 2024. Mr. Merril founded APT in October 2016, and served as its Chief Executive Officer until October 2023 and served on its board of directors until March 2024. Currently, he lends his expertise to various startups, serving in capacities ranging from advisor to executive director. Mr. Merril served as Chief Executive Officer of Yost Labs, a developer of inertial motion sensors used in fields such as physical rehabilitation and drone navigation, from August 2015 to December 2017. Between 2011 and August 2015, he founded and led Brain Sentry, a company dedicated to developing wearable sensors to detect head impacts risking traumatic brain injury in sports including football, hockey, and lacrosse. From October 2009 to February 2011, he served as chief operating officer of Decision Technologies, which supported the U.S. Navy and the Missile Defense Agency with technology acquisitions and deployments. Earlier, as the founding chief executive officer and chair of Interaction Laboratories from March 2002 to October 2009, Merril worked on patents and products that enhanced physical activity in video games and military simulations. Before this, he was the founding Chief Executive Officer of HT Medical Systems, a company focusing on surgical training simulators, which merged with Immersion Corp (NASDAQ: IMMR) in July 2000. Mr. Merril is credited as inventor with 22 issued patents and holds a B.A. in psychobiology from McDaniel College.

We believe that Mr. Merril's qualifications to sit on our Board include his experience in drug research and development in the pharmaceutical industry.

Edward "Eddie" Williams has served as a director of the Company since October 2023. Mr. Williams has served as a member of the board of directors of BioAtla, Inc. (Nasdaq: BCAB), a publicly traded biotechnology company focusing on oncology, since December 2021. From January 2018 to December 2022, he served as a member of the board of directors of Catalyst Biosciences Inc. (Nasdaq: CBIO, now GYRE), a publicly traded biopharmaceutical company. He also currently serves as director on the non-profit healthcare boards of Boone Memorial Health, and Innovative Hematology, Inc.

From March 2020 to September 2022, Mr. Williams held the positions of Special Advisor to the Chief Executive Officer and Interim Chief Commercial Officer of Ascendis Pharma, Inc. (Nasdaq: ASND). Prior to Ascendis, from 2006 to January 2017, Mr. Williams served as Senior Vice President and General Manager of US BioPharmaceuticals at Novo Nordisk, Inc. (NYSE: NVO), a multinational pharmaceutical and biotech company. Prior to Novo, from 2003 to 2006, Mr. Williams served as Vice President of Sales at the Respiratory and Dermatology Business Unit at Novartis Pharmaceuticals Corporation. Mr. Williams started his career in 1981 at The Upjohn Company (Pharmacia & Upjohn), where he later served as Vice President of Sales until July 2001 and then as Regional Vice President of Sales of Northeast Region post-merger with Searle, from July 2001 until May 2003. Mr. Williams holds a B.S. in Biology and Chemistry from the Marshall University, Huntington, WV, and the Grambling State University, Grambling, LA.

We believe that Mr. Williams's qualifications to sit on our Board include his extensive board and leadership experience, coupled with his successful experiences pre-launch and commercialization of novel compounds in the pharmaceutical industry.

Dr. Jesse Goodman has served as a director of the Company since March 2024. Dr. Goodman has been the director of the Center on Medical Product Access, Safety and Stewardship, and professor of medicine and attending physician in infectious diseases, at Georgetown University since March 2014. Dr. Goodman also is an infectious disease physician at the Washington DC Veterans Affairs and Walter Reed Medical Centers. He serves on the board of directors of GlaxoSmithKline plc, a multinational pharmaceutical company, which he joined in 2016, and chaired that board's science committee until early 2023, and he has served on the board of directors of Intellia Therapeutics, Inc., a publicly traded biotechnology company, since October 2018. Prior to the Merger Agreement, Dr. Goodman served on the board of directors of APT. He also has served as a president (2015 to 2020) and member (2015 to present) of the board of trustees of the United States Pharmacopeia Convention, Inc. From 2009 until February 2014, Dr. Goodman served as the chief scientist of the FDA. Dr. Goodman also served as deputy commissioner for science and public health at the FDA from 2009 through 2012. Prior to that, Dr. Goodman was the director of the FDA's Center for Biologics Evaluation and Research from 2003 to 2009 and a senior advisor to the FDA commissioner from 1998 through 2000. Prior to his government service, Dr. Goodman was professor of medicine and chief of infectious diseases at the University of Minnesota. Dr. Goodman has served on numerous advisory boards and committees for national and international health care organizations, including the CDC, the National Institute of Health, the World Health Organization and the Coalition on Epidemic Preparedness Innovations. Dr. Goodman received a B.S. in biology from Harvard College, a master's in public health from the University of Minnesota and an M.D. from the Albert Einstein College of Medicine, and did his residency and fellowship training in medicine, infectious diseases and oncology at the Hospital of the University of Pennsylvania and at the University of California in Los Angeles, where he was also chief medical resident. He has been elected to the Institute of Medicine of the National Academy of Sciences.

We believe that Dr. Goodman's qualifications to sit on our Board include his extensive board and leadership experience in clinical development in the pharmaceutical industry and regulation.

Code of Business Conduct and Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all directors, officers and employees. The Code of Business Conduct and Ethics is available on our website at www.biomx.com. If we make any substantive amendments to the Code of Business Conduct and Ethics or grants any waiver from a provision of the Code to any director or executive officer, we will promptly disclose the nature of the amendment or waiver on our website.

Board Committees and Corporate Governance

Board Composition and Leadership Structure

As of April 3, 2024, the Board is comprised of seven members. The Board has a flexible policy with respect to the combination or separation of the offices of Chairman of the Board and Chief Executive Officer. Currently, Dr. Russell Greig serves as our independent Chairman, and Mr. Jonathan Solomon serves as our Chief Executive Officer. The Board believes that by having separate roles, the Chief Executive Officer is able to focus on the day-to-day business and affairs of the Company and the Chairman is able to focus on key strategic issues, board leadership and communication. While the Board believes this leadership structure is currently in the best interests of the Company and its stockholders, the Board also recognizes that future circumstances could lead it to combine these roles.

Board Committees

The Board has established three standing committees: the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee, each of which is composed solely of independent directors, and is described more fully below. Each of the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee operates pursuant to a written charter and each committee reviews and assesses the adequacy of its charter and submits its charter to the Board for approval. The charters for the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are all available on our website, www.biomx.com.

Audit Committee

Our Audit Committee engages the Company's independent accountants: reviews their independence and performance; reviews the Company's accounting and financial reporting processes and the integrity of its financial statements; reviews the audits of the Company's financial statements and the appointment, compensation, qualifications, independence and performance of the Company's independent auditors; reviews the Company's compliance with legal and reviews regulatory requirements; and reviews the performance of the Company's internal audit function and internal control over financial reporting.

The members of the Audit Committee are Dr. Russell Greig and Edward Williams, each of whom is an independent director under NYSE American's listing standards and satisfies the additional independence requirements of Rule 10A-3 of the Exchange Act. Dr. Russell Greig is the Chairperson of the Audit Committee. The Audit Committee does not currently have as a member an "audit committee financial expert," as defined under the rules and regulations of the SEC.

Compensation Committee

Our Compensation Committee reviews annually the Company's corporate performance goals and objectives relevant to the Chief Executive Officer's compensation, evaluates the Chief Executive Officer's performance in light of such goals and objectives, determines and approves the Chief Executive Office's compensation level based on this evaluation; makes recommendations to the Board regarding approval, disapproval, modification, or termination of existing or proposed employee benefit plans; makes recommendations to the Board with respect to the compensation of our executive officers, other than the Chief Executive Officer, and directors; and administers the Company's incentive-compensation plans and equity-based plans, as well as the Company's clawback policy. The Compensation Committee has the authority to delegate any of its responsibilities to subcommittees as it may deem appropriate in its sole discretion. The Chief Executive Officer of the Company may not be present during voting or deliberations of the Compensation Committee with respect to his compensation. The Company's executive officers do not play a role in suggesting their own salaries.

The members of the Compensation Committee are Dr. Alan Moses, Mr. Jonathan Leff and Dr. Russell Greig, each of whom is an independent director under NYSE American's listing standards. Dr. Alan Moses is the Chairperson of the Compensation Committee.

The Compensation Committee retained Aon Solutions UK Limited or Aon, an independent compensation consultant, to provide advice with respect to option exchange and repricing of options under the Chardan Healthcare Acquisition Corp. 2019 Equity Incentive Plan, or the 2019 Plan, and the Company's 2015 Employee Stock Option Plan , or the 2015 Plan, respectively. Aon's primary responsibilities for the fiscal year ended December 31, 2023 included identifying the methodology of the repricing and option exchange and providing recommendations to the Compensation Committee, which the Compensation Committee considered among the factors it reviewed when determining such repricing and exchange of options.

Nominating and Governance Committee

Our Nominating and Corporate Governance Committee is responsible for overseeing the selection of persons to be nominated to serve on the Board. Specifically, the Nominating and Corporate Governance Committee makes recommendations to the Board regarding the size and composition of the Board, establishes procedures for the director nomination process and screens and recommends candidates for election to the Board. On an annual basis, the Nominating and Corporate Governance Committee recommends for approval by the Board certain desired qualifications and characteristics for Board membership. Additionally, the Nominating and Corporate Governance Committee establishes and oversees the annual assessment of the performance of the Board as a whole and its individual members. The Nominating and Corporate Governance Committee will consider a number of qualifications relating to management and leadership experience, background and integrity and professionalism in evaluating a person's candidacy for membership on the Board. Although the Nominating and Corporate Governance Committee does not have a formal policy with regard to the consideration of diversity identifying nominees, the Nominating and Corporate Governance Committee may require certain skills or attributes, such as financial or accounting experience, to meet specific needs of the Board that arise from time to time and will also consider the overall experience and makeup of its members to obtain a broad and diverse mix of Board members. The Nominating and Corporate Governance Committee does not distinguish among nominees recommended by stockholders and other persons.

The members of the Nominating and Corporate Governance Committee are Dr. Russell Greig, Dr. Jesse Goodman and Mr. Gregory Merril, each

of whom is an independent director under NYSE American's listing standards. Dr. Russell Greig is the Chairperson of the Nominating and Corporate Governance Committee.

ITEM 11. EXECUTIVE COMPENSATION

Summary Compensation Table

The following table sets forth the total compensation paid or accrued during the last two fiscal years with respect to (i) our Chief Executive Officer, (ii) our two other most highly compensated executive officers, who each earned more than $100,000 during the fiscal year ended December 31, 2023, and were serving as executive officers as of such date.

Name and Principal Position	Year	Salary ($)[1]	Bonus ($)[1]	Option Awards[2] ($)[2]	All Other Compensation ($)[1][3]	Total ($)[1]
Jonathan Solomon	2023	412,135	201,234	404,174	100,998	1,118,541
Chief Executive Officer	2022	424,581	-	512,974	103,987	1,041,542
Marina Wolfson	2023	214,727	76,209	90,742	46,578	428,256
Chief Financial Officer	2022	231,414	-	116,827	48,002	396,243
Dr. Merav Bassan	2023	264,105	101,145	153,218	72,463	590,931
Chief Development Officer	2022	280,213	-	206,332	76,373	562,948

(1) All payments were originally made in NIS and were translated into USD using the annual average USD/NIS exchange rate for each fiscal year.

(2) Amounts in this column represent the grant date fair value of the option awards as computed in accordance with ASC 718, not including any estimates of forfeitures related to service-based vesting conditions. See note 12.B. to our Consolidated Financial Statements for the year ended December 31, 2023 for a discussion of assumptions made by the Company in determining the grant date fair value of our option awards for the fiscal years ended December 31, 2023 and 2022. Note that the amounts reported in this column reflect the accounting cost for these stock options and do not reflect the actual economic value that may be realized by the non-employee directors upon the vesting of the stock options, the exercise of the stock options, or the sale of the Common Stock underlying such stock options.

(3) Amounts in this column represent additional payments for welfare benefits, disability insurance and other customary or mandatory social benefits to employees in Israel.

Narrative Disclosure to the Summary Compensation Table

Option Awards

Prior to the Business Combination, option awards were granted to our named executive officers under the 2015 Plan. Option awards granted to our named executive officers after the closing of the Business Combination are granted pursuant to the 2019 Plan. In each case, one fourth of the options vest and become exercisable on the first anniversary of the grant date, and the remainder of the options vest and become exercisable in 12 equal quarterly instalments, subject to the named executive officer's continued employment; provided that the options will vest and become exercisable in the event the named executive officer is terminated within the twelve (12) month period following the occurrence of a Change in Control (as defined in the applicable grant agreement) as a result of an involuntary termination without Cause (as defined in the applicable grant agreement) or a voluntary termination with Good Reason (as defined in the applicable grant agreement). Subject to the terms of any employment agreement, the unexercised portion of these awards is generally forfeited by a participant on the date his or her employment is terminated other than due to death or disability. In the event of death or disability, the options become fully exercisable and remain exercisable for a period specified in the applicable award agreement.

Bonus Awards

We have an annual corporate and individual goal-setting and review process for our named executive officers that is the basis for the determination of potential annual bonuses. Each of our named executive officers is eligible for annual performance-based bonuses of up to a specific percentage of their salary, ranging from 40% to 50% subject to approval by the Board or the Compensation Committee. The performance-based bonus is tied to a set of specified corporate and/or individual goals and objectives reviewed and approved by the Board, such as clinical and development milestones, meeting budget and strategic goals, and we conduct an annual performance review to determine the attainment of such goals and objectives. Our management may propose bonus awards to the Board primarily based on such review process. The Compensation Committee makes the final determination of the achievement of both the specified corporate and strategic objectives and the eligibility requirements for and the amount of such bonus awards and recommends a bonus award payout to the Board for approval. For fiscal year 2023, bonuses were accrued based on advancing or development plans, the satisfaction of certain product candidate development milestones and strategic objectives.

Employment Agreements

Below are descriptions of our employment agreements with our named executive officers.

Jonathan Solomon

Pursuant to an employment agreement dated February 1, 2016, by and between BiomX Israel and Mr. Solomon, as the Chief Executive Officer of BiomX Israel, Mr. Solomon is entitled to a base salary of NIS 64,000, or approximately $19,500, per month, and an additional gross payment of NIS 16,000, or approximately $4,900, per month for up to 40 hours per month worked outside of normal business hours and normal business days (together with the base salary, Mr. Solomon's Salary). Starting April 1, 2023, Mr. Solomon is entitled to a base salary of NIS 100,000, or approximately $27,778, per month, and overtime payment of NIS 25,000 or approximately $6,944, per month.

BiomX Israel also makes customary contributions on Mr. Solomon's behalf to a pension fund or a managers insurance company, at Mr. Solomon's election, in an amount equal to 8.33% of his Salary, allocated to a fund for severance pay, and an additional amount equal to 5.00% of the Salary in case Mr. Solomon is insured through a managers insurance policy, or 6.50% of Mr. Solomon's Salary in case Mr. Solomon is insured through a pension fund, which shall be allocated to a provident fund or pension plan. In case Mr. Solomon chooses to allocate his pension payments to a managers insurance policy (and not a pension fund), the Company shall also insure him under a work disability insurance policy at the rate required to insure 100% of Mr. Solomon's Salary and for this purpose will contribute an amount of up to 2.50% of Mr. Solomon's Salary insured in such insurance policy for disability insurance in a policy and/or insurance company. These payments are intended to be in lieu of statutory severance pay that Mr. Solomon would otherwise be entitled to receive from BiomX Israel in accordance with Severance Pay Law 5723-1963, or the Severance Pay Law. BiomX Israel also contributes 7.50% of Mr. Solomon's monthly salary to a recognized educational fund. BiomX Israel also reimburses Mr. Solomon for automobile

maintenance and transportation expenses of NIS 2,000, or $556 per month. Mr. Solomon is also entitled to non-statutory 12 months severance (including social benefits), upon either (i) resignation with a good reason, or (ii) termination without cause (as the terms good reason and cause would be defined by the parties, consistent with our past practice), provided that Mr. Solomon waives all claims and continues to comply with the other terms of his employment agreement.

Marina Wolfson

Pursuant to an employment agreement dated December 1, 2019, by and between BiomX Israel and Ms. Wolfson, she serves as our Chief Financial Officer. Ms. Wolfson is entitled to a base salary of NIS 39,600, or approximately $11,400, per month, and an additional gross payment of NIS 7,400, or approximately $2,130, per month for up to 40 hours per month worked outside of normal business hours and normal business days (together with the base salary, Ms. Wolfson's Salary. Starting May 1, 2020, Ms. Wolfson's base salary was NIS 40,000 or approximately $11,458, per month, and an additional gross payment of NIS 10,000 or approximately $2,865, per month. Starting April 1, 2023, Ms. Wolfson's base salary is NIS 54,080 or approximately $15,022, per month, and an additional gross payment of NIS 13,520 or approximately $3,756, per month.

BiomX Israel also makes customary contributions on Ms. Wolfson's behalf to a pension fund or a managers insurance company, at Ms. Wolfson's election, in an amount equal to 8.33% of Ms. Wolfson's Salary, allocated to a fund for severance pay, and an additional amount equal to 5.00% of Ms. Wolfson's Salary in case Ms. Wolfson is insured through a managers insurance policy, or 6.50% of Ms. Wolfson's Salary in case Ms. Wolfson is insured through a pension fund, which shall be allocated to a provident fund or pension plan. In case Ms. Wolfson chooses to allocate her pension payments to a managers insurance policy (and not a pension fund), the Company shall also insure her under a work disability insurance policy at the rate required to insure 75% of Ms. Wolfson's Salary and for this purpose will contribute an amount of up to 2.50% of Ms. Wolfson's Salary insured in such insurance policy for disability insurance in a policy and/or insurance company. These payments are in lieu of statutory severance pay that Ms. Wolfson would otherwise be entitled to receive from BiomX Israel in accordance with the Severance Law. BiomX Israel also contributes 7.50% of Ms. Wolfson's monthly Salary (not to exceed NIS 15,712, or approximately $4,364) to a recognized educational fund. The Company reimburses Ms. Wolfson for automobile maintenance and transportation expenses of NIS 2,500, or approximately $694, per month. Ms. Wolfson is also entitled to non-statutory 9 months severance (including social benefits), upon either (i) resignation with a good reason, or (ii) termination without cause (as the terms good reason and cause would be defined by the parties, consistent with our past practice), provided that Ms. Wolfson waives all claims and continues to comply with the other terms of his employment agreement.

Dr. Merav Bassan

Pursuant to an employment agreement dated August 26, 2019, by and between BiomX Israel and Dr. Bassan, as the Chief Development Officer of BiomX Israel, Dr. Bassan is entitled to a base salary of NIS 56,000, or approximately $17,230, per month, and an additional gross payment of NIS 14,000, or approximately $4,307, per month for up to 40 hours per month worked outside of normal business hours and normal business days (together with the base salary, Dr. Bassan's Salary. Starting April 1, 2023, Dr. Bassan is entitled to a base salary of NIS 62,800, or approximately $17,444, per month, and an additional gross payment of NIS 15,700 or approximately $4,361, per month.

BiomX Israel also makes customary contributions on Dr. Bassan's behalf to a pension fund or a managers insurance company, at Dr. Bassan's election, in an amount equal to 8.33% of Dr. Bassan's Salary, allocated to a fund for severance pay, and an additional amount equal to 7.30% of Dr. Bassan's Salary in case Dr. Bassan is insured through a managers insurance policy, or 6.50% of Dr. Bassan's Salary in case Dr. Bassan is insured through a pension fund, which shall be allocated to a provident fund or pension plan. In case Dr. Bassan chooses to allocate her pension payments to a managers insurance policy (and not a pension fund), the Company shall also insure her under a work disability insurance policy at the rate required to insure 75% of Dr. Bassan's Salary and for this purpose will contribute an amount of up to 2.50% of the Salary insured in such insurance policy for disability insurance in a policy and/or insurance company. These payments are in lieu of statutory severance pay that Dr. Bassan would otherwise be entitled to receive from BiomX Israel in accordance with the Severance Law. BiomX Israel also contributes 7.50% of Dr. Bassan's monthly Salary to a recognized educational fund. The Company reimburses Dr. Bassan for automobile maintenance and transportation expenses of NIS 2,500, or approximately $694, per month. Dr. Bassan is also entitled to non-statutory 9 months severance (including social benefits), upon either (i) resignation with a good reason, or (ii) termination without cause (as the terms good reason and cause would be defined by the parties, consistent with our past practice), provided that Dr. Bassan waives all claims and continues to comply with the other terms of her employment agreement.

Outstanding Equity Awards at 2023 Fiscal Year-End

The following table provides information regarding equity awards held by the named executive officers that were outstanding as of December 31, 2023:

	Option Awards				
Name	**Grant Date**	**Number of Securities Underlying Unexercised Options Exercisable (1) (#)**	**Number of Securities Underlying Unexercised Options Unexercisable (1) (#)**	**Option Exercise Price ($)**	**Option Expiration Date**
Jonathan Solomon	11/13/2016	167,434	-	0.54	01/07/2027
	03/26/2017 (2)	182,133	-	0.275	03/26/2027
	05/22/2018 (2)	201,718	-	0.275	05/21/2028
	03/29/2019 (2)	284,701	-	0.275	03/29/2029
	03/25/2020 (3)	35,527	2,368	0.275	03/25/2030
	03/30/2021 (3)	27,500	12,500	0.275	03/30/2031
	03/29/2022 (3)	64,063	82,366	0.275	03/29/2032
	08/22/2022	31,250	68,750	0.66	08/22/2032
	03/01/2023		410,000	0.4	03/01/2033
Dr. Merav Bassan	10/10/2019 (2)	189,997	-	0.275	10/10/2029
	03/30/2021 (3)	8,593	3,907	0.275	03/30/2031
	03/29/2022 (3)	31,250	40,179	0.275	03/29/2032

	08/22/2022	23,438	51,562	0.66	08/22/2032
	03/01/2023	-	100,000	0.4	03/01/2033
Marina Wolfson	03/25/2020 (3)	8,882	592	0.275	03/25/230
	03/30/2021 (3)	6,017	2,733	0.275	03/30/2031
	03/29/2022 (3)	15,625	20,090	0.275	03/29/2032
	08/22/2022	23,438	51,562	0.66	08/22/2032
	03/01/2023	-	100,000	0.4	03/01/2033
	29/10/2023	-	59,800	0.275	10/29/2033

(1) Unless otherwise indicated, options vest and become exercisable as follows: 25% of the options on the first anniversary of the "vesting commencement date" (as defined in the applicable notice of option grant) and, thereafter, in 12 equal quarterly installments of 6.25% each.

(2) On October 29, 2023, the Board of Directors approved a reduction in the exercise price of each outstanding option to purchase shares of the Company's Common Stock currently held by employees of the Company with an original exercise price above $0.69 per share granted under the 2015 Plan to $0.275 per share. Other than the exercise price, no other terms of grant of the repriced options were changed; however, the options may not be exercised until one year after the repricing date.

(3) On November 9, 2023, the Company filed with the SEC a Tender Offer Statement defining the terms and conditions of a one-time voluntary stock option exchange of certain eligible options for its employees, or the Option Exchange granted under the 2019 Plan. The Company offered to exchange certain out-of-the-money stock options for new stock options at an exchange ratio of between 1.4 and 3.8 surrendered options for one new option exercisable for shares of common stock with a lower exercise price. On December 11, 2023, the completion date of the Option Exchange, the stock options were tendered by eligible employees, and the Company granted new options at an exercise price of $0.275.

Compensation of Directors

We maintain a non-employee director compensation policy, pursuant to which each non-employee director receives an annual retainer of $35,000. In addition, our non-employee directors receive the following cash compensation for board services, as applicable:

- the chairman of the Board receives an annual retainer of $100,000 (inclusive of annual committee chairmanship and membership);

- each member of our Audit, Compensation and Nominating and Corporate Governance Committees, other than the chairperson, receives an additional annual retainer of $7,500, $5,000 and $4,000, respectively; and

- each chairperson of our Audit, Compensation and Nominating and Corporate Governance Committees receives an additional annual retainer of $15,000, $10,000 and $8,000, respectively.

We pay all amounts in quarterly installments. We also reimburse each of our directors for their reasonable travel, lodging and other out-of-pocket expenses incurred relating to their attendance at Board and committee meetings.

Each non-employee director also receives an annual award of options to purchase our Common Stock. One-fourth of each Annual Option Award vests on the first anniversary of the date of grant, and the remainder of the annual option award vests in 12 equal quarterly installments, subject to such director's continued service on the Board. The Company's policy is to grant options based, among other things, on the recommendations of a compensation consultant. In 2023, the Company granted 41,000 options to each non-employee director and 82,000 to the Chairman of the Board.

The following table sets forth information concerning compensation accrued or paid to our independent, non-employee directors during the year ended December 31, 2023 for their service on our Board. Mr. Jonathan Solomon, a director who is also our employee, received no additional compensation for his service as a director and is not set forth in the table below:

Name	Fees earned or paid in cash ($)	Option Awards[(2)(3)]	All other compensation	Total ($)
Dr. Russell Greig	100,500	61,077	-	161,577
Michael Dambach[(1)]	27,205	2,449	-	29,654
Jason Marks[(1)]	25,605	2,449	-	28,054
Dr. Alan Moses	47,560	33,873	-	81,433
Edward L. Williams	7,704	1,085	-	8,789
Lynne Sullivan[(1)]	54,000	30,538	-	84,538
	262,574	131,471	-	394,045

(1) Effective as of March 15, 2024, the director resigned and no longer serves on the Board

(2) Amounts in this column represent the grant date fair value of the option awards as computed in accordance with ASC 718, not including any estimates of forfeitures related to service-based vesting conditions. See note 12.B. of the notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2023 for a discussion of assumptions made by the Company in determining the grant date fair value of our option awards for the fiscal years ended December 31, 2022 and 2023. Note that the amounts reported in this column reflect the accounting cost for these stock options and do not reflect the actual economic value that may be realized by the non-employee directors upon the vesting of the stock options, the exercise of the stock options, or the sale of the Common Stock underlying such stock options.

(3) As of December 31, 2023, we had outstanding grants to our non-executive directors aggregating 493,800 options of which 134,675 were exercisable or vested, as the case may be, as follows:

Name	Total of options granted	Total of options exercisable and vested
Russell Greig	185,400	68,839

Michael Dambach	41,000	-
Jason Marks	41,000	-
Dr. Alan Moses	92,700	31,418
Edward L. Williams	41,000	-
Lynne Sullivan	92,700	34,418
Total	493,800	134,675

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

Securities Authorized for Issuance Under Equity Compensation Plans

We have two equity incentive plans, the 2015 Plan, and the 2019 Plan. Although no shares of our Common Stock are available for future issuance under the 2015 Plan, the 2015 Plan will continue to govern outstanding awards granted thereunder. As of December 31, 2023, options to purchase 2,055,836 shares of our Common Stock remained outstanding under the 2015 Plan.

The 2019 Plan was adopted by the Board of Directors and approved by our stockholders in connection with the Business Combination. As of December 31, 2023, there were 1,011,104 shares of our Common Stock available for issuance under the 2019 Plan. The aggregate number of shares of our Common Stock available for issuance pursuant to the 2019 Plan automatically increases on January 1 of each year, for a period of not more than ten years, commencing on January 1, 2020 and ending on (and including) January 1, 2029, in an amount equal to 4% of the total number of shares of Common Stock outstanding on December 31 of the preceding calendar year. Accordingly, on January 1, 2024, 1,839,197 additional shares of our Common Stock were made available for issuance pursuant to the 2019 Plan.

For additional information regarding the 2015 Plan and the 2019 Plan, as of December 31, 2023, please see Part II – Item 8 – Financial Statements and Supplemental Data – Notes to consolidated financial statements – note 12B – Stock-Based Compensation.

	Equity Compensation Plan Information December 31, 2023		
Plan category	**Number of securities to be issued upon exercise of outstanding options and restricted stock (a)**	**Weighted-average exercise price of outstanding options and restricted stock (b)**	**Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)**
Equity compensation plans approved by security holders	3,224,871	0.68	1,011,104
Equity compensation plans not approved by security holders	2,055,840	0.32	-
Total	5,280,711	0.54	1,011,104

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information regarding the beneficial ownership of our Common Stock as of March 28, 2024 (except as otherwise indicated) based on information obtained from the persons named below, with respect to the beneficial ownership of our Common Stock, by (i) each person known by us to be the beneficial owner of more than 5% of our outstanding Common Stock; (ii) each of our named executive officers and directors; and (iii) all our executive officers and directors as a group. Information with respect to beneficial ownership is based on information furnished to us by each director, executive officer or stockholder who holds more than 5% of our outstanding Common Stock, and Schedules 13G or 13D filed with the SEC, as the case may be, and includes shares of our Common Stock which each beneficial owner has the right to acquire within 60 days of March 28, 2024. Unless otherwise indicated, we believe that all persons named in the table have sole voting and investment power with respect to all Common Stock beneficially owned by them. We have based our calculation of beneficial ownership on 55,220,077 shares of our Common Stock outstanding as of March 28, 2024.

Name and Address of Beneficial Owner[1]	**Amount and Nature of Beneficial Ownership**	**Percent of Class**
OrbiMed Israel GP Ltd. [2] 89 Medinat Hayehudim St. Building E Herzliya 4614001 Israel	12,577,821	19.9%
Cystic Fibrosis Foundation [3] 4550 Montgomery Ave. Suite 1100N Bethesda, MD 20814	9,330,580	15.6%
Nimble Ventures, LLC [4] 1 Letterman Drive, Building A, Suite 4900, San Francisco, CA 94129 [2]	4,598,189	8.3%
Deerfield Healthcare Innovations Fund II, L.P. [5] 345 Park Avenue South, 12th Floor, New York, New York 10010	3,055,049	5.5%
Deerfield Private Design Fund V, L.P. [6] 345 Park Avenue South, 12th Floor, New York, New York 10010	3,055,049	5.5%

AMR Action Fund, L.P. [7]		
225 Franklin Street, Suite 1750, Boston, MA 02110	3,054,870	5.5%
Telmina Limited [8]		
34 Rue de l'athenee, PO Box 393, 1211 Geneva 12, Switzerland	2,839,714	5.1%
Directors and Named Executive Officers		
Jonathan Solomon[9]	1,167,096	2.1%
Marina Wolfson [10]	98,272	*
Dr. Merav Bassan[11]	292,900	*
Dr. Russell Greig[12]	102,365	*
Dr. Jesse Goodman	-	-
Jonathan Leff	-	-
Gregory Merril	-	-
Dr. Alan Moses[13]	54,650	*
Edward L. Williams	-	-
All directors and executive officers as a group (11 persons)	2,027,633	**3.7%**

* Less than 1%.

(1) Unless otherwise indicated, the business address of each of the individuals is c/o BiomX Inc., 22 Einstein St., 4 th Floor, Ness Ziona 7414003, Israel.

(2) This stockholder, together with its affiliates and any other persons acting as a group together with the holder or any of the holder's affiliated, including OrbiMed Israel BioFund GP Limited Partnership, Carl L. Gordon and Erez Chimovits beneficially own 4,517,589 shares of Common Stock and pre-funded warrants to acquire up to 8,060,232 shares of Common Stock. Excludes (x) 4,327 Series X Non-Voting Convertible Preferred Stock, (y) 290,781 Warrants and (y) 1,220,176 Pre-Funded Warrants, and (z) 2,538,500 warrants to purchase Shares. The Warrants and Pre-Funded Warrants each contain an issuance limitation that prohibits the holder from exercising such Warrants or Pre-Funded Warrants to the extent that after giving effect to such issuance after exercise, the holder (together with the holder's affiliates and any other persons acting as a group together with the holder or any of the holder's affiliated, including OrbiMed Israel BioFund GP Limited Partnership, Carl L. Gordon and Erez Chimovits) would beneficially own in excess of 19.9% of the Shares outstanding immediately after giving effect to the issuance of the Shares upon exercise of the warrants, or the Beneficial Ownership Limitation. Each share of Series X Preferred Stock is automatically convertible into 1,000 Shares following approval by the Issuer's stockholders of such conversion, subject to the Beneficial Ownership Limitation. Based on information contained in the Schedule 13D/A filed with the SEC on March 19, 2024 and on the Company's records.

(3) Consists of (i) 4,552,315 shares of Common Stock and (ii) 4,778,265 shares of Common Stock issuable upon exercise of a warrant exercisable within 60 days. Excludes (i) 21,635 shares of Series X Non-Voting Convertible Preferred Stock, and (ii) 10,817,500 shares of common stock issuable upon exercise of a warrant, as the Series X Preferred Stock and such warrant will only become convertible or exercisable, as applicable, following approval by the Company's stockholders. Each share of Series X Preferred Stock is convertible into 1,000 shares of common stock following approval by the Company's stockholders of such conversion, subject to a beneficial ownership limitation. Based solely on information contained in a Schedule 13G filed with the SEC on March 26, 2024 and on the Company's records.

(4) Consists of (i) 4,550,000 shares of Common Stock and (ii) warrants to acquire up to 552,041 shares of Common Stock, which contain an issuance limitation that prohibits the holder from exercising the Pre-Funded Warrants to the extent that after giving effect to such issuance after exercise, the holder (together with the holder's affiliates and any other persons acting as a group together with the holder or any of the holder's affiliated) would beneficially own in excess of 9.99% of the shares of common stock outstanding immediately after giving effect to the issuance of the shares of common stock issuance upon exercise of the warrants. John H. Burbank III is the control person of Nimble Ventures and, in such capacity, may be deemed to indirectly beneficially own the Shares that Nimble Ventures directly beneficially owns. Based on information contained in the Schedule 13G filed with the SEC on June 23, 2023 and on the Company's records.

(5) Does not include (i) an aggregate of 53,840,000 shares of Common Stock underlying 53,840 shares of Series X Preferred Stock, which will become convertible into Common Stock (subject to a beneficial ownership limitation), if at all, upon the occurrence of certain conditions, or (ii) an aggregate of 20,897,175 shares of Common Stock underlying warrants that will become exercisable for Common Stock (subject to a beneficial ownership limitation), if at all, upon the occurrence of certain conditions. Based solely on information contained in a Schedule 13D filed with the SEC on March 22, 2024 and on the Company's records.

(6) Does not include (i) an aggregate of 53,840,000 shares of Common Stock underlying 53,840 shares of Series X Preferred Stock, which will become convertible into Common Stock (subject to a beneficial ownership limitation), if at all, upon the occurrence of certain conditions, or (ii) an aggregate of 20,897,175 shares of Common Stock underlying warrants that will become exercisable for Common Stock (subject to a beneficial ownership limitation), if at all, upon the occurrence of certain conditions. Based solely on information contained in a Schedule 13D filed with the SEC on March 22, 2024 and on the Company's records.

(7) Does not include (i) an aggregate of 42,337,000 shares of Common Stock underlying 42,337 shares of Series X Preferred Stock, which will become convertible into Common Stock (subject to a beneficial ownership limitation), if at all, upon the occurrence of certain conditions, or (ii) an aggregate of 15,145,647 shares of Common Stock underlying warrants that will become exercisable for Common Stock (subject to a beneficial ownership limitation), if at all, upon the occurrence of certain conditions. Based solely on information contained in a Schedule 13G filed with the SEC on March 25, 2024 and on the Company's records.

(8) Consists of 2,839,714 shares of Common Stock. Based solely on information contained in a Schedule 13G filed with the SEC on September 29, 2023 and on the Company's records.

(9) Consists of 25,000 shares of Common Stock, 25,000 warrants (entitling the holder to acquire up to 18,750 shares of Common Stock), 1,105,444 options that are exercisable and 17,902 additional options that will become exercisable within 60 days of March 28, 2024.

(10) Consists of 3,750 shares of Common Stock, 3,750 warrants (entitling the holder to acquire up to 2,813 shares of Common Stock), 84,242 options that are exercisable and 7,467 additional options that will become exercisable within 60 days of March 28, 2024.

(11) Consists of 282,966 options that are exercisable and 9,934 additional options that will become exercisable within 60 days of March 28, 2024.

(12) Consists of 3,750 shares of Common Stock, 3,750 warrants (entitling the holder to acquire up to 2,813 shares of Common Stock), 91,339 options that are exercisable and 4,463 additional options that will become exercisable within 60 days of March 28, 2024.

(13) Consists of 5,000 shares of Common Stock, 5,000 warrants (entitling the holder to acquire up to 3,750 shares of Common Stock), 42,668 options that are exercisable and 3,232 additional options that will become exercisable within 60 days of March 28, 2024.

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

Director Independence

The NYSE American requires that a majority of the Board be composed of "independent directors," which is defined generally as a person other than an officer or employee of the Company or its subsidiaries or any other individual having a relationship that, as determined by the Board, would interfere with the exercise of his or her objective judgment and will meet the required standards for independence, as established by the applicable rules and regulations of the NYSE American and the SEC.

Dr. Russell Greig, Dr. Alan Moses, Mr. Edward L. Williams, Mr. Jonathan Leff, Dr. Jesse Goodman and Mr. Gregory Merril are our independent directors.

At least annually, the Board evaluates all relationships between us and each director considering relevant facts and circumstances for the purposes of determining whether a material relationship exists that might signal a potential conflict of interest or otherwise interfere with such director's ability to satisfy his or her responsibilities as an independent director. Based on this evaluation, our Board will make an annual determination of whether each director is independent within the meaning of NYSE American and the SEC independence standards.

Policies and Procedures Regarding Transactions with Related Parties

Our Related-Person Transactions Policy requires us to avoid, wherever possible, all related party transactions that could result in actual or potential conflicts of interests, except under guidelines approved by the Board (or the Audit Committee). For as long as the Company qualifies as a "smaller reporting company" as defined under Rule 12b-2 under the Exchange Act, a related-person transaction is defined under our Related-Person Transactions Policy as a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any Related Person (as defined in the policy) are, were or will be participants in which the amount involved exceeds the lesser of $120,000 or one percent of the average of the Company's total assets at year-end for the last two completed fiscal years, and in which any Related Person had or will have a direct or indirect material interest. If the Company ceases to be a smaller reporting company, a related-person transaction will be defined as a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which the Company and any Related Person are, were or will be participants in which the amount involved exceeds $120,000, and in which any Related Person had or will have a direct or indirect material interest. Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related-person transactions under this policy.

In the event that the Company proposes to enter into, or materially amend, a related-person transaction, management of the Company shall present such related-person transaction to the Audit Committee for review, consideration and approval or ratification. The presentation must include, to the extent reasonably available, a description of (a) all of the parties thereto, (b) the interests, direct or indirect, of any Related Person(s) in the transaction in sufficient detail so as to enable the Audit Committee to fully assess such interests, (c) the purpose of the transaction, (d) all of the material facts of the proposed related-person transaction, including the proposed aggregate value of such transaction, or, in the case of indebtedness, the amount of principal that would be involved, (e) the benefits to the Company of the proposed related-person transaction, (f) if applicable, the availability of other sources of comparable products or services, (g) an assessment of whether the proposed related-person transaction is on terms that are comparable to the terms available to or from, as the case may be, unrelated third parties that would have been negotiated at arm's length, and (h) management's recommendation with respect to the proposed related-person transaction knowing that there is a potential or actual conflict that will arise of the matter proceeds to fruition. In the event the Audit Committee is asked to consider whether to ratify an ongoing related-person transaction, in addition to the information identified above, the presentation must include (i) a description of the extent of work performed and remaining to be performed in connection with the transaction, (ii) an assessment of the potential risks and costs of termination of the transaction, and (iii) where appropriate, the possibility of modification of the transaction.

The Committee, in approving or rejecting the proposed related-person transaction, will consider all the relevant facts and circumstances deemed relevant by and available to the Committee, including but not limited to (a) the risks, costs and benefits to the Company, (b) the impact on a director's independence in the event the Related Person is a director, immediate family member of a director or an entity with which a director is affiliated, (c) the terms and timing of the transaction, (d) the availability of other sources of comparable services or products, (e) the terms available to or from, as the case may be, unrelated third parties, and (f) how the related-person transaction was realized and communicated to the Audit Committee as required under the Related-Person Transactions Policy. The Audit Committee will approve only those related-person transactions that, in light of known circumstances, are in, or are not inconsistent with, the best interests of the Company and its stockholders, as the Audit Committee determines in the good faith exercise of its discretion.

Other than compensation, termination, change in control and other arrangements, which are described in Item 11 – Executive Compensation and Item 12 – Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, our only related-person transactions since January 1, 2023 consisted of (i) a Securities Purchase Agreement we entered into on February 22, 2023 with accredited and non-U.S. investors, including the Cystic Fibrosis Foundation, or CFF, OrbiMed Israel GP Ltd., or Orbimed, and Nimble Ventures LLC our stockholders, each of which holding more than 5% of our outstanding Common Stock, relating to a private placement of an aggregate of 15,997,448 shares of our Common Stock and 14,610,714 pre-funded warrants, at a purchase price of $0.245 per Share and $0.244 per pre-funded warrant. The gross proceeds from this offering are approximately $7.4 million, before deducting issuance costs. The pre-funded warrants became exercisable on May 4, 2023, at an exercise price of $0.001 per share of Common Stock and have no expiration date. Of these proceeds, an aggregate of 3,385,000 shares of Common Stock and 4,778,265 pre-funded warrants were sold to CF for gross proceeds of $2 million, an aggregate of 1,740,000 shares of Common Stock and 9,280,408 pre-funded warrants were sold to Orbimed for gross proceeds of $2.7 million and an aggregate of 4,550,000 shares of Common Stock and 552,041 pre-funded warrants were sold to Nimble Venture LLC for gross proceeds of $1.25 million and (ii) a Securities Purchase Agreement we entered into on March 6, 2024 with certain investors, including CFF, Orbimed and Telmina Limited, or Telmina, our stockholders, each of which hold more than 5% of our outstanding Common Stock, pursuant to which we sold an aggregate of 216,417 shares of Convertible Preferred Stock and Private Placement Warrants to purchase up to an aggregate of 108,208,500 shares of Common Stock, at a combined purchase price of $231.10 per share of Series X Preferred Stock and accompanying Private Placement Warrant. The aggregate gross proceeds from this offering were approximately $50 million. The Private Placement Warrants may be exercised at any time following stockholder approval of the conversion of all issued and outstanding Series X Preferred Stock and the exercise of all Private Placement Warrants in accordance with the listing rules of NYSE American, which we are obligated to bring to the stockholders vote by no later than August 12, 2024, will have an exercise price of $0.2311 and expire on the 24-month anniversary of the date on which they are first exercisable. The exercise price of the Private Placement Warrants is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like. Of these proceeds, an aggregate of 21,635 shares of Convertible Preferred Stock and 10,817,500 Private Placement Warrants were sold to CFF for gross proceeds of $5 million, an aggregate of 4,327 shares of Convertible Preferred Stock and 2,163,500 Private Placement Warrants were sold to Orbimed for gross proceeds of $1 million and an aggregate of 2,596 shares of Convertible Preferred Stock and 1,298,000 Private Placement Warrants were sold to Telmina for gross proceeds of $0.6 million.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following is a summary and description of fees billed by us to Kesselman & Kesselman, Certified Public Accountants (Isr.) for the fiscal years ended December 31, 2023 and December 31, 2022.

	Fiscal year ended December 31, 2023	Fiscal year ended December 31, 2022
Audit fees[(1)]	$ 126,000	$ 126,000
Audit-related fees[(2)]	$ 97,000	$ 24,969
Tax fees[(3)]	$ 3,393	$ -
All other fees	$ -	$ -
Total fees	$ 226,393	$ 150,969

(1) Audit Fees include fees for professional services rendered for the quarterly reviews of the interim consolidated financial statements and the annual audit of our consolidated financial statements included in our Annual Report on Form 10-K.

(2) Audit-Related Fees include fees for services that were reasonably related to the performance of the audit of the annual consolidated financial statements for the fiscal year, other than Audit Fees, such as for services in connection with the Sale Agreement, our February 2023 PIPE and a registration statement filed for the re-sale of certain shares of Common Stock by selling stockholders.

(3) Tax Fees include fees for tax compliance and tax advice.

Pre-Approval Policies and Procedures

The Audit Committee approves all audit and pre-approves all non-audit services provided by our independent registered public accounting firm before it is engaged by us to render non-audit services. These services may include audit-related services, tax services and other services.

The pre-approval requirement set forth above does not apply with respect to non-audit services if:

- all such services do not, in the aggregate, amount to more than 5% of the total fees paid by us to our independent registered public accounting firm during the fiscal year in which the services are provided;
- such services were not recognized as non-audit services at the time of the relevant engagement; and
- such services are promptly brought to the attention of and approved by the Audit Committee (or its delegate) prior to the completion of the annual audit.

Pre-Approval Policies and Procedures

The Audit Committee approves all audit and pre-approves all non-audit services provided by our independent registered public accounting firm before it is engaged by us to render non-audit services. These services may include audit-related services, tax services and other services.

The pre-approval requirement set forth above does not apply with respect to non-audit services if:

- all such services do not, in the aggregate, amount to more than 5% of the total fees paid by us to our independent registered public accounting firm during the fiscal year in which the services are provided;
- such services were not recognized as non-audit services at the time of the relevant engagement; and
- such services are promptly brought to the attention of and approved by the Audit Committee (or its delegate) prior to the completion of the annual audit.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following are filed with this Annual Report:

(1) The financial statements listed on the Financial Statements' Table of Contents

(2) Not applicable

(b) Exhibits

The following exhibits are filed as part of this Annual Report or are incorporated by reference.

EXHIBIT INDEX

Exhibit	Description
2.1*	Agreement and Plan of Merger, dated March 6, 2024, by and among BiomX Inc., BTX Merger Sub I, Inc., BTX Merger Sub II, LLC and Adaptive Phage Therapeutics, Inc. (Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed by the Company on March 6, 2024)

3.1	Composite Copy of Amended and Restated Certificate of Incorporation of the Company, effective on December 11, 2018, as amended to date. (Incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed by the Company on November 9, 2022)
3.2	Amended and Restated Bylaws of the Company, effective as of October 28, 2019 (Incorporated by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed by the Company on November 1, 2019)
3.3	Form of Certificate of Designation of Series X Preferred Stock (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed by the Company on March 6, 2024)
4.1***	Description of securities registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended
4.2	Specimen Unit Certificate (Incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1 filed by the Company on December 4, 2018)
4.3	Specimen Common Stock Certificate (Incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-1 filed by the Company on December 4, 2018)
4.4	Specimen Warrant Certificate (Incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-1 filed by the Company on December 4, 2018)
4.5	Warrant Agreement, dated December 13, 2018 between Continental Stock Transfer & Trust Company and the Company (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed by the Company on December 18, 2018)
4.6	Form of Warrant. (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed by the Company on July 26, 2021)
4.7	Form of Pre-Funded Warrant. (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed by the Company on February 27, 2023)
4.8	Form of Merger Warrant (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed by the Company on March 6, 2024)
4.9	Form of Private Placement Warrant (Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed by the Company on March 6, 2024)
4.10	Form of Placement Agent Warrant (Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed by the Company on March 6, 2024)
4.11	Form of Warrant (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed by the Company on March 18, 2024)
10.1**	Chardan Healthcare Acquisition Corp. 2019 Omnibus Long-Term Incentive Plan, as amended (Incorporated by reference to Annex A to the Company's Definitive Proxy Statement on Schedule 14A filed by the Company on July 28, 2023)
10.2	Registration Rights Agreement dated October 28, 2019 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed by the Company on November 1, 2019)
10.3**, ***	Form of Indemnification Agreement
10.4*	Research and License Agreement, dated June 22, 2015, between BiomX Ltd. and Yeda Research and Development Company Limited, as amended (Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed by the Company on November 1, 2019)
10.8**	2015 Employee Stock Option Plan, as amended (Incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 filed by the Company on January 2, 2020)
10.9	Registration Rights Agreement, dated December 13, 2018, among the Company and the initial stockholders and Chardan Capital Markets, LLC. (Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed by the Company on December 18, 2018)
10.10**	Form of Non-Qualified Stock Option Agreement (U.S. Awards to Non-Executives) (Incorporated by reference to Exhibit 10.19 to the Company's Annual Report on Form 10-K filed by the Company on March 26, 2020)
10.11**	Form of Non-Qualified Stock Option Agreement (U.S. Awards to Executive Officers) (Incorporated by reference to Exhibit 10.20 to the Company's Annual Report on Form 10-K filed by the Company on March 26, 2020)
10.12**	Form of Option Agreement (Israeli Awards) (Incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K filed by the Company on March 26, 2020)
10.13*	An addendum to a lease agreement dated from May 25, 2017, dated September 7, 2020 by and among AFI Assets Ltd., AF – SHAR Ltd., WIS and BiomX Ltd. (translated from Hebrew) (Incorporated by reference to Exhibit 10.14 to the Company's Annual Report on Form 10-K filed by the Company on March 31, 2021)

10.14*	Lease agreement dated September 7, 2020 by and among AFI Assets Ltd., AF – SHAR Ltd., WIS, Nova Measuring Systems Ltd. and BiomX Ltd. (translated from Hebrew) (Incorporated by reference to Exhibit 10.15 to the Company's Annual Report on Form 10-K filed by the Company on March 31, 2021)
10.15	Open Market Sale Agreement℠, dated December 4, 2020, between the Company and Jefferies LLC (incorporated by reference to Exhibit 1.2 of the Company's Registration Statement on Form S-3 filed by the Company on December 4, 2020).
10.17**	Employment Agreement, dated February 1, 2016, between BiomX Ltd. (formerly MBcure Ltd.) and Jonathan Solomon (Incorporated by reference to Exhibit 10.1 to the Company's Amended Annual Report on Form 10-K/A filed by the Company on May 2, 2022)
10.18**	Employment Agreement, dated August 26, 2019, between BiomX Ltd. and Merav Bassan (Incorporated by reference to Exhibit 10.2 to the Company's Amended Annual Report on Form 10-K/A filed by the Company on May 2, 2022)
10.19**	Employment Agreement, dated January 1, 2017, between BiomX Ltd. (formerly MBcure Ltd.) and Assaf Oron. (Incorporated by reference to Exhibit 10.3 to the Company's Amended Annual Report on Form 10-K/A filed by the Company on May 2, 2022)
10.20	Form of Securities Purchase Agreement dated February 22, 2023 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed by the Company on February 22, 2023)
10.21	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed by the Company on February 22, 2023)
10.22*,***	Exclusive License between Adaptive Phage Therapeutics, Inc. and United States of America, as represented by the Secretary of the Navy, dated March 16, 2017
10.23*,***	First Amendment, dated January 10, 2019, to Exclusive License between Adaptive Phage Therapeutics, Inc. and United States of America, as represented by the Secretary of the Navy
10.24*,***	Non-Exclusive License Agreement by and between Adaptive Phage Therapeutics, Inc. and Walter Reed Army Institute of Research, dated August 24, 2021
10.25***	License Modification 1, dated August 31, 2022, to Non-Exclusive License Agreement by and between Adaptive Phage Therapeutics, Inc. and Walter Reed Army Institute of Research
10.26	Securities Purchase Agreement, dated as of March 6, 2024, by and among BiomX Inc. and each purchaser identified on Annex A thereto (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed by the Company on March 6, 2024)
10.27	Form of Registration Rights Agreement, dated as of March 6, 2024, by and among the Company and certain purchasers (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed by the Company on March 6, 2024)
10.28*,***	Lease Agreement, dated as of August 9, 2019, by and between ARE-708 Quince Orchard, LLC and Adaptive Phage Therapeutics, Inc.
10.29*,***	Amendment No. 1, dated as of October 28, 2020, to Lease Agreement by and between ARE-708 Quince Orchard, LLC and Adaptive Phage Therapeutics, Inc.

10.30*,***	Amendment No. 2, dated as of July 8, 2021, to Lease Agreement by and between ARE-708 Quince Orchard, LLC and Adaptive Phage Therapeutics, Inc.
10.31*,***	Amendment No. 3, dated as of July 15, 2021, to Lease Agreement by and between ARE-708 Quince Orchard, LLC and Adaptive Phage Therapeutics, Inc.
10.32*,***	Amendment No. 4, dated as of September 27, 2022, to Lease Agreement by and between ARE-708 Quince Orchard, LLC and Adaptive Phage Therapeutics, Inc.
10.33*,***	Amendment No. 5, dated as of February 2, 2023, to Lease Agreement by and between ARE-708 Quince Orchard, LLC and Adaptive Phage Therapeutics, Inc.
10.34*,***	Amendment No. 6, dated as of March 5, 2024, to Lease Agreement by and between ARE-708 Quince Orchard, LLC and Adaptive Phage Therapeutics, Inc.
21.1***	Subsidiaries of Company
23.1***	Consent of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited
31.1***	Certification of Chief Executive Officer pursuant to Rule 13a-14 and Rule 15d-14(a).
31.2***	Certification of Chief Financial Officer pursuant to Rule 13a-14 and Rule 15d-14(a).
32.1****	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350.
97.1***	Clawback Policy
99.1***	Resolutions of Board of Directors Ratifying Stock Issuance
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Portions of this exhibit have been omitted pursuant to Rule 601(b)(10) of Regulation S-K. The omitted information is not material and would likely cause competitive harm to the Company if publicly disclosed.
** Indicates a management contract or a compensatory plan or agreement.
*** Filed herewith.
**** Furnished herewith.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Exchange Act of 1934, the registrant caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized.

BIOMX INC.

Dated: April 3, 2024

By: /s/ Jonathan Solomon
Name: Jonathan Solomon
Title: Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Company and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Jonathan Solomon Jonathan Solomon	Chief Executive Officer (Principal Executive Officer) and Director	April 3, 2024
/s/ Avraham Gabay Avraham Gabay	Interim Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 3, 2024
/s/ Russell Greig Dr. Russell Greig	Chairman of the Board of Directors	April 3, 2024
/s/ Jesse Goodman Dr. Jesse Goodman	Director	April 3, 2024
/s/ Jonathan Leff Jonathan Leff	Director	April 3, 2024
/s/ Gregory Merril Gregory Merril	Director	April 3, 2024
/s/ Alan Moses Dr. Alan Moses	Director	April 3, 2024
/s/ Eddie Williams Eddie Williams	Director	April 3, 2024

BIOMX INC.

CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2023

CONTENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and stockholders of BiomX Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of BiomX Inc. and its subsidiaries (the "Company") as of December 31, 2023 and 2022 and the related consolidated statements of operations, changes in stockholders' equity and cash flows for each of the two years in the period ended December 31, 2023, including 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 as of December 31, 2023 and 2022 and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America.

Substantial Doubt about the Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1C to the consolidated financial statements, the Company has incurred significant losses and negative cash flows from operations, incurred an accumulated deficit, and has stated that these events or conditions raise substantial doubt on the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1C. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated 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 Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements 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 consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the 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 Matters

Critical audit matters are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. We determined there are no critical audit matters.

/s/ Kesselman & Kesselman
Certified Public Accountants (Isr.)

A member of PricewaterhouseCoopers International Limited
Tel-Aviv, Israel

April 3, 2024
We have served as the Company's auditor since 2021.

BIOMX INC.
CONSOLIDATED BALANCE SHEETS
(USD in thousands, except share and per share data)

	As of December 31,	
	2023	2022
ASSETS		
Current assets		
Cash and cash equivalents	14,907	31,332
Restricted cash	957	962
Short-term deposits	-	2,000
Other current assets	1,768	2,587
Total current assets	17,632	36,881
Non-current assets		
Operating lease right-of-use assets	3,495	3,860
Property and equipment, net	3,902	4,790
Total non-current assets	7,397	8,650
	25,029	45,531

The accompanying notes are an integral part of the consolidated financial statements.

BIOMX INC.
CONSOLIDATED BALANCE SHEETS
(USD in thousands, except share and per share data)

	As of December 31,	
	2023	2022
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Trade account payables	1,381	820
Current portion of lease liabilities	666	687
Other account payables	3,344	2,150
Current portion of long-term debt	5,785	4,282
Total current liabilities	11,176	7,939
Non-current liabilities		
Contract liability	1,976	1,976
Long-term debt, net of current portion	5,402	10,591
Operating lease liabilities, net of current portion	3,239	3,798
Other liabilities	155	188
Total non-current liabilities	10,772	16,553
Commitments and Contingencies (Note 10)		
Stockholders' equity		
Preferred Stock, $ 0.0001 par value; Authorized - 1,000,000 shares as of December 31, 2023 and December 31, 2022. No shares issued and outstanding as of December 31, 2023 and December 31, 2022.	-	-
Common stock, $ 0.0001 par value ("Common Stock"); Authorized - 120,000,000 shares as of December 31, 2023 and December 31, 2022. Issued – 45,979,930 and 29,982,282 as of December 31, 2023 and 2022, respectively. Outstanding – 45,979,930 and 29,976,582 as of December 31, 2023 and 2022, respectively.	3	2
Additional paid in capital	166,048	157,838
Accumulated deficit	(162,970)	(136,801)
Total Stockholders' equity	3,081	21,039
	25,029	45,531

The accompanying notes are an integral part of the consolidated financial statements.

BIOMX INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(USD in thousands, except share and per share data)

	Year ended December 31,	
	2023	2022
Research and development ("R&D") expenses, net	16,698	16,244
Amortization of intangible assets	-	1,519
General and administrative expenses	8,650	9,456
Operating loss	25,348	27,219
Other income	(357)	(134)
Interest expenses	2,404	2,069
Finance income, net	(1,249)	(902)
Loss before tax	26,146	28,252
Tax expenses	23	65
Net Loss	26,169	28,317
Basic and diluted loss per share of Common Stock	0.51	0.95
Weighted average number of shares of Common Stock outstanding, basic and diluted	51,330,324	29,854,003

The accompanying notes are an integral part of the consolidated financial statements.

BIOMX INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(USD in thousands, except share and per share data)

	Common stock		Additional paid in capital	Accumulated deficit	Total Stockholder' equity
	Shares	Amount			
Balance as of December 31, 2021	29,747,538	2	156,017	(108,484)	47,535
Issuance of Common Stock under Open Market Sales Agreement net of $ 8 issuance costs (**)	229,044	*	273	-	273
Stock-based compensation expenses	-	-	1,529	-	1,529
Proceeds on account of shares (***)	-	-	19	-	19
Net loss	-	-	-	(28,317)	(28,317)
Balance as of December 31, 2022	29,976,582	2	157,838	(136,801)	21,039
Issuance of Common Stock and warrants under Private Investment in Public Equity ("PIPE"), net of $ 333 issuance costs (**)	15,997,448	1	7,151	-	7,152
Reissuance of treasury stock (***)	5,700	-	-	-	-
Stock-based compensation expenses	-	-	1,059	-	1,059
Issuance of Common Stock under Open Market Sales Agreement (**)	200	*	*	-	*
Net loss	-	-	-	(26,169)	(26,169)
Balance as of December 31, 2023	45,979,930	3	166,048	(162,970)	3,081

(*) Less than $1.
(**) See note 12A.
(***) See note 9A.

The accompanying notes are an integral part of the consolidated financial statements.

BIOMX INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(USD in thousands, except share and per share data)

	Year ended December 31,	
	2023	2022
CASH FLOWS – OPERATING ACTIVITIES		
Net loss	(26,169)	(28,317)

Adjustments required to reconcile net loss to cash flows used in operating activities		
Depreciation and amortization	871	2,520
Stock-based compensation	1,059	1,529
Amortization of debt issuance costs	567	463
Finance income, net	(128)	(842)
Changes in other liabilities	(33)	(27)
Capital loss, net	71	10
Changes in operating assets and liabilities:		
Other current assets	819	956
Trade account payables	556	(1,975)
Other account payables	1,194	(3,303)
Net change in operating leases	(93)	(106)
Net cash used in operating activities	(21,286)	(29,092)
CASH FLOWS – INVESTING ACTIVITIES		
Investment in short-term deposits	-	(13,500)
Proceeds from short -term deposits	2,000	11,500
Purchase of property and equipment	(50)	(112)
Proceeds from sale of property and equipment	1	5
Net cash provided by (used in) investing activities	1,951	(2,107)
CASH FLOWS – FINANCING ACTIVITIES		
Issuance of Common Stock under Open Market Sales Agreement, net of issuance costs	-	273
Issuance of Common Stock and warrants under PIPE	7,485	-
Issuance costs from PIPE	(333)	-
Repayment of long-term debt	(4,253)	-
Proceeds on account of shares	-	19
Net cash provided by financing activities	2,899	292
Decrease in cash and cash equivalents and restricted cash	(16,436)	(30,907)
Effect of exchange rate changes on cash and cash equivalents and restricted cash	6	106
Cash and cash equivalents and restricted cash at the beginning of the year	32,294	63,095
Cash and cash equivalents and restricted cash at the end of the year	15,864	32,294

The accompanying notes are an integral part of the consolidated financial statements.

BIOMX INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(USD in thousands, except share and per share data)

	Year ended December 31,	
	2023	**2022**
RECONCILIATION OF AMOUNTS ON CONSOLIDATED BALANCE SHEETS:		
Cash and cash equivalents	14,907	31,332
Restricted cash	957	962
Total cash and cash equivalents and restricted cash	15,864	32,294
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid for interest	1,873	1,554
Taxes paid	54	65
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING ACTIVITIES:		
Property and equipment purchases included in accounts payable	5	-

The accompanying notes are an integral part of the consolidated financial statements.

BIOMX INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(USD in thousands, except share and per share data)

NOTE 1 - GENERAL

A. General information:

BiomX Inc., (individually, and together with its subsidiaries, BiomX Ltd. and RondinX Ltd., the “Company” or “BiomX”) was

incorporated as a blank check company on November 1, 2017 , under the laws of the state of Delaware, for the purpose of entering into a merger, stock exchange, asset acquisition, stock purchase, recapitalization, reorganization or similar business combination with one or more businesses or entities.

On October 29, 2019, the Company merged with BiomX Israel, who survived the merger as a wholly owned subsidiary of BiomX Inc. The Company acquired all outstanding shares of BiomX Israel. In exchange, shareholders of BiomX Israel received 15,069,058 shares of the Company's Common Stock, representing 65 % of the total shares issued and outstanding after the acquisition ("Recapitalization Transaction"). BiomX Israel was deemed the "accounting acquirer" due to the largest ownership interest in the Company. The Company's shares of Common Stock, units, and warrants are traded on the NYSE American under the symbols PHGE, PHGE.U, and PHGE.WS, respectively.

On February 6, 2020, the Company's Common Stock also began trading on the Tel-Aviv Stock Exchange. On July 6, 2022, the Company announced a voluntary delisting of its shares of Common Stock from the Tel-Aviv Stock Exchange which became effective on October 6, 2022.

BiomX is developing both natural and engineered phage cocktails designed to target and destroy harmful bacteria in chronic diseases, focusing its efforts at this point on cystic fibrosis and to a lesser degree on atopic dermatitis. BiomX discovers and validates proprietary bacterial targets and customizes phage compositions against these targets. The Company's headquarters are located in Ness Ziona, Israel.

On March 6, 2024, the Company entered into an agreement and plan of merger (the "Merger Agreement") with Adaptive Phage Therapeutics Inc., a Delaware corporation ("APT"), and certain other parties, as a result of which APT became a wholly-owned subsidiary of the Company (the "Acquisition"). See note 1D for further information regarding the Acquisition.

B. Israel-Hamas war

On October 7, 2023, an unprecedented attack was launched against Israel by terrorists from the Hamas terrorist organization that infiltrated Israel's southern border from the Gaza Strip and in other areas within the state of Israel attacking civilians and military targets while simultaneously launching extensive rocket attacks on the Israeli population. These attacks resulted in extensive deaths, injuries and kidnapping of civilians and soldiers. In response, the Security Cabinet of the State of Israel declared war against Hamas and a military campaign against these terrorist organizations commenced in parallel to their continued rocket and terror attacks. In addition, Hezbollah, an Islamist terrorist group that controls large portions of southern Lebanon, has attacked military and civilian targets in Northern Israel, to which Israel has responded.

To date, the State of Israel continues to be at war with Hamas and on an armed conflicts with Hezbollah.

BiomX headquarters and principal offices and most of its operations are located in the State of Israel. In addition, all of the key employees and officers are residents of Israel. Accordingly, political, economic and military conditions in Israel and the surrounding region may directly affect its business.

While a few employees of the Company were called to reserve duty in the Israel Defense Forces, the ongoing war with Hamas has not, since its inception, materially impacted BiomX business or operations. Furthermore, BiomX does not expect any delays to its programs as a result of the situation. However, at this time, it is not possible to predict the intensity or duration of Israel's war against Hamas, nor predict how this war will ultimately affect BiomX business and operations or Israel's economy in general.

NOTE 1 - GENERAL (Cont.)

C. Going concern

The Company has incurred significant losses and negative cash flows from operations and incurred an accumulated deficit of $ 162,970 as of December 31, 2023. The Company expects to continue to incur additional losses and negative cash flows from operations for the foreseeable future. The Company plans to continue to fund its current operations, as well as other development activities relating to additional product candidates, through future issuances of debt and/or equity securities, loans and possibly additional grants from the Israel Innovation Authority ("IIA") (see note 10A) and other government institutions. The Company's ability to raise additional capital in the equity and debt markets is dependent on a number of factors including, but not limited to, the market demand for the Company's Common Stock, which itself is subject to a number of development and business risks and uncertainties, as well as the uncertainty that the Company would be able to raise such additional capital at a price or on terms that are favorable to it. If the Company is unable to raise capital when needed or on attractive terms, it may be forced to delay or reduce its research and development programs. Subsequent to December 31, 2023, the Company raised approximately $ 50 million in a private placement in March 2024 (the "March 2024 PIPE"). Management believes that its available funds as of the issuance date of the financial statements, which includes the funds received under the March 2024 PIPE, will be sufficient to fund its operations for at least one year from the issuance date of these financial statements. However, the conversion of the Series X Non-Voting Convertible Preferred Stock (as defined below) that was issued in connection with the March 2024 PIPE and the Acquisition is subject to stockholder approval and there is no assurance that such approval will be received. If such approval is not received, the Company may be required to redeem the Convertible Preferred Stock at its fair value. These factors raise substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements have been prepared on a going concern basis and do not include any adjustments that may result from the outcome of such circumstances.

D. Merger Agreement

On March 6, 2024, the Company, entered into the Merger Agreement with BTX Merger Sub I, Inc., a Delaware corporation and a wholly owned subsidiary of the Company ("First Merger Sub"), BTX Merger Sub II, LLC, a Delaware limited liability company and wholly owned subsidiary of the Company ("Second Merger Sub"), and APT. Pursuant to the Merger Agreement, First Merger Sub merged with and into APT, with APT being the surviving corporation and becoming a wholly owned subsidiary of the Company (the "First Merger"). Immediately following the First Merger, APT merged with and into Second Merger Sub, pursuant to which Second Merger Sub was the surviving entity (together with the First Merger, the "Acquisition"). The Acquisition is intended to qualify as a tax-free reorganization for U.S. federal income tax purposes.

On March 15, 2024, the effective time of the Acquisition, APT's former stockholders were issued an aggregate of 9,164,968 shares of the Company's Common Stock, 40,470 shares of the Company's Series X non-voting convertible preferred stock, par value $ 0.0001 per share ("Convertible Preferred Stock") and Warrants to purchase up to an aggregate of 2,166,497 shares of the Company Common stock ("Merger Warrants"). Each share of Convertible Preferred Stock is convertible into an aggregate of 1,000 shares of Common Stock. The Merger Warrants will be exercisable at any time after the date of the receipt of BiomX stockholder approval at an exercise price of $ 5.00 per share and will expire on January 28, 2027. In the event the Convertible Preferred Stock is not converted by the earlier to occur of (i) the time that BiomX Stockholders' Meeting is ultimately concluded or (ii) 150 days after the initial issuance of the Convertible Preferred Stock, the Company may be required to pay to each holder of the Convertible Preferred Stock an amount in cash equal to the fair value of the shares of Convertible Preferred Stock.

Concurrently with the consummation of the Acquisition, the Company entered into a securities purchase agreement with certain investors, pursuant to which such investors purchased an aggregate of 216,417 shares of Convertible Preferred Stock ("PIPE Preferred Shares") and Private Placement Warrants to purchase up to an aggregate of 108,208,500 shares of the Company's Common stock ("Private Placement Warrants"), at a combined price of $ 231.10 per share. The PIPE Preferred Shares and the Private Placement Warrants were issued in a private placement pursuant to an exemption from registration requirements under the Securities Act for aggregate gross proceeds of $ 50 million.

Immediately following the Acquisition, and without taking into account the PIPE Preferred Shares and the Private Placement Warrants, the Company's stockholders prior to the Acquisition owned approximate 55 % the Company and APT's stockholders prior to the Acquisition owned approximately 45 % of the Company.

NOTE 1 - GENERAL (Cont.)

D. Merger Agreement (Cont.)

The Acquisition will be accounted in accordance with Accounting Standards Codification Topic 805, "Business Combinations," using the acquisition method of accounting. The Company was identified as the accounting acquirer, based on the evaluation of the following facts and circumstances:

- Pursuant to the Merger Agreement, the post-Acquisition board of directors of the Company consists of seven directors, out of which the Company designated four board seats, with the Company's chair of the board prior to the Acquisition continuing in his position, i.e. the majority of the post-closing board was designated by the Company.
- The Chief Executive Officer and the majority of management roles are held by individuals who were affiliated with the Company prior to the Acquisition.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies applied in the preparation of the financial statements on a consistent basis, are as follows, except for the adoption of new accounting standards:

A. Basis of presentation and principles of consolidation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and include the accounts of the Company and its wholly owned subsidiaries, BiomX Israel and RondinX Ltd. All intercompany accounts and transactions have been eliminated in consolidation.

B. Use of estimates in the preparation of financial statements

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities in the financial statements and the amounts of expenses during the reported years. The most significant estimates in the Company's financial statements relate to accruals for research and development expenses and valuation of stock-based compensation awards. These estimates and assumptions are based on current facts, future expectations, and various other factors believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the recording of expenses that are not readily apparent from other sources. Actual results may differ materially and adversely from these estimates.

The full extent to which the Israel-Hamas war may directly or indirectly impact the Company's business, results of operations and financial condition will depend on future developments that are uncertain, as well as the economic impact on local, regional, national and international markets.

C. Functional currency and foreign currency translation

The functional currency of the Company is the U.S. dollar ("USD") since the dollar is the currency of the primary economic environment in which the Company has operated and expects to continue to operate in the foreseeable future. Transactions and balances originally denominated USD are presented at their original amounts. Balances in non-USD currencies are translated into USDs using historical and current exchange rates for non-monetary and monetary balances, respectively. For non-USD transactions and other items in the statements of income (indicated below), the following exchange rates are used: (i) for transactions – exchange rates at transaction dates or average exchange rates; and (ii) for other items (derived from non-monetary balance sheet items such as depreciation and amortization) – historical exchange rates. Currency transaction gains and losses are presented in finance income, net as appropriate.

D. Cash and cash equivalents and restricted cash

The Company considers cash equivalents to be all short-term, highly liquid investments, which include money market funds, that are

(USD in thousands, except share and per share data)

not restricted as to withdrawal or use, and short-term bank deposits with original maturities of three months or less from the date of purchase that are not restricted as to withdrawal or use and are readily convertible to known amounts of cash. Restricted cash consists of funds that are contractually restricted to a credit line for outstanding short-term foreign exchange contracts and bank guarantee due to rental agreements. The Company has presented restricted cash separately from cash and cash equivalents in the consolidated balance sheets. The Company includes its restricted bank deposits in cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts shown on the combined statement of cash flows.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

E. Concentrations of credit risk

Financial instruments which potentially subject us to credit risk consist primarily of cash, cash equivalents, and short-term deposits. These amounts at times may exceed federally insured limits. We have not experienced any credit losses in such accounts and do not believe we are exposed to any significant credit risk on these funds. Most of the Company's cash and cash equivalents and bank deposits are invested in major banks in the U.S. and Israel. Management believes that the credit risk with respect to the financial institutions that hold the Company's cash and cash equivalents and bank deposits is low. Refer to note 2J.

F. Property and equipment

Property and equipment are presented at cost less accumulated depreciation. Depreciation is calculated based on the straight-line method over the estimated useful lives of the related assets or terms of the related leases, as follows:

	Estimated Useful Lives
Laboratory equipment	7 years
Computers and software	3 years
Equipment and furniture	15 years
Leasehold improvements	Shorter of lease term or useful life

G. Long-lived assets

In accordance with ASC 360-10, "Impairment and Disposal of Long-Lived Assets", management reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable based on estimated future undiscounted cash flows. If so indicated, an impairment loss would be recognized for the difference between the carrying amount of the asset and its fair value. For the years ended December 31, 2023 and 2022, no impairment expenses were recorded.

H. Income taxes

The Company accounts for income taxes using the asset and liability approach. Deferred tax assets and liabilities are recorded based on the differences between the financial statement and tax basis of assets and liabilities and the tax rates in effect when these differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance if, based on the weight of available evidence, it is more likely than not that some or all the deferred tax assets will not be realized. As of December 31, 2023 and 2022, the Company had a full valuation allowance against deferred tax assets.

The Company is subject to the provisions of ASC 740-10-25, "Income Taxes" ("ASC 740"). ASC 740 prescribes a more likely-than-not threshold for the financial statement recognition of uncertain tax positions. ASC 740 clarifies the accounting for income taxes by prescribing a minimum recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. On a yearly basis, the Company undergoes a process to evaluate whether income tax accruals are in accordance with ASC 740 guidance on uncertain tax positions. The Company has not recorded any liability for uncertain tax positions for the years ended December 31, 2023 and 2022. The Company presents unrecognized tax benefits as a reduction to deferred tax asset where a net operating loss, a similar tax loss, or a tax credit carryforward that are available, under the tax law of the applicable jurisdiction, to offset any additional income taxes that would result from the settlement of a tax position.

I. Derivative activity

The Company uses foreign exchange contracts (option and forward contracts) to hedge cash flows from currency exposure. These foreign exchange contracts are not designated as hedging instruments for accounting purposes. In connection with these foreign exchange contracts, the Company recognizes gains or losses that offset the revaluation of the cash flows also recorded under financial expenses (income), net in the consolidated statements of operations. As of December 31, 2023, the Company had outstanding short-term foreign exchange contracts for the exchange of USD to NIS in the amount of approximately $ 4,136 with a fair value asset of $ 256 . As of December 31, 2022, the Company had outstanding short-term foreign exchange contracts for the exchange of USD to NIS in the amount of approximately $ 4,547 with a fair value liability of $ 55 .

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

(USD in thousands, except share and per share data)

J. Fair value of financial instruments

The Company accounts for financial instruments in accordance with ASC 820, "Fair Value Measurements and Disclosures" ("ASC 820"). ASC 820 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under ASC 820 are described below:

Level 1 – Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2 – Quoted prices in non-active markets or in active markets for similar assets or liabilities, observable inputs other than quoted prices, and inputs that are not directly observable but are corroborated by observable market data.

Level 3 – Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

There were no changes in the fair value hierarchy levelling during the years ended December 31, 2023 and 2022.

The following table summarizes the fair value of our financial assets and liabilities that were accounted for at fair value on a recurring basis, by level within the fair value hierarchy:

	December 31, 2023			
	Level 1	**Level 2**	**Level 3**	**Fair Value**
Assets:				
Cash equivalents:				
Money market funds	11,377	-	-	11,377
Foreign exchange contracts receivable	-	256	-	256
	11,377	256	-	**11,633**
Liabilities:				
Contingent consideration	-	-	155	155
	-	**-**	**155**	**155**

	December 31, 2022			
	Level 1	**Level 2**	**Level 3**	**Fair Value**
Assets:				
Cash equivalents:				
Money market funds	27,824	-	-	27,824
	27,824	**-**	**-**	**27,824**
Liabilities:				
Contingent consideration	-	-	148	148
Foreign exchange contracts payable	-	55	-	55
	-	**55**	**148**	**203**

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

J. Fair value of financial instruments (Cont.)

Financial instruments with carrying values approximating fair value include cash and cash equivalents, restricted cash, short-term deposits, other current assets, trade accounts payable and other current liabilities, due to their short-term nature.

The Company determined the fair value of the liabilities for the contingent consideration based on a probability discounted cash flow analysis. This fair value measurement is based on significant unobservable inputs in the market and thus represents a Level 3 measurement within the fair value hierarchy. The fair value of the contingent consideration is based on several factors, such as: the attainment of future clinical, developmental, regulatory, commercial and strategic milestones relating to product candidates for treatment of primary sclerosing cholangitis. The discount rate applied ranged from 2.4 % to 4.6 %. The contingent consideration is evaluated quarterly, or more frequently, if circumstances dictate. Changes in the fair value of contingent consideration are recorded in consolidated statements of operations. Significant changes in unobservable inputs, mainly the probability of success and cash flows projected, could result in material changes to the contingent consideration liability. Changes in contingent consideration for the years ended December 31, 2023 and 2022 resulted from the passage of time and discount rate revaluation.

K. Defined contribution plans

Under Israeli employment laws, employees of BiomX Israel are included under Section 14 of the Severance Compensation Act, 1963 ("Section 14") for a portion of their salaries. Pursuant to Section 14, these employees are entitled to monthly deposits made by the Company on their behalf with insurance companies.

Payments in accordance with Section 14 release the Company from any future severance payments (under the Israeli Severance Compensation Act, 1963) with respect of those employees. The aforementioned deposits are not recorded as an asset on the Company's balance sheet, and there is no liability recorded as the Company does not have a future obligation to make any additional payments. The Company's contributions to the defined contribution plans are charged to the consolidated statements of operations as and when the services are received from the Company's employees. Total expenses with respect to these contributions were $ 426 and $ 562 for the years ended December 31, 2023 and 2022, respectively. The Company expects to contribute approximately $ 400 in the year ending December 31, 2024 to insurance companies in connection with its expected severance liabilities for the year.

For U.S. employees the Company has a defined contribution savings plan under Section 401(k) of the Internal Revenue Code. This plan covers substantially all employees of BiomX Inc in the U.S. who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis.

The Company has not elected to match any of the employee's deferral. During the years ended December 31, 2023 and 2022 the Company did not record any expenses for 401(k) match contributions.

L. Financial instruments

When the Company issues freestanding instruments, it first analyzes the provisions of ASC 480, "Distinguishing Liabilities From Equity" ("ASC 480") in order to determine whether the instrument should be classified as a liability, with subsequent changes in fair value recognized in the consolidated statements of operations in each period. If the instrument is not within the scope of ASC 480, the Company further analyzes the provisions of ASC 815-10 in order to determine whether the instrument is considered indexed to the entity's own stock and qualifies for classification within equity. All warrants issued by the Company are classified within stockholders' equity as "Additional paid-in capital". Equity classification is permitted when warrants are indexed to the Company's own shares and meet the classification requirements for stockholders' equity classification of ASC 815-40,"Contracts in Entity's Own Equity" ("ASC 815-40").

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

M. Research and development costs

Research and development costs are charged to statements of operations as incurred. Royalty-bearing grants from the IIA are recognized at the time the Company is entitled to such grants, on the basis of the costs incurred and applied as a deduction from research and development expenses.

N. Basic and diluted loss per share

Basic loss per share is computed by dividing net loss by the weighted average number of shares of Common Stock outstanding during the year, fully vested warrants with no exercise price for the Company's Common Stock and fully vested Pre-Funded Warrants for the Company's Common Stock at an exercise price of $ 0.001 per share, as the Company considers these shares to be exercised for little to no additional consideration. The calculation excludes o shares of Common Stock purchased by the Company and held as treasury shares. Diluted loss per share is computed by dividing net loss by the weighted average number of shares of Common Stock outstanding during the year, plus the number of shares of Common Stock that would have been outstanding if all potentially dilutive shares of Common Stock had been issued, using the treasury stock method, in accordance with ASC 260-10 "Earnings per Share." Potentially dilutive shares of Common Stock were excluded from the calculation of diluted loss per share for all periods presented due to their anti-dilutive effect due to losses in each period.

O. Stock compensation plans

The Company applies ASC 718-10, "Stock-Based Payment," ("ASC 718-10") which requires the measurement and recognition of compensation expenses for all stock-based payment awards made to employees and directors including employee stock options under the Company's stock plans based on estimated fair values.

ASC 718-10 requires companies to estimate the fair value of stock-based payment awards granted to employees and non-employees on the date of grant using an option-pricing model. The fair value of the award is recognized as an expense over the requisite service periods in the Company's statements of operations using the graded vesting method. The Company accounts for share-based payment awards classified as equity awards. The Company recognizes stock-based award forfeitures as they occur rather than estimate by applying a forfeiture rate.

All issuances of stock options or other equity instruments to non-employees as consideration for goods or services received by the Company are accounted for based on the fair value of the equity instruments issued.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

O. Stock compensation plans (Cont.)

The Company estimates the fair value of stock options granted as equity awards using a Black-Scholes option-pricing model. The option-pricing model requires a number of assumptions, of which the most significant are share price, expected volatility and the expected option term (the time from the grant date until the options are exercised or expire). The Company uses an average historical stock price volatility based on a combined weighted average of the Company's historical average volatility and that of a selected peer group of comparable public companies within the biotechnology and pharmaceutical industry that were deemed to be representative of future stock price trends as the Company does not have a sufficient historical trading history of its own Common Stock. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available. The Company has historically not paid dividends and has no foreseeable plans to issue dividends. The risk-free interest rate is based on the yield from governmental zero-coupon bonds with an equivalent term. The

expected option term is calculated for all stock option grants using the “simplified” method. Changes in the determination of each of the inputs can affect the fair value of the options granted and the results of operations of the Company.

P. Leases

Under Accounting Standards Update, “Leases” (“ASC 842”), the Company determines if an arrangement is a lease at inception. Upon initial recognition, the Company recognizes a liability at the present value of the lease payments to be made over the lease term, and concurrently recognizes a right-of-use asset at the same amount of the liability, adjusted for any prepaid or accrued lease payments, plus initial direct costs incurred in respect of the lease. The Company uses its incremental borrowing rate based on the information available at the commencement date to determine the present value of the lease payments. The subsequent measurement depends on whether the lease is classified as a finance lease or an operating lease. During the reporting periods, the Company has only operating leases. Lease terms include options to extend the lease when it is reasonably certain that the Company will exercise that option. Lease expenses for operating leases are recognized on a straight-line basis over the lease term.

The Company has made a policy election not to capitalize leases with a term of 12 months or less.

In accordance with ASC 360-10, management reviews operating lease assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable based on estimated future undiscounted cash flows. If so indicated, an impairment loss would be recognized for the difference between the carrying amount of the asset and its fair value.

Q. Treasury stock

Treasury shares are presented as a reduction of equity, at their cost to the Company.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

R. New accounting pronouncements

Recently adopted accounting pronouncements

In June 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2016-13, “Financial Instruments—Credit Losses—Measurement of Credit Losses on Financial Instruments.” This guidance replaces the current incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The guidance is effective for smaller reporting companies (as defined by the rules under the Securities Exchange Act of 1934, as amended) for the fiscal year beginning on January 1, 2023, including interim periods within that year. The Company adopted the guidance on January 1, 2023, and has concluded the adoption did not have a material impact on its consolidated financial statements.

In October 2021, the FASB issued ASU 2021-08, “Business Combinations (Topic 805), Accounting for Contract Assets and Contract Liabilities from Contracts with Customers”, which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606. The guidance will result in the acquirer recognizing contract assets and contract liabilities at the same amounts recorded by the acquiree. The guidance should be applied prospectively to acquisitions occurring on or after the effective date. The guidance is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Effective January 1, 2023, the Company has concluded the adoption has not a material impact on its consolidated financial statements.

In December 2022, the FASB issued ASU 2022-06, Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848. This ASU extends the temporary optional practical expedients for reference rate reform related activities that impact debt, leases, derivatives and other contracts through December 31, 2024. The Company adopted the guidance immediately and has concluded the adoption did not have a material impact on its consolidated financial statements.

Recently issued accounting pronouncements, not yet adopted

In November 2023, the FASB issued ASU 2023-07 “Segment Reporting: Improvements to Reportable Segment Disclosures” (“ASU 2023-07”). This guidance expands public entities’ segment disclosures primarily by requiring disclosure of significant segment expenses that are regularly provided to the chief operating decision maker and included within each reported measure of segment profit or loss, an amount and description of its composition for other segment items, and interim disclosures of a reportable segment’s profit or loss and assets that are currently required annually. Public entities with a single reportable segment are required to provide the new disclosures and all the disclosures required under ASC 280, Segment Reporting. The guidance is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The amendments are required to be applied retrospectively to all prior periods presented in an entity’s financial statements. The Company is currently evaluating the impact that the adoption of ASU 2023-07 may have on its consolidated financial statements.

In December 2023, the FASB issued ASU 2023-09 “Income Taxes (Topic 740): Improvements to Income Tax Disclosures” (“ASU 2023-09”). This guidance is intended to enhance the transparency and decision-usefulness of income tax disclosures. The amendments in ASU 2023-09 address investor requests for enhanced income tax information primarily through changes to disclosure regarding rate reconciliation and income taxes paid both in the U.S. and in foreign jurisdictions. ASU 2023-09 is effective for fiscal years beginning after December 15, 2024 on a prospective basis, with the option to apply the standard retrospectively. Early adoption is permitted. The Company is currently evaluating this guidance to determine the impact it may have on its consolidated financial statements disclosures.

NOTE 3 - SHORT-TERM DEPOSITS

Short-term deposits represent time deposits placed with banks with original maturities of greater than three months but less than one year. Interest earned is recorded as finance income, net in the consolidated statements of operations during the years for which the Company held

(USD in thousands, except share and per share data)

short-term deposits.

As of December 31, 2023, the Company had no deposits. As of December 31, 2022, the Company had deposits in USD at Leumi Bank (Israel) that bore fixed annual interest of 4.3 %.

NOTE 4 - OTHER CURRENT ASSETS

	As of December 31,	
	2023	2022
Government institutions	66	90
Prepaid insurance	505	1,410
Other prepaid expenses	128	84
Grants receivables	574	567
Other	495	436
	1,768	2,587

NOTE 5 - PROPERTY AND EQUIPMENT, NET

Composition of assets, grouped by major classifications, is as follows:

	As of December 31,	
	2023	2022
Computers and software	525	508
Laboratory equipment	3,715	3,847
Equipment and furniture	154	158
Leasehold improvements	2,989	2,987
Accumulated depreciation	(3,481)	(2,710)
	3,902	4,790

Substantially all of the Company's non-current assets are concentrated in Israel.

Depreciation expenses were $ 871 and $ 1,001 in the years ended December 31, 2023 and 2022, respectively.

NOTE 6 - ACQUISITION OF SUBSIDIARY

In November 2017, BiomX Israel signed a share purchase agreement with the shareholders of RondinX Ltd. In accordance with the share purchase agreement, BiomX Israel acquired 100 % control and ownership of RondinX Ltd. The share purchase agreement included a contingent consideration mechanism. The contingent consideration is based on the attainment of future clinical, developmental, regulatory, commercial and strategic milestones relating to product candidates for treatment of primary sclerosing cholangitis or entry into qualifying collaboration agreements with certain third parties and may require the Company to issue 567,729 shares of Common Stock upon the attainment of certain milestones, as well as make future cash payments and/or issue additional shares of the most senior class of the Company's shares of Common Stock authorized or outstanding as of the time the payment is due, or a combination of both, up to $ 32,000 within ten years from the closing of the agreement. The Company has the discretion of determining whether milestone payments will be made in cash or by issuance of shares of Common Stock.

The contingent consideration is accounted for at fair value (level 3). There were no changes in the fair value hierarchy levelling during the years ended December 31, 2023 and December 31, 2022. Refer to note 2J.

The consolidated financial statements as of December 31, 2023 and 2022 include a liability with respect to this agreement in the amount of $ 155 and $ 148 , respectively, recorded as other liabilities.

Intangible asset acquired in the RondinX Ltd. Acquisition was fully amortized as of December 31, 2022. For the year ended December 31, 2022, amortization expense recorded in the consolidated statements of operations was $ 1,519 .

NOTE 7 - LEASES

In September 2020, BiomX Israel entered into a lease agreement for office space in Ness Ziona, Israel for five years beginning on September 1, 2020, with an option to extend for an additional period until November 30, 2030. The monthly lease payments under the lease agreement are approximately $ 56 . As part of the agreement, the lessor reimbursed BiomX Israel for costs incurred for leasehold improvements by a pre-defined amount. BiomX Israel will pay back the reimbursed amount with interest during the entire contract term. As a result, the Company recognized a lease incentive asset in an amount of $ 1,030 that is deducted from the operating lease right-of-use asset. The operating lease right-of-use assets and operating lease liabilities contemplate the option period. As a part of the agreement, BiomX Israel provided a bank guarantee to the landlord in the amount of approximately $ 257 , representing four monthly lease and related

(USD in thousands, except share and per share data)

payments.

On October 1, 2020, the Company entered into a lease agreement for office space in Branford, Connecticut, U.S., for 25 months beginning on October 5, 2020. Monthly lease payments under the agreement are approximately $ 4 . As part of the agreement, the Company deposited $ 8 as a security, representing two monthly lease and related payments. The agreement ended in October 2022.

In August 2022, BiomX Israel entered into a sublease agreement for a portion of its office space in Ness Ziona, Israel. The agreement is for a period of two years beginning on August 15, 2022. The monthly lease payments under the agreement are approximately $ 29 . The monthly lease proceeds are recorded as other income in the consolidated statements of operations.

Lease expenses recorded in the consolidated statements of operations were $ 628 and $ 713 for the years ended December 31, 2023 and 2022, respectively.

Supplemental cash flow information related to operating leases was as follows:

	Year ended December 31, 2023	Year ended December 31, 2022
Cash payments for operating leases	676	786

As of December 31, 2023, the Company's operating leases had a weighted average remaining lease term of 6.9 years and a weighted average discount rate of 6 %. The maturity analysis of operating leases as of December 31, 2023 were as follows:

	Operating Leases
2024	688
2025	688
2026	688
2027	688
2028	688
2029	688
2030	630
Total operating lease payments	4,758
Less imputed interest	(853)
Total operating lease liability balance	3,905

NOTE 8 - OTHER ACCOUNT PAYABLES

	As of December 31,	
	2023	2022
Employees and related institutions	1,852	800
Accrued expenses	1,289	887
Government institutions	175	166
Deferred fees from collaboration agreements and prepaid sublease income	28	242
Other	-	55
	3,344	2,150

NOTE 9 - TRANSACTION WITH RELATED PARTIES

A. In October 2019, BiomX Israel entered into a loan agreement in the amount of $ 19 with a stockholder who was subject to taxation in Israel in connection with the Recapitalization Transaction. As part of the loan agreement, the stockholder's shares of Common Stock were restricted and allocated to the Company. The number of shares of Common Stock in respect of which the loan was granted was 5,700 . The granting of the loan and the restrictions imposed on the related Common Stock until repayment of the loan were accounted as an acquisition of treasury stock by the Company at an amount equal to the loan. During the year ended December 31, 2022, the loan was repaid by the stockholder to the Company and was accounted as proceeds on account of shares in the statements of changes in stockholders' equity. During the year ended December 31, 2023, the shares of Common Stock were transferred to the stockholder and were accounted as reissuance of treasury stock.

B. Refer to note 12A regarding a Securities Purchase Agreement with institutional investors, all of the Company's directors and certain executive officers.

C. Refer to note 12B regarding stock options granted to related parties.

NOTE 10 - COMMITMENTS AND CONTINGENCIES

A. In March 2021, the IIA approved two new applications in relation to the Company's cystic fibrosis product candidate for an aggregate budget of NIS 10,879 thousands (approximately $ 3,286) and for the Company's product candidate for Inflammatory Bowel Disease ("IBD") and Primary Sclerosing Cholangitis for an aggregate revised budget of NIS 6,753 thousands (approximately $ 2,118). The IIA committed to fund 30 % of the approved budgets. The programs are for the period beginning January 2021 through December 2021. Through December 31, 2023, the Company received NIS 5,289 thousands (approximately $ 1,622) from the IIA and does not expect to receive additional funds with respect to these programs.

In August 2021, the IIA approved an application that supports upgrading the Company's manufacturing capabilities for an aggregate budget of NIS 5,737 thousands (approximately $ 1,778). The IIA committed to fund 50 % of the approved budget. The program is

for the period beginning July 2021 through June 2022. The program does not bear royalties. Through December 31, 2023, the Company received NIS 1,912 thousands (approximately $ 577) from the IIA with respect to this program.

In March 2022, the IIA approved an application for a total budget of NIS 13,004 thousands (approximately $ 4,094) in relation to the Company's cystic fibrosis product candidate. The IIA committed to fund 30 % of the approved budget. The program is for the period beginning January 2022 through December 2022. Through December 31, 2023, the Company received NIS 1,365 thousands (approximately $ 395) from the IIA with respect to this program.

In March 2023, the IIA approved an application for a total budget of NIS 11,283 thousands (approximately $ 3,164) in relation to the Company's cystic fibrosis product candidate. The IIA committed to fund 30 % of the approved budget. The program is for the period beginning January 2023 through December 2023. Through December 31, 2023, the Company received NIS 2, 783 thousands (approximately $ 768) from the IIA with respect to this program.

According to the agreements with the IIA, BiomX Israel will pay royalties of 3 % to 3.5 % of future sales up to an amount equal to the accumulated grant received including annual interest of LIBOR linked to the USD. Starting January 2024, the IIA has notified that the interest has changed to the 12-month SOFR rate as published on the first trading day of each calendar year. BiomX Israel may be required to pay additional royalties upon the occurrence of certain events as determined by the IIA, that are within the control of BiomX Israel. No such events have occurred or were probable of occurrence as of the balance sheet date with respect to these royalties. Repayment of the grant is contingent upon the successful completion of the BiomX Israel's R&D programs and generating sales. BiomX Israel has no obligation to repay these grants if the R&D program fails, is unsuccessful or aborted or if no sales are generated. The Company had not yet generated sales as of December 31, 2023; therefore, no liability was recorded in these consolidated financial statements. IIA grants are recorded as a reduction of R&D expenses, net.

Through December 31, 2023, total grants approved from the IIA aggregated to approximately $ 9,353 (NIS 32,068 thousands). Through December 31, 2023, BiomX Israel had received an aggregate amount of $ 8,003 (NIS 27,423 thousands) in the form of grants from the IIA. Total grants subject to royalties' payments aggregated to approximately $ 7,413 . As of December 31, 2023, BiomX Israel had a contingent obligation to the IIA in the amount of approximately $ 7,941 including annual interest of LIBOR linked to the USD.

B.

NOTE 10 - COMMITMENTS AND CONTINGENCIES (Cont.)

In July 2019, the Company and Yeda Research and Development Company Limited ("Yeda") amended the Research and License Agreement (the "License Agreement") entered into in 2015. Pursuant to the amendment, following the closing of the Recapitalization Transaction, the provisions of the Yeda license agreements related to the Exit Fee were amended so that the Company is obligated to pay Yeda a one-time payment as described in the amendment which will not exceed 1% of the consideration received in the event of any merger or acquisition involving the Company instead of the Exit Fee, with respect to each license agreement. The Merger Agreement as described in note 1D, does not apply for such merger or acquisition as defined in the amendment.

C. As successor in interest to RondinX Ltd., BiomX Israel is a party to a license agreement dated March 20, 2016 with Yeda, pursuant to which the Company has a worldwide exclusive license to Yeda's know-how, information and patents related to the Company's meta-genomics target discovery platform. As consideration for the license, the Company is obligated to pay annual license fees of $ 10 , subject to the terms and conditions of the agreement. Either party has the option to terminate the agreement at any time by way of notice to the other party, as outlined in the agreement. In addition, the Company is obligated to pay a royalty in the low single digits based on revenue of products. The consolidated financial statements as of December 31, 2023 and 2022 include a liability with respect to this agreement in the amount of $ 155 and $ 148 , respectively, recorded as other liabilities. Refer to note 6 regarding a contingent consideration with respect to the RondinX Ltd. acquisition.

D. In December 2017, BiomX Israel signed a patent license agreement with Keio University and JSR Corporation in Japan. According to the agreement, BiomX Israel received an exclusive patent license to certain patent rights related to inflammatory bowel disease ("IBD") In return, the Company will pay an annual license fee of between $ 15 and $ 25 subject to the terms and conditions specified in the agreement. Additionally, the Company is obligated to make additional payments based upon the achievement of clinical and regulatory milestones up to an aggregate of $ 32,100 and royalty payments based on future revenue. As the Company has not yet generated revenue from operations and the achievement of certain milestones is not probable, no provision was included in the consolidated financial statements as of December 31, 2023 and 2022 with respect to the agreement.

In April 2019, BiomX Israel signed an additional patent license agreement with Keio University and JSR Corporation in Japan. According to the agreement, BiomX Israel received an exclusive sublicense by JSR to certain patent rights related to the treatment of primary sclerosing cholangitis. In return, the Company is required (i) to pay a license issue fee of $ 20 and annual license fees ranging from $ 15 to $ 25 (ii) make additional payments based upon the achievement of clinical and regulatory milestones up to an aggregate of $ 32,100 and (iii) make tiered royalty payments, in the low single digits based on future revenue. As the Company has not yet generated revenue from operations and the achievement of certain milestones is not probable, no provision was included in the consolidated financial statements as of December 31, 2023. As of December 31, 2022, the consolidated financial statements included liabilities with respect to this agreement in the amount of $ 40 recorded as other liabilities. For the year ended December 31, 2023, the Company recorded $ 40 in the consolidated statements of operations as a reduction of R&D expenses.

(USD in thousands, except share and per share data)

NOTE 10 - COMMITMENTS AND CONTINGENCIES (Cont.)

F. On June 23, 2022 (the "Effective Date"), BiomX Israel entered into a research collaboration agreement with Boehringer Ingelheim International GmbH ("BI") for a collaboration to identify biomarkers for IBD. Under the agreement, BiomX Israel is eligible to receive fees totaling $ 1,411 to cover costs to be incurred by BiomX Israel in conducting the research plan under the collaboration. The fees will be paid in instalments of $500 within 30 days of the Effective Date and three additional installments of $500, $200 and $211 upon completion of certain activities under the research plan. Unless terminated earlier, this agreement will remain in effect until (a) a period of eighteen (18) months thereafter or (b) completion of the project plan and submission and approval of the final report, whichever occurs sooner, unless otherwise extended. The consideration is recorded as a reduction of R&D expenses, net in the consolidated statements of operations according to the input model method on a cost-to-cost basis. The remainder of the consideration is recorded as other accounts payable in the consolidated balance sheets. In December 2023, the Company completed its obligations with respect to this agreement. As of December 31, 2023, the Company received consideration of $ 1,200 . For the years ended December 31, 2023 and 2022, the Company recorded $ 1,124 and $ 287 , respectively, in the consolidated statements of operations as a reduction of R&D expenses. See note 19A regarding funds received after the balance sheet date.

G. Refer to note 7 for information regarding the Company's lease liabilities.

NOTE 11 - LONG-TERM DEBT

On August 16, 2021, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with Hercules Capital, Inc. ("Hercules"), with respect to a venture debt facility. Under the Loan Agreement, Hercules provided the Company with access to a term loan with an aggregate principal amount of up to $ 30,000 (the "Term Loan Facility"), available in three tranches, subject to certain terms and conditions. The first tranche of $ 15,000 was advanced to the Company on the date the Loan Agreement was executed. Upon the occurrence of specified milestones and continuing through December 31, 2022 and through September 30, 2023, a loan in the aggregate principal amount of up to $ 10,000 ("the second tranche") and $ 5,000 ("the third tranche"), would have become available. The milestones for the second and third tranches were not reached and have expired. The Company was required to make interest only payments through March 1, 2023, and started then to repay the principal balance and interest in equal monthly installments through September 1, 2025.

The Company may prepay advances under the Loan Agreement, in whole or in part, at any time subject to a prepayment charge equal to: (a) 3.0 % of amounts prepaid, if such prepayment occurs during the first 12 months following the closing date; (b) 2.0% after 12 months but prior to 24 months; (c) 1.0% after 24 months but prior to 36 months, and (d) no charge after 36 months. Upon prepayment or repayment of all or any of the term loans under the Term Loan Facility, the Company is required to pay an end of term charge ("End of Term Charge") equal to 6.55 % of the total aggregate amount of the term loans being prepaid or repaid. See note 19D regarding prepayment of the term loan after the balance sheet date.

Interest on the term loan accrues at a per annum rate equal to the greater of (i) the Prime Rate as reported in The Wall Street Journal plus 5.70% and (ii) 8.95%. On December 31, 2023, the Prime Rate was 8.50 %. Interest expense is calculated using the effective interest method and is inclusive of non-cash amortization of capitalized loan issuance costs and of the End of Term Charge. Debt issuance costs are recorded on the consolidated balance sheet as a reduction of liabilities. Amounts allocated to the debt, net of issuance cost, are subsequently recognized at amortized cost using the effective interest method. On December 31, 2023, the effective interest rate was 19.39 %.

NOTE 11 - LONG-TERM DEBT (Cont.)

As of December 31, 2023, the carrying value of the term loan consists of $ 10,747 principal outstanding in addition to the unamortized debt discount, issuance costs and End of Term Charge of approximately $ 440 . The full End of Term Charge of $ 983 is recognized over the life of the term loan as an interest expense using the effective interest method. The debt issuance costs have been recorded as a debt discount which is being accreted to interest expense through the maturity date of the term loan.

Interest expense relating to the term loan, which is included in interest expense in the consolidated statements of operations was $ 2,404 and $ 2,069 for the years ended December 31, 2023 and 2022, respectively.

Under the terms of the Loan Agreement, the Company granted first priority liens and security interests in substantially all of the Company's intellectual property as collateral for the obligations thereunder. The Company also granted Hercules the right, at their discretion, to participate in any closing of any single subsequent broadly marketed financing as defined up to a maximum aggregate amount of $ 2,000 under the terms as afforded to other investors in such financing. The Loan Agreement also contains representations and warranties by the Company and Hercules, indemnification provisions in favor of Hercules and customary affirmative and negative covenants, including a liquidity covenant beginning October 1, 2022, requiring the Company to maintain a minimum aggregate compensating cash balance of $ 5,000 , and events of default, including a material adverse change in the Company's business, payment defaults, breaches of covenants following any applicable cure period, and a material impairment in the perfection or priority of Hercules' security interest in the collateral. In the event of default by the Company under the Loan Agreement, the Company may be required to repay all amounts then outstanding under the Loan Agreement.

Future principal payments for the long-term debt are as follows:

	December 31, 2023
2024	5,785
2025	4,962
Total principal payments	10,747
Unamortized discount, debt issuance costs and accretion of End of Term Charge	440
Total future principal payments	$ 11,187
Current portion of long-term debt	(5,785)
Long-term debt, net	$ 5,402

NOTE 12 - STOCKHOLDERS EQUITY

A. Share Capital:

Common Stock:

On August 24, 2022, the Company's stockholders approved increasing the number of authorized shares of Common Stock from 60,000,000 shares, par value $ 0.0001 per share, to 120,000,000 shares, par value $ 0.0001 per share.

Treasury Stock:

Refer to note 9A.

Initial Public Offering:

On December 18, 2018, the Company consummated its initial public offering ("IPO") of 7,000,000 units ("Public Units"). The Public Units sold in the IPO were sold at an offering price of $ 10.00 per Public Unit, generating total gross proceeds of $ 70,000 . The Public Units each consist of one share of Common Stock and one warrant to purchase one-half of a share of Common Stock ("Public Warrant"), with every two Public Warrants entitling the holder to purchase one share of Common Stock for $ 11.50 per full share.

Simultaneous with the consummation of the IPO, the Company consummated the private placement of an aggregate of 2,900,000 warrants ("Private Placement Warrants"). The Private Placement Warrants were expired on December 13, 2023.

NOTE 12 - STOCKHOLDERS EQUITY (Cont.)

A. Share Capital: (Cont.)

Stock Exchange:

As detailed in note 1, as part of the Recapitalization Transaction on October 28, 2019, the Company issued 15,069,058 shares of Common Stock in exchange for approximately 65 % of the issued and outstanding ordinary shares and all the preferred shares of BiomX Israel.

In addition, the Company also agreed to issue the following number of additional shares of Common Stock, in the aggregate, to stockholders on a pro rata basis, subject to the Company's achievement of the conditions specified below following the recapitalization transaction (all with respect to the Company's Common Stock traded on the NYSE American):

A. 2,000,000 additional shares of the Company's Common Stock if the daily volume weighted average price of the Company's Common Stock in any 20 trading days within a 30 -trading day period prior to January 1, 2024 is greater than or equal to $ 22.75 per share. As of December 31, 2023, the condition was not achieved and the Company's conditional undertaking to issue additional shares expired.

B. 2,000,000 additional shares of the Company's Common Stock if the daily volume weighted average price of the Company's Common Stock in any 20 trading days within a 30 -trading day period prior to January 1, 2026 is greater than or equal to $ 29.00 per share.

Private Investment in Public Equity:

On February 22, 2023, the Company entered into a Securities Purchase Agreement to issue and sell an aggregate of 15,997,448 shares of its Common Stock and 14,610,714 pre-funded warrants (the "Pre-Funded Warrants", and collectively, the "Securities") at a price of $ 0.245 per share and $ 0.244 per Pre-Funded Warrant, through a PIPE. The gross proceeds from this offering are approximately $ 7,485 , before deducting issuance costs. The offering closed in two parts. The first closing, which covered 3,199,491 shares of Common Stock and 2,776,428 Pre-Funded Warrants for gross proceeds of $ 1,469 , occurred on February 27, 2023. Such Pre-Funded Warrants became exercisable on February 27, 2023, at an exercise price of $ 0.001 per share of Common Stock and have no expiration date. At the first closing, the Company raised net proceeds of $ 1,293 , after deducting issuance costs of $ 176 . On April 24, 2023, the Company's stockholders approved the issuance of up to 24,632,243 shares of Common Stock, comprised of shares and shares underlying Pre-Funded Warrants, in accordance with NYSE American rules. On May 4, 2023, the Company completed the second closing of the offering and issued an aggregate of 12,797,957 shares of Common Stock and 11,834,286 Pre-Funded Warrants. Such Pre-Funded Warrants became exercisable on May 4, 2023, at an exercise price of $ 0.001 per share of Common Stock and have no expiration date. At the second closing, the Company raised net proceeds of $ 5,859 , after deducting issuance costs of $ 157 . As of December 31, 2023, no Pre-Funded Warrants were exercised.

The exercise of the outstanding Pre-Funded Warrants is subject to a beneficial ownership limitation between 9.90 %- 9.99 %, The exercise price and number of shares of Common Stock issuable upon the exercise of the Pre-Funded Warrants are subject to adjustment in the event of any stock dividends, stock splits, reverse stock split and reclassification, as described in the agreements. Pursuant to the sole discretion of the holder, the Pre-Funded Warrants may be exercisable on a "cashless" basis. The Pre-Funded Warrants were classified as a component of stockholders' equity.

NOTE 12 - STOCKHOLDERS EQUITY (Cont.)

A. Share Capital: (Cont.)

At-the-market Sales Agreement:

In December 2020, pursuant to a registration statement on Form S-3 declared effective by the Securities and Exchange Commission on December 11, 2020, the Company entered into an Open Market Issuance Sales Agreement ("ATM Agreement") with Jefferies LLC. ("Jefferies"), which provided that, upon the terms and subject to the conditions and limitations in the ATM Agreement, the Company could elect, from time to time, to offer and sell shares of Common Stock having an aggregate offering price of up to $ 50,000 through Jefferies acting as sales agent. During the year ended December 31, 2023, the Company sold 200 shares of Common Stock under the ATM Agreement, at an average price of $ 0.62 per share. During the year ended December 31, 2022, the Company sold 229,044 shares of Common Stock under the ATM Agreement, at an average price of $ 1.19 per share, raising aggregate net proceeds of approximately $ 273 , after deducting an aggregate commission of $ 8 . The ATM Agreement was terminated on December 7, 2023.

In December 2023, pursuant to a registration statement on Form S-3 declared effective by the Securities and Exchange Commission on January 2, 2024, the Company entered into an Open Market Offering Agreement with H.C. Wainwright & Co., LLC ("Wainwright"), pursuant to which the Company may issue and sell shares of Common Stock having an aggregate offering price of up to $ 7,500,000 from time to time through Wainwright. The Company recorded transaction costs of $ 210 in the consolidated statements of operations.

Maruho Agreement:

In October 2021, the Company entered into a Stock Purchase Agreement with a subsidiary of Maruho Co. Ltd., ("Maruho"), a leading dermatology-focused pharmaceutical company in Japan, pursuant to which the Company issued to Maruho 375,000 shares of Common Stock at a price of $ 8.00 per share for gross proceeds of $ 3,000 . The company also granted Maruho a right of first offer to license its atopic dermatitis product candidate, BX005, in Japan. The right of first offer will commence following the availability of results from the Phase 1/2 study initially expected in 2022. The Company applied ASC 606 by analogy to the agreements. The agreements were combined into a single unit of account for the purpose of applying ASC 606. Part of the consideration paid under the agreements, equal to the grant date fair value of the shares issued to Maruho of $ 1,024 , is attributed to the issuance of shares and accounted for as an increase in equity. The remainder of $ 1,976 was attributed to a contract liability, to be recognized as other income, at a point in time, once the clinical trials related to the product candidate are completed. Following the Company's announcement on May 24, 2022, as mentioned in note 18 below regarding the delaying of the Company's atopic dermatitis program, the contract liability was classified as a non-current liability.

NOTE 12 - STOCKHOLDERS EQUITY (Cont.)

A. Share Capital: (Cont.)

CFF Agreement:

In December 2021, the Company entered into a Securities Purchase Agreement with the CF Foundation, an organization that historically played a role in supporting the development of innovative therapies for patients suffering from cystic fibrosis (CF). Under the terms of the agreement, the Company will receive up to $ 5,000 in two tranches. In the first tranche, which closed and fully received on December 21, 2021, the CF Foundation invested $ 3,000 as an initial equity investment based on a share price of $ 2.57 . Upon completion of patient dosing in Part 1 of the Company's Phase 1b/2a study of BX004, the Company would have the right to receive the second tranche of $ 2,000 , also as an equity investment. In the event that the average closing price of the Common Stock for the ten trading days prior to the second tranche completion is less than $ 2.57 , the Company shall have the right in its sole discretion to waive the second tranche payment and in such event the CF Foundation would not have had any right to receive additional shares. However, the CF Foundation may waive the Milestone in its discretion and make the Milestone Payment nonetheless. In February 2023, the Company waived its right to receive the second tranche of $ 2,000 mentioned above, as the CF Foundation participated in the PIPE and invested an aggregate amount of $2,000.

Preferred Stock:

The Company is authorized to issue 1,000,000 shares of preferred stock with a par value of $ 0.0001 per share with such designation, rights and preferences as may be determined from time to time by the Company's Board of Directors (the "Board"). See note 1D regarding issuance of shares of preferred stock after the balance sheet date.

Warrants:

The Public Warrants became exercisable upon the closing of the Recapitalization Transaction. No fractional shares will be issued upon exercise of the Public Warrants. Therefore, the Public Warrants must be exercised in multiples of two warrants. The Public Warrants will expire five years after the completion of the Recapitalization Transaction or earlier upon redemption or liquidation.

The Company may redeem the Public Warrants:

- in whole and not in part;
- at a price of $ 0.01 per warrant;
- at any time during the exercise period;
- upon a minimum of 30 days prior written notice of redemption;

(USD in thousands, except share and per share data)

- if, and only if, the last sale price of the Company's Common Stock equals or exceeds $ 16.00 per share for any 20 trading days within a 30 -trading day period ending on the third business day prior to the date on which the Company sends the notice of redemption to the warrant holders; and

- if, and only if, there is a current registration statement in effect with respect to the shares of Common Stock underlying such warrants at the time of redemption and for the entire 30 -day trading period referred to above and continuing each day thereafter until the date of redemption.

If the Company calls the Public Warrants for redemption, management will have the option to require all holders that wish to exercise the Public Warrants to do so on a "cashless basis," as described in the warrant agreement. The exercise price and number of shares of Common Stock issuable upon exercise of the warrants may be adjusted in certain circumstances including in the event of a stock dividend, or recapitalization, reorganization, merger or consolidation. However, the warrants will not be adjusted for issuance of Common Stock at a price below their exercise price. Additionally, in no event will the Company be required to net cash settle the warrants.

NOTE 12 - STOCKHOLDERS EQUITY (Cont.)

A. Share Capital: (Cont.)

As of December 31, 2023, the Company had the following outstanding warrants to purchase Common Stock issued to stockholders:

Warrant	Issuance Date	Expiration Date	Exercise Price Per Share	Number of Shares of Common Stock Underlying Warrants
Public Warrants	IPO (December 13, 2018)	October 28, 2024	11.50	3,500,000
2021 Registered Direct Offering Warrants	SPA (July 28, 2021)	January 28, 2027	5.00	2,812,501
Pre-Funded Warrants	February 27, 2023	-	0.001	2,776,428
Pre-Funded Warrants	May 4, 2023	-	0.001	11,834,286
				20,923,215

B. Stock-based compensation:

Equity Incentive Plan:

In 2015, the Board of Directors of BiomX Israel approved a plan for the allocation of options to employees, service providers, and officers (the "2015 Plan"). The options represented a right to purchase one Ordinary Share of the BiomX Israel in consideration of the payment of an exercise price. Also, the options were granted in accordance with the "capital gains route" under section 102 and section 3(i) of the Israeli Income Tax Ordinance and section 409A of the U.S. Internal Revenue Code as technically adjusted following the Recapitalization Transaction on October 28, 2019.

As of December 31, 2023, there are no shares of Common Stock remaining for issuance under the 2015 Plan.

In 2019, the Company adopted a new incentive plan (the "2019 Plan") to grant 1,000 options, exercisable for Common Stock.

The aggregate number of shares of Common Stock that may be delivered pursuant to the 2019 Plan will automatically increase on January 1 of each year, commencing on January 1, 2020 and ending on (and including) January 1, 2029, in an amount equal to four percent (4 %) of the total number of shares of Common Stock outstanding on December 31 of the preceding calendar year.

Notwithstanding the foregoing, the Board may act prior to January 1 of a given year to provide that there will be no January 1 increase for such year or that the increase for such year will be a lesser number of shares of Common Stock than provided herein.

As of December 31, 2023, there were 1,011,104 shares of Common Stock remaining for issuance under the 2019 Plan. On January 1, 2024, the number of shares of Common Stock available to grant under the 2019 Plan was increased by 1,839,187 .

NOTE 12 - STOCKHOLDERS EQUITY (Cont.)

B. Stock-based compensation: (Cont.)

Stock Options:

On March 29, 2022, the Board of Directors approved the grant of 1,153,500 options to 89 employees, three senior officers, one consultant, and five directors under the Company's 2019 Plan, without consideration. Options were granted at an exercise price of $ 1.41 per share with a vesting period of four years . Directors and senior officers are entitled to full acceleration of their unvested

(USD in thousands, except share and per share data)

options upon the occurrence of both a change in control of the Company and the end of their engagement with the Company.

On June 21, 2022, the Board of Directors approved the grant of 350,500 options to 53 employees, and one consultant under the Company's 2019 Plan, without consideration. Options were granted at an exercise price of $ 0.66 per share with a vesting period of four years .

On August 22, 2022, the Board of Directors approved the grant of 290,000 options to four senior officers under the Company's 2019 Plan, without consideration. Options were granted at an exercise price of $ 0.66 per share with a vesting period of four years . Senior officers are entitled to full acceleration of their unvested options upon the occurrence of both a change in control of the Company and the end of their engagement with the Company.

On September 30, 2022, the Board of Directors approved the grant of 20,000 options to a consultant under the Company's 2019 Plan, without consideration. Options were granted at an exercise price of $ 0.37 per share with a vesting period of one year .

On March 1, 2023, the Board of Directors approved the grant of 1,543,000 options to 49 employees, five senior officers and three directors under the 2019 Plan, without consideration. The options were granted at an exercise price of $ 0.40 per share with a vesting period of four years . Directors and senior officers are entitled to full acceleration of their unvested options upon the occurrence of both a change in control of the Company and the end of their engagement with the Company.

On August 21, 2023, the Board of Directors approved the grant of 82,000 options to two directors under the Company's 2019 Plan, without consideration. Options were granted at an exercise price of $ 0.363 per share with a vesting period of four years . Directors are entitled to full acceleration of their unvested options upon the occurrence of both a change in control of the Company and the end of their engagement with the Company.

On October 19, 2023, the Board of Directors approved the grant of 41,000 options to one director under the 2019 Plan, without consideration. The options were granted at an exercise price of $ 0.32 per share with a vesting period of four years . Such director is entitled to full acceleration of his unvested options upon the occurrence of both a change in control of the Company and the end of his engagement with the Company.

On October 29, 2023, the Board of Directors approved the grant of 151,100 options to 4 employees and one senior officer under the 2019 Plan, without consideration. The options were granted at an exercise price of $ 0.275 per share with a vesting period of four years . The senior officer is entitled to full acceleration of her unvested options upon the occurrence of both a change in control of the Company and the end of her engagement with the Company.

On October 29, 2023, the Board of Directors approved a reduction in the exercise price ("the Repricing") of each outstanding option to purchase shares of the Company's Common Stock currently held by employees of BiomX with an original exercise price above $ 0.69 per share granted under the Company's 2015 Employee Stock Option Plan to $ 0.275 per share. Other than the exercise price, no other terms of grant of the repriced options were changed; however, the options may not be exercised until one year after the repricing date. The reduction of the exercise price of the options was considered a type I modification according to ASC 718. As a result of the Repricing, the Company recognized immediately the incremental fair value in the amount of $ 167 as the repriced options were fully vested on October 29, 2023.

On November 9, 2023, the Company filed with the Securities and Exchange Commission a Tender Offer Statement defining the terms and conditions of a one-time voluntary stock option exchange of certain eligible options for its employees (the "Option Exchange"). the Company offered to exchange certain out-of-the-money stock options for new stock options at an exchange ratio of between 1.4 and 3.8 surrendered options for one new option exercisable for shares of common stock with a lower exercise price. On December 11, 2023, the completion date of the Option Exchange, stock options covering an aggregate of 1,508,280 shares of Common Stock were tendered by eligible employees, and the Company granted new options at an exercise price of $ 0.275 , the Company's closing stock price on December 11, 2023, covering an aggregate of 694,871 shares of Common Stock under the 2019 Plan in exchange for the tendered options. The Cancellation and new stock options grant qualifies as a "cancellation of an award accompanied by the concurrent grant of a replacement award," as defined in ASC 718, which is accounted for as a modification. Under ASC 718, incremental compensation cost is measured as the excess, if any, of the fair value of the modified award over the fair value of the original award immediately before its terms are modified. As a result of the Option Exchange, the Company will recognize an incremental stock-based compensation expense of $ 19 over the remaining vesting period of the new stock options, which is three or four years . The Company will recognize the sum of the incremental stock-based compensation expense and the remaining unrecognized compensation expense for the original awards on the modification date, over the remaining vesting period of the new stock options.

The fair value of each option was estimated as of the date of grant or reporting period using the Black-Scholes option-pricing model using the following assumptions:

	2023	2022
Underlying value of Common Stock ($)	0.28 - 0.40	0.37 - 1.41
Exercise price ($)	0.28 - 0.40	0.37 - 1.41
Expected volatility (%)	90.0 - 96.6	85.3 - 88.4
Expected terms of the option (years)	6.11	5.31 - 6.11
Risk-free interest rate (%)	4.21 - 4.98	2.50 - 4.05

NOTE 12 - STOCKHOLDERS EQUITY (Cont.)

B. Stock-based compensation: (Cont.)

Stock Options: (Cont.)

Total fair value embodied in the options granted in 2023 and 2022 at the grant date, is estimated to be $ 552 and $ 1,311 respectively. These amounts will be recognized in statements of operations over the vesting period.

(USD in thousands, except share and per share data)

As of December 31, 2023, the unrecognized compensation cost related to all unvested, equity classified stock options of $ 742 is expected to be recognized as an expense on a graded vesting method over a weighted-average period of 1.65 years.

A summary of options granted to purchase the Company's Common Stock under the Company's stock option plans are as follows:

	For year ended December 31, 2023		
	Number of Options	Weighted average exercise price	Aggregate intrinsic value
Outstanding at the beginning of period	4,769,441	$ 2.93	$ 40
Granted	1,817,100	0.36	
Forfeited/canceled	(1,838,140)	3.98	
Replacement options granted	694,871	0.27	
Expired	(162,561)	4.66	
Exercised	-	$ -	
Outstanding at the end of period	5,280,711	0.54	$ 72
Exercisable at end of period	2,790,269	0.58	
Weighted average remaining contractual life – years as of December 31, 2023	6.85		

Warrants:

As of December 31, 2023, and 2022, the Company had the following outstanding compensation related warrants to purchase Common Stock as follows:

Warrant	Issuance Date	Expiration Date	Exercise Price Per Share	Number of Shares of Common Stock Underlying Warrants
Private Warrants issued to scientific founders (see below)	November 27, 2017	-	-	2,974

NOTE 12 - STOCKHOLDERS EQUITY (Cont.)

B. Stock-based compensation: (Cont.)

Warrants: (Cont.)

In November 2017, BiomX Israel issued 2,974 warrants to its founders. The warrants were fully vested at their grant date and will expire immediately prior to a consummation of an M&A transaction. The warrants did not expire as a result of the Recapitalization Transaction and have no exercise price. The Merger Agreement as described in note 1D does not apply for such M&A transaction as defined in the grant agreement.

The following table sets forth the total stock-based payment expenses resulting from options and warrants granted, included in the statements of operations:

	Year ended December 31,	
	2023	2022
Research and development expenses, net	369	490
General and administrative	690	1,039
	1,059	1,529

The Company recognized stock-based compensation expenses in connection with options granted to executive officers of the Company in the amount of $ 722 and $ 923 for the years ended December 31, 2023 and 2022, respectively.

NOTE 13 - RESEARCH AND DEVELOPMENT EXPENSES, NET

(USD in thousands, except share and per share data)

	Year ended December 31,	
	2023	2022
Professional service and subcontractors	10,349	5,218
Salaries and related expenses	5,636	8,640
Stock-based compensation	369	490
Depreciation	782	909
Materials and supplies	930	1,149
Rent and related expenses	905	1,101
Other	104	160
	19,075	17,667
Less change in contingent liabilities (see Note 10D)	(40)	-
Less income from collaboration agreements (see Note 10F)	(1,272)	(287)
Less grants from the IIA (see Note 10A)	(1,065)	(1,136)
	16,698	16,244

NOTE 14 - GENERAL AND ADMINISTRATIVE EXPENSES

	Year ended December 31,	
	2023	2022
Salaries and related expenses	2,714	2,423
Stock-based compensation	690	1,039
Professional services	2,289	2,067
Travel expenses	112	160
Rent and related expenses	298	346
Insurance expenses	1,577	2,447
Other	970	974
	8,650	9,456

NOTE 15 - FINANCE EXPENSES (INCOME), NET

	Year ended December 31,	
	2023	2022
Exchange rate differences	(106)	(862)
Interest income from bank deposits	(1,122)	(464)
Bank fees and other	56	13
Loss (income) from foreign exchange contracts	(77)	411
	(1,249)	(902)

NOTE 16 - INCOME TAXES

A. The Company files income tax returns in the U.S. federal jurisdiction and in state and local jurisdictions and is subject to examination by the various taxing authorities. The Company's income tax returns since 2020 remain open and subject to examination. The statutory U.S. federal income tax rate is 21 %. As of December 31, 2023, the Company had total net operating losses in the U.S. of approximately $ 19,633 , which may be carried forward and offset against taxable income in the future.

B. BiomX Ltd. and RondinX Ltd. file income tax returns in Israel. Their tax assessments through 2017 are deemed to be final. The statutory Israeli income tax rate is 23 %.

C. As of December 31, 2023 and 2022, BiomX Israel had total carryforward losses in Israel of approximately $ 108,364 and $ 90,878 respectively, which may be offset against taxable income in the future for an indefinite period. See Note 19E for further information regarding the carryforward losses in respect to the tax assessment.

D. Management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets as of December 31, 2023 and 2022. Management reevaluates the positive and negative evidence at each reporting period.

E. The Company's policy is to record estimated interest and penalties related to uncertain tax positions in income tax expense. The Company has no amounts recorded for any unrecognized tax positions, accrued interest or penalties as of December 31, 2023 and 2022.

A reconciliation of the U.S. federal statutory tax rate and the effective tax rate is as follow:

	As of December 31,	
	2023	2022

Statutory U.S. federal income tax rate	(21)%	(21)%
U.S. vs foreign tax rate differential	(2)	(2)
Change in deferred tax asset valuation allowance	23	23
Effective tax rate	-%	-%

Loss before taxes on income, consists of the following:

	As of December 31,	
	2023	2022
United States	6,085	6,645
Israel	20,061	21,607
	26,146	28,252

Net deferred tax assets as of December 31, 2023 and 2022 consisted of the following:

	As of December 31,	
	2023	2022
Deferred tax assets:		
Net operating loss carryforwards	29,047	24,509
Research and development expenses, net	2,982	3,183
Lease liability	898	1,031
Other	200	192
Total deferred tax assets	33,127	28,915
Deferred tax liabilities:		
Right of use assets	(964)	(1,071)
Fixed assets	(16)	(12)
Total deferred tax liabilities	(980)	(1,083)
Valuation allowance	(32,147)	(27,832)
Net deferred tax assets	-	-

NOTE 17 - BASIC LOSS PER SHARE

The basic and diluted net loss per share and weighted average number of shares of Common Stock used in the calculation of basic and diluted net loss per share are as follows:

	For the year ended December 31,	
	2023	2022
Net loss	26,169	28,317
Net loss per share	0.51	0.95
Weighted average number of Common Stock	51,330,324	29,854,003

Basic loss per share is computed on the basis of the net loss for the period divided by the weighted average number of shares of Common Stock outstanding during the period, fully vested warrants with no exercise price for the Company's Common Stock and fully vested Pre-Funded Warrants for the Company's Common Stock at an exercise price of $ 0.001 per share, as the Company considers these shares to be exercised for little to no additional consideration.

As of December 31, 2023, the basic loss per share calculation included a weighted average number of 2,974 of fully vested warrants and 10,176,995 of fully vested Pre-Funded Warrants. As the inclusion of shares of Common Stock equivalents in the calculation would be anti-dilutive for all periods presented, diluted net loss per share is the same as basic net loss per share.

The calculation of diluted loss per share as of December 31, 2023 does not include 5,280,711 , 6,312,501 and 2,000,000 of shares underlying options, shares underlying warrants and contingent shares, respectively, because the effect would be anti-dilutive.

The calculation of diluted loss per share as of December 31, 2022 does not include 4,769,441 , 9,215,475 and 4,000,000 of shares underlying options, shares underlying warrants and contingent shares, respectively, because the effect would be anti-dilutive.

NOTE 18 - CORPORATE RESTRUCTURING

On May 24, 2022, the Company announced a Corporate Restructuring, intended to extend the Company's capital resources, while prioritizing the Company's ongoing cystic fibrosis program and delaying the Company's atopic dermatitis program. The Corporate Restructuring included a reduction of 36 full-time employees, two consultants and 9 part-time employees, or 42% of the Company's employees as of such date . The Company incurred a one-time employee benefits and severance cost of approximately $ 214 in operating expenses as of December 31, 2022. Non-cash stock-based compensation credits related to the forfeiture of stock options of approximately $ 376 are included in operating expenses as of December 31, 2022.

NOTE 19 - SUBSEQUENT EVENTS

A. On January 18, 2024, the Company received the last instalment of $ 211 with respect to the BI research collaboration agreement as described in note 10F.

B. On March 6, 2024, the Company entered into a Merger Agreement with APT and certain other parties, as a result of which APT became a wholly-owned subsidiary of the Company. See note 1D for further information. Under the disclosure requirements of Accounting Standards Codification Topic 805, "Business Combinations", the Company is required to provide information regarding the effect of the business combination. Due to the following limitations, the initial accounting for the business combination was incomplete at the time of the issuance of the financial statements, therefore, the Company did not include the above mentioned information as permitted by ASC 805-10-50-4 and ASC 805-30-50-3.

   a. The Acquisition closed on March 15, 2024, while the filing date of the Company's annual financial statements in its annual report on Form 10-K is April 3, 2024.

   b. Full and final financial data of APT was not available to the Company by the filing date of the Company's annual financial statements in form 10-K.

   c. The Company hasn't completed the work of the purchase price allocation needed under ASC 805.

C. On March 6, 2024, concurrently with the consummation of the Acquisition, the Company entered into a securities purchase agreement with certain investors for aggregate gross proceeds of $ 50 million. See note 1D for further information.

D. On March 19, 2024, the Company prepaid all of the term loan under the Term Loan Facility in a total of $ 10,428 . The prepayment included the End of Term Charge of $ 983 and accrued interest of $ 69 . The Company received a waiver regarding the prepayment charge that should have been 1 % out of the prepaid principal amount that equals to $ 94 .

E. On March 21, 2024, RondinX signed an agreement with the Israeli tax authority in respect to an assessment for the years 2018-2022. The agreement concluded that RondinX's IP and employees were transferred to BiomX Israel on the acquisition date. As a result, RondinX had a capital gain equal to its carryforward losses of $ 2,785 (NIS 10,036 thousands) and no further payment will be required.

Exhibit 4.1

DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12
OF THE SECURITIES EXCHANGE ACT OF 1934

BiomX Inc., or the Company, we, us or our, has three classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended, or the Exchange Act: (i) shares of Common Stock, $0.0001 par value per share, or common stock; (ii) Units, each consisting of one share of common stock and one warrant entitling the holder to receive one-half (1/2) of a share of common stock, or the units; and (iii) the warrants included as part of the units, or the warrants. Each of the Company's securities registered under Section 12 of the Exchange Act are listed on the NYSE American Stock Market.

DESCRIPTION OF SECURITIES

The following summary is a description of the material terms of our share capital. We encourage you to read our Amended and Restated Certificate of Incorporation, as amended, or our Certificate of Incorporation, and Amended and Restated By-laws, or our Bylaws, and the Certificate of Designation of Preferences, Rights and Limitations of Series X Preferred Stock, or the Certificate of Designation, which have been filed with the Securities and Exchange Commission, as well as the applicable provisions of the General Corporation Law of the State of Delaware, or the DGCL, for more information.

Our authorized capital stock consists of 120,000,000 shares of common stock, and 1,000,000 shares of preferred stock.

Common Stock

Our holders of record of our common stock are entitled to one vote for each share held on all matters to be voted on by stockholders. Our stockholders have no conversion, preemptive or other subscription rights and there are no sinking fund or redemption provisions applicable to the shares of common stock. There is no cumulative voting with respect to the election of directors. Our stockholders are entitled to receive ratable dividends when, as and if declared by our Board of Directors out of funds legally available therefor.

We have not paid any cash dividends on our common stock to date and do not intend to pay cash dividends in the foreseeable future. The payment of cash dividends in the future will be dependent upon our revenues and earnings, if any, capital requirements and general financial condition. The payment of any cash dividends will be within the discretion of our Board of Directors at such time.

Preferred Stock

We have 256,888 Series X Non-Voting Convertible Preferred Stock, par value $0.0001 per share, outstanding, or the Series X Preferred Stock . Our Certificate of Incorporation authorizes the issuance of 1,000,000 shares of preferred stock with such designation, rights and preferences as may be determined from time to time by our Board of Directors. Accordingly, our Board of Directors is empowered, without stockholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights which could adversely affect the voting power or other rights of the holders of common stock. In addition, the preferred stock could be utilized as a method of discouraging, delaying or preventing a change in control of us.

The powers, preferences, rights, qualifications, limitations and restrictions applicable to the Series X Preferred Stock are set forth in the Certificate of Designation, which was filed with the Secretary of State of the State of Delaware prior to the closing of the merger between us and Adaptive Phage Therapeutics, Inc., or APT, on March 15, 2024, or the Merger.

Holders of Series X Preferred Stock are entitled to receive dividends on shares of Series X Preferred Stock equal to, on an as-if-converted-to-Common-Stock basis, and in the same form as, dividends actually paid on shares of the Common Stock. Except as otherwise required by law or with respect to the Series X Preferred Stock protective provisions set forth the Certificate of Designations and described below, the Series X Preferred Stock does not have voting rights.

The Certificate of Designation contains certain customary covenants of the Company that are customary for documents of this type, including restrictions on (i) consummating Fundamental Transactions (as defined in the Certificate of Designation), or (ii) reclassifying the outstanding Common Stock, including but not limited to a stock dividend or reverse stock split, in each case prior to the stockholder approval of the conversion of the Series X Preferred Stock into shares of Common Stock in accordance with the rules of NYSE American, or the Conversion Proposal, without the affirmative vote or written approval, agreement or waiver of the holders of 70% of the then outstanding shares of the Series X Preferred Stock, or the Requisite Holders. The Series X Preferred Stock does not have a preference upon any liquidation, dissolution or winding-up of the Company.

Following stockholder approval of the Conversion Proposal, each share of Series X Preferred Stock will automatically convert into 1,000 shares of Common Stock, subject to certain limitations, including that a holder of Series X Preferred Stock is prohibited from converting shares of Series X Preferred Stock into shares of Common Stock if, as a result of such conversion, such holder, together with any person whose beneficial ownership would be aggregated with such holder's for purposes of Section 13(d) or Section 16 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, would beneficially own more than a specified percentage (to be established by the holder between 0% and 19.99%) of the total number of shares of Common Stock issued and outstanding immediately after giving effect to such conversion.

In the event the Series X Preferred Stock is not convertible pursuant to the terms of the Certificate of Designation by the earlier to occur of (i) the time that the stockholders' meeting is ultimately concluded or (ii) five months after the initial issuance of the Series X Preferred Stock, or the Deadline Date, upon written request by the Requisite Holders, the Company shall be required to pay to each holder of Series X Preferred Stock an amount in cash equal to the fair value of the shares of Series X Preferred Stock held by such holder, based on an average of the daily volume weighted average price of the Common Stock for the 30 trading days ending on (a) the first trading day prior to the Stockholders' Meeting or (b) the Deadline Date.

Warrants

Each warrant entitles the registered holder to purchase one-half (1/2) of a share of common stock at a price of $11.50 per whole share, subject to adjustment as discussed below, at any time commencing on December 18, 2019. A warrantholder may exercise its warrants only for a whole number of shares. This means that only an even number of warrants may be exercised at any given time by a warrantholder. However, no warrants will be exercisable for cash unless we have an effective and current registration statement covering the shares of common stock issuable upon exercise of the warrants and a current prospectus relating to such shares of common stock. The warrants will expire on October 28, 2024 at 5:00 p.m., New York City time.

We may call the outstanding warrants for redemption, in whole and not in part, at a price of $0.01 per warrant:

- at any time while the warrants are exercisable,
- upon not less than 30 days' prior written notice of redemption to each warrantholder,
- if, and only if, the reported last sale price of the shares of common stock equals or exceeds $16.00 per share, for any 20 trading days within a 30-day trading period ending on the third business day prior to the notice of redemption to warrantholders, and
- if, and only if, there is a current registration statement in effect with respect to the shares of common stock underlying such warrants at the time of redemption and for the entire 30-day trading period referred to above and continuing each day thereafter until the date of redemption.

The right to exercise will be forfeited unless the warrants are exercised prior to the date specified in the notice of redemption. On and after the redemption date, a record holder of a warrant will have no further rights except to receive the redemption price for such holder's warrant upon surrender of such warrant.

The redemption criteria for our warrants have been established at a price which is intended to provide warrantholders a reasonable premium to the initial exercise price and provide a sufficient differential between the then-prevailing share price and the warrant exercise price so that if the share price declines as a result of our redemption call, the redemption will not cause the share price to drop below the exercise price of the warrants.

If we call the warrants for redemption as described above, our management will have the option to require all holders that wish to exercise the warrants to do so on a "cashless basis." In such event, each holder would pay the exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" shall mean the average reported last sale price of our common stock for the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants. Whether we will exercise our option to require all holders to exercise their warrants on a "cashless basis" will depend on a variety of factors including the price of our common stock at the time the warrants are called for redemption, our cash needs at such time and concerns regarding dilutive share issuances.

The warrants were issued in registered form under a warrant agreement between Continental Stock Transfer & Trust Company, as warrant agent, and us. The warrant agreement provides that the terms of the warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval, by written consent or vote, of the holders of a majority of the then-outstanding warrants in order to make any change that adversely affects the interests of the registered holders.

The exercise price and number of shares of common stock issuable on exercise of the warrants may be adjusted in certain circumstances including in the event of a share dividend, extraordinary dividend or our recapitalization, reorganization, merger or consolidation. However, the warrants will not be adjusted for issuances of shares of common stock at a price below their respective exercise prices.

The warrants may be exercised upon surrender of the warrant certificate on or prior to the expiration date at the offices of the warrant agent, with the exercise form on the reverse side of the warrant certificate completed and executed as indicated, accompanied by full payment of the exercise price, by certified or official bank check payable to us, for the number of warrants being exercised. The warrantholders do not have the rights or privileges of holders of shares of common stock and any voting rights until they exercise their warrants and receive shares of common stock. After the issuance of shares of common stock upon exercise of the warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Except as described above, no warrants will be exercisable for cash and we will not be obligated to issue shares of common stock unless at the time a holder seeks to exercise such warrant, a prospectus relating to the shares of Common Stock issuable upon exercise of the warrants is current and the shares of common stock have been registered or qualified or deemed to be exempt under the securities laws of the state of residence of the holder of the warrants. Under the terms of the warrant agreement, we have agreed to use our best efforts to meet these conditions and to maintain a current prospectus relating to the shares of common stock issuable upon exercise of the warrants until the expiration of the warrants. However, we cannot assure you that we will be able to do so and, if we do not maintain a current prospectus relating to the shares of common stock issuable upon exercise of the warrants, holders will be unable to exercise their warrants and we will not be required to settle any such warrant exercise. If the prospectus relating to the shares of common stock issuable upon the exercise of the warrants is not current or if the common stock is not qualified or exempt from qualification in the jurisdictions in which the holders of the warrants reside, we will not be required to net cash settle or cash settle the warrant exercise, the warrants may have no value, the market for the warrants may be limited and the warrants may expire worthless.

Warrantholders may elect to be subject to a restriction on the exercise of their warrants such that an electing warrantholder would not be able to exercise their warrants to the extent that, after giving effect to such exercise, such holder would beneficially own in excess of 9.9% of the shares of common stock outstanding.

No fractional shares will be issued upon exercise of the warrants. If, upon exercise of the warrants, a holder would be entitled to receive a fractional interest in a share, we will, upon exercise, round down to the nearest whole number of shares of Common Stock to be issued to the warrantholder.

In addition to the warrants described herein, we have issued additional warrants that are outstanding but are not registered under Section 12 of the Exchange Act.

Certain Anti-Takeover Provisions of Delaware Law and our Certificate of Incorporation and Bylaws

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. This statute prevents certain Delaware corporations, under certain circumstances, from engaging in a "business combination" with:

- a stockholder who owns 10% or more of our outstanding voting stock (otherwise known as an "interested stockholder");

- an affiliate of an interested stockholder; or
- an associate of an interested stockholder, for three years following the date that the stockholder became an interested stockholder.

A “business combination” includes a merger or sale of more than 10% of our assets. However, the above provisions of Section 203 do not apply if:

- our Board of Directors approves the transaction that made the stockholder an “interested stockholder,” prior to the date of the transaction;
- after the completion of the transaction that resulted in the stockholder becoming an interested stockholder, that stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, other than statutorily excluded shares of common stock; or
- on or subsequent to the date of the transaction, the business combination is approved by our Board of Directors and authorized at a meeting of our stockholders, and not by written consent, by an affirmative vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

Special meeting of stockholders

Our Bylaws provide that special meetings of our stockholders may be called only by a majority vote of our Board of Directors, or by our chief executive officer.

Classified Board of Directors

Our Board of Directors is divided into three classes, each of which will generally serve for a term of three years with only one class of directors being elected in each year. This system of electing Directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the Directors.

Advance notice requirements for stockholder proposals and director nominations

Our Bylaws provide that stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders must provide timely notice of their intent in writing. To be timely, a stockholder’s notice to bring matters before our annual meeting of stockholders needs to be delivered to our principal executive offices not later than the close of business on the 90th day nor earlier than the opening of business on the 120th day prior to the scheduled date of the annual meeting of stockholders, and a stockholder’s notice to nominate candidates for election as directors needs to be delivered to us not less than 120 days prior to any meeting of stockholders called for the election of directors. Our Bylaws also specify certain requirements as to the form and content of a stockholders’ notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders.

Exhibit 10.3

BIOMX INC.
INDEMNIFICATION AGREEMENT

This Indemnification Agreement (this "Agreement") is made as of, by and between BiomX Inc., a Delaware corporation (the " Company"), and _____ ("Indemnitee").

RECITALS

The Company and Indemnitee recognize the increasing difficulty in obtaining liability insurance for directors, officers and key employees, the significant increases in the cost of such insurance and the general reductions in the coverage of such insurance. The Company and Indemnitee further recognize the substantial increase in corporate litigation in general, subjecting directors, officers and key employees to expensive litigation risks at the same time as the availability and coverage of liability insurance has been severely limited. Indemnitee does not regard the current protection available as adequate under the present circumstances, and Indemnitee may not be willing to continue to serve in Indemnitee's current capacity with the Company without additional protection. The Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, and to indemnify its directors, officers and key employees so as to provide them with the maximum protection permitted by law.

AGREEMENT

In consideration of the mutual promises made in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and Indemnitee hereby agree as follows:

1. **Indemnification.**

(a) **Third-Party Proceedings.** To the fullest extent permitted by applicable law, the Company shall indemnify Indemnitee, if Indemnitee was, is or is threatened to be made, a party to or a participant (as a witness or otherwise) in any Proceeding (other than a Proceeding by or in the right of the Company to procure a judgment in the Company's favor), against all Expenses, judgments, fines and amounts paid in settlement (if such settlement is approved in advance by the Company, which approval shall not be unreasonably withheld) actually and reasonably incurred by Indemnitee in connection with such Proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company and, in the case of a criminal Proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful.

(b) **Proceedings By or in the Right of the Company .** To the fullest extent permitted by applicable law, the Company shall indemnify Indemnitee, if Indemnitee was, is or is threatened to be made a party to or a participant (as a witness or otherwise) in any Proceeding by or in the right of the Company to procure a judgment in the Company's favor, against all Expenses actually and reasonably incurred by Indemnitee in connection with such Proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, except that no indemnification shall be made in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudicated by court order or judgment to be liable to the Company unless and only to the extent that the Court of Chancery or the court in which such Proceeding is or was pending shall determine upon application that, in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

(c) **Success on the Merits.** To the fullest extent permitted by applicable law and to the extent that Indemnitee has been successful on the merits or otherwise in defense of any Proceeding referred to in Section 1(a) or Section 1(b) hereof or the defense of any claim, issue or matter therein, in whole or in part, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee in connection therewith. Without limiting the generality of the foregoing, if Indemnitee is successful on the merits or otherwise as to one or more but less than all claims, issues or matters in a Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee in connection with such successfully resolved claims, issues or matters to the fullest extent permitted by applicable law. If any Proceeding is disposed of on the merits or otherwise (including a disposition without prejudice), without (i) the disposition being adverse to Indemnitee, (ii) an adjudication that Indemnitee was liable to the Company, (iii) a plea of guilty by Indemnitee, (iv) an adjudication that Indemnitee did not act in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and (v) with respect to any criminal Proceeding, an adjudication that Indemnitee had reasonable cause to believe Indemnitee's conduct was unlawful, Indemnitee shall be considered for the purposes hereof to have been wholly successful with respect thereto.

(d) **Witness Expenses.** To the fullest extent permitted by applicable law and to the extent that Indemnitee is a witness or otherwise asked to participate in any Proceeding to which Indemnitee is not a party, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee in connection with such Proceeding.

2. **Indemnification Procedure.**

(a) **Advancement of Expenses.** To the fullest extent permitted by applicable law, the Company shall advance all Expenses actually and reasonably incurred by Indemnitee in connection with a Proceeding within thirty (30) days after receipt by the Company of a statement requesting such advances from time to time, whether prior to or after final disposition of any Proceeding. Such advances shall be unsecured and interest free and shall be made without regard to Indemnitee's ability to repay the Expenses and without regard to Indemnitee's ultimate entitlement to indemnification under the other provisions of this Agreement. Indemnitee shall be entitled to continue to receive advancement of Expenses pursuant to this Section 2(a) unless and until the matter of Indemnitee's entitlement to indemnification hereunder has been finally adjudicated by court order or judgment from which no further right of appeal exists. Indemnitee hereby undertakes to repay such amounts advanced only if, and to the extent that, it ultimately is determined that Indemnitee is not entitled to be indemnified by the Company under the other provisions of this Agreement. Indemnitee shall qualify for advances upon the execution and delivery of this Agreement, which shall constitute the requisite undertaking with respect to repayment of advances made hereunder and no other form of undertaking shall be required to qualify for advances made hereunder other than the execution of this Agreement.

(b) **Notice and Cooperation by Indemnitee .** Indemnitee shall promptly notify the Company in writing upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter for which indemnification will or could be sought under this Agreement. Such notice to the Company shall include a description of the nature of, and facts underlying, the Proceeding, shall be directed to the Chief Executive Officer of the Company and shall be given in accordance with the provisions of Section 13(e) below. In addition, Indemnitee shall give the Company such additional information and cooperation as the Company may reasonably request. Indemnitee's failure to so notify, provide information and otherwise cooperate with the Company shall not relieve the Company of any obligation that it may have to Indemnitee under this Agreement, except to the extent that the Company is adversely affected by such failure.

(c) **Determination of Entitlement.**

(i) **Final Disposition.** Notwithstanding any other provision in this Agreement, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding.

(ii) **Determination and Payment.** Subject to the foregoing, promptly after receipt of a statement requesting payment with respect to the indemnification rights set forth in Section 1 hereof, to the extent required by applicable law, the Company shall take the steps necessary to authorize such payment in the manner set forth in Section 145 of the Delaware General Corporation Law. The Company shall pay any claims made under this Agreement, under any statute, or under any provision of the Company's Certificate of Incorporation or Bylaws providing for indemnification or advancement of Expenses, within thirty (30) days after a written request for payment thereof has first been received by the Company, and if such claim is not paid in full within such thirty (30) day-period, Indemnitee may, but need not, at any time thereafter bring an action against the Company in the Delaware Court of Chancery to recover the unpaid amount of the claim and, subject to Section 12 hereof, Indemnitee shall also be entitled to be paid for all Expenses actually and reasonably incurred by Indemnitee in connection with bringing such action. It shall be a defense to any such action (other than an action brought to enforce a claim for advancement of Expenses under Section 2(a) hereof) that Indemnitee has not met the standards of conduct which make it permissible under applicable law for the Company to indemnify Indemnitee for the amount claimed. In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement and the Company shall have the burden of proof to overcome that presumption with clear and convincing evidence to the contrary. The termination of any Proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, or, in the case of a criminal Proceeding, that Indemnitee had reasonable cause to believe that Indemnitee's conduct was unlawful. In addition, it is the parties' intention that if the Company contests Indemnitee's right to indemnification, the question of Indemnitee's right to indemnification shall be for the court to decide, and neither the failure of the Company (including its Board of Directors, any committee or subgroup of the Board of Directors, independent legal counsel, or its stockholders) to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct required by applicable law, nor an actual determination by the Company (including its Board of Directors, any committee or subgroup of the Board of Directors, independent legal counsel, or its stockholders) that Indemnitee has not met such applicable standard of conduct, shall create a presumption that Indemnitee has or has not met the applicable standard of conduct. If any requested determination with respect to entitlement to indemnification hereunder has not been made within ninety (90) days after the final disposition of the Proceeding, the requisite determination that Indemnitee is entitled to indemnification shall be deemed to have been made.

(d) **Payment Directions.** To the extent payments are required to be made hereunder, the Company shall, in accordance with Indemnitee's request (but without duplication), (i) pay such Expenses on behalf of Indemnitee, (ii) advance to Indemnitee funds in an amount sufficient to pay such Expenses, or (iii) reimburse Indemnitee for such Expenses.

(e) **Notice to Insurers.** If, at the time of the receipt of a notice of a claim pursuant to Section 2(b) hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such Proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.

(f) **Defense of Claim and Selection of Counsel.** In the event the Company shall be obligated under Section 2(a) hereof to advance Expenses with respect to any Proceeding, the Company, if appropriate, shall be entitled to assume the defense of such Proceeding, with counsel reasonably acceptable to Indemnitee, upon the delivery to Indemnitee of written notice of its election so to do. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same Proceeding, provided that (i) Indemnitee shall have the right to employ counsel in any such Proceeding at Indemnitee's expense; and (ii) if (A) the employment of counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense or (C) the Company shall not, in fact, have employed counsel to assume the defense of such Proceeding, then the fees and expenses of Indemnitee's counsel shall be at the expense of the Company. In addition, if there exists a potential, but not an actual, conflict of interest between the Company and Indemnitee, the actual and reasonable legal fees and expenses incurred by Indemnitee for separate counsel retained by Indemnitee to monitor the Proceeding (so that such counsel may assume Indemnitee's defense if the conflict of interest between the Company and Indemnitee becomes an actual conflict of interest) shall be deemed to be Expenses that are subject to indemnification hereunder. The existence of an actual or potential conflict of interest, and whether such conflict may be waived, shall be determined pursuant to the rules of attorney professional conduct and applicable law. The Company shall not be required to obtain the consent of Indemnitee for the settlement of any Proceeding the Company has undertaken to defend if the Company assumes full and sole responsibility for each such settlement; provided, however, that the Company shall be required to obtain Indemnitee's prior written approval, which shall not be unreasonably withheld, before entering into any settlement which (1) does not grant Indemnitee a complete release of liability, (2) would impose any penalty or limitation on Indemnitee, or (3) would admit any liability or misconduct by Indemnitee.

3. **Additional Indemnification Rights.**

(a) **Scope.** Notwithstanding any other provision of this Agreement, the Company hereby agrees to indemnify Indemnitee to the fullest extent permitted by law, notwithstanding that such indemnification is not specifically authorized by the other provisions of this Agreement, the Company's Certificate of Incorporation, the Company's Bylaws or by statute. In the event of any change, after the date of this Agreement, in any applicable law, statute, or rule which expands the right of a Delaware corporation to indemnify a member of its board of directors or an officer, such changes shall be deemed to be within the purview of Indemnitee's rights and the Company's obligations under this Agreement. In the event of any change in any applicable law, statute or rule which narrows the right of a Delaware corporation to indemnify a member of its board of directors or an officer, such changes, to the extent not otherwise required by such law, statute or rule to be applied to this Agreement shall have no effect on this Agreement or the parties' rights and obligations hereunder.

(b) **Non-exclusivity.** The indemnification provided by this Agreement shall not be deemed exclusive of any rights to which Indemnitee may be entitled under the Company's Certificate of Incorporation, its Bylaws, any agreement, any vote of stockholders or disinterested members of the Company's Board of Directors, the Delaware General Corporation Law, or otherwise, both as to action in Indemnitee's official capacity and as to action in another capacity while holding such office.

(c) **Interest on Unpaid Amounts.** If any payment to be made by the Company to Indemnitee hereunder is delayed by more than ninety

(90) days from the date the duly prepared request for such payment is received by the Company, interest shall be paid by the Company to Indemnitee at the legal rate under Delaware law for amounts which the Company indemnifies or is obligated to indemnify for the period commencing with the date on which Indemnitee actually incurs such Expense or pays such judgment, fine or amount in settlement and ending with the date on which such payment is made to Indemnitee by the Company.

(d) **Third-Party Indemnification.** The Company hereby acknowledges that Indemnitee has or may from time to time obtain certain rights to indemnification, advancement of expenses and/or insurance provided by one or more third parties (collectively, the "Third-Party Indemnitors"). The Company hereby agrees that it is the indemnitor of first resort (*i.e.,* its obligations to Indemnitee are primary and any obligation of the Third-Party Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), and that the Company will not assert that the Indemnitee must seek expense advancement or reimbursement, or indemnification, from any Third-Party Indemnitor before the Company must perform its expense advancement and reimbursement, and indemnification obligations, under this Agreement. No advancement or payment by the Third-Party Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing. The Third-Party Indemnitors shall be subrogated to the extent of such advancement or payment to all of the rights of recovery which Indemnitee would have had against the Company if the Third-Party Indemnitors had not advanced or paid any amount to or on behalf of Indemnitee. If for any reason a court of competent jurisdiction determines that the Third-Party Indemnitors are not entitled to the subrogation rights described in the preceding sentence, the Third-Party Indemnitors shall have a right of contribution by the Company to the Third-Party Indemnitors with respect to any advance or payment by the Third-Party Indemnitors to or on behalf of the Indemnitee.

4. **Partial Indemnification.** If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of the Expenses, judgments, fines or amounts paid in settlement, actually and reasonably incurred in connection with a Proceeding, but not, however, for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion of such Expenses, judgments, fines and amounts paid in settlement to which Indemnitee is entitled.

5. **Director and Officer Liability Insurance.**

(a) **D&O Policy.** The Company shall, from time to time, make the good faith determination whether or not it is practicable for the Company to obtain and maintain a policy or policies of insurance with reputable insurance companies providing the directors and officers of the Company with coverage for losses from wrongful acts, or to ensure the Company's performance of its indemnification obligations under this Agreement. Among other considerations, the Company will weigh the costs of obtaining such insurance coverage against the protection afforded by such coverage. In all policies of director and officer liability insurance, Indemnitee shall be named as an insured in such a manner as to provide Indemnitee the same rights and benefits as are accorded to the most favorably insured of the Company's directors, if Indemnitee is a director; or of the Company's officers, if Indemnitee is not a director of the Company but is an officer; or of the Company's key employees, if Indemnitee is not an officer or director but is a key employee. Notwithstanding the foregoing, the Company shall have no obligation to obtain or maintain such insurance if the Company determines in good faith that such insurance is not reasonably available, if the premium costs for such insurance are disproportionate to the amount of coverage provided, if the coverage provided by such insurance is limited by exclusions so as to provide an insufficient benefit, or if Indemnitee is covered by similar insurance maintained by a parent or subsidiary of the Company.

(b) **Tail Coverage.** In the event of a Change of Control or the Company's becoming insolvent (including being placed into receivership or entering the federal bankruptcy process and the like), the Company shall maintain in force any and all insurance policies then maintained by the Company in providing insurance (directors' and officers' liability, fiduciary, employment practices or otherwise) in respect of Indemnitee, for a period of seven years thereafter.

6. **Severability.** Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. If this Agreement or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Company shall nevertheless indemnify Indemnitee to the full extent permitted by any applicable portion of this Agreement that shall not have been invalidated, and the balance of this Agreement not so invalidated shall be enforceable in accordance with its terms.

7. **Exclusions.** Any other provision of this Agreement to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement:

(a) **Claims Initiated by Indemnitee.** To indemnify or advance Expenses to Indemnitee with respect to Proceedings initiated or brought voluntarily by Indemnitee and not by way of defense, except with respect to Proceedings brought to establish, enforce or interpret a right to indemnification under this Agreement or any other statute or law or otherwise as required under Section 145 of the Delaware General Corporation Law, but such indemnification or advancement of Expenses may be provided by the Company in specific cases if the Board of Directors finds it to be appropriate; provided, however, that the exclusion set forth in the first clause of this subsection shall not be deemed to apply to any investigation initiated or brought by Indemnitee to the extent reasonably necessary or advisable in support of Indemnitee's defense of a Proceeding to which Indemnitee was, is or is threatened to be made, a party;

(b) **Lack of Good Faith.** To indemnify Indemnitee for any Expenses incurred by Indemnitee with respect to any Proceeding instituted by Indemnitee to establish, enforce or interpret a right to indemnification under this Agreement or any other statute or law or otherwise as required under Section 145 of the Delaware General Corporation Law, if a court of competent jurisdiction determines that each of the material assertions made by Indemnitee in such proceeding was not made in good faith or was frivolous;

(c) **Insured Claims.** To indemnify Indemnitee for Expenses to the extent such Expenses have been paid directly to Indemnitee by an insurance carrier under an insurance policy maintained by the Company; or

(d) **Certain Exchange Act Claims.** To indemnify Indemnitee in connection with any claim made against Indemnitee for (i) an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Exchange Act or any similar successor statute or any similar provisions of state statutory law or common law, or (ii) any reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Exchange Act (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") or Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act); provided, however, that to the fullest extent permitted by applicable law and to the extent Indemnitee is

successful on the merits or otherwise with respect to any such Proceeding, the Expenses actually and reasonably incurred by Indemnitee in connection with any such Proceeding shall be deemed to be Expenses that are subject to indemnification hereunder.

8. **Contribution Claims.**

(a) If the indemnification provided in Section 1 hereof is unavailable in whole or in part and may not be paid to Indemnitee for any reason other than those set forth in Section 7 hereof, then in respect to any Proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such Proceeding), to the fullest extent permitted by applicable law, the Company, in lieu of indemnifying Indemnitee, shall pay, in the first instance, the entire amount incurred by Indemnitee, whether for Expenses, judgments, fines or amounts paid in settlement, in connection with any Proceeding without requiring Indemnitee to contribute to such payment, and the Company hereby waives and relinquishes any right of contribution it may have at any time against Indemnitee.

(b) With respect to a Proceeding brought against directors, officers, employees or agents of the Company (other than Indemnitee), to the fullest extent permitted by applicable law, the Company shall indemnify Indemnitee from any claims for contribution that may be brought by any such directors, officers, employees or agents of the Company (other than Indemnitee) who may be jointly liable with Indemnitee, to the same extent Indemnitee would have been entitled to such indemnification under this Agreement if such Proceeding had been brought against Indemnitee.

9. **No Imputation.** The knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Company or the Company itself shall not be imputed to Indemnitee for purposes of determining any rights under this Agreement.

10. **Determination of Good Faith.** For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise, including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or the Board of Directors of the Enterprise or any counsel selected by any committee of the Board of Directors of the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser, investment banker, compensation consultant, or other expert selected with reasonable care by the Enterprise or the Board of Directors of the Enterprise or any committee thereof. The provisions of this Section 10 shall not be deemed to be exclusive or to limit in any way the other circumstances in which the Indemnitee may be deemed to have met the applicable standard of conduct. Whether or not the foregoing provisions of this Section are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company.

11. **Defined Terms and Phrases.** For purposes of this Agreement, the following terms shall have the following meanings:

(a) "Beneficial Owner" and "Beneficial Ownership" shall have the meanings set forth in Rule 13d-3 promulgated under the Exchange Act as in effect on the date hereof.

(b) "Change of Control" shall be deemed to occur upon the earliest of any of the following events:

(i) Acquisition of Stock by Third Party. Any Person is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing 15% or more of the combined voting power of the Company's then outstanding securities entitled to vote generally in the election of directors, unless (1) the change in the relative Beneficial Ownership of the Company's securities by any Person results solely from a reduction in the aggregate number of outstanding shares of securities entitled to vote generally in the election of directors, or (2) such acquisition was approved in advance by the Continuing Directors and such acquisition would not constitute a Change of Control under part (iii) of this definition.

(ii) Change in Board of Directors. Individuals who, as of the date of this Agreement, constitute the Company's Board of Directors (the "Board"), and any new director whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two thirds of the directors then still in office who were directors on the date of this Agreement (collectively, the "Continuing Directors"), cease for any reason to constitute at least a majority of the members of the Board.

(iii) Corporate Transaction. The effective date of a reorganization, merger, or consolidation of the Company (a " Business Combination"), in each case, unless, following such Business Combination: (1) all or substantially all of the individuals and entities who were the Beneficial Owners of securities entitled to vote generally in the election of directors immediately prior to such Business Combination beneficially own, directly or indirectly, more than 51% of the combined voting power of the then outstanding securities of the Company entitled to vote generally in the election of directors resulting from such Business Combination (including a corporation which as a result of such transaction owns the Company or all or substantially all of the Company's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership, immediately prior to such Business Combination, of the securities entitled to vote generally in the election of directors and with the power to elect at least a majority of the Board or other governing body of the surviving entity; (2) no Person (excluding any corporation resulting from such Business Combination) is the Beneficial Owner, directly or indirectly, of 15% or more of the combined voting power of the then outstanding securities entitled to vote generally in the election of directors of such corporation except to the extent that such ownership existed prior to the Business Combination; and (3) at least a majority of the Board of Directors of the corporation resulting from such Business Combination were Continuing Directors at the time of the execution of the initial agreement, or of the action of the Board of Directors, providing for such Business Combination.

(iv) Liquidation. The approval by the Company's stockholders of a complete liquidation of the Company or an agreement or series of agreements for the sale or disposition by the Company of all or substantially all of the Company's assets, other than factoring the Company's current receivables or escrows due (or, if such approval is not required, the decision by the Board to proceed with such a liquidation, sale or disposition in one transaction or a series of related transactions).

(v) Other Events. There occurs any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or a response to any similar item or any similar schedule or form) promulgated under the Exchange Act whether or not the Company is then subject to such reporting requirement.

(c) "Company" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that if Indemnitee is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, trustee, general partner, managing member, fiduciary, employee or agent of any other enterprise, Indemnitee shall stand in the same position under the provisions of this Agreement with respect to the resulting or surviving corporation as Indemnitee would have with respect to such constituent corporation if its separate existence had continued.

(d) "Enterprise" means the Company and any other enterprise that Indemnitee was or is serving at the request of the Company as a director, officer, partner (general, limited or otherwise), member (managing or otherwise), trustee, fiduciary, employee or agent.

(e) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(f) "Expenses" shall include all direct and indirect costs, fees and expenses of any type or nature whatsoever, including all attorneys' fees and costs, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, fees of private investigators and professional advisors, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, any federal, state, local or foreign taxes imposed on Indemnitee as a result of the actual or deemed receipt of any payment under this Agreement (including taxes that may be imposed upon the actual or deemed receipt of payments under this Agreement with respect to the imposition of federal, state, local or foreign taxes), fax transmission charges, secretarial services and all other disbursements, obligations or expenses in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, settlement or appeal of, or otherwise participating in a Proceeding. Expenses also shall include any of the forgoing expenses incurred in connection with any appeal resulting from any Proceeding, including the principal, premium, security for, and other costs relating to any costs bond, supersedes bond, or other appeal bond or its equivalent. Expenses also shall include any interest, assessment or other charges imposed thereon and costs incurred in preparing statements in support of payment requests hereunder. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(g) "Person" shall have the meaning as set forth in Section 13(d) and 14(d) of the Exchange Act as in effect on the date hereof; provided, however, that "Person" shall exclude: (i) the Company; (ii) any direct or indirect majority owned subsidiaries of the Company; (iii) any employee benefit plan of the Company or any direct or indirect majority owned subsidiaries of the Company or of any corporation owned, directly or indirectly, by the Company's stockholders in substantially the same proportions as their ownership of stock of the Company (an "Employee Benefit Plan"); and (iv) any trustee or other fiduciary holding securities under an Employee Benefit Plan.

(h) "Proceeding" shall include any actual, threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by a third party, a government agency, the Company or its Board of Directors or a committee thereof, whether in the right of the Company or otherwise and whether of a civil (including intentional or unintentional tort claims), criminal, administrative, legislative or investigative (formal or informal) nature, including any appeal therefrom, in which Indemnitee was, is, will or might be involved as a party, potential party, non-party witness or otherwise by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Company, by reason of any action (or failure to act) taken by Indemnitee or of any action (or failure to act) on Indemnitee's part while acting as a director, officer, employee or agent of the Company, or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, partner (general, limited or otherwise), member (managing or otherwise), trustee, fiduciary, employee or agent of any other enterprise, in each case whether or not serving in such capacity at the time any liability or expense is incurred for which indemnification, reimbursement or advancement of expenses can be provided under this Agreement.

(i) In addition, references to "other enterprise" shall include another corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or any other enterprise; references to "fines" shall include any excise taxes assessed on Indemnitee with respect to an employee benefit plan; references to "serving at the request of the Company" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by Indemnitee with respect to an employee benefit plan, its participants, or beneficiaries; and if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan, Indemnitee shall be deemed to have acted in a manner "not opposed to the best interests of the Company" as referred to in this Agreement; references to "include" or "including" shall mean include or including, without limitation; and references to Sections, paragraphs or clauses are to Sections, paragraphs or clauses in this Agreement unless otherwise specified.

12. **Attorneys' Fees.** In the event that any Proceeding is instituted by Indemnitee under this Agreement to enforce or interpret any of the terms hereof, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee in connection with such Proceeding, unless a court of competent jurisdiction determines that each of the material assertions made by Indemnitee as a basis for such Proceeding were not made in good faith or were frivolous. In the event of a Proceeding instituted by or in the name of the Company under this Agreement or to enforce or interpret any of the terms of this Agreement, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee in connection with such Proceeding (including with respect to Indemnitee's counterclaims and cross-claims made in such action), unless a court of competent jurisdiction determines that each of Indemnitee's material defenses to such action were made in bad faith or were frivolous.

13. **Miscellaneous.**

(a) **Governing Law.** The validity, interpretation, construction and performance of this Agreement, and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the state of Delaware, without giving effect to principles of conflicts of law.

(b) **Entire Agreement; Binding Effect.** Without limiting any of the rights of Indemnitee described in Section 3(b) hereof, this Agreement sets forth the entire agreement and understanding of the parties relating to the subject matter herein and merges all prior discussions and supersedes any and all previous agreements between them covering the subject matter herein. The indemnification provided under this Agreement applies with respect to events occurring before or after the effective date of this Agreement, and shall continue to apply even after Indemnitee has ceased to serve the Company in any and all indemnified capacities.

(c) **Amendments and Waivers.** No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement. No delay or failure to require performance of any provision of this Agreement shall constitute a waiver of that provision as to that or any other instance.

(d) **Successors and Assigns.** This Agreement shall be binding upon the Company and its successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business and/or assets of the Company) and assigns, and inure to the benefit of Indemnitee and Indemnitee's heirs, executors, administrators, legal representatives and assigns. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

(e) **Notices.** Any notice, demand or request required or permitted to be given under this Agreement shall be in writing and shall be deemed sufficient when delivered personally or by overnight courier or sent by email, or 48 hours after being deposited in the U.S. mail as certified or registered mail with postage prepaid, addressed to the party to be notified at such party's address as set forth on the signature page, as subsequently modified by written notice, or if no address is specified on the signature page, at the most recent address set forth in the Company's books and records.

(f) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement, (ii) the balance of the Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of the Agreement shall be enforceable in accordance with its terms.

(g) **Construction.** This Agreement is the result of negotiations between and has been reviewed by each of the parties hereto and their respective counsel, if any; accordingly, this Agreement shall be deemed to be the product of all of the parties hereto, and no ambiguity shall be construed in favor of or against any one of the parties hereto.

(h) **Counterparts.** This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and all of which together shall constitute one and the same agreement. Execution of a facsimile copy will have the same force and effect as execution of an original, and a facsimile signature will be deemed an original and valid signature.

(i) **No Employment Rights.** Nothing contained in this Agreement is intended to create in Indemnitee any right to continued employment.

(j) **Company Position.** The Company shall be precluded from asserting, in any Proceeding brought for purposes of establishing, enforcing or interpreting any right to indemnification under this Agreement, that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement and is precluded from making any assertion to the contrary.

(k) **Subrogation.** In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all documents required and shall do all acts that may be necessary to secure such rights and to enable the Company to effectively bring suit to enforce such rights.

[Signature Page Follows]

The parties have executed this Agreement as of the date first set forth above.

THE COMPANY:

BIOMX INC.

By: _____
(Signature)

Name:
Title:

Address:

_____

_____

_____

AGREED TO AND ACCEPTED:

INDEMNITEE:

_____
(Signature)

Address:

_____

_____

Email: _____

Schedule to Exhibit 10.3

The following directors and executive officers of BiomX Inc., or BiomX, are parties to Indemnification Agreements with BiomX which are substantially identical in all material respects to the representative Indemnification Agreement filed herewith and are dated as of the respective dates listed below. The other Indemnification Agreements are omitted pursuant to Instruction 2 to Item 601 of Regulation S-K.

Name of Signatory	Date
Dr. Jesse Goodman	March 15, 2024
Jonathan Leff	March 15, 2024
Gregory Merril	March 15, 2024
Avraham Gabay	November 14, 2023
Eddie Williams	October 12, 2023
Dr. Alan C. Moses	October 2, 2020

Marina Wolfson	December 1, 2019
Jonathan Solomon	October 28, 2019
Dr. Russell Greig	October 28, 2019
Assaf Oron	October 28, 2019
Dr. Merav Bassan	October 28, 2019

Exhibit 10.22

EXCLUSIVE LICENSE
Between
Adaptive Phage Therapeutics, Inc.
And
UNITED STATES OF AMERICA
As Represented By
THE SECRETARY OF THE NAVY

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

INDEX

PREAMBLE

This exclusive License (hereinafter called "LICENSE") is made and entered into by and between the United States of America as represented by the Secretary of the Navy (hereinafter called "LICENSOR") and

Adaptive Phage Therapeutics, Inc (hereinafter called "LICENSEE") having an address at 7211 Exfair Road, Bethesda, MD 20814.

BACKGROUND:WHEREAS Title 35 of the United States Code, section 207 authorizes Federal agencies to grant exclusive licenses of their inventions; and

WHEREAS Title 37 of the Code of Federal Regulations, Chapter IV, Part 404 entitled "Licensing of Government Owned Inventions" sets forth the terms and conditions under which licenses may be granted and;

WHEREAS the above-cited authorities note that licensing of Government inventions will best serve the interests of the Federal Government and the public when utilization of such inventions is promoted and such inventions are brought to Practical Application; and

WHEREAS, LICENSOR (United States Navy) has an assignment of title to the invention disclosed and described in United States Provisional Patent Application No. 62/353,517 entitled "Bacteriophage Compositions And Method Of Selection Of Components Against Specific Bacteria" as well as associated Materials; and

WHEREAS LICENSEE (Adaptive Phage Therapeutics, Inc) has supplied LICENSOR with a plan for development and marketing of the invention disclosed in these patents and has expressed its intention to carry out this plan upon the granting of this LICENSE; and

WHEREAS LICENSOR has provided public notice of its intent to grant an exclusive license to the Licensed Patents;

NOW THEREFORE, as provided by the above authorities and in accordance with the following obligations, and for good and valuable consideration, the parties agree to the following:

ARTICLE 1 Definitions

The following definitions shall apply to the defined words where such words are used in this LICENSE:

a. The "Licensed Patents" means United States Provisional Patent Application No. 62/353,517 entitled "Bacteriophage Composition And Method Of Selection Of Components Against Specific Bacteria", filed 22 June 2016, as well as any future filings submitted under the Patent Cooperation Treaty (PCT filings) or derivatives thereof, and any U.S. non-provisional, continuation, continuation-in- part, or divisional application claiming priority to 62/353,517;

b. A "Licensed Invention" means an invention claimed or disclosed in the Licensed Patents;

c. To "Practice The Licensed Invention" means to make, use and/or sell by or on behalf of LICENSEE or otherwise practice any machine, article of manufacture or composition of matter according to a Licensed Invention;

d. "Benchmarks" mean the performance milestones that are set forth in Appendix A;

e. “Commercial Development Plan” means the written commercialization plan attached as Appendix C;

f. “Practical Application” means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system, and, in each case under such conditions as to establish that a Licensed Invention is being utilized and that its benefits are to the extent permitted by law and Government regulations available to the public on reasonable terms;

g. A “Royalty-Bearing Product” means a product made by LICENSEE that, 1) is defined by or containing a composition defined by any claim of the Licensed Patents, or made by a method claimed in a Licensed Invention, or 2) is based on, originating from, or containing Licensed Materials, or 3) is based on, originating from, or supported by Licensed Data;

h. The “Net Selling Price” shall mean the invoice price of the Royalty-Bearing Product sold and not returned. A Royalty-Bearing Product will be considered to be sold when shipped or delivered to a customer. No deductions shall be made for commissions paid to individuals, whether they are independent sales agencies or regularly employed by LICENSEE, or SUBLICENSEE, and on its payroll, or for the cost of collections;

i. “United States” means the United States of America, its territories and possessions, the District of Columbia, and the Commonwealth of Puerto Rico;

j. “Licensed Territory” shall mean those countries listed in Schedule A of Article 6; and

k. A “Grace Period” is the period after October 1 of a calendar year and before January 1 of the following year;

1. “Affiliate” of a party means any corporation or other form of business organization, which directly or indirectly is controlled by, controls or is under common control with such party. For clarity, “control” means (1) in the case of corporate entities, direct or indirect ownership of at least 50% of the stock or shares or memberships entitled to vote for the election of directors, and (ii) in the case of non-corporate entities, direct or indirect ownership of at least 50% of the equity interest with the power to direct the management and policies of such non-corporate entities;

m. “SUBLICENSEE” means (i) each third party to whom LICENSEE has granted a sublicense to make, use, or sell a Royalty-Bearing Product by or on behalf of said third party; and (ii) any other third party to whom such sublicensed third party has granted a further sublicense;

n. “Sublicensing Revenue” means revenue received by LICENSEE from the grant to any third party of a sublicense of any rights under this LICENSE by LICENSEE or SUBLICENSEE. Sublicensing revenue shall include fair market value and pro-rata share of equity received on account of the grant of a sublicense;

o. “Licensed Materials” means any of the licensed biological materials listed in Appendix B, which may be updated from time to time, including all progeny, subclones, and derivatives thereof; and

p. “Licensed Data” means Navy-created information not found within Licensed Patents, and used to support the commercialization or regulatory approval of a Royalty-Bearing Product, such as and including, DNA sequence data, clinical trial data, detailed laboratory methods, etc related to the Licensed Invention;

q. “Government” means the United States of America Federal Government.

r. “Valid Issued Claim” shall mean a claim of an issued and unexpired patent included in the Licensed Patents that covers the Royalty-Bearing Product and that has not been held unenforceable, unpatentable or invalid in a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through reissue or disclaimer or otherwise.

ARTICLE 2.1 License Grant

LICENSOR grants to LICENSEE an exclusive right and license to Practice The Licensed Invention throughout the Licensed Territory in the field of treating and/or eliminating bacteria for all uses including, for example industrial or medical uses, commencing on the date of execution of this LICENSE by LICENSOR, which shall become the effective date of the LICENSE, and continuing until the later of the expiration of a Valid Issued Claim, including any U.S. and foreign patents from jurisdictions listed in Schedule A of Article 6, or the license is terminated, or LICENSEE is no longer using Licensed Materials or Licensed Data. LICENSOR also grants LICENSEE an exclusive commercial license to Licensed Materials and use Licensed Data to support the commercialization and regulatory approval of Royalty-Bearing Product(s). LICENSOR explicitly retains the right to use or transfer Licensed Materials and use or transfer Licensed Data for non-commercial Government or research purposes.

This LICENSE is non-assignable without written approval of LICENSOR except to the successor of that part of LICENSEE’S business to which the Licensed Invention pertains. LICENSEE and LICENSOR have a Cooperative Research and Development Agreement (NMR 9975) with the purpose of accelerating research and development resulting in a phage-based product available for military and civilian use. With respect to commercialization activities (e.g., marketing, manufacturing for sale, selling, etc.), LICENSOR and LICENSEE do not enter into any business relationship beyond this LICENSE.

LICENSORS reserve the right to require LICENSEE to promptly grant sublicenses to responsible applicants on reasonable terms when necessary to fulfill health and safety needs of the public to the extent such needs are not being reasonably satisfied by LICENSEE and its SUBLICENSEES.

This LICENSE is subject to the irrevocable, royalty free right of the Government of the United States To Practice And Have Practiced The Licensed Invention throughout the world by or on behalf of the United States and by or on behalf of any foreign government or intergovernmental or international organization pursuant to any existing or future treaty or agreement with the Government of the United States.

ARTICLE 2.2 Sublicensing

LICENSOR grants LICENSEE the right to sublicense the Licensed Invention, Licensed Materials and Licensed Data pursuant to the rights granted

under this LICENSE. Such sublicenses may be for contract manufacturing, or other commercialization purposes consistent with the Commercial Development Plan in Appendix C. A complete copy of all sublicenses that do not contemplate Sublicensing Revenue (e.g., for manufacturing under contract) shall be sent to the Naval Medical Research Center, Office of Partnerships & Business Development (NMRC, OPBD) within thirty (30) days of execution.

Sublicenses that do contemplate Sublicensing Revenue shall require prior written approval from LICENSOR, administered by NMRC, OPBD, and whose approval shall not be unduly withheld.

Additionally, within thirty (MD days of execution of any sublicense between LICENSEE and SUBLICENSEE, LICENSEE shall forward a copy of the executed sublicense to NMRC, OPBD.

ARTICLE 3 LICENSEE'S Performance

LICENSEE agrees to carry out the Commercial Development Plan (Appendix C) for development and marketing of a Licensed Invention submitted with LICENSEE'S "Application for License" dated 16 June 2016 to bring a Licensed Invention to Practical Application consistent with the milestones provided in the Commercial Development Plan by 31 December 2022; and LICENSEE will, thereafter, continue to make the benefits of a Licensed Invention reasonably accessible to the public for the remainder of the period of this LICENSE.

LICENSEE agrees that during the period of this LICENSE any products embodying a Licensed Invention or produced through the use of a Licensed Invention for use or sale in the United States will be manufactured substantially in the United States.

LICENSEE agrees to promptly report to LICENSOR any changes in mailing address, name or company affiliation during the period of this LICENSE and to promptly report discontinuance of LICENSEE'S making the benefits of this Licensed Invention reasonably accessible to the United States public.

LICENSEE agrees to supply the Navy, at no charge, one (1) display article of a Royalty-Bearing Product that is made, used or sold by or on behalf of LICENSEE or SUBLICENSEE, within 60 days of the first commercial sale of such Royalty-Bearing Products, sent to the address specified in Article 11. LICENSEE shall continue to supply one (1) display example of each distinct product line every third year thereafter for the duration of the Agreement.

ARTICLE 4.1 Royalties

LICENSEE shall pay to the LICENSOR a nonrefundable licensing execution royalty in the amount of Five Thousand dollars ($5K) payable upon the execution of this LICENSE. Payment will be made in the manner prescribed in Article 11.

In consideration for the LICENSES granted under Article 2.1, LICENSEE shall pay a royalty to LICENSOR of [***] percent ([***]%; [***]% for Licensed Patents/Licensed Invention and [***]% for both Licensed Data and Licensed Materials, collectively) of the Net Selling Price for each Royalty-Bearing Product made, used or sold by LICENSEE or its licensed Affiliates in the Licensed Territory until the expiration of a Valid Issued Claim. Following the expiration of a Valid Issued Claim or in the event that a Valid Issued Claim does not grant in a particular country, LICENSEE shall pay a royalty of [***] percent ([***]%) for each Royalty-Bearing Product made, used, or sold by LICENSEE or its licensed Affiliates that includes Licensed Materials or relies on Licensed Data. On sales made between LICENSEE and its Affiliates for resale, the royalty shall be paid on the higher Net Selling Price.

LICENSEE also agrees to pay at least a minimum annual royalty of the following: Five Thousand dollars **($5K)** for calendar years 2018 through 2020, and Twenty thousand dollars ($20K) for calendar year 2022 and each year thereafter throughout the period of the LICENSE, as described in the following table.

YEAR	MINIMUM ANNUAL ROYALTY
2018- 2020	$5,000
2021 and thereafter	$20,000

LICENSEE agrees to pay (a) a [***] royalty of [***] dollars ($[***]) within 180 days of [***]; and (b) [***] royalty of [***] dollars ($[***]) when [***] has been met.

The minimum annual royalty for each calendar year shall be due and payable on or before October 1 of the preceding year and will be credited as advance payment of royalties to accrue during the calendar year following payment. The minimum annual royalty payments will not be refunded in whole or part.

ARTICLE 4.2 Sublicensing Revenue

LICENSEE shall pay LICENSOR [***] percent ([***]%) of all Sublicensing Revenue.

ARTICLE 4.3 Royalties- General Provisions

LICENSEE shall send to LICENSOR all royalties, which accrue between 1 January and 31 December of each year no later than 1 March of the following year. A detailed royalty report shall be included with each payment setting forth the quantity and Net Selling Price of each Royalty-Bearing Product sold during the period covered by the report, to whom sold and the date of such sale, and the total amount of royalties being paid for that year. Royalty reports are due no less frequently than each calendar year.

All payments due LICENSOR under this LICENSE shall be paid in U.S. dollars and payment instructions are listed at the bottom of Article 11.

LICENSEE agrees to make and keep full, accurate and complete books and records as are necessary to establish its compliance with these Articles 4.1, 4.2, and 4.3.

LICENSEE agrees that LICENSOR may, if LICENSOR so desires at a future time or times, have a duly authorized agent or representative in LICENSOR'S behalf inspect, check or verify all such books and records either at LICENSEE'S business premises or at a place mutually agreed upon by LICENSEE and LICENSOR. If a royalty underpayment of greater than five percent (>5%) is determined, LICENSEE shall reimburse for the inspection, as well as double the total discrepancy amount.

ARTICLE 5 Patent Marking and Nonendorsement

LICENSEE hereby agrees to mark any Royalty-Bearing Product manufactured or sold by LICENSEE under this LICENSE (or when the character of the product precludes marking, the package containing any such product) with the notation "Licensed from the U.S. Navy." LICENSEE agrees not to

create any appearance that LICENSOR endorses LICENSEE'S business or products. LICENSEE agrees that all sublicenses shall contain terms consistent with this Article 5.

ARTICLE 6 Patent Prosecution and Maintenance

LICENSEE will control, including choice of counsel, and diligently prosecute the Licensed Patents. LICENSEE agrees to pay all costs associated with prosecuting and maintaining the Licensed Patents in domestic (U.S) and foreign jurisdictions, including those specified in Schedule A, below.

LICENSEE will use best efforts to provide LICENSOR copies of all prosecution related actions related to the Licensed Patents within at least 20 days of receiving such prosecution related actions.

LICENSEE will consider, in good faith, comments provided by LICENSOR. If no comment is provided by LICENSOR concerning a prosecution related action within fifteen (15) days prior to response deadline, the LICENSEE is free to act on the prosecution related action without consideration of LICENSOR's comments.

LICENSOR on behalf of itself and its inventors, shall provide all necessary cooperation in connection of prosecuting the Licensed Patents.

If LICENSEE determines or decides that it is unable or unwilling, for any reason, to prosecute the Licensed Patents, LICENSEE shall provide LICENSOR prompt notification to enable LICENSOR to assume prosecution, if LICENSOR so desires.

Schedule A
List of Jurisdictions Wherein LICENSEE will Manage Patent Protection

LICENSE will be world-wide until December of 2018. At that point, the Territory defined in this LICENSE will be updated to reflect National Stage Filings

LICENSOR does not by entering into this LICENSE transfer the property rights in the Licensed Invention. Under this exclusive license, LICENSOR gives LICENSEE the right of enforcement of the Licensed Patent, at no cost to the Government, pursuant to the provisions of35 USC 404. If LICENSEE successfully recovers fees from an accused infringer of the Licensed Patent, then LICENSEE shall pay LICENSORS the lesser of (i), an amount equal to the royalty that would have been payable by LICENSEE in accordance with this LICENSE had the accused infringer of the Licensed Patent been sublicensed by LICENSEE, or (ii), one-half of the actual recovery after deduction of LICENSEE'S litigation costs and expenses.

Except as expressly set forth in this LICENSE, nothing herein shall be deemed to grant, either directly or by implication, estoppel, or otherwise, any license under any patents, patent applications, or other proprietary interests to any other invention, discovery, or improvement of either party.

ARTICLE 7 Representations and Warranties

LICENSOR makes no representation or warranty as to validity of Licensed Patents and associated PCT filing, or of the scope of any of the claims contained therein, or that the exercise of this LICENSE will not result in the infringement of other patent(s). Neither LICENSOR nor its employees assumes any liability whatsoever resulting from the exercise of this LICENSE.

Nothing relating to the grant of this LICENSE nor the grant itself shall be construed to confer upon LICENSEE any immunity from or defenses under the antitrust laws or from a charge of patent misuse. This LICENSE does not change or alter LICENSEE'S requirement to abide by State and Federal law. Nothing contained in this LICENSE shall be interpreted to grant to LICENSEE any rights with respect to any invention other than a Licensed Invention.

LICENSOR makes the following representations and warranties:

a) The execution and delivery of this LICENSE and the performance by LICENSOR of the transactions contemplated hereby have been duly authorized by all necessary corporate actions.

b) LICENSOR warrants that it has the right and authority to grant the rights and licenses granted in this LICENSE and has obtained the assignment of all government interests Licensed Patents, Licensed Materials and Licensed Data from the inventor.

c) LICENSOR is entering an agreement with The Henry M. Jackson Foundation for the Advancement of Military Medicine to consolidate all rights, title and interest in the Licensed Patents with LICENSOR. LICENSOR warrants that it owns or has unlimited rights in Licensed Materials and Licensed Data and no claims have been asserted challenging LICENSOR's right to the Licensed Patents, Licensed Materials and/or Licensed Data.

d) LICENSOR has not granted any commercial right, license or interest in or to the Licensed Patents, Licensed Materials, and/or Licensed Data that is in conflict with this License.

e) The Licensed Patents are currently pending in the United States as a provisional application.

f) Provision of Licensed Materials and Licensed Data is pending on the availability of Navy phage program fiscal resourcing.

LICENSEE represents and warrants to the LICENSOR as follows:

a) The execution and delivery of this LICENSE and the performance by LICENSEE of the transactions contemplated hereby have been duly authorized by all necessary corporate actions.

b) The performance by LICENSEE of any of the terms and conditions of this LICENSE will not constitute a breach or violation of any other agreement or understanding, written or oral, to which it is a party.

ARTICLE 8.1 Progress and Sales Reports

LICENSEE agrees to submit periodic reports, submitted at least once per year, on its efforts to achieve Practical Application of the Licensed Invention by 01 JAN 2021, with particular reference to LICENSEE'S Commercial Development Plan submitted with LICENSEE'S Application for License.

These reports shall contain information within LICENSEE'S knowledge, or which it may acquire under normal business practices, pertaining to the commercial use being made of the Licensed Invention and other information which LICENSOR may determine is pertinent to Government licensing activities.

LICENSEE agrees to submit such reports to LICENSOR at least annually until such time that the invention has been brought to the point of Practical Application. Once the invention has been brought to Practical Application, LICENSEE shall submit annual reports detailing all LICENSEE and SUBLICENSEE sales activities involving the Licensed Invention.

ARTICLE 8.2 Sales to the U.S. Government

LICENSEE agrees that the per unit cost charged to instrumentalities of the U.S. Government (e.g., Department of Defense, Centers for Medicare and Medicaid Services, etc) for the purchase of Royalty - Bearing Products will be no higher than the lowest cost charged to non-Federal buyers in the United States.

ARTICLE 9 Modification and Termination

This LICENSE may be terminated in whole or in part by LICENSOR, if:

(1) LICENSOR determines that LICENSEE is not executing the Commercial Development Plan submitted with the request for license dated 14 November 2016 (unless otherwise amended by written consent of both LICENSEE and LICENSOR) and LICENSEE cannot otherwise demonstrate to the satisfaction of LICENSOR that it has taken or can be expected to take within a reasonable time effective steps to achieve Practical Application of this Licensed Invention;

(2) LICENSOR determines that such action is necessary to meet requirements for public use specified by Federal regulations issued after the date of this LICENSE and such requirements are not reasonably satisfied by LICENSEE;

(3) LICENSEE willfully made a material false statement of or willfully omitted a material fact in its Application for License or in any report required by this LICENSE; or

(4) LICENSEE commits a substantial material breach of a covenant or agreement herein contained and that is not cured within 30 days of written notice of breach.

This LICENSE may be modified or terminated in whole or in part consistent with Federal law and applicable regulations upon mutual agreement of LICENSOR and LICENSEE evidenced in writing and signed by both parties.

LICENSEE may request modification of this LICENSE in writing sent to LICENSOR and stating the reasons for such request.

This LICENSE is restricted to the fields of use or geographic areas, or both, in which the LICENSEE has brought the invention to Practical Application and continues to make the benefits of the invention reasonably accessible to the public.

Before modifying or terminating this LICENSE in whole or in part, other than by mutual agreement, LICENSOR shall furnish LICENSEE a written notice of intention to modify or terminate in whole or in part this LICENSE, and LICENSEE shall be allowed no less than thirty (30) days after such notice or other agreed-upon time period, whichever is greater, to remedy any breach of any covenant or agreement set forth in this LICENSE or to show cause why this LICENSE should not be modified or terminated in whole or in part.

LICENSEE has a right to appeal, in accordance with procedures prescribed by the Chief of Naval Research, any decision concerning the interpretation, modification or termination in whole or in part of this LICENSE.

This LICENSE may be terminated in whole or in part by LICENSEE by providing LICENSOR with one-hundred and twenty (120) days written notice thereof.

In the event of termination, all rights to the Licensed Patents, Licensed Materials and Licensed Data revert back to LICENSOR.

ARTICLE 10 Officials Not to Benefit

No member of or delegate to the United States Congress shall be admitted to any share or part of this LICENSE or to any benefit that may arise thereupon.

ARTICLE 11 Notices

Confirmed electronic communications are acceptable, and communications and notices required under this LICENSE shall also be considered duly given if timely delivered by courier to the addresses below:

(a) if to LICENSOR:

(b) if to LICENSEE:

Director, Partnerships & Business Development
Naval Medical Research Center

503 Robert Grant Avenue
Silver Spring, MD 20910

CEO, Adaptive Phage Therapeutics, Inc
7211 Exfair Road
Bethesda, MD 20814

or such mailing address as the parties from time to time specify in writing.

Payment Instructions:

Electronic Funds Transfer Instruction. DFAS Cleveland can receive funds via ACH using the following:

Bank Name:	[***]
RTN:	[***]
A/C:	[***]

When funds are being transferred electronically, ensure the License number (NMRC-10010) is noted. Also please provide **advance notice** to both NMRC, OPBD and to the email below, so we can be on the lookout for the payment.

Should you have any further questions or concerns, please feel free to contact Louann Willard Email: lou.a.willard@civ.mail.mil
Phone: 216-204-7654

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed by their duly authorized representatives.

Signatures on following page

The parties have executed this agreement on the dates set forth below. Any communication or notice to be given shall be done in accordance with Article 11 above.

For the Secretary of the Navy, under 35 USC 207

February 16, 2017
DATE

/s/ J.D. Rychnovsky
By: J.D. Rychnovsky
CAPT NC USN
Commanding Officer
Naval Medical Research Center

For **Adaptive Phage Therapeutics, Inc.**

February 28, 2017
DATE

/s/ Greg Merril
By: Greg Merril
Title: Chief Executive Officer
Adaptive Phage Therapeutics, Inc.

Terms Summary:

- Development: Annual report (minimum), w/ provision of example products.
- Royalties: Minimum Annual= Execution $5K; CY18-20 $5K, CY21+ $20K; [***] $[***], Revenue Milestone: $[***]; Running= [***]% ([***]% for Licensed Patents/Licensed Invention + [***]% for Licensed Materials and Licensed Data); Sublicensing Revenue= [***]%; detailed sales reports.
- Patenting: Adaptive Phage Therapeutics, Inc. to fund domestic and foreign prosecution/maintenance (see Schedule A in Article 6).
- US Govt Sales Price ≤ Sales Price used for domestic Non-US Govt institutions.

APPENDIX A
Benchmarks/Milestones

Milestone 1: [***]: [***]
Milestone 2: [***]: [***]
Milestone 3: [***]: [***]
Milestone 4: [***]: [***]

Exhibit 10.23

FIRST AMENDMENT

TO

EXCLUSIVE LICENCE

Between

Adaptive Phage Therapeutics, Inc.

And

UNITED STATES OF AMERICA

As Represented By

THE SECRETARY OF THE NAVY

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

The parties agree to amend the licensing Agreement number NMR-17-10010. This First Amendment to the license shall be effective as of the date of the last signature below ("Amendment Effective Date").

The parties hereby agree as follows:

1. The **first paragraph of Article 2.1 is removed and replaced with the following:**

   LICENSOR grants to LICENSEE an exclusive right and license to Practice The Licensed Invention throughout the Licensed Territory in the field of treating and/or eliminating multi-drug resistant bacteria for all uses including, for example industrial or medical uses, commencing on the date of execution of this LICENSE by LICENSOR, which shall become the effective date of the LICENSE, and continuing until the later of the expiration of a Valid Issued Claim, including any U.S. and foreign patents from jurisdictions listed in Schedule A of Article 6, or the license is terminated, or LICENSEE is no longer using Licensed Materials or Licensed Data. LICENSOR also grants LICENSEE a worldwide exclusive commercial license to Licensed Materials and use Licensed Data to support the commercialization and regulatory approval of Royalty-Bearing Product(s). LICENSOR explicitly retains the right to use or transfer licensed Materials and use or transfer Licensed Data for non-commercial Government or research purposes.

2. **Schedule A in Article 6 is updated to include the jurisdictions of, 1) Europe, and 2) Canada.**

3. **The previous Appendix A is removed and replaced with the attached Appendix A.**

4. **The previous Appendix B is removed and replaced with the attached Appendix B.**

5. **All other terms and conditions of the licensing agreement shall remain in full force.**

IN WITNESS WHEREOF, the undersigned agree to the terms and conditions of licensing agreement as further amended herein.

SIGNATURES

For Adaptive Phage Therapeutics, Inc

We, the undersigned, are duly authorized to bind Adaptive Phage Therapeutics, Inc. to this Agreement and do so by affixing my signature hereto.

Entered into this 28th day of December 2018.

By: */s/ Gregory L. Merril*
Gregory L. Merril
CEO

For the Department of the Navy:

I, the undersigned, by 35 USC 207 and Navy regulations, am duly authorized to bind the U.S. Navy to this Agreement and do so by affixing my signature hereto.

Entered into this 10th day of January 2019.

By: */s/ A.W. Armstrong*
A.W. Armstrong
CAPT, MC, USN
Commander

Appendix A

Benchmarks/Milestones

Milestone 1: [***]: [***]
Milestone 2: [***]: [***]
Milestone 3: [***]: [***]
Milestone 4: [***]: [***]

MEDICAL TECHNOLOGY TRANSFER

Control Number:

CUI BIOLOGICAL MATERIALS
LICENSE AGREEMENT

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

This Agreement is entered into between the ***Walter Reed Army Institute of Research (WRAIR)*** (hereinafter **"LICENSOR")** a subordinate Laboratory of United States Army Medical Research and Materiel Command ("USAMRDC"), located at 503 Robert Grant Avenue, Silver Spring, Maryland 20910 and ***Adaptive Phage Therapeutics (APT)),*** (hereinafter **"LICENSEE")**, a private corporation, having its principal place of business at 708 Quince Orchard Road, Suite 205, Gaithersburg, Maryland 20878.

Under the authority of 15 United States Code (U.S.C.) 3701 et seq., 35 U.S.C. Sections 200 - 210, and 37 Code of Federal Regulations (CFR), Chapter IV (together with any amendments and the underlying rules and regulations now or hereafter promulgated collectively, the ***"Federal Technology Transfer Act"*** or the ***("FTTA"), WRAIR*** has the authority to enter into this Biological Material License Agreement ("Agreement").

BACKGROUND: The Parties wish to enter into a license to transfer agreed upon materials and information to develop and commercialize phage products to treat/prevent [***], [***], [***], [***], [***], and [***] bacterial infections. The Parties agree that additional phage specific for other organisms may be included by execution of an amendment/modification to this Agreement. A sample license modification has been included as Appendix B.

1. Definitions:

(a) ***"Affiliate(s)"*** means any corporation or other legal entity that controls, is controlled by, or is under common control with LICENSEE. For purposes of this definition, "control" (including, with correlative means, the terms "controlled by" and "under common control with"), means, whether de jure or de facto, the ownership, directly or indirectly, of more than fifty perfect (50%) of the outstanding equity securities of a corporation which are entitled to vote in the election of its Board of Directors or more than fifty percent (50%) interest in the net assets or profits of an entity which is not a corporation. For purposes of this definition, Affiliates shall include those Affiliates that are, or will become, Sublicensees under this Agreement and LICENSEE shall initially and continuously identify, designate and update its relationship with each Sublicensees and each Affiliate.

(b) ***"Combination Product"*** refers to a Licensed Product that comprises at least one WRAIR Material(s) along with at least one other phage obtained from other source(s) that is co-administered, co-packaged, and/or combined in a formulation that is administered together as part of a Licensed Product.

(c) ***"Commercial Purpose(s)"*** or ***"Commercial Use(s)"*** means to market, promote, distribute, offer for sale, sell, have sold, import, have imported, export, have exported or otherwise commercialize a Licensed Product.

(d) ***"Effective Date"*** is the date that the execution fee is received by Defense Finance Accounting Service (DFAS) which date will be added to this Agreement by amendment.

(e) *"**Licensed Field of Use**"* means uses and indications as part of APT's PhageBank, including therapeutic, diagnostic, and industrial uses.

(f) ***"Licensed Products"*** means a product sold that incorporates at least one of the WRAIR Material(s). Notwithstanding the previous, if multiple different WRAIR Materials are commercialized by APT as part of a single cocktail, these multiple WRAIR Materials will be considered a single "Licensed Product."

(g) ***"Net Sales"*** means the actual gross amount billed, invoiced, charged or received on sales or transfers of any Licensed Products by LICENSEE or its Affiliates to any and all unaffiliated person(s), or in the event of disposal of any Licensed Products other than as scrap prior to shipment from its place of manufacture or predisposal storage, or other than by sales, the amount billed, invoiced, charged or received on sales or transfers for a like quantity and quality of Licensed Products to unaffiliated persons on or about the time of such disposal, less:

(i) trade, cash and quantity discounts, including charge backs, rebates, premiums, allowances and any other deduction actually granted to the unaffiliated person (not to exceed the original billing);

(ii) sales and excise taxes and duties and any other governmental charges imposed upon the importation, use or sale of the Licensed Products actually charged to the unaffiliated person;

(iii) freight, insurance and other transportation charges actually charged to the unaffiliated person; and

(iv) amounts repaid or credited (not to exceed the original billing) by reason of rejections, defects, outdating, price differences, recalls, or returns, or because of retroactive price reductions, or due to governmental laws or regulations, requiring rebates actually granted to the unaffiliated person.

The cumulative total of deductions specified above shall not decrease Net Sales by more than one-third compared to Net Sales calculated without consideration of these deductions.

For purposes of calculating Net Sales for any reporting period, any and all deductions used in calculating Net Sales are allowable only to the extent that they have already been included in the amounts billed, invoiced, charged or received or granted on the sales or transfers of Licensed Products by LICENSEE or its Affiliates to unaffiliated persons in bona fide arms' length transactions. Calculation of Net Sales shall be in accordance with generally accepted accounting principles. Sales or transfers of Licensed Products between or among LICENSEE and its Affiliate(s) shall be excluded from the computation of Net Sales except where such Affiliate(s) are end users, but Net Sales shall include the subsequent final sales or transfers to unaffiliated persons by such Affiliate(s), if not end users.

(h) ***"Research Purposes"*** means non-Commercial Purposes and other government purposes not reasonably met by APT.

(i) "Sublicensing Revenue" means all royalty payments and forms of consideration made to Licensee under any Sublicense agreement or arrangement by or on behalf of each Sublicensee. It includes license execution fees, royalties on Net Sales, minimum annual royalties, milestone payments, and other similar cash (or cash equivalent) payments, where such payments and considerations are exchanged for rights granted pursuant to this Agreement beyond those rights normally granted end users. Sublicense Revenue does not include loan or extensions of credit or Sublicensee payment of direct costs of research, development, and clinical activities to commercialize products using the Licensed Technology.

(j) ***"Term"*** is defined as starting on the Effective Date and which shall expire, on an individual WRAIR Material by WRAIR Material basis, 10 years from the date that the WRAIR Material was added to Appendix A, unless previously terminated under one of the other terms of this Agreement.

(k) ***"Territory"*** means world-wide.

(1) ***"WRAIR Materials"*** means the 100 bacteriophage listed in Appendix A and, the 2 propagation strains for [***] and 2 propagation strains for [***] bacteriophages listed in Appendix A, and all related information/description and know-how, including, but not limited to, the timing of transfer, the source of the isolates, biological characterization data, sequence data (e.g., raw sequencing reads), and/or other know-how relating to the WRAIR Materials. In order to access the WRAIR Materials, LICENSEE will request specific bacteriophage(s) and/or propagation strain(s), which LICENSOR will then make available. LICENSEE shall be responsible for transfer, shipping, handling, and delivery costs for the WRAIR Materials provided to LICENSEE. It is understood that the propagation strains are provided hereunder solely for use in propagating the bacteriophage provided under this license agreement. Appendix A will be updated quarterly or as needed as the Parties agree to maintain a current list of transferred agreed upon WRAIR Materials. LICENSEE shall utilize the WRAIR nomenclature (set forth in Appendix A) of transferred WRAIR Material in LICENSEE products for tracking purposes.

2. LICENSEE desires to obtain a license from LICENSOR to use the WRAIR Materials provided under this Agreement in its commercial product development and marketing activities. LICENSEE agrees to limit use of the WRAIR Materials propagation strains solely for propagating the bacteriophage provided under this license agreement. LICENSEE represents that it has the facilities, personnel, and expertise to use the WRAIR Materials and/or the Licensed Products for commercial purposes and agrees to expend reasonable efforts and resources to develop the WRAIR Materials and/or the Licensed Products for commercial use or commercial research.

3. LICENSOR hereby grants to LICENSEE:

a **worldwide, non-exclusive** license to make, have made, and use the WRAIR Materials and/or the Licensed Products;

a **worldwide, non-exclusive** license to sell and have sold, to offer to sell and to import the Licensed Products in the Licensed Field of Use; and

the right to grant sublicenses upon prior written approval of Licensor, which approval shall not be unreasonably withheld.

4. In consideration of the grant in Paragraph 3, LICENSEE hereby agrees to make the following payments to LICENSOR according to the following schedule:

(a) An initial execution fee of **$5,000** is due within forty-five (45) days of last signature.

(b) A nonrefundable annual license maintenance payment of $5,000 due every year on the anniversary of the Effective Date as consideration for additional WRAIR Materials that may be provided by modification of this Agreement.

(c) LICENSEE shall pay LICENSOR an annual royalty of [***]% of Net Sales for the WRAIR Materials in Licensed Products.

Royalty payments for a Combination Product will be calculated by multiplying the Net Sales of the Combination Product, during the applicable royalty reporting period, by the fraction: 1 / (total number of WRAIR Material included in the Licensed Product). In the event that LICENSEE (or its Affiliate) is required to pay royalties to one or more third parties in connection with the manufacture, use, or sale of any Licensed

Product/Combination Product, to avoid infringement of an issued patent of such third parties, then fifty percent (50%) of the royalty due under such a third party license(s) shall be creditable against any royalty to be paid by LICENSEE provided that in no event shall the royalties due WRAIR be less than fifty percent (50%) of the royalties that would otherwise be payable to WRAIR. If LICENSEE utilizes Combination Product and/or royalty stacking provisions to reduce the royalty owed to Licensor, in no event shall the royalty paid to Licensor be less than [***]% of Net Sales.

(d) LICENSEE shall pay LICENSOR [***]% on all Sublicensing Revenue on an annual basis.

Royalty stacking and combination product language as is set forth above for Net Sales will apply for Sublicensing Revenue. LICENSOR and LICENSEE agree that the royalty rate owed WRAIR on Sublicense Revenue involving Combination Product and/or Royalty Stacking will be no lower than [***]%.

(e) All royalties shall be due and payable within forty-five (45) days of the end of each calendar year.

(f) All payments required under this Agreement shall be paid in U.S. dollars. For conversion of foreign currency to U.S. dollars, the conversion rate shall be the New York foreign exchange rate quoted in *The Wall Street Journal* on the day that the payment is due.

(g) LICENSOR will notify LICENSEE in written and/or electronic communication of Department of the Army and USAMRDC control numbers. Checks must be made payable to "DFAS COLUMBUS." On a statement accompanying the check, it shall be noted that the payment is for royalties or licensing fees, and United States Department of Army log number(s) MUST be listed and specifically referenced. In the case where payments of License Fees are made on more than one Licensed Product, LICENSEE shall submit an estimated allocation of payments amongst the relevant Licensed Products. All checks for payments under this Agreement should be mailed to the below address with a copy to LICENSOR's representative at the address on the signature page.

(h) Address to send payments:

Post Office Box 1391
Frederick, MD 21702-9921
Attention: Ginger Fogle

If using Fed-Ex, use this address:

MRDC
Post Office Box 1391
Frederick, MD 21702-9921
Attention: Ginger Fogle (301) 619-1116

With a copy of the check and brief description to the Licensor's Representative Ginger Fogle via email at Virginia.L.Fogle2.ctr@mail.mil.

(i) Any loss of exchange, value, taxes, or other expenses incurred in the transfer or conversion to U.S. dollars shall be paid entirely by LICENSEE.

(j) Additional royalties may be assessed by LICENSOR on any payment that is overdue at the rate of [***] percent ([***]%) per annum. This [***] percent ([***]%) per annum rate may be applied retroactively from the original due date until the date of receipt by LICENSOR of the overdue payment and additional royalties. The payment of any additional royalties shall not prevent LICENSOR from exercising any other rights it may have as a consequence of the lateness of any payment.

5. Upon receipt and verification by LICENSOR of the execution fee and/or other payments agreed to by the parties, LICENSOR agrees to provide LICENSEE with the WRAIR Materials, as available, and to replace these WRAIR Materials, as available, at reasonable cost, in the event of their unintentional destruction.

6. LICENSEE agrees to make written Annual Progress Reports to LICENSOR within forty-five (45) days of December 31 for each calendar year, detailing its efforts, and the efforts of all Affiliate(s), to bring the inventions licensed under this Agreement to the point of practical application, together with any additional information requested by LICENSOR or as contemplated and required under the development plan. The Annual Progress Reports and any additional information shall contain reasonably sufficient information to substantiate that LICENSEE is in full compliance with the terms of the Agreement and that the development plan is being executed. No such Annual Progress Reports shall be required with respect to any particular Licensed Product after notification of the first commercial sale of such Licensed Product, unless otherwise requested by LICENSOR. LICENSEE shall submit each Annual Progress Report to LICENSOR at the mailing address for Agreement notices indicated on the signature page.

7. Concurrently with each payment of amounts due and owing LICENSOR under this Agreement, LICENSEE shall also submit a true, accurate and complete written Royalty Reports setting forth for the proceeding six-month reporting period, (a) the quantity of Licensed Products made, used, sold or otherwise disposed of by LICENSEE and its Affiliate(s), (b) the gross and Net Sales calculations thereof, and (c) a true, accurate and complete calculation of the amounts due to LICENSOR under this Agreement for each such period. If no License Fees or other payments are due LICENSOR for any reporting period, the Royalty Reports shall so state.

8. As part of LICENSEE's performance under this Agreement, LICENSEE agrees to [***] within [***] years from the Effective Date of this Agreement.

9. Except as provided in Paragraph 3, LICENSEE agrees to retain control over the WRAIR Materials and the Licensed Products, and not to distribute them to third parties without prior written consent of LICENSOR, which will not be unreasonably withheld after reasonably prompt review.

10. This Agreement does not preclude LICENSOR from distributing the WRAIR Materials to third parties for research. Before entering into a commercial license with a third party, LICENSOR grants to LICENSEE a right of first negotiation to include submission of a license agreement application for such commercial purpose. In the event LICENSEE is interested in a pursuing a commercial license for such commercial purpose, LICENSEE shall have forty-five (45) days from notification by LICENSOR to submit a license agreement application and financial offer for LICENSOR's consideration.

11. With the agreement of both parties, this Agreement shall be amended to include new or improved WRAIR Materials. The process by which new materials are added to Appendix A is as follows:

    LICENSOR sends to LICENSEE phage and/or producer cell lines and any related data for evaluation ("Materials for Evaluation") by LICENSEE. If LICENSEE chooses to accept and add any or all of the Materials for Evaluation to their PhageBank, the Materials for Evaluation automatically becomes a WRAIR Material and will be added by amendment to Appendix A. Any phage and/or producer cells lines provided by LICENSOR that are not accepted or added into the PhageBank will be returned to WRAIR or destroyed as directed by LICENSOR.

LICENSEE agrees that it must be current on all payments due under this Agreement prior to LICENSOR sending the Materials for Evaluation.

12. NO WARRANTIES, EXPRESS OR IMPLIED, ARE OFFERED AS TO THE MERCHANTABILITY OR FITNESS FOR ANY PURPOSE OF THE WRAIR MATERIALS PROVIDED TO LICENSEE UNDER THIS AGREEMENT, OR THAT THE WRAIR MATERIALS OR THE LICENSED PRODUCTS MAY BE EXPLOITED WITHOUT INFRINGING THE PATENT RIGHTS OF ANY THIRD PARTIES. LICENSEE ACCEPTS LICENSE RIGHTS TO THE WRAIR MATERIALS AND THE LICENSED PRODUCTS "AS IS," AND LICENSOR DOES NOT OFFER ANY GUARANTEE OF ANY KIND.

13. LICENSEE agrees to indemnify and hold harmless the United States Government from any claims, costs, damages, or losses that may arise from or through LICENSEE's use of the WRAIR Materials or the Licensed Products. LICENSEE further agrees that it shall not by its action bring the United States Government into any lawsuit involving the WRAIR Materials or the Licensed Products.

14. LICENSEE agrees in its use of the supplied WRAIR Materials or the Licensed Products to comply with all applicable statutes, regulations, and guidelines. LICENSEE agrees not to use the WRAIR Materials or the Licensed Products for research involving human subjects or clinical trials in the United States without complying with 21 CFR Part 50 and 45 CFR Part 46 and approval by LICENSOR.

15. LICENSEE may terminate this Agreement upon sixty (60) days written notice to LICENSOR. LICENSOR may terminate this Agreement if LICENSEE is in default in the performance of any material obligation under this Agreement and if the default has not been remedied within ninety (90) days after the date of written notice by LICENSOR of the default.

16. Upon termination of this Agreement, LICENSEE agrees to return all WRAIR Materials and the Licensed Products to LICENSOR, or provide LICENSOR with written certification of their destruction. Notwithstanding the foregoing, LICENSEE may retain any WRAIR Materials after termination that have been produced under Good Manufacturing Procedures ("GMP") and may continue to exploit such product for Commercial Purposes until the GMP phage stock is depleted while continuing to compensate LICENSOR as described herein in Section 4. For clarity, with the expiration of this Agreement, LICENSEE can continue to exploit the WRAIR Material for Commercial Purposes without further compensation to LICENSOR.

17. Within sixty (60) days of termination or expiration of this Agreement, LICENSEE agrees to submit a final report to LICENSOR, and to submit to LICENSOR payment of any royalties due. LICENSEE agrees to keep records showing the gross sales, Net Sales or other disposition of Licensed Products sold or otherwise disposed of under the license appropriate to determine the amount of fees and other payments due USAMRDC hereunder. Such records, including, without limitation, those of its Affiliates and Sublicensees, shall be retained for a period of five (5) years following the end of the calendar year to which such records pertain, and shall be treated and maintained as Confidential Information of LICENSEE. Such records should be in sufficient detail and clearly organized to enable the fees and any other amounts payable hereunder by LICENSEE to be determined, and LICENSEE further agrees to afford USAMRDC or its designee(s) or agent(s) access to examine any and all relevant books and records of LICENSEE and, where appropriate, its Affiliate(s) and sublicensees, as may be necessary to make such determination. Upon thirty (30) days prior written notice, LICENSEE shall make such records available for examination during normal business hours for the sole purpose of verifying the accuracy of LICENSEE's payments and compliance with this Agreement for any period within the most recently completed five (5) calendar years during the term of this Agreement and for five (5) years after the expiration or termination of this Agreement. If an auditor or certified public accountant is appointed by USAMRDC to conduct such an examination, USAMRDC shall, at LICENSEE's sole cost and expense, review and approve any reasonable request that its designee or agent execute an agreement not to otherwise disclose confidential or proprietary information. LICENSEE shall also assume and pay any and all audit expenses and costs incurred in the event any underpayment is reported which equals or exceeds five percent (5%) of the License Fees or other payments due USAMRDC hereunder. The parties agree to adhere to the rules and procedures established under the Administrative Dispute Resolution Act (5 U.S.C. Section 571, as amended) to resolve any dispute arising under this Section.

18. LICENSEE is encouraged to publish the results of its research projects using the WRAIR Materials or the Licensed Products. In all oral presentations or written publications concerning the WRAIR Materials or the Licensed Products, LICENSEE shall acknowledge the contributions of LICENSOR through co-authorship or acknowledgment depending on the contributions of the LICENSOR and the agency supplying the WRIAR Materials, unless requested otherwise by LICENSOR.

19. This Agreement shall be construed in accordance with U.S. Federal law, as interpreted and applied by the U.S. Federal courts in the District of Columbia. Federal law and regulations shall preempt any conflicting or inconsistent provisions in this Agreement. LICENSEE agrees to be subject to the jurisdiction of U.S. courts.

20. This Agreement constitutes the entire understanding of LICENSOR and LICENSEE and supersedes all prior agreements and understandings with respect to the WRAIR Materials or the Licensed Products.

21. The Parties hereto are independent contractors and nothing contained in this Agreement will be deemed to create a partnership, agency, distributorship, fiduciary, employment, joint venture or other relationship between the parties.

22. Nothing hereunder shall obligate either Party to enter into any other agreement with the other Party, nor shall it prohibit either Party from entering into any other agreement with a third party or from conducting any internal program, provided that such agreement or program does not violate any provisions of this Agreement

23. In the event Licensor files a non-provisional patent application covering the WRAIR Materials, and/or the use of the WRAIR Materials, provided as part of this License Agreement, Licensee shall be notified, and the Parties will assess the need and/or desirability of a patent license. Licensee shall have the first right of refusal to negotiate a non-exclusive or an exclusive license. The Parties agree to negotiate in good faith the terms of a non-exclusive or exclusive patent license agreement in accordance with 37 CFR 404.7, which may be accomplished by amending this Agreement with terms including but not limited to, patent prosecution expense reimbursement and royalty rate. If no patent license agreement is executed within 180 days after Licensee is notified of the non-provisional patent application, Licensor shall be free to seek other patent licensing partners, and Licensee agrees to cease use of the WRAIR Material that are covered by the claims of the non-provisional patent application (and the patent(s) that ultimately issues therefrom).

24. The provisions of this Agreement are severable, and in the event that any provision of the Agreement shall be determined to be invalid or unenforceable under any controlling body of law, the invalidity or unenforceability of any provision of this Agreement, shall not in any way affect the validity or enforceability of the remaining provisions of this Agreement.

25. Paragraph 12, 13, 14, 15, and 20 of this Agreement shall survive termination or expiration of this Agreement.

26. This Agreement may be executed in any number of counterparts which, when taken together, will constitute one original, and a photocopy, electronic signatures, or other copies shall have the same effect for all purposes as an ink-signed original. Each party hereto consents to be bound by photocopy, (including a PDF image delivered via email) or electronic signatures of such party's representative hereto.

[The remainder of this page intentionally left blank]

BIOLOGICAL MATERIALS LICENSE AGREEMENT

SIGNATURE PAGE

In Witness Whereof, the parties have executed this Agreement on the dates set forth below. Any communication or notice to be given shall be forwarded to the respective addresses listed below.

For ***Walter Reed Army Institute of Research (WRAIR):***

/s/ Robert J. O'Connell Date: 8/24/2021
Robert J. O'Connell
Colonel, U.S. Army
Acting Commander

Mailing Address of LICENSOR's Representative for all Notices and Copies of payments sent to DFAS:

Medical Technology Transfer Staff
Judge Advocate (MCMR-JA) 504
Scott Street
Fort Detrick, MD 21702-5012

For LICENSEE (Upon, information and belief, the undersigned expressly certifies or affirms that the contents of any statements of LICENSEE made or referred to in this document are truthful and accurate.):

For: ***Adaptive Phage Therapeutics (APT):***

/s/ Greg Merril Date: 8/24/2021
Greg Merril
Chief Executive Officer

Any false or misleading statements made, presented, or submitted to the United States Government, including any relevant omissions, under this Agreement and during the course of negotiation of this Agreement are subject to all applicable civil and criminal statutes including Federal statutes 31 U.S.C. §§3801-3812 (civil liability) and 18 U.S.C. §1001 (criminal liability including fine(s) and/or imprisonment).

CUI

APPENDIX B

MEDICAL TECHNOLOGY TRANSFER

Control Number:
W81XWH-

LICENSE MODIFICATION

THIS modification to the Non-Exclusive License Agreement Control Number: "W81XWH- **"("Modification l** "), effective upon the last signature date below, is made by and between: ***Walter Reed Army Institute of Research (WRAIR)*** (hereinafter **"LICENSOR")** a subordinate Laboratory of United States Army Medical Research and Materiel Command ("USAMRDC"), located at 503 Robert Grant Avenue, Silver Spring, Maryland 20910 and ***Adaptive Phage Therapeutics (APD)***, (hereinafter **"LICENSEE"),** a private corporation, having its principal place of business at 708 Quince Orchard, Suite 205, Maryland 20878.

NOW, THEREFORE, in consideration of the forgoing and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Capitalized terms used and not otherwise defined in this Modification 1 are used herein as defined in the Non-Exclusive License Agreement #W81XWH- _____

2. The parties acknowledge that on previous dates, new phage and/or isolates were transferred to LICENSEE by LICENSOR for evaluation by LICENSEE.

3. Appendix A is hereby modified as set forth below to add the following phage and/or isolates which have been found acceptable by LICENSEE to include in its PhageBank™: [Insert list of phage and isolates] The royalty term for these newly added phage runs ten (10) years from the last signature of this Modification. No additional fee is required for transfer of the phage and/or isolates which were found acceptable, as LICENSOR and LICENSOR agree that the annual maintenance fee shall be deemed sufficient compensation.

4. Appendix A now reflects a complete list of WRAIR Materials;

5. Full Force and Effect: Except as otherwise specifically set forth herein, the parties hereto hereby ratify and affirm the terms and provisions of the License Agreement W81XWH, which shall remain in full force and effect.

Exhibit 10.25

MEDICAL TECHNOLOGY TRANSFER

CUI

Control Number: W81XWH-21-0265

LICENSE MODIFICATION 1

THIS modification to the Non-Exclusive License Agreement Control Number: "W8IXWH- **"("Modification 1"),** effective upon the last signature date below, is made by and between: ***Walter Reed Armv Institute of Research (WRAIR)*** (hereinafter **"LICENSOR")** a subordinate Laboratory of United States Army Medical Research and Materiel Command ("USAMRDC"), located at 503 Robert Grant Avenue, Silver Spring, Maryland 20910 and ***Adaptive Phage Therapeutics (APT))***, (hereinafter **"LICENSEE")**, a private corporation, having its principal place of business at 708 Quince Orchard, Suite 205, Maryland 20878.

NOW, THEREFORE, in consideration of the forgoing and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Capitalized terms used and not otherwise defined in this Modification 1 are used herein as defined in the Non-Exclusive License Agreement #W8lXWH-21-0265.

2. The parties acknowledge that on previous dates, phage and/or isolates were transferred to LICENSEE by LICENSOR for evaluation by LICENSEE.

3. Appendix A is hereby modified as set forth below to add the following phage and/or isolates which have been found acceptable by LICENSEE to include in its PhageBank: WRAIR_EEf1 and WRAIR_EEf2. The royalty term for these newly added phage runs ten (10) years from the last signature of this Modification. No additional fee is required for transfer of the phage and/or isolates which were found acceptable, as LICENSOR and LICENSOR agree that the annual maintenance fee shall be deemed sufficient compensation.

4. Appendix A now reflects a complete list of WRAIR Materials;

5. Full Force and Effect: Except as otherwise specifically set forth herein, the parties hereto hereby ratify and affirm the terms and provisions of the License Agreement W81XWH, which shall remain in full force and effect.

CUI

BIOLOGICAL MATERIALS LICENSE AGREEMENT

SIGNATURE PAGE

In Witness Whereof, the parties have executed this Agreement on the dates set forth below. Any communication or notice to be given shall be forwarded to the respective addresses listed below.

For ***Walter Reed Armv Institute of Research (WRAIR):***

/s/ Chad A. Koenig Date: 31 August 2022
Chad A. Koenig
Colonel, U.S. Army
Commanding

Mailing Address of LICENSOR's Representative for all Notices and Copies of payments sent to DFAS:

ORTA/Medical Technology Transfer
FCMR-ZCT
504 Scott Street
Fort Detrick, MD 21702-5012

For LICENSEE (Upon, information and belief, the undersigned expressly certifies or affirms that the contents of any statements of LICENSEE made or referred to in this document are truthful and accurate.):

For: ***Adaptive Phage Therapeutics (APT):***

/s/ Greg Merril Date: August 12, 2022
Greg Merril
Chief Executive Officer

Mailing Address: 708 Quince Orchard, Suite 205, Gaithersburg, Maryland 20878

Any false or misleading statements made, presented, or submitted to the United States Government, including any relevant omissions, under this Agreement and during the course of negotiation of this Agreement are subject to all applicable civil and criminal statutes including Federal statutes 31 U.S.C. §§3801-3812 (civil liability) and 18 U.S.C. § l 001 (criminal liability including fine(s) and/or imprisonment).

Exhibit 10.28

LEASE AGREEMENT

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

THIS LEASE AGREEMENT ("**this Lease**") is made as of this 9th day of August, 2019 between **ARE-708 QUINCE ORCHARD, LLC,** a Delaware limited liability company ("**Landlord**"), **and ADAPTIVE PHAGE THERAPEUTICS, INC., a Delaware corporation** ("**Tenant**").

BASIC LEASE PROVISIONS

Address: Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878.

Premises: That portion of the Project, containing approximately 5,878 rentable square feet, as determined by Landlord, as shown as the hatched area on **Exhibit A.** Gaudreau, Inc., Landlord's architect, has measured the area of the Premises pursuant to the 1996 Standard Method of Measuring Floor Area in Office Buildings as adopted by the Building Owners and Managers Association (ANSI/BOMA 265.1-1996) ("**BOMA Standards**")Tenant acknowledges receipt of such measurement and confirms that (a) Tenant has had an opportunity to confirm such measurement with an architect of its selection before the Commencement Date, and (b) such measurement shall be conclusive as to the area of the Premises.

Project: The real property on which the building ("**Building**") in which the Premises are located, together with all improvements thereon and appurtenances thereto as described on **Exhibit B.**

Base Rent: $15,674.67, per month

Rentable Area of Premises: 5,878 sq. ft.

Rentable Area of Project: 49,624 sq. ft.

Tenant's Share of Operating Expenses: 11.85%

Security Deposit: $31,349.34

Target Commencement Date: September 1, 2019

Rent Adjustment Percentage: [***]%

Base Term: Beginning on the Commencement Date and. ending 123 months from the first day of the first full month following the Lease Commencement Date. For clarity, if the Lease Commencement Date occurs on the first day of a month, the Base Term will be measured from that date. If the Lease Commencement Date occurs on a day other than the first day of a month, the Base Term will be measured from the first day of the following month.

Permitted Use: research and development laboratory (Current Good Manufacturing Practice biology and chemistry), related manufacturing, office, and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of Section 7 hereof.

Address for Rent Payment:
For check payments remit to:
P.O. Box 79840 Baltimore,
MD 21279-0840

For overnight courier remit to:

Lockbox # 79840
c/o Sun Trust Bank

Landlord's Notice Address:
385 E. Colorado Blvd., Suite 299
Pasadena, CA 91101
Attention: Corporate Secretary

1000 Stewart Avenue Glen Burnie, MD 21061

Tenant's Notice Address:
Suite 125
22 Firstfield Road
Gaithersburg, MD 20878

With a copy to:
Shulman, Rogers, Gandal, Pordy & Ecker, P.A.
12505 Park Potomac Avenue, 6th Floor
Potomac, MD 20854
Attn: Douglas K. Hirsch, Esq.

The following Exhibits and Addenda are attached hereto and incorporated herein by this reference:

☒ **EXHIBIT A -** PREMISES DESCRIPTION
☒ **EXHIBIT B -** DESCRIPTION OF PROJECT
☒ **EXHIBIT D -** COMMENCEMENT DATE
☒ **EXHIBIT F -** TENANT'S PERSONAL PROPERTY
☒ **EXHIBIT A-1** - AVAILABLE SPACE
☒ **EXHIBIT C —** WORK LETTER
☒ **EXHIBIT E -** RULES AND REGULATIONS

1. **Lease of Premises**. Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The portions of the Project that are for the non-exclusive use of tenants of the Project are collectively referred to herein as the "**Common Areas**." Landlord reserves the right to modify Common Areas, provided that such modifications do not materially adversely affect Tenant's use of the Premises for the Permitted Use. Subject to Force Majeure (as defined in Section 34), a Taking (as defined in Section 19), and the provisions of this Section and Section 2 below, Tenant shall have access to and egress from the Premises 24 hours a day, 7 days a week.

2. **Delivery; Acceptance of Premises; Commencement Date.** Landlord shall use reasonable efforts to make the Premises available to Tenant for the Tenant Improvements under the Work Letter within 5 days of full execution of this Lease and Tenant's delivery of evidence of the insurance required hereby and by the Work Letter ("**Delivery**" **or** "**Deliver**"). If Landlord fails to timely Deliver the Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable except as provided herein. If Landlord does not Deliver the Premises within 30 days of the Target Commencement Date, this Lease may be terminated by Tenant by written notice to Landlord, and if so terminated: (a) the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions that expressly survive termination of this Lease. As used herein, (i) "**Tenant Improvements**" has the meaning set forth in the Work Letter attached hereto as Exhibit C, and (ii) "Substantially Completed" or "Substantial Completion" (or derivations of such phrases) have the meaning set forth in Section 3(d) of the Work Letter. If Tenant does not elect to void this Lease within 5 business days of the lapse of such 30 day period, such right to void this Lease shall be waived and this Lease shall remain in full force and effect.

A. **Defined Terms.** For purposes of this Lease, (i) the "**Commencement Date**" shall be the date of this Lease, (ii) the "**Lease Commencement Date**" means September 1, 2019, and (iii) the Rent "**Commencement Date**" means December 1, 2019. Upon request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Commencement Date, the Lease Commencement Date, and the Rent Commencement Date, and the expiration date of the Term when such are established in the form of the "Acknowledgement of Commencement Date" attached to this Lease as Exhibit D; provided, however, that Tenant's failure to execute and deliver such acknowledgment shall not affect Landlord's rights hereunder. The "Term" of this Lease shall be the Base Term, as defined above in the Basic Lease Provisions and the Extension Term that Tenant may elect pursuant to Section 40 hereof.

B. **Condition of Premises.** Except as set forth in the Work Letter and the provisions of this paragraph B, if applicable: (i) Tenant shall accept the Premises in their condition as of the Commencement Date (including existing cabinetry and casework, power generators, communications systems, security systems, and any other equipment located in the Premises as of the Commencement Date), subject to all applicable Legal Requirements (as defined in Section 7 hereof); (ii) Landlord shall have no obligation for any defects in the Premises; and (iii) Tenant's taking possession of the Premises shall be conclusive evidence that Tenant accepts the Premises and that the Premises were in good condition at the time possession was taken. Any occupancy of the Premises by Tenant before the Commencement Date shall be subject to all of the terms and conditions of this Lease.

Notwithstanding the foregoing provisions of this Section 2, Tenant shall have a period of 60 days after Landlord's Delivery of the Premises to Tenant to reasonably identify in writing any latent defects in the mechanical, electrical, and plumbing systems and the structural components serving the Premises. For purposes of this paragraph, **"latent defects"** means those material defects in such systems and/or components that could not have been identified or discovered through a reasonable inspection of such systems or components conducted by a qualified technician. Landlord will promptly repair such identified latent defects (subject to Landlord's reasonable confirmation that such defects are, in fact, latent defects).

C. **No Implied Warranty.** Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the Premises or the Project for the conduct of Tenant's business, and Tenant waives any implied warranty that the Premises or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations that are not contained herein. Landlord in executing this Lease does so in reliance upon Tenant's representations, warranties, acknowledgments and agreements contained herein.

D. **Decommissioning Report.** Promptly after Tenant's execution and delivery of Landlord's standard non-reliance letter, Landlord shall deliver to Tenant a copy of the most recent decommissioning report for the Premises.

E. **Potential Pathway Installation.** The Project adjoins the property known as 22 Firstfield Road, Gaithersburg, Maryland (" **22FF Property**") that is owned by an affiliate of Landlord, ARE- 20/22/1300 Firstfield Quince Orchard, LLC, a Delaware limited liability company ("**22FF Owner**"). Tenant leases space from the 22FF Owner at the 22FF Property pursuant to the Lease Agreement dated May 2, 2017 (as amended) between the 22FF Owner and Tenant ("**22FF Lease**"). To facilitate pedestrian and cart access (but specifically excluding vehicles) between the Project and the 22FF Property, within 45 days after the Lease Commencement Date Landlord shall use commercially reasonable efforts to obtain approval from the applicable Governmental Authority (as defined in Section 9) to construct a pathway between the Project and the 22FF Property by means of a curb cut, median cut, or other acceptable means of access ("**Project/22FF Pathway**"). If Landlord obtains such approval, it shall promptly construct (at Landlord's expense) and thereafter maintain (as an Operating Expense) the ProjecU22FF Pathway in compliance with applicable Legal Requirements. Tenant and its employees shall have the non-exclusive right to use the ProjecU22FF Pathway solely for pedestrian and cart access (but specifically excluding vehicles) between the Project and the 22FF Property. Landlord makes no guaranty or assurance that it will be able to obtain such approval from the applicable Governmental Authority, and Landlord shall have no liability or further obligation to Tenant or otherwise.

3. **Rent.**

(a) **Base Rent.** The first month's Base Rent and the Security Deposit shall be due and payable on delivery of an executed copy of this Lease to Landlord. Beginning on the Lease Commencement Date (but subject to the Base Rent Abatement (as defined in Section 4(a) or otherwise as expressly provided in this Lease (e.g., Section 18)), Tenant shall pay to Landlord in advance, without demand, abatement, deduction or set-off, monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office of Landlord for payment of Rent set forth above, or to such other person or at such other place as Landlord may from time to time designate in writing. Payments of Base Rent for any fractional calendar month shall be prorated. The obligation of Tenant to pay Base Rent and other sums to Landlord and the obligations of Landlord under this Lease are independent obligations. Tenant shall have no right at any time to abate, reduce, or set-off any Rent (as defined in Section 5) due hereunder except for any abatement as may be expressly provided in this Lease.

(b) **Additional Rent.** In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent (" **Additional Rent**"): (i) Tenant's Share of "Operating Expenses" (as defined in Section 5), and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period.

4. **Base Rent Adjustments.** Base Rent shall be increased (i) as of the date or dates on which Tenant uses the Additional Tenant Improvement Allowance pursuant to Section 5 of the Work Letter (such increase to be calculated based on the amount of the Additional Tenant Improvement Allowance used by Tenant, such amount to be amortized over the Base Term based on an interest rate of 9% per annum; the resulting amount so amortized shall be payable at the same time that the monthly installments of Base Rent are payable (it being understood and agreed that such repayment of Additional Tenant Improvement Allowance shall not be subject to any annual increase based on the application of the Rent Adjustment Percentage), and (ii) on each anniversary of the first day of the first full month during the Term of this Lease (each an "**Adjustment Date**") by multiplying the Base Rent payable immediately before such Adjustment Date by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided herein. Base Rent adjustments for any fractional calendar month shall be prorated. For the avoidance of doubt, the increases in Base Rent described in clause (i) above shall not be subject to the annual increases in Base Rent as described in clause (ii) above.

(a) [***]

5. **Operating Expense Payments.** Landlord shall deliver to Tenant a written estimate of Operating Expenses for each calendar year during the Term ("**Annual Estimate**"), which may be revised by Landlord from time to time during such calendar year. Beginning on the Lease Commencement Date, Tenant shall pay Landlord on or before the first day of each calendar month during the Term hereof an amount equal to 1/12th of Tenant's Share of the Annual Estimate. Payments for any fractional calendar month shall be prorated.

The term "**Operating Expenses**" means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Project (including, without duplication, Taxes (as defined in Section 9), capital repairs and improvements amortized over the useful life of such capital items ("**Permitted Capital Expenditures**"), and the costs of Landlord's third party property manager or, if there is no third party property manager, administration rent in the amount of 4% of Base Rent), excluding only:

(a) the original construction costs of the Project and renovation prior to the date of this Lease and costs of correcting defects in such original construction or renovation;

(b) capital expenditures for the Project, except for Permitted Capital Expenditures, and any capital expenditures in connection with the expansion of the Project;

(c) costs incurred in connection with environmental clean up, response action, or remediation on, in, or under or about the Project, to the extent related to known conditions existing in, on, or under or about the Project on or before the Commencement Date;

(d) interest, principal payments of Mortgage (as defined in Section 27) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured and all ground rent under any ground lease or other underlying lease of all or any portion of the Project;

(e) depreciation of the Project (except for Permitted Capital Expenditures);

(f) 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 leasing office maintained in the Project, free rent and construction allowances for tenants;

(g) legal and other expenses incurred in the negotiation or enforcement of leases;

(h) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work;

(i) costs of utilities sold to tenants of the Project;

(j) 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;

(k) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project;

(l) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;

(m) 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 Building;

(n) 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 or any Legal Requirement (as defined in Section 7);

(o) 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;

(p) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;

(q) costs of Landlord's charitable or political contributions, or of fine art maintained at the Project;

(r) costs in connection with services (including electricity), items or other benefits of a type that are not standard for the Project and that 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;

(s) costs incurred in the sale or refinancing of the Project;

(t) net income taxes of Landlord or the owner of any interest in the Project (except to the extent such net income taxes are in substitution for any Taxes payable hereunder), franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein;

(u) reserves for repairs, maintenance, and replacements; and

(v) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project.

Notwithstanding any contrary provision contained in this Lease, the Controllable Operating Expenses (as defined below) shall be capped so that no increase in the Controllable Operating Expenses exceeds 5% per calendar year based on the actual Controllable Operating Expenses incurred during calendar year 2019. As a result, the actual annual increase in Controllable Operating Expenses in any given calendar year from and after calendar year 2019 may be less than or equal to 5% (but shall not exceed 5%). For purposes of performing the calculations in this paragraph, the 5% annual cap shall apply and that such calculations shall be made on a cumulative basis. The calculations made under this paragraph shall be made on a current basis with reference to the calendar year in question, and no retroactive adjustments shall be made at the end of the Term for the preceding calendar years. For purposes of this Lease, (1) "**Controllable Operating Expenses**" means all Operating Expenses except Non-Controllable Operating Expenses, and (2) "**Non-Controllable Operating Expenses**" means insurance premiums, real estate taxes, costs of snow and ice removal, and Utilities costs,.

Within 90 days after the end of each calendar year (or such longer period as may be reasonably required, but not to exceed 120 days), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the total and Tenant's Share of actual Operating Expenses for the previous calendar year, (b) the total of Tenant's payments in respect of Operating Expenses for such year, and (c) the Controllable Operating Expenses and the Non-Controllable Operating Expenses for such previous calendar year. If Tenant's Share of actual Operating Expenses for such year exceeds Tenant's payments of Operating Expenses for such year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Operating Expenses for such year exceed Tenant's Share of actual Operating Expenses for such year Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord.

The Annual Statement shall be final and binding upon Tenant unless Tenant, within 45 days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 45 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Operating Expenses, Landlord will provide Tenant with access to Landlord's books and records relating to the operation of the Project and such information as Landlord reasonably determines to be responsive to Tenant's questions ("**Expense Information**"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Operating Expenses, then Tenant shall have the right to have an independent public accounting firm selected by Tenant from among the 5 largest in the United States, working pursuant to a fee arrangement other than a contingent fee (at Tenant's sole cost and expense) and approved by Landlord (which approval shall not be unreasonably withheld or delayed), audit and/or review the Expense Information for the year in question ("**Independent Review**"). The results of any such Independent Review shall be binding on Landlord and Tenant. If the Independent Review shows that the payments actually made by Tenant with respect to Operating Expenses for the calendar year in question exceeded Tenant's Share of Operating Expenses for such calendar year, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Operating Expenses for such calendar year were less than Tenant's Share of Operating Expenses for the calendar year, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid with respect to Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all costs incurred by Tenant for the Independent Review (such reimbursement not to exceed an amount equal to $3,500). Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall be prorated. Notwithstanding anything set forth herein to the contrary, if the Project is not at least 95% occupied on average during any year of the Term, Tenant's Share of Operating Expenses for such year shall be computed as though the Project had been 95% occupied on average during such year.

"**Tenant's Share**" shall be the percentage set forth in the Basic Lease Provisions as Tenant's Share as reasonably adjusted by Landlord for changes in the physical size of the Premises or the Project occurring thereafter. Landlord may equitably increase Tenant's Share for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that varies with occupancy or use. Base Rent, Tenant's Share of Operating Expenses, and all other amounts payable by Tenant to Landlord hereunder are collectively referred to herein as "**Rent**."

6. **Security Deposit.** Tenant shall deposit with Landlord, upon delivery of an executed copy of this Lease to Landlord, a security deposit ("**Security Deposit**") for the performance of all of Tenant's obligations hereunder in the amount set forth in the Basic Lease Provisions, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit ("**Letter of Credit**"): (i) in form and substance satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution satisfactory to Landlord, and (v) redeemable by presentation of a sight draft in the state of Landlord's choice. If Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit. The Security Deposit shall be held by Landlord as security for the performance of Tenant's obligations under this Lease. Upon each occurrence of a Default (as defined in Section 20), Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Upon any such use of all or any portion of the Security Deposit, Tenant shall pay Landlord on demand the amount that will restore the Security Deposit to the amount set forth in the Basic Lease Provisions. Tenant hereby waives the provisions of any law, now or hereafter in force, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon bankruptcy or other debtor-creditor proceedings involving Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for periods

prior to the filing of such proceedings. Upon any such use of all or any portion of the Security Deposit, Tenant shall, within 5 days after demand from Landlord, restore the Security Deposit to its original amount. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 60 days after the expiration or earlier termination of this Lease.

If Landlord transfers its interest in the Project or this Lease, Landlord shall either (a) transfer any Security Deposit then held by Landlord to a person or entity assuming Landlord's obligations under this Section 6, or (b) return to Tenant any Security Deposit then held by Landlord and remaining after the deductions permitted herein. Upon such transfer to such transferee or the return of the Security Deposit to Tenant, Landlord shall have no further obligation with respect to the Security Deposit, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Landlord's obligation respecting the Security Deposit is that of a debtor, not a trustee, and no interest shall accrue thereon.

7. **Use.** The Premises shall be used solely for the Permitted Use set forth in the Basic Lease Provisions, and in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and to the use and occupancy thereof, including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, "**ADA**") (collectively, "**Legal Requirements**" and each, a "**Legal Requirement**"). Tenant shall, upon 5 days' written notice from Landlord, discontinue any use of the Premises that is declared by any Governmental Authority having jurisdiction to be a violation of a Legal Requirement. Tenant will not use or permit the Premises to be used for any purpose or in any manner that would void Tenant's or Landlord's insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits. Tenant shall not permit any part of the Premises to be used as a "place of public accommodation", as defined in the ADA or any similar legal requirement. Tenant shall reimburse Landlord promptly upon demand for any additional premium charged for any such insurance policy by reason of Tenant's failure to comply with the provisions of this Section or otherwise caused by Tenant's use and/or occupancy of the Premises. Tenant will use the Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or unreasonably interfere with the rights of Landlord or other tenants or occupants of the Project, including conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises, or using or allowing the Premises to be used for any unlawful purpose. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not (i) place any machinery or equipment weighing 500 pounds or more in or upon the Premises, or (ii) transport or move such items through the Common Areas of the Project without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned, or delayed. Except as may be provided under the Work Letter, Tenant shall not, without the prior written consent of Landlord, use the Premises in any manner that will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Project as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use.

(a) **Modifications to Common Areas.** Landlord shall, as an Operating Expense (to the extent such Legal Requirement is generally applicable to similar buildings in the area in which the Project is located) or at Tenant's expense (to the extent such Legal Requirement is applicable solely by reason of Tenant's, as compared to other tenants of the Project, particular use of the Premises) make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements, including the ADA; provided, however, that Landlord shall, at its expense (and not as an Operating Expense), make such alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements, including the ADA, in existence as of the Commencement Date. Tenant, at its sole expense, shall make any alterations or modifications to the interior of the Premises that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA); provided, however, that Landlord shall, at its sole expense, make any such alterations or modifications to the sink located in the laboratory portion of the Premises if that sink failed to meet any Legal Requirements applicable to the Premises as of the Commencement Date. Tenant shall notify Landlord in writing within one year after the Commencement Date whether any such alterations or modifications are, so required to the sink and Landlord shall perform such alterations or modifications if Landlord confirms that such sink was not in compliance with applicable Legal Requirements as of the Commencement Date. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys' fees, charges and disbursements and costs of suit) (collectively, "**Claims**") arising out of or in connection with Tenant's use of the Premises and Legal Requirements, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all Claims arising out of or in connection with any failure of the Premises to comply with any Legal Requirement.

(b) **Alexandria Fitlab.** As long as Tenant is not in Default, Tenant's on-site employees shall have a non-exclusive license to use on a complimentary basis the Alexandria FitLab located at 910 Clopper Road, Gaithersburg, Maryland that is owned by an affiliate of Landlord ("**910 Clopper Landlord**"). Although the Alexandria FitLab does not form a part of the Premises, the provisions of this Lease (a) imposing obligations on Tenant for matters occurring in, on, within, or about the Premises or arising out of the use or occupancy of the Premises (including, but not limited to, those obligations relating to insurance and indemnification), or (b) limiting Landlord's liability, shall apply with equal force to Tenant's use of the Alexandria FitLab. Landlord shall have the right at any time and from time to time in the exercise of its sole and absolute subjective discretion to eliminate, reconfigure, relocate, or modify the Alexandria FitLab or modify its hours of availability for Tenant's use, it being understood and agreed that Landlord makes no guaranty, assurance, or representation to Tenant that the Alexandria FitLab will remain available for use by Tenant during all or any part of the Term. Landlord or its designee may specifically condition the use of the Alexandria FitLab by any employee of Tenant upon such employee's execution and delivery of the standard license, indemnification, and waiver agreement required by Landlord or, if applicable, any operator of the Alexandria FitLab. Tenant and its employees shall be required to comply with all of the rules, regulations, conditions, and scheduling procedures of the 910 Clopper Landlord in connection with the use of the Alexandria FitLab. As of the Commencement Date, Tenant shall cause the 910 Clopper Landlord to be named as an additional insured under the commercial general liability policy of insurance that Tenant is required to maintain under this Lease. If Tenant Defaults in its obligations under this Section 7(b). Landlord shall have the right, in addition to any other rights and remedies available to Landlord for a Default by Tenant, to terminate immediately Tenant's license to use the Alexandria FitLab, provided Tenant's right to use the Alexandria FitLab shall be reinstated upon cure of any such Default. The expiration or earlier termination of this Lease shall automatically terminate the license hereby granted to Tenant to so use the Alexandria FitLab.

(c) **Loading Dock.** The Building contains a loading dock ("**Loading Dock**"). Tenant shall have a non-exclusive license to use the Loading Dock 24 hours per day, 7 days per week, in common with other tenants in the Building in accordance with the Legal Requirements and the terms and conditions of this paragraph. The license granted hereby is personal to Tenant but may be assigned or transferred to an assignee or transferee of Tenant

as set forth in Section 22. Tenant shall use the Loading Dock in a manner that will not interfere with the rights of any tenants or occupants in the Building. Landlord assumes no responsibility for enforcing Tenant's rights or for protecting the Loading Dock from any person or entity, including, but not limited to, other tenants or occupants of the Building. During any period of replacement, repair, or maintenance of the Loading Dock when it is not operational, Landlord shall have no obligation to provide Tenant with alternative, supplemental, temporary, or back-up loading docks. Landlord makes no warranties of any kind, express or implied, with respect to the Loading Dock, and Landlord disclaims any such warranties. Without limiting the foregoing, Tenant expressly acknowledges and agrees that Landlord does not guaranty or warrant that the Loading Dock will be operational at all times, will be of sufficient capacity to accommodate Tenant's use thereof, will be free of Hazardous Materials, or will function or perform adequately, and Landlord shall not be liable for any damages resulting from the failure of the Loading Dock. Although the Loading Dock does not form a part of the Premises, the provisions of this Lease (i) governing Tenant's use, operation, and enjoyment of the Premises, (ii) imposing obligations on Tenant for matters occurring in, on, within, or about the Premises or arising out of the use or occupancy of the Premises (including, but not limited to, those obligations relating to insurance, indemnification, Hazardous Materials Clearance, and environmental requirements), or (iii) limiting Landlord's liability, shall apply with equal force to Tenant's use of the Loading Dock. If Tenant defaults in its obligations under this Section 7(c) and fails to cure such default within 3 business days after written notice from Landlord, Landlord shall have the right, in addition to any other rights and remedies available to Landlord for a Default by Tenant, to suspend immediately Tenant's license to use the Loading Docks. If Tenant cures such default, Tenant's license to use the Loading Docks shall be immediately restored. The expiration or earlier termination of this Lease shall automatically terminate the license hereby granted to Tenant to so use the Loading Dock. The terms and provisions of this paragraph shall survive the expiration or earlier termination of this Lease.

8. **Holding Over.** If, with Landlord's express written consent, Tenant retains possession of the Premises after the termination of the Term, (i) unless otherwise agreed in such written consent, such possession shall be subject to immediate termination by Landlord at any time, (ii) all of the other terms and provisions of this Lease (including, without limitation, the adjustment of Base Rent pursuant to Section 4 hereof) shall remain in full force and effect (excluding any expansion or renewal option or other similar right or option) during such holdover period, (iii) Tenant shall continue to pay Base Rent in the amount payable upon the date of the expiration or earlier termination of this Lease or such other amount as Landlord may indicate, in Landlord's sole and absolute discretion, in such written consent, and (iv) all other payments shall continue under the terms of this Lease. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to 150% of Base Rent in effect during the last 30 days of the Term plus 100% of Tenant's Share of Operating Expenses, and (B) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant's holding over (including consequential damages if Landlord has advised Tenant in advance of any particular consequential damages that Landlord may incur or suffer as a result of Tenant's holding over, including, without limitation, consequential damages that Landlord may incur or suffer by reason of Landlord's inability to lease the Premises or deliver occupancy to a particular tenant). No holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease except as otherwise expressly provided, and this Section 8 shall not be construed as consent for Tenant to retain possession of the Premises. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.

9. **Taxes.** Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as "**Taxes**"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "**Governmental Authority**") during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by any Governmental Authority, or (v) imposed as a license or other fee, charge, tax, or assessment on Landlord's business or occupation of leasing space in the Project. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. If Landlord contests Taxes for any period during which Tenant has paid Taxes to Landlord, and in connection with such contest, Landlord receives a refund of any Taxes that were previously paid by Tenant for such period, then Landlord shall pay to Tenant, after deducting all reasonable, out-of-pocket costs and amounts incurred by Landlord in connection with such tax contest, Tenant's proportionate share of such refund. Taxes shall not include any net income taxes imposed on Landlord except to the extent such net income taxes are in substitution for any Taxes payable hereunder. If any such Tax is levied or assessed directly against Tenant, then Tenant shall be responsible for and shall pay the same at such times and in such manner as the taxing authority shall require. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand.

10. **Parking.** Subject to all Legal Requirements, Force Majeure, a Taking (as defined in Section 19 below) and the exercise by Landlord of its rights hereunder, Tenant shall have the right, free of charge throughout the Term (i.e., Base Term and the Extension Term), in common with other tenants of the Project pro rata in accordance with the rentable area of the Premises and the rentable areas of the Project occupied by such other tenants, to park in those areas designated for non-reserved parking, subject in each case to Landlord's rules and regulations. Landlord may allocate parking spaces among Tenant and other tenants in the Project pro rata as described above if Landlord determines that such parking facilities are becoming crowded. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including other tenants of the Project.

11. **Utilities, Services.**

(a) **General.** Landlord shall provide, subject to the terms of this Section 11, janitorial services to the Common Areas, and the following services to the Premises and Common Areas: water, electricity, heat, light, power, telephone, sewer, and other utilities (including gas and fire sprinklers to the extent the Project is plumbed for such services), and refuse and trash collection (collectively, "**Utilities**"). Landlord shall pay, as Operating Expenses or subject to Tenant's reimbursement obligation as provided in this Lease, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any taxes, penalties, surcharges or similar charges thereon. If Landlord reasonably determines that Tenant is using excessive utilities, Landlord may cause, at Tenant's expense, any Utilities to be separately metered or charged directly to Tenant by the provider; provided, however, that Landlord shall, at its sole cost and expense and on or before the Delivery of the Premises to Tenant, install a separate electrical submeter for the laboratory portion of the Premises as part of Landlord's Work. Tenant shall pay directly to the Utility provider, prior to delinquency, any separately metered Utilities and services that may be furnished to Tenant or the Premises during the Term. Tenant shall pay, as part of Operating Expenses, its share of all charges for jointly metered Utilities based upon consumption, as reasonably determined by Landlord. No interruption or failure of Utilities, from any cause whatsoever other than Landlord's willful misconduct, shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

(b) **Generator.** Landlord's sole obligation for either providing emergency generators or providing emergency back-up power to Tenant shall be: (i) to provide emergency generators with not less than the stated capacity of the emergency generators located in the Building as of the Commencement Date, and (ii) to contract with a third party to maintain the emergency generators as per the manufacturer's standard maintenance guidelines. Landlord shall have no obligation to provide Tenant with operational emergency generators or back-up power or to supervise, oversee or confirm that the third party maintaining the emergency generators is maintaining the generators as per the manufacturer's standard guidelines or otherwise. During any period of replacement, repair or maintenance of the emergency generators when the emergency generators are not operational, including any delays thereto due to the inability to obtain parts or replacement equipment, Landlord shall have no obligation to provide Tenant with an alternative back-up generator or generators or alternative sources of back-up power. Tenant expressly acknowledges and agrees that Landlord does not guaranty that such emergency generators will be operational at all times or that emergency power will be available to the Premises when needed.

12. **Alterations and Tenant's Property.** Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure or connections (other than by ordinary plugs or jacks) to Building Systems (as defined in Section 13) ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure or Building Systems, but which shall otherwise not be unreasonably withheld, conditioned, or delayed. Tenant may construct nonstructural Alterations in the Premises without Landlord's prior approval if the aggregate cost of all such work in any 12 month period does not exceed $50,000 (a "**Notice-Only Alteration**"), provided Tenant notifies Landlord in writing of such intended Notice-Only Alteration, and such notice shall be accompanied by plans, specifications, work contracts, and such other information concerning the nature and cost of the Notice-Only Alteration as may be reasonably requested by Landlord, which notice and accompanying materials shall be delivered to Landlord not less than 15 business days in advance of any proposed construction. If Landlord approves any Alterations, Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's reasonable discretion. Any request for approval shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, on demand an amount equal to the reasonable, actual out of pocket costs incurred by Landlord for plan review, coordination, scheduling, and supervision (such costs not to exceed 1% of the total costs of such Alteration). Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Subject to the provisions of Section 17, Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

Tenant shall furnish security or make other arrangements reasonably satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance (in form and substance reasonably satisfactory to Landlord; form ACORD 28 [2006/07] is not satisfactory to Landlord) for workers' compensation and other coverage in amounts and from an insurance company reasonably satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord: (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

Other than (i) the items, if any, listed on **Exhibit F** attached hereto, (ii) any items agreed by Landlord in writing to be included on **Exhibit F** in the future, and (iii) any trade fixtures, machinery, equipment and other personal property not paid for out of the TI Fund (as defined in the Work Letter) that may be removed without material damage to the Premises, which damage shall be repaired (including capping or terminating utility hook-ups behind walls) by Tenant during the Term (collectively, "**Tenant's Property**"), all property of any kind paid for with the TI Fund, all Alterations, real property fixtures, built-in machinery and equipment, built-in casework and cabinets and other similar additions and improvements built into the Premises so as to become an integral part of the Premises, such as fume hoods that penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch (collectively, "**Installations**"), shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term and shall remain upon and be surrendered with the Premises as a part thereof in accordance with Section 28 following the expiration or earlier termination of this Lease; provided, however, that Landlord shall, at the time its approval of such Installation is requested or at the time it receives notice of a Notice-Only Alteration, notify Tenant in writing if it has elected to cause Tenant to remove such Installation upon the expiration or earlier termination of this Lease. If Landlord so elects, Tenant shall remove such Installation upon the expiration or earlier termination of this Lease and restore any damage caused by or occasioned as a result of such removal, including, when removing any of Tenant's Property that was plumbed, wired or otherwise connected to any of the Building Systems, capping off all such connections behind the walls of the Premises and repairing any holes. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant.

13. **Landlord's Repairs.** Landlord, as an Operating Expense, shall maintain all of the structural, exterior, parking and other Common Areas of the Project, including HVAC, plumbing, fire sprinklers, and all other building systems serving the Premises and other portions of the Project ("**Building Systems**"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's agents, servants, employees, invitees and contractors (collectively, "**Tenant Parties**") excluded. Losses and damages caused by Tenant or any Tenant Party shall be repaired by Landlord, to the extent not covered by insurance, at Tenant's sole cost and expense. Landlord reserves the right to stop temporarily Building Systems services when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of Landlord, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed. Landlord shall have no responsibility or liability for failure to supply Building Systems services during any such period of interruption; provided, however, that Landlord shall, except in case of emergency, make a commercially reasonable effort to give Tenant 48 hours advance notice of any planned stoppage of Building Systems services for routine maintenance, repairs, alterations or improvements. Tenant shall promptly give Landlord written notice of any repair required by Landlord pursuant to this Section, after which Landlord shall have a reasonable opportunity to effect such repair. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's

expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 18.

14. **Tenant's Repairs.** Subject to Section 13 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition all interior, non-structural portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls. Such repair and replacement may include capital expenditures and repairs whose benefit may extend beyond the Term. Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may, upon at least 5 days' prior written notice to Tenant, perform such work and shall be reimbursed by Tenant within 10 days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Sections 17 and 18, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.

15. **Mechanic's Liens.** Tenant shall discharge, by bond or otherwise, any mechanic's lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant within 15 days after the filing thereof, at Tenant's sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant. Should Tenant fail to discharge any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the cost thereof shall be immediately due from Tenant as Additional Rent. If Tenant shall lease or finance the acquisition of 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 filed as a matter of public record by any lessor or creditor of Tenant will 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 Project be furnished on the statement without qualifying language as to applicability of the lien only to removable personal property, located in an identified suite held by Tenant.

16. **Indemnification.** Tenant hereby indemnifies and agrees to defend, save and hold Landlord harmless from and against any and all Claims for injury or death to persons or damage to property occurring within or about the Premises, arising directly or indirectly out of use or occupancy of the Premises or a breach or default by Tenant in the performance of any of its obligations hereunder, except to the extent caused by the willful misconduct or gross negligence of Landlord. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Premises). Tenant further waives any and all Claims for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party.

17. **Insurance.** Landlord shall maintain a special causes of loss form property insurance policy and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project or such lesser coverage amount as Landlord may elect provided such coverage amount is not less than 90% of such full replacement cost. Landlord shall further procure and maintain commercial general liability insurance with a single loss limit of not less than $[***] for bodily injury and property damage with respect to the Project. Landlord may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary, including, but not limited to, flood, environmental hazard and earthquake, loss or failure of building equipment, errors and omissions, rental loss during the period of repair or rebuilding, workers' compensation insurance and fidelity bonds for employees employed to perform services and 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 the Project. All such insurance shall be included as part of the Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Landlord based upon the insurer's cost calculations). Tenant shall also reimburse Landlord for any increased premiums or additional insurance that Landlord incurs as a result of Tenant's use of the Premises.

Tenant, at its sole cost and expense, shall maintain during the Term: a special causes of loss form property insurance policy with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with such limits as required by law; and commercial general liability insurance, with a minimum limit of not less than $[***] per occurrence for bodily injury and property damage with respect to the Premises. The commercial general liability insurance policy shall name Landlord and Alexandria Real Estate Equities, Inc., and its and their respective members, officers, directors, employees, managers, and agents (collectively, "**Landlord Parties**"), as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies that have a rating of not less than policyholder rating of A- and financial category rating of at least Class X in "Best's Insurance Guide"; shall not be cancelable for nonpayment of premium unless 30 days prior written notice shall have been given to Landlord from the insurer (if it is the practice of such insurer to provide such notice, otherwise, Tenant shall promptly notify Landlord in the event of any cancellation of insurance); contain a hostile fire endorsement and a contractual liability endorsement; and provide primary coverage to Landlord (any policy issued to Landlord providing duplicate or similar coverage shall be deemed excess over Tenant's policies). Copies of such policies (if requested by Landlord), or certificates of insurance (in form and substance reasonably satisfactory to Landlord; form ACORD 28 [2006/07] is not satisfactory to Landlord) showing the limits of coverage required hereunder and showing Landlord as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord by Tenant upon Tenant's execution and delivery of this Lease and upon each renewal of said insurance. Tenant's policy may be a "blanket policy" with an aggregate per location endorsement that specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 5 days prior to the expiration of such policies, furnish Landlord with renewal certificates.

In each instance where insurance is to name Landlord as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord as additional insured to: (i) any lender of Landlord holding a security interest in the Project or any portion thereof, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers, agents, invitees and contractors ("**Related Parties**"), in connection with any loss or damage thereby insured against. Notwithstanding anything to the contrary contained in this Lease,

neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder or any cause whatsoever, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

Landlord may require insurance policy limits to be raised to conform with requirements of Landlord's lender and/or, in Landlord's reasonable judgment (and not more frequently that once every 3 years), to bring coverage limits to levels then being generally required of new tenants within the Project.

18. **Restoration.** If, at any time during the Term, the Project or the Premises are damaged or destroyed by a fire or other insured casualty, Landlord shall notify Tenant within 60 days after discovery of such damage as to the amount of time Landlord reasonably estimates it will take to restore the Project or the Premises, as applicable ("**Restoration Period**"). If the Restoration Period is estimated to exceed 12 months (" **Maximum Restoration Period**"), Landlord may, in such notice, elect to terminate this Lease as of the date that is 75 days after the date of discovery of such damage or destruction; provided, however, that notwithstanding Landlord's election to restore, Tenant may elect to terminate this Lease by written notice to Landlord delivered within 5 business days of receipt of a notice from Landlord estimating a Restoration Period for the Premises longer than the Maximum Restoration Period. Unless Landlord so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Section 30) in, on or about the Premises (collectively referred to herein as "**Hazardous Materials Clearances**"); provided, however, that if repair or restoration of the Premises is not substantially complete as of the end of the Maximum Restoration Period or, if longer, the Restoration Period, Tenant may by written notice to Landlord delivered within 5 business days of the expiration of the Maximum Restoration Period or, if longer, the Restoration Period, elect to terminate this Lease, in which event Landlord shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date that is 75 days after the later of: (i) discovery of such damage or destruction, or (ii) the date all required Hazardous Materials Clearances are obtained, but Landlord shall retain any Rent paid and the right to any Rent payable by Tenant prior to such election by Landlord or Tenant.

Tenant, at its expense, shall promptly perform, subject to delays arising from the collection of insurance proceeds, from Force Majeure (as defined in Section 34) events or to obtain Hazardous Material Clearances, all repairs or restoration not required to be done by Landlord and shall promptly re-enter the Premises and commence doing business in accordance with this Lease. Notwithstanding the foregoing, either Landlord or Tenant may terminate this Lease if the Premises are damaged during the last year of the Term and Landlord reasonably estimates that it will take more than 2 months to repair such damage, or if insurance proceeds are not available for such restoration. Rent shall be abated from the date all required Hazardous Material Clearances are obtained until the Premises are repaired and restored, in the proportion that the area of the Premises, if any, that is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space during the period of repair that is suitable for the temporary conduct of Tenant's business. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 18, Tenant waives any right to terminate this Lease by reason of damage or casualty loss.

The provisions of this Lease, including this Section 18, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation that is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 18 sets forth their entire understanding and agreement with respect to such matters.

19. **Condemnation.** If the whole or any material part of the Premises or the Project is taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a "**Taking**" **or** "**Taken**"), and the Taking would in Landlord's reasonable judgment either prevent or materially interfere with Tenant's use of the Premises or materially interfere with or impair Landlord's ownership or operation of the Project, then upon written notice by Landlord this Lease shall terminate and Rent shall be apportioned as of said date. If part of the Premises shall be Taken, and this Lease is not terminated as provided above, Landlord shall promptly restore the Premises and the Project as nearly as is commercially reasonable under the circumstances to their condition prior to such partial Taking and the rentable square footage of the Building, the rentable square footage of the Premises, Tenant's Share of Operating Expenses and the Rent payable hereunder during the unexpired Term shall be reduced to such extent as may be fair and reasonable under the circumstances. Upon any such Taking, Landlord shall be entitled to receive the entire price or award from any such Taking without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant shall have the right, to the extent that same shall not diminish Landlord's award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant's trade fixtures, if a separate award for such items is made to Tenant. Tenant hereby waives any and all rights it might otherwise have pursuant to any provision of state law to terminate this Lease upon a partial Taking of the Premises or the Project.

20. **Events of Default.** Each of the following events shall be a default (" **Default**") by Tenant under this Lease:

(a) **Payment Defaults.** Tenant shall fail to pay any installment of Rent or any other payment hereunder when due; provided, however, that Landlord will give Tenant notice and an opportunity to cure any failure to pay Rent within 3 days of any such notice (and it shall not be deemed a Default) not more than once in any 12 month period and Tenant agrees that such notice shall be in lieu of and not in addition to, or shall be deemed to be, any notice required by law.

(b) **Insurance.** Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance at least 20 days before the expiration of the current coverage.

(c) **Abandonment.** Tenant shall abandon the Premises without (i) the release of the Premises of all Hazardous Materials Clearances and free of any residual impact from the Tenant HazMat Operations, and (ii) complying with the provisions of Section 28.

(d) **Improper Transfer.** Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.

(e) **Liens.** Tenant shall fail to discharge or otherwise obtain the release of any lien placed upon the Premises in violation of this Lease within 15 days after any such lien is filed against the Premises.

(f) **Insolvency Events.** Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief that is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(g) **Estoppel Certificate or Subordination Agreement.** Tenant fails to execute any document required from Tenant under Sections 23 or 27 within 5 business days after a second notice requesting such document.

(h) **Default Under 22FF Lease.** Tenant is in Default (as defined therein) under the 22FF Lease.

(i) **Other Defaults.** Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 20, and, except as otherwise expressly provided herein, such failure shall continue for a period of 15 days after written notice thereof from Landlord to Tenant.

Any notice given under Section 20(i) hereof shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice; provided that if the nature of Tenant's default pursuant to Section 20(i) is such that it cannot be cured by the payment of money and reasonably requires more than 15 days to cure, then Tenant shall not be deemed to be in default if Tenant commences such cure within said 15 day period and thereafter diligently prosecutes the same to completion; provided, however, that such cure shall be completed no later than 60 days from the date of Landlord's notice (which 60 day period shall be extended by a day for each day of the Force Majeure; Tenant shall notify Landlord immediately on the occurrence of any such Force Majeure and provide an estimate of its anticipated duration).

21. **Landlord's Remedies.**

(a) **Interest.** Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law **("Default Rate"),** whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.

(b) **Late Payment Rent.** Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges that may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum of 6% of the overdue Rent as a late charge (provided that, once per calendar year, Tenant shall not be required to pay such late charge upon the first occurrence of a late payment by Tenant of Rent during such calendar year). The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.

(c) **Re-Entry.** Landlord shall have the right, immediately or at any time thereafter, without further notice to Tenant (unless otherwise provided herein), to enter the Premises, without terminating this Lease or being guilty of trespass, and do any and all acts as Landlord may deem necessary, proper or convenient to cure such Default, for the account and at the expense of Tenant, any notice to quit or notice of Landlord's intention to re-enter being hereby expressly waived, and Tenant agrees to pay to Landlord as Additional Rent all expense incurred by Landlord in so doing, including interest at the Default Rate, from the due date until the date payment is received by Landlord.

(d) **Termination.** Landlord shall have the right to terminate this Lease and Tenant's right to possession of the Premises and, with or without legal process, take possession of the Premises and remove Tenant, any occupant and any property therefrom, using such force as may be necessary, without being guilty of trespass and without relinquishing any rights of Landlord against Tenant, any notice to quit, or notice of Landlord's intention to re-enter being hereby expressly waived. Landlord shall be entitled to recover damages from Tenant for all amounts covenanted to be paid during the remainder of the Term (except for the period of any holdover by Tenant, in which case the monthly rental rate stated at Section 8 herein shall apply), which may be accelerated by Landlord at its option, together with (i) all expenses of any proceedings (including, but not limited to, the expenses set forth in Section 22(f) below) that may be necessary in order for Landlord to recover possession of the Premises, (ii) the expenses of the re-renting of the Premises (including, but not limited to, any commissions paid to any real estate agent, advertising expense and the costs of such alterations, repairs, replacements or modifications that Landlord, in its sole judgment, considers advisable and necessary for the purpose of re-renting), and (iii) interest computed at the Default Rate from the due date until paid; provided, however, that there shall be credited against the amount of such damages all amounts received by Landlord from such re-renting of the Premises, with any overage being refunded to Tenant. Landlord shall in no event be liable in any way whatsoever for failure to re-rent the Premises or, in the event that the Premises are re-rented, for failure to collect the rent thereof under such re-renting and Tenant expressly waives any duty of the Landlord to mitigate damages. No act or thing done by Landlord shall be deemed to be an acceptance of a surrender of

the Premises, unless Landlord shall execute a written agreement of surrender with Tenant. Tenant's liability hereunder shall not be terminated by the execution of a new lease of the Premises by Landlord, unless that new lease expressly so states. In the event Landlord does not exercise its option to accelerate the payment of amounts owed as provided hereinabove, then Tenant agrees to pay to Landlord, upon demand, the amount of damages herein provided after the amount of such damages for any month shall have been ascertained; provided, however, that any expenses incurred by Landlord shall be deemed to be a part of the damages for the month in which they were incurred. Separate actions may be maintained each month or at other times by Landlord against Tenant to recover the damages then due, without waiting until the end of the term of this Lease to determine the aggregate amount of such damages. Tenant hereby expressly waives any and all rights of redemption granted by or under any present or future laws in the event of Tenant being evicted or being dispossessed for any cause, or in the event of Landlord obtaining possession of the Premises by reason of the violation by Tenant of any of the covenants and conditions of this Lease.

(e) **Lien for Rent.** Upon any Default by Tenant in the payment of Rent or other amounts owed hereunder, Landlord shall have a lien upon the property of Tenant in the Premises for the amount of such unpaid amounts, and Tenant hereby specifically waives any and all exemptions allowed by law. In such event, Tenant shall not remove any of Tenant's property from the Premises except with the prior written consent of Landlord, and Landlord shall have the right and privilege, at its option, to take possession of all Tenant's property in the Premises, to store the same on the Premises, or to remove it and store it in such place as may be selected by Landlord, at Tenant's risk and expense. If Tenant fails to redeem the personal property so seized, by payment of whatever sum may be due Landlord hereunder (including all storage costs), Landlord shall have the right, after twenty (20) days written notice to Tenant of its intention to do so, to sell such personal property so seized at public or private sale and upon such terms and conditions as may appear advantageous to Landlord, and after the payment of all proper charges incident to such sale, apply the proceeds thereof to the payment of any balance due to Landlord on account of rent or other obligations of Tenant pursuant to this Lease. In the event there shall then remain in the hands of Landlord any balance realized from the sale of said personal property, the same shall be paid over to Tenant. The exercise of the foregoing remedy by Landlord shall not relieve or discharge Tenant from any deficiency owed to Landlord that Landlord has the right to enforce pursuant to any of the provisions of this Lease. Tenant shall also be liable for all expenses incident to the foregoing process, including any auctioneer or attorney's fees or commissions. At Tenant's request, Landlord shall subordinate its lien rights as set forth in this paragraph to the lien, operation, and effect of any bona fide third party equipment financing pursuant to a subordination agreement in form and substance reasonably acceptable to Landlord. Such subordination shall be limited to specific items of equipment and shall not be in the form of a blanket lien subordination.

(f) **Expenses.** If any action is brought by either party against the other party, relating to or arising out of this Lease or the enforcement hereof, the prevailing party shall be entitled to recover from the other party reasonable attorneys' fees, costs, and expenses incurred in connection with the prosecution or defense of such action. For purposes of this Lease, the term **"attorneys' fees"** or **"attorneys' fees and costs"** shall mean the fees and expenses of counsel to the parties hereto, which may include printing, photostating, duplicating and other expenses, air freight charges, and fees billed for law clerks, paralegals and other persons not admitted to the bar but performing services under the supervision of an attorney, and the costs and fees incurred in connection with the enforcement or collection of any judgment obtained in any such proceeding. The provisions of this Section shall survive the entry of any judgment, and shall not merge, or be deemed to have merged, into any judgment.

(g) **Suspension of Funding.** Upon a Default by Tenant hereunder and during the continuance thereof, Landlord shall have the right to suspend funding of any TI Allowance.

(h) **Other Remedies.** Upon a Default by Tenant hereunder and in addition to any other remedy available to Landlord under this Lease or otherwise, Landlord shall be entitled to recover damages from Tenant the unamortized amount of the Base Rent Abatement but only if Landlord terminates this Lease. In addition to the remedies set forth in this Section 21, Landlord, at its option, without further notice or demand to Tenant, shall have all other rights and remedies provided at law or in equity.

22. **Assignment and Subletting.**

(a) **General Prohibition.** Without Landlord's prior written consent subject to and on the conditions described in this Section 22, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or limited liability company, the shares or other ownership interests thereof that are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of transfers whereby 49% or more of the issued and outstanding shares or other ownership interests of such corporation are, or voting control is, transferred (but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities that were owners thereof at time of execution of this Lease to persons or entities who were not owners of shares or other ownership interests of the corporation, partnership or limited liability company at time of execution of this Lease, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this Section 22. Notwithstanding the foregoing, any public offering of shares or other ownership interest in Tenant shall not be deemed an assignment.

(b) **Permitted Transfers.** If Tenant desires to assign, sublease, hypothecate or otherwise transfer this Lease or sublet the Premises, then at least 15 business days, but not more than 45 business days, before the date Tenant desires the assignment or sublease to be effective **("Assignment Date"),** Tenant shall give Landlord a notice **("Assignment Notice")** containing such information about the proposed assignee or sublessee, including the proposed use of the Premises and any Hazardous Materials proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent, or (ii) refuse such consent, in its reasonable discretion (provided that Landlord shall further have the right to review and approve or disapprove the proposed form of sublease prior to the effective date of any such subletting). Tenant shall pay to Landlord a fee equal to $1,500 in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents. Notwithstanding the foregoing, (1) Landlord's consent to an assignment of this Lease or a subletting of any portion of the Premises to any entity controlling, controlled by, or under common control with Tenant shall not be required, provided that Landlord shall have the right to approve the form of any such sublease or assignment, and (2) Tenant shall have the right to assign this Lease, upon 10 days prior written notice to Landlord but without obtaining Landlord's prior written consent, to a corporation or other entity that is a successor-in-interest to Tenant, by way of merger, consolidation or corporate reorganization, or by the purchase of all or substantially all of the assets or the ownership interests of Tenant provided that (A) such merger or consolidation, or such acquisition or assumption, as the case may be, is for a good business purpose and not principally for the purpose of transferring this Lease, (B) the net worth (as determined in accordance with generally accepted accounting principles consistently applied **["GAAP"])** of the assignee is not less than the net worth (as determined in accordance with GAAP) of Tenant as of the date of Tenant's most current quarterly or annual financial statements, (C) such assignee shall agree in writing to assume all of the terms, covenants, and conditions of this Lease arising after the effective date of the assignment, and (D) the proposed assignee is not engaged in areas of scientific research or other business concerns that are controversial, in Landlord's reasonable judgment (collectively, a **"Permitted Assignment").** Notwithstanding anything to the contrary contained in this Lease, Landlord shall not be entitled to any consideration in connection with a Permitted Assignment.

Among other reasons, it shall be reasonable for Landlord to withhold its consent in any of these instances: (1) the proposed assignee or sublessee is engaged in areas of scientific research or other business concerns that are controversial, in Landlord's reasonable judgment, or its proposed use of the Premises will violate any applicable Legal Requirement, (2) the proposed assignee or transferee lacks the creditworthiness to support the financial obligations it would incur under the proposed assignment or sublease, (3) in Landlord's reasonable judgment, the use of the Premises by the proposed assignee or sublessee would require increased services by Landlord, (4) Landlord has received from any other landlord to the proposed assignee or sublessee a negative report (in the nature of defaults or other forms of material non-compliance committed by such assignee or sublessee under any lease or sublease) concerning such other landlord's experience with the proposed assignee or sublessee, (5) Landlord has experienced previous defaults by or is in litigation with the proposed assignee or sublessee, (6) the proposed assignment will create a vacancy elsewhere in the Project because the assignment or sublease involves an existing tenant of the Project, or (7) the assignment or sublease is prohibited by Landlord's lender under the terms of the existing loan documents.

(c) **Additional Conditions.** As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in Default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under this Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment; and

(ii) A list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in or release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment, generation, release or disposal of Hazardous Materials by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or subtenant is required, however, to provide Landlord with any portion(s) of the such documents containing information of a proprietary nature that, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(d) **No Release of Tenant, Sharing of Excess Rents.** Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. If the Rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the sum of the rental payable under this Lease (excluding however, any Rent payable under this Section) **("Excess Rent"),** then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent (less the actual brokerage fees, legal costs and any design or construction fees directly related to such sublease or assignment) and required pursuant to the terms of any such sublease within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part 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 Landlord may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent.

(e) **No Waiver.** The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under this Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(f) **Prior Conduct of Proposed Transferee.** Notwithstanding any other provision of this Section 22, if (i) the proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority), or (iii) because of the existence of a pre-existing environmental condition in the vicinity of or underlying the Project, the risk that Landlord would be targeted as a responsible party in connection with the remediation of such pre-existing environmental condition would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

23. **Estoppal Certificate.** Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a proposed lender or purchaser, (i) 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 the rental and other charges are paid in advance, if any, (ii) acknowledging that there are not any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of 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 time shall, at the option of Landlord and subject to the expiration of the time period set forth in Section 20(g), be conclusive upon Tenant that this 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.

24. **Quiet Enjoyment.** So long as Tenant shall perform all of the covenants and agreements herein required to be performed by Tenant, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

25. **Prorations.** All prorations required or permitted to be made hereunder shall be made on the basis of a 365 day year and based upon the number of days in the applicable month.

26. **Rules and Regulations.** Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project. The current rules and regulations are attached hereto as **Exhibit E.** If there is any conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.

27. **Subordination.** This Lease and Tenant's interest and rights hereunder are hereby made and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the necessity of any further instrument or act on the part of Tenant; provided, however that so long as there is no Default hereunder, Tenant's right to possession of the Premises shall not be disturbed by the Holder of any such Mortgage. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees upon demand to execute, acknowledge and deliver such instruments, confirming such subordination, and such instruments of attornment as shall be requested by any such Holder, provided any such instruments contain appropriate non-disturbance provisions assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. Notwithstanding the foregoing, any such Holder may at any time subordinate its Mortgage to this Lease, without Tenant's consent, by notice in writing to Tenant, and thereupon this Lease shall be deemed prior to such Mortgage without regard to their respective dates of execution, delivery or recording and in that event such Holder shall have the same rights with respect to this Lease as though this Lease had been executed prior to the execution, delivery and recording of such Mortgage and had been assigned to such Holder. On Tenant's written request, Landlord shall use its commercially reasonable efforts (but with no obligation to pay any out-of -pocket fees or sums) to obtain from any Holder of a first lien Mortgage at any time during the Term covering any or all of the Project or the Premises a non-disturbance agreement on Holder's standard form in favor of Tenant assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. The term **"Mortgage"** whenever used in this Lease shall be deemed to include deeds of trust, security assignments and any other encumbrances, and any reference to the **"Holder"** of a Mortgage shall be deemed to include the beneficiary under a deed of trust. As of the Commencement Date, the Project is not encumbered by the lien of a Mortgage.

28. **Surrender.** Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, subject to any Alterations or Installations permitted by Landlord to remain in the Premises in accordance with this Lease, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than a Landlord Party (collectively, **"Tenant HazMat Operations"**) and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Sections 18 and 19 excepted. At least 3 months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises (including any Installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (**"Surrender Plan"**). Such Surrender Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall reasonably request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of this Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed $2,500. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable and appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 28.

Upon the expiration or earlier termination of this Lease, Tenant shall immediately return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims against Landlord for any damages resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 30 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

29. **Waiver of Jury Trial**. TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH OR THE TRANSACTIONS RELATED HERETO.

30. **Environmental Requirements.**

(a) **Prohibition/Compliance/Indemnity**. Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon,

kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises by anyone other than Landlord and Landlord's employees, agents and contractors otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, reasonable attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, **"Environmental Claims**") that arise during or after the Term as a result of such contamination; provided, however, that Tenant shall have no indemnification, remediation, or other obligation or responsibility under this Section 30 for any contamination or Environmental Claim if such contamination or Environmental Claim arises from any Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from the Premises by Landlord, its employees or contractors, or another tenant or third party unrelated or unaffiliated with Tenant or that existed in the Premises as of the Commencement Date and were not brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from the Premises by Tenant or any Tenant Party. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld, conditioned, or delayed so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises or the Project.

(b) **Business**. Landlord acknowledges that it is not the intent of this Section 30 to prohibit Tenant from using the Premises for the Permitted Use. Tenant may operate its business according to prudent industry practices so long as the use or presence of Hazardous Materials is strictly and properly monitored according to all then applicable Environmental Requirements. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("**Hazardous Materials List**"). Promptly upon request, Tenant shall deliver to Landlord an updated Hazardous Materials List at least once a year and shall also deliver an updated list before any new Hazardous Material is brought onto, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises. Tenant shall deliver to Landlord true and correct copies of the following documents ("**Haz Mat Documents**") relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that time, concurrent with the receipt from or submission to a Governmental Authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Legal Requirements; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks; and a Surrender Plan (to the extent surrender in accordance with Section 28 cannot be accomplished in 3 months). Tenant is not required, however, to provide Landlord with any portion(s) of the Haz Mat Documents containing information of a proprietary nature that, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. It is not the intent of this Section to provide Landlord with information that could be detrimental to Tenant's business should such information become possessed by Tenant's competitors.

(c) **Tenant Representation and Warranty**. Tenant hereby represents and warrants to Landlord that (i) neither Tenant nor any of its legal predecessors has been required by any prior landlord, lender, or Governmental Authority at any time to take remedial action in connection with Hazardous Materials contaminating a property, which contamination was permitted by Tenant of such predecessor or resulted from Tenant's or such predecessor's action or use of the property in question, and (ii) Tenant is not subject to any enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority). If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion.

(d) **Testing**. Subject to Section 32 below, Landlord shall have access to, and a right to perform inspections and tests of, the Premises and the Project to determine Tenant's compliance with Environmental Requirements (as defined below), its obligations under this Section 30, or the environmental condition of the Premises and the Project. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Party. Access shall be granted to Landlord upon Landlord's prior notice to Tenant and at such times so as to minimize, so far as may be reasonable under the circumstances, any disturbance to Tenant's operations. Such inspections and tests shall be conducted at Landlord's expense, unless such inspections or tests are conducted pursuant to Section 21 hereof or reveal that Tenant has not complied with any Environmental Requirement, in which case Tenant shall reimburse Landlord for the reasonable cost of such inspection and tests. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights that Landlord may have against Tenant.

(e) **Underground Tanks**. Under no circumstances whatsoever will Tenant have the right to install any underground storage tank on or about the Premises or the Project. If underground or other storage tanks storing Hazardous Materials located on the Premises or the Project before the Commencement Date are used by Tenant, Tenant shall install, use, monitor, operate, maintain, upgrade and manage such storage tanks, maintain appropriate records, obtain and maintain appropriate insurance, implement reporting procedures, properly close any underground storage tanks if required by applicable Legal Requirements, and take or cause to be taken all other actions necessary or required under applicable state and federal Legal

Requirements, as such now exists or may hereafter be adopted or amended in connection with the installation, use, maintenance, management, operation, upgrading and closure of such storage tanks.

(f) **Control Areas**. Tenant shall be allowed to utilize up to its pro rata share of the Hazardous Materials inventory within any control area or zone (located within the Premises), as designated from time to time by the applicable building code or other Legal Requirement, for Hazardous Materials use or storage. As used in the preceding sentence, Tenant's pro rata share of any control area or zone located within the Premises shall be determined based on the rentable square footage that Tenant leases within the applicable control area or zone. For purposes of example only, if a control area or zone contains 10,000 rentable square feet and 2,000 rentable square feet of a tenant's premises are located within such control area or zone (while such premises as a whole contains 5,000 rentable square feet), the applicable tenant's pro rata share of such control area or zone would be 20%.

(g) **Tenant's Obligations**. Tenant's obligations under this Section 30 shall survive the expiration or earlier termination of this Lease for the applicable statute of limitations period under federal, state, or local Legal Requirement. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan), Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(h) **Definitions**. As used herein, (i) the term **"Environmental Requirements"** means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued. thereunder, and (ii) the term **"Hazardous Materials"** means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the **"operator"** of Tenant's **"facility"** and the **"owner"** of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

31. **Tenant's Remedies/Limitation of Liability**. Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary). Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.

All obligations of Landlord under this Lease will be binding upon Landlord only during the period of its ownership of the Premises and not thereafter. The term **"Landlord"** in this Lease shall mean only the owner for the time being of the Premises. Upon the transfer by such owner of its interest in the Premises, such owner shall thereupon be released and discharged from all obligations of Landlord thereafter accruing, but such obligations shall be binding during the Term upon each new owner for the duration of such owner's ownership.

32. **Inspection and Access**. Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs as may be required or permitted pursuant to this Lease, inspecting the Premises, showing the Premises to prospective purchasers and, during the last year of the Term, to prospective tenants or for any other business purpose. Landlord may erect a suitable sign on the Project stating the Premises are available to let (but only during the last 9 months of the Term) or that the Project is available for sale. Landlord may grant easements, make public dedications, designate Common Areas and create restrictions on or about the Project, provided that no such easement, dedication, designation or restriction materially, adversely affects Tenant's use or occupancy of the Premises for the Permitted Use. At Landlord's request, Tenant shall execute such reasonable instruments as may be necessary for such easements, dedications or restrictions. Tenant shall at all times, except in the case of emergencies, have the right to escort Landlord or its agents, representatives, contractors or guests while the same are in the Premises, provided such escort does not materially and adversely affect Landlord's access rights hereunder.

33. **Security**. Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

34. **Force Majeure**. Neither Landlord nor Tenant shall be responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond the reasonable control of Landlord or Tenant ("**Force Majeure");** provided, however, that in no event shall Force Majeure excuse Tenant from performing any monetary obligation under this Lease.

35. **Brokers**. 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 transaction and that no Broker brought about this transaction, other than CBRE, Inc. (" **CBRE**"). CBRE, acting as Tenant's broker and Landlord's broker pursuant to a dual agency, shall be paid by Landlord pursuant to a separate agreement between Landlord and CBRE. Tenant hereby agrees to indemnify and hold Landlord harmless from and against any claims by any Broker, other than CBRE, claiming a commission or other form of compensation by virtue of having dealt with Tenant, with regard to this leasing transaction. Landlord hereby agrees to indemnify and hold Tenant harmless from and against any claims by any Broker, including CBRE, claiming a commission or other form of compensation by virtue of having dealt with Landlord, with regard to this leasing transaction.

36. **Limitation on Landlord's Liability**. **[***]**

37. **Severability**. If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby. It is also the intention of the parties to this Lease that in lieu of each clause or provision of this Lease that is illegal, invalid or unenforceable, there be added, as a part of this Lease, a clause or provision as similar in effect to such illegal, invalid or unenforceable clause or provision as shall be legal, valid and enforceable. This Lease, including the exhibits attached hereto, constitutes the entire agreement between Landlord and Tenant pertaining to the subject matter hereof and supersedes all prior agreements, understandings, letters of intent, negotiations, and discussions, whether oral or written, of the parties, and there are no warranties, representations, or other agreements, express or implied, made to either party by the other party in connection with the subject matter hereof except as specifically set forth herein or in the documents delivered pursuant hereto or in connection herewith.

38. **Signs; Exterior Appearance**. Tenant shall not, without the prior written consent of Landlord, which may be granted or withheld in Landlord's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Landlord's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Premises or the Project any signs, notices, window or door lettering, placards, decorations, or advertising media of any type that can be viewed from the exterior of the Premises. Landlord, at its sole cost, shall provide a suite entry sign at the Premises entrance and the Building directory tablet, which signage shall contain Tenant's name and suite number, and that shall be of a size, color and type consistent with the Building standard signage. Nothing may be placed on the exterior of corridor walls or corridor doors other than Landlord's standard lettering. The directory tablet shall be provided exclusively for the display of the name and location of tenants.

(a) **Monument Sign**. Landlord shall install, at its expense, and maintain throughout the Term as part of the Operating Expenses Tenant's name on the existing monument sign serving the Project. Tenant acknowledges that its rights under this paragraph are non-exclusive.

39. **Relocation to Another Project**. **[***]**

40. **Right to Extend Term**. **[***]**

41. **Right to Expand. [***]**

42. **Miscellaneous.**

(a) **Notices**. All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth above. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Joint and Several Liability**. If and when included within the term **"Tenant,"** as used in this instrument, there is more than one person or entity, each shall be jointly and severally liable for the obligations of Tenant.

(c) **Financial Information**. Tenant shall furnish Landlord with true and complete copies of (i) Tenant's most recent audited annual financial statements (if audited statements are not prepared, Tenant shall furnish annual financial statements certified as accurate by an officer of Tenant) within 90 days of the end of each of Tenant's fiscal years during the Term, and (ii) upon Landlord's request, any other financial information or summaries that Tenant typically provides to its lenders. Landlord shall keep confidential all such financial information provided by Tenant to Landlord (except Landlord may disclose such information to Landlord's employees, attorneys and accountants or if required by law).

(d) **Recordation**. Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file (at Landlord's sole cost and expense), and upon request by Landlord Tenant will execute, a memorandum of lease.

(e) **Interpretation**. The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. Words of any gender used in this Lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(f) **Not Binding Until Executed**. The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(g) **Limitations on Interest**. It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

(h) **Choice of Law**. Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.

(i) **Time**. Time is of the essence as to the performance of each party's obligations under this Lease.

(j) **OFAC**. Tenant, and all beneficial owners of Tenant, are currently (i) in compliance with and shall at all times during the Term of this Lease

remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the **"OFAC Rules"),** (ii) not listed on, and shall not during the Term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List, or the Sectoral Sanctions Identifications List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (iii) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

(k) **Incorporation by Reference**. All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control.

(l) **No Accord and Satisfaction.** No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.

(m) **Non-Disclosure of Terms**. Tenant acknowledges and agrees that the terms of this Lease are confidential and constitute proprietary information of Landlord. Disclosure of such terms could adversely affect the ability of Landlord and its affiliates to negotiate, manage, and administer other leases and impair Landlord's relationship with other tenants. Accordingly, as a material inducement for Landlord to enter into this Lease, Tenant, and behalf of itself and its partners, managers, members, officers, directors, employees, agents, and attorneys, agrees that it shall not intentionally and voluntarily disclose the terms and conditions of this Lease to any publication or other media or any tenant or apparent prospective tenant of the Building or other portion of the Project, or real estate agent or broker (other than CBRE), either directly or indirectly.

(n) **Hazardous Activities**. Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or services in any portion of the Premises that, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

[**Signatures on next page]**

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease under seal as of the day and year first above written.

TENANT:

ADAPTIVE PHAGE THERAPEUTICS, INC.,
a Delaware corporation

By: */s/ Greg Merril*
Name: Greg Merril
Title: CEO

LANDLORD:

ARE-708 QUINCE ORCHARD, LLC,
a Delaware limited liability company

By: ARE-GP 708 Quince Orchard QRS CORP.,
a Maryland corporation,
managing member

By: */s/ Jennifer Banks*
Name: Jennifer Banks
Title: Co-Chief Operating Officer
and General Counsel

Exhibit 10.29

FIRST AMENDMENT TO LEASE AGREEMENT

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

THIS FIRST AMENDMENT TO LEASE AGREEMENT ("**this First Amendment**") is dated as of October 28, 2020 (" **Effective Date**"), by and between **ARE-708 QUINCE ORCHARD, LLC,** a Delaware limited liability company, having an address at 26 North Euclid Avenue, Pasadena, California 91101 ("**Landlord**"), and **ADAPTIVE PHAGE THERAPEUTICS, INC.,** a Delaware corporation, having an address at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878 ("**Tenant**").

RECITALS

A. Landlord and Tenant have entered into that certain Lease Agreement (" **Lease**") dated as of August 9, 2019, wherein Landlord leased to Tenant certain premises containing approximately [***] rentable square feet ("**Existing Premises**") located at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878, as more particularly described in the Lease.

B. Landlord and Tenant desire to amend the Lease, among other things, to expand the Existing Premises by an additional [***] rentable square feet, provide for the possible use and access of a portion of the Expansion Premises (as defined below) before the commencement date for the entire Expansion Premises, extend the Term, and provide certain improvement allowances, all on the terms and conditions set forth in this First Amendment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recitals, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree that the Lease is amended as follows:

1. **Definitions; Recitals.** Terms used in this First Amendment but not otherwise defined shall have the meanings set forth in the Lease. The Recitals form an integral part of this First Amendment and are hereby incorporated by reference.

2. **Expansion Premises**. Effective as of the Expansion Premises Commencement Date (as defined in Section 4 below), the Existing Premises shall be expanded by an additional approximately 20,950 rentable square feet ("**Expansion Premises**"; the Expansion Premises and the Existing Premises are collectively referred to herein as the "**Premises**"). **Exhibit A-1** attached hereto, which depicts the Expansion Premises as the hatched area labeled as the "Expansion Premises," shall be added as **Exhibit A-1** to the Lease. **Exhibit A** attached hereto, which depicts the Existing Premises as the hatched area, depicts the Existing Premises.

a. **Tenant Improvements.** Tenant shall improve the Expansion Premises as set forth in the Work Letter attached hereto as **Exhibit C**, and Landlord shall provide Tenant with the Tenant Allowance as described in the Work Letter.

b. **First Extension Term**. The Base Term expires at midnight on November 30, 2029. The Base Term is hereby extended for a period (" **First Extension Term**") beginning on the Expansion Premises Commencement Date and, unless earlier terminated or extended in accordance with the terms and conditions of the Lease, expiring 128 months after the Expansion Premises Commencement Date. For purposes of the Lease, "**Term**" shall mean, collectively, the Base Term and the First Extension Term.

c. **Increase in Security Deposit.** As of the date of Tenant's execution of this First Amendment, Tenant shall deliver to Landlord an amount equal to $[***] as an additional Security Deposit. As a result, the total amount of the Security Deposit shall be an amount equal to $153,557.68. Tenant shall deliver to Landlord an amendment to, or replacement of, the existing Letter of Credit reflecting the aggregate amount of the Security Deposit.

d. **Potential Pathway Installation**. Effective as of the Expansion Premises Commencement Date, (i) Landlord shall have no obligation to install or maintain the Project/22FF Pathway, and (ii) Section 2.E of the Lease shall be deleted in its entirety.

e. **No Cross Default**. Effective as of the Expansion Premises Commencement Date, Section 20(h) of the Lease (Default Under 22FF Lease) shall be deleted and replaced with "Intentionally Deleted."

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3. **Contingency**. [***]

4. **Expansion Premises Commencement Date**. For purposes of this First Amendment and subject to the satisfaction of the Contingency, the "**Expansion Premises Commencement Date**" means February 1, 2021, which date shall be subject to a day for day extension if the Extension Premises has not been Delivered to Tenant by February 1, 2021. Upon request of Landlord, Tenant shall execute and deliver a written acknowledgement of the Expansion Premises Commencement Date when it is established in the form attached hereto as **Exhibit B**; provided, however, that Tenant's failure to execute and deliver such acknowledgement shall not affect Landlord's rights under this First Amendment.

5. **Delivery of Expansion Premises**. Subject to Section 3, Landlord shall use commercially reasonable efforts to deliver the Expansion Premises to Tenant on the Expansion Premises Commencement Date in its broom clean, "as is" condition, free and clear of the prior occupant's property ("**Delivery**" or "**Deliver**"). If Landlord fails to Deliver timely the Expansion Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this First Amendment and the Lease with respect to the Expansion Premises shall not be void or voidable.

a. **Acceptance**. Except as set forth in this First Amendment, if applicable: (i) Tenant shall accept the Expansion Premises in its condition as of the Expansion Premises Commencement Date; (ii) Landlord shall have no obligation for any defects in the Expansion Premises, and (iii) Tenant's taking possession of the Expansion Premises shall be conclusive evidence that Tenant accepts the Expansion Premises and that the Expansion Premises were in good condition at the time possession was taken. Notwithstanding the foregoing provisions of this paragraph, Tenant shall have a period of 60 days after the Expansion Premises Commencement Date to Tenant to reasonably identify in writing any latent defects in the mechanical, electrical, and plumbing systems and the structural components serving the Expansion Premises. For purposes of this paragraph, "**latent defects**" means those material defects in such systems and/or components that could not have been identified or discovered through a reasonable inspection of such systems or components conducted by a qualified technician. Landlord will promptly repair such identified latent defects (subject to Landlord's reasonable

confirmation that such defects are, in fact, latent defects).

b. **Condition**. Neither Landlord nor any of its agents has made any representation or warranty with respect to the condition of all or any portion of the Expansion Premises and/or the suitability of the Expansion Premises for the conduct of Tenant's business, and Tenant waives any implied warranty that the Expansion Premises are suitable for the Permitted Use. Tenant shall use the Expansion Premises only for the Permitted Use under the Lease in compliance with the provisions of Section 7 of the Lease.

c. **Permits**. Landlord shall have no obligation to perform any work at the Building in connection with Tenant's occupancy of the Expansion Premises or obtain any permits, approvals, or entitlements related to Tenant's specific use of the Expansion Premises or Tenant's business operations therein.

6. **Base Rent for Expansion Premises**. (a) Tenant shall continue to pay Base Rent with respect to the Existing Premises at the rates set forth in the Lease, (b) Tenant shall pay Base Rent for the Office Space during the Office Space Term as provided in Section 3, and (c) commencing on the Expansion Premises Commencement Date but subject to the Expansion Premises Base Rent Abatement (as defined below), Base Rent for the Expansion Premises shall be payable at the rate of $61,104.17 per month. During the Term, the Base Rent for the Expansion Premises shall be increased on each August 1 (which date shall constitute the Adjustment Date), beginning on August 1, 2022, by multiplying the monthly Base Rent payable immediately before such Adjustment Date for the Expansion Premises by the Rent Adjustment Percentage (i.e., 3%) and adding the resulting amount to the monthly Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided in Section 4 of the Lease. On the Effective Date, Tenant shall deliver to Landlord an amount equal to the first monthly installment of Base Rent as well as a new or replacement Letter of Credit evidencing a Security Deposit in the amount of $153,557.68. Base Rent for the Expansion Premises shall also be increased as of the date or dates on which Tenant uses the Additional Tenant Improvement Allowance pursuant to Section 5 of the Work Letter (such increase to be calculated based on the amount of the Additional Tenant Improvement Allowance used by Tenant, such amount to be amortized over the Base Term based on an interest rate of 9% per annum; the resulting amount so amortized shall be added to the monthly installments of Base Rent). Such increase based on the use of the Additional Tenant Improvement Allowance shall in no event be subject to increase on the Adjustment Date by the Rent Adjustment Percentage.

a. **Base Rent Abatement for Expansion Premises.** [***]

7. **Changes to Defined Terms**. Effective as of the Expansion Premises Commencement Date (except as otherwise specified below), the following amendments are hereby made to the definitions contained in the Basic Lease Provisions.

a. The defined term "**Premises**" shall be deleted in its entirety and replaced with the following:

"**Premises:** That portion of the Project, containing approximately [***] rentable square feet, as determined by Landlord, consisting of (i) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A** attached hereto ("**Existing Premises**"), and (ii) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A-1** attached hereto ("**Expansion Premises";** together with the Existing Premises, the "**Premises**"). EwingCole, Landlord's architect, has measured the area of the Premises pursuant to the 1996 Standard Method of Measuring Floor Area in Office Buildings as adopted by the Building Owners and Managers Association (ANSI/BOMA 265.1-1996) ("**BOMA Standards**"). Tenant acknowledges receipt of such measurement and confirms that (a) Tenant has had an opportunity to confirm such measurement with an architect of its selection before the Commencement Date (with respect to the Existing Premises) and the Expansion Premises Commencement Date (with respect to the Expansion Premises), and (b) such measurement shall be conclusive as to the area of the Premises."

b. The defined term "**Rentable Area of Premises**" shall mean approximately [***] rentable square feet.

c. The defined term "**Tenant's Share of Operating Expenses**" shall mean [***]%.

d. Effective as of the Effective Date, the defined term " **Security Deposit**" shall mean **$[***].**

8. **Amendment to Section 38 (Signs; Exterior Appearance)**. Section 38 of the Lease is hereby amended by adding the following new Section 38(b) immediately after Section 38(a):

(b) **Identification Signage**. From and after the Effective Date (as defined in the First Amendment to Lease between Landlord and Tenant), Tenant shall have the right, at its sole option, cost, and expense and in compliance with all applicable Legal Requirements, to install and affix to the facade of the Building a single mounted, backlit illuminated sign as desired by Tenant and permitted by applicable Legal Requirements (and related electrical connections and equipment) bearing the then-current name and the corporate logo of Tenant ("**Identification Signage**"). Such right shall be personal to Adaptive Phage Therapeutics, Inc. The Identification Signage shall not exceed Tenant's proportionate share of the signage (based on the percentage of Tenant's Share of Operating Expenses) eligible to be installed on the facade of the Building in accordance with all applicable Legal Requirements. Landlord shall have the right to approve the place, size, and design of the Identification Signage, which approval shall not be unreasonably withheld, delayed, or conditioned. Tenant shall, at its sole cost and expense, maintain the Identification Signage in good order and repair and shall have the right to replace, renovate, and/or update the Identification Signage from time to time, subject to Landlord's approval, which approval shall not be unreasonably withheld, delayed, or conditioned. On the expiration or earlier termination of the Term, Tenant shall, at its sole cost and expense, (i) remove the Identification Signage in a good and workmanlike manner and in compliance with all applicable Legal Requirements, and (ii) repair any damage to the facade or appearance of the Building caused by installation, replacement, renovation, updating and/or removal of the Identification Signage, ordinary wear and tear and damage by casualty excepted.

9. **Amendment to Section 39 (Relocation to Another Project)**. Section 39 of the Lease is hereby amended by deleting that provision in its entirety and replacing it with the following new Section 39:

39. Relocation to Another Project. [***]

10. **Amendment to Section 41 (Right to Expand)**. Section 41 of the Lease is hereby amended by deleting that provision in its entirety and replacing it with the following new Section 41:

41. Right to Expand. [***]

11. **Addition of Section 43 (Roof Rights)** . The following new Section 43 is hereby added immediately after Section 42:

43. **Roof Equipment**. As long as Tenant is not in default under this Lease, Tenant shall have the right at its sole cost and expense, subject to compliance with all Legal Requirements, to install, maintain, and remove on the top of the roof of the Building (based on Tenant's proportionate share of the space available on the roof) directly above the Premises one or more satellite dishes, communication antennae, or other equipment (all of which having a diameter and height acceptable to Landlord) for the transmission or reception of communication of signals as Tenant may from time to time desire (collectively, the "**Roof Equipment**") on the following terms and conditions:

a. **Requirements**. Tenant shall submit to Landlord (i) the plans and specifications for the installation of the Roof Equipment, (ii) copies of all required governmental and quasi-governmental permits, licenses, and authorizations that Tenant will and must obtain at its own expense, with the cooperation of Landlord, if necessary for the installation and operation of the Roof Equipment, and (iii) an insurance policy or certificate of insurance evidencing insurance coverage as required by this Lease and any other insurance as reasonably required by Landlord for the installation and operation of the Roof Equipment. Landlord shall not unreasonably withhold or delay its approval for the installation and operation of the Roof Equipment; provided, however, that Landlord may reasonably withhold its approval if the installation or operation of the Roof Equipment (A) may damage the structural integrity of the Building, (B) may void, terminate, or invalidate any applicable roof warranty, (C) may interfere with any service provided by Landlord or any tenant of the Building, (D) may reduce the leaseable space in the Building, or (E) is not properly screened from the viewing public.

b. **No Damage to Roof**. If installation of the Roof Equipment requires Tenant to make any roof cuts or perform any other roofing work, such cuts shall only be made to the roof area of the Building located directly above the Premises and only in the manner designated in writing by Landlord; and any such installation work (including any roof cuts or other roofing work) shall be performed by Tenant, at Tenant's sole cost and expense by a roofing contractor designated by Landlord. If Tenant or its agents shall otherwise cause any damage to the roof during the installation, operation, and removal of the Roof Equipment such damage shall be repaired promptly at Tenant's expense and the roof shall be restored in the same condition it was in before the damage. Landlord shall not charge Tenant Additional Rent for the installation and use of the Roof Equipment. If, however, Landlord's insurance premium or Tax assessment increases as a result of the Roof Equipment, Tenant shall pay such increase as Additional Rent within 10 days after receipt of a reasonably detailed invoice from Landlord. Tenant shall not be entitled to any abatement or reduction in the amount of Rent payable under this Lease if for any reason Tenant is unable to use the Roof Equipment. In no event whatsoever shall the installation, operation, maintenance, or removal of the Roof Equipment by Tenant or its agents void, terminate, or invalidate any applicable roof warranty.

c. **Protection**. The installation, operation, and removal of the Roof Equipment shall be at Tenant's sole risk. Tenant shall indemnify, defend, and hold Landlord harmless from and against any and all claims, costs, damages, liabilities and expenses (including, but not limited to, attorneys' fees) of every kind and description that may arise out of or be connected in any way with Tenant's installation, operation, or removal of the Roof Equipment.

d. **Removal**. At the expiration or earlier termination of this Lease or the discontinuance of the use of the Roof Equipment by Tenant, Tenant shall, at its sole cost and expense, remove the Roof Equipment from the Building. Tenant shall leave the portion of the roof where the Roof Equipment was located in good order and repair, reasonable wear and tear excepted. If Tenant does not so remove the Roof Equipment, Tenant hereby authorizes Landlord to remove and dispose of the Roof Equipment and charge Tenant as Additional Rent for all costs and expenses incurred by Landlord in such removal and disposal. Tenant agrees that Landlord shall not be liable for any Roof Equipment or related property disposed of or removed by Landlord.

e. **No Interference**. The Roof Equipment shall not interfere with the proper functioning of any telecommunications equipment or devices that have been installed or will be installed by Landlord or for any other tenant or future tenant of the Building. Tenant acknowledges that other tenant(s) may have approval rights over the installation and operation of telecommunications equipment and devices on or about the roof, and that Tenant's right to install and operate the Roof Equipment is subject and subordinate to the rights of such other tenants. Tenant agrees that any other tenant of the Building that currently has or in the future takes possession of any portion of the Building will be permitted to install such telecommunication equipment that is of a type and frequency that will not cause unreasonable interference to the Roof Equipment.

f. **Relocation**. Landlord shall have the right, at its expense and after 60 days prior notice to Tenant, to relocate the Roof Equipment to another site on the roof of the Building as long as such site reasonably meets Tenant's sight line and interference requirements and does not unreasonably interfere with Tenant's use and operation of the Roof Equipment.

g. **Access**. Landlord grants to Tenant the right of ingress and egress on a 24 hour 7 day per week basis to install, operate, and maintain the Roof Equipment. Before receiving access to the roof of the Building, Tenant shall give Landlord at least 24 hours' advance written or oral notice, except in emergency situations, in which case 2 hours' advance oral notice shall be given by Tenant. Landlord shall supply Tenant with the name, telephone, and pager numbers of the contact individual(s) responsible for providing access during emergencies.

h. **Appearance**. If permissible by Legal Requirements, the Roof Equipment shall be painted the same color as the Building so as to render the Roof Equipment virtually invisible from ground level.

i. **No Assignment**. The right of Tenant to use and operate the Roof Equipment shall be personal solely to Adaptive Phage Therapeutics, Inc., and (i) no other person or entity shall have any right to use or operate the Roof Equipment, and (ii) Tenant shall not assign, convey, or otherwise transfer to any person or entity any right, title, or interest in all or any portion of the Roof Equipment or the use and operation thereof.

12. **Miscellaneous.**

a. **Entire Agreement**. The Lease, as amended by this First 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 First Amendment, may be amended only by an agreement in writing, signed by the parties hereto.

b. **Binding Effect**. This First 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. **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 First Amendment and that no Broker brought about this transaction, other than CBRE, Inc. (" **CBRE**"). CBRE shall be paid by Landlord pursuant to a separate agreement between Landlord and CBRE. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than CBRE, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this First Amendment.

d. **Ratification; Conflicts**. Except as amended and/or modified by this First 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 First Amendment. In the event of any conflict between the provisions of this First Amendment and the provisions of the Lease, the provisions of this First Amendment shall prevail. Regardless of whether specifically amended by this First 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 First Amendment.

e. **Counterparts/Electronic Signatures**. This First 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, such as DocuSign) 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 First Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

[SIGNATURES APPEAR ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment under seal as of the day and year first above written.

TENANT:

ADAPTIVE PHAGE THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Greg Merril
Name: Greg Merril
Title: CEO

LANDLORD:

ARE-708 QUINCE ORCHARD, LLC,
a Delaware limited liability company

By: ARE-GP 708 Quince Orchard QRS CORP.,
a Maryland corporation,
managing member

By: /s/ Allison Grochola
Name: Allison Grochola
Title: Vice President, RE Legal Affairs

Exhibit 10.30

SECOND AMENDMENT TO LEASE AGREEMENT

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

THIS SECOND AMENDMENT TO LEASE AGREEMENT ("**this Second Amendment**") is dated as of July 8, 2021 (" **Second Amendment Effective Date**"), by and between **ARE-708 QUINCE ORCHARD, LLC**, a Delaware limited liability company, having an address at 26 North Euclid Avenue, Pasadena, California 91101 ("**Landlord**"), and **ADAPTIVE PHAGE THERAPEUTICS, INC.**, a Delaware corporation, having an address at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878 ("**Tenant**").

RECITALS

A. Landlord and Tenant have entered into that certain Lease Agreement (" **Original Lease**") dated as of August 9, 2019, as amended by that certain letter agreement dated August 7, 2019, that certain letter agreement dated October 28, 2020, and that certain First Amendment to Lease Agreement dated as of October 28, 2020 ("**First Amendment**"; together with the Original Lease, the letter agreements, and the First Amendment, the "**Lease**"), wherein Landlord leased to Tenant certain premises containing approximately [***] rentable square feet (" **Existing Premises**") located at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878, as more particularly described in the Lease.

B. Landlord and Tenant desire to amend the Lease, among other things, to expand the Existing Premises by an additional [***] rentable square feet in 2 phases, extend the Term, and provide certain improvement allowances, and grant certain signage rights, all on the terms and conditions set forth in this Second Amendment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recitals, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree that the Lease is amended as follows:

1. **Definitions; Recitals**. Terms used in this Second Amendment but not otherwise defined shall have the meanings set forth in the Lease. The Recitals form an integral part of this Second Amendment and are hereby incorporated by reference.

2. **Additional Expansion Premises**. The Existing Premises will be expanded to include the following areas in the Building, to the end and effect that Tenant will ultimately lease 100% of the Building: (a) effective as of the First Floor Expansion Premises Commencement Date (as defined in Section 4 below), the Existing Premises shall be expanded by an additional approximately [***] rentable square feet ("**First Floor Expansion Premises**"), and (b) effective as of the Second Floor Expansion Premises Commencement Date (as defined in Section 4 below), the Existing Premises shall be expanded by an additional approximately [***] rentable square feet **("Second Floor Expansion Premises**"; the First Floor Expansion Premises, the Second Floor Expansion Premises, and the Existing Premises are collectively referred to herein as the "**Premises**," and the First Floor Expansion Premises and the Second Floor Expansion Premises are collectively referred to as the "**Additional Expansion Premises**"). **Exhibits A** and **A-1** attached hereto, which depict the Existing Premises as the hatched areas, depict the Existing Premises. **Exhibit A-2** attached hereto, which depicts the First Floor Expansion Premises as the hatched area, shall be added as **Exhibit A-2** to the Lease. **Exhibit A-3** attached hereto, which depicts the Second Floor Expansion Premises as the hatched area, shall be added as **Exhibit A-3** to the Lease.

a. **Additional Expansion Premises Tenant Improvements**. Tenant shall improve the Additional Expansion Premises as set forth in the Work Letter attached hereto as **Exhibit C**, and Landlord shall provide Tenant with the Additional Expansion Premises TI Allowance as described in the Work Letter.

b. **Second Extension Term**. The First Extension Term expires at midnight on September 30, 2031. The Base Term is further hereby extended for a period ("**Second Extension Term**") beginning on the Second Floor Expansion Premises Commencement Date and, unless earlier terminated or extended in accordance with the terms and conditions of the Lease, expiring 129 months after the Second Floor Expansion Premises Commencement Date. For purposes of the Lease, "**Term**" shall mean, collectively, the Base Term, the First Extension Term, and the Second Extension Term.

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3. **Contingencies**. [***]

4. **First Floor Expansion Premises Commencement Date; Second Floor Expansion Premises Commencement Date.** [***]

5. **Delivery of Additional Expansion Premises**. Subject to Section 3 (Contingencies), Landlord shall (i) deliver the First Floor Expansion Premises to Tenant on the First Floor Expansion Premises Commencement Date in its broom clean, "as is" condition, free and clear of the prior occupant's property, and (ii) deliver the Second Floor Expansion Premises to Tenant on the Second Floor Expansion Premises Commencement Date in its broom clean, "as is" condition, free and clear of the prior occupant's property (each, a "**Delivery,**" "**Delivered**," or "**Deliver**"). If Landlord fails to Deliver timely the First Floor Expansion Premises or the Second Floor Expansion Premises (as applicable), Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Second Amendment and the Lease with respect to the Additional Expansion Premises shall not be void or voidable

a. **Acceptance**. Except as set forth in this Second Amendment, if applicable: (i) Tenant shall accept the First Floor Expansion Premises in its "as is" condition as of the First Floor Expansion Premises Commencement Date; (ii) Tenant shall accept the Second Floor Expansion Premises in its "as is" condition as of the Second Floor Expansion Premises Commencement Date; (iii) Landlord shall have no obligation for any defects in the Additional Expansion Premises, and (iii) Tenant's taking possession of the Additional Expansion Premises shall be conclusive evidence that Tenant accepts the Additional Expansion Premises and that the Additional Expansion Premises were in good condition at the time possession was taken, including, but not limited to, all cabinetry and casework, uninterruptable power supply systems, power surge protectors, emergency generator, communication systems, security systems, chemical fume hoods, and other fixed equipment located in the Additional Expansion Premises and to the extent such items exist. Notwithstanding the foregoing provisions of this paragraph, Tenant shall have a period of 60 days after the First Floor Expansion Premises Commencement Date and the Second Floor Expansion Premises Commencement Date, as applicable, to reasonably identify in writing any latent defects in the mechanical, electrical, and plumbing systems and the structural components serving the First Floor Expansion Premises and the Second Floor Expansion Premises, as applicable. For purposes of this paragraph, "**latent defects**" means those material defects in such systems and/or components that could not have been identified or discovered through a reasonable inspection of such systems or components conducted by a qualified

technician. Landlord will promptly repair such identified latent defects (subject to Landlord's reasonable confirmation that such defects are, in fact, latent defects).

b. **Landlord's Work**. Landlord shall, at its sole cost and expense, perform the following work in a good and workmanlike manner: (i) replace damaged or mis-colored ceiling tiles within the Additional Expansion Premises, (ii) paint with Building standard paint the common area walls in the corridors, common spaces, restrooms, and Building entrances (the work described in clauses (i) and (ii) are collectively referred to as the "**Pre-Occupancy Work**"), and (iii) professionally clean the flooring within the Additional Expansion Premises (" **Post-Occupancy Work**"; together with the Pre-Occupancy Work, "**Landlord's Work**"). Landlord shall use commercially reasonable efforts to minimize any interference with Tenant's normal business operations during Landlord's performance of Landlord's Work. Landlord shall coordinate with Tenant the timing of the performance of Landlord's Work, but (A) Landlord shall complete the Pre-Occupancy Work (subject to Force Majeure Delays) by no later than April 1, 2022, and (B) Landlord shall complete the Post-Occupancy Work (subject to Force Majeure Delays) by no later than 30 days after the First Floor Expansion Premises Commencement Date and the Second Floor Expansion Premises Commencement Date, as applicable.

c. **Condition**. Neither Landlord nor any of its agents has made any representation or warranty with respect to the condition of all or any portion of the Additional Expansion Premises and/or the suitability of the Additional Expansion Premises for the conduct of Tenant's business, and Tenant waives any implied warranty that the Additional Expansion Premises are suitable for the Permitted Use. Tenant shall use the Additional Expansion Premises only for the Permitted Use under the Lease in compliance with the provisions of Section 7 of the Lease.

d. **Permits**. Subject to the provisions of Sections 5.b above and 5.e below, Landlord shall have no obligation to perform any work at the Building in connection with Tenant's occupancy of the Additional Expansion Premises or obtain any permits, approvals, or entitlements related to Tenant's specific use of the Additional Expansion Premises or Tenant's business operations therein. Tenant shall be responsible for obtaining certificates of occupancy for the Additional Expansion Premises.

e. **Decommissioning of Second Floor Expansion Premises**. By no later than the Second Floor Expansion Premises Commencement Date, Landlord shall, at no expense to Tenant, (i) cause the Second Floor Expansion Premises to be decommissioned in accordance with applicable Legal Requirements, (ii) deliver to Tenant (after receipt of a non-reliance letter from Tenant in form and substance reasonably acceptable to Landlord and its environmental consultant) a decommissioning report obtained by Landlord in connection with the decommissioning of the Second Floor Expansion Premises, and (iii) deliver to Tenant in good working order the systems and equipment located in the Second Floor Expansion Premises as of the Second Floor Expansion Premises Commencement Date.

6. **Base Rent for Additional Expansion Premises** . (a) Tenant shall continue to pay Base Rent with respect to the Existing Premises at the rates set forth in the Lease, (b) commencing on the First Floor Expansion Premises Commencement Date but subject to the First Floor Expansion Premises Base Rent Abatement (as defined below), Base Rent for the First Floor Expansion Premises shall be payable at the rate of $53,912.50 per month, and (c) commencing on the Second Floor Expansion Premises Commencement Date but subject to the Second Floor Expansion Premises Base Rent Abatement (as defined below), Base Rent for the Second Floor Expansion Premises shall be payable at the rate of $18,368.75 per month.

a. **Base Rent Adjustments**.

i. **First Floor Expansion Premises**. During the Term, the Base Rent for the First Floor Expansion Premises shall be increased on each anniversary of the First Floor Expansion Premises Commencement Date (which date shall constitute the Adjustment Date), by multiplying the monthly Base Rent payable immediately before such Adjustment Date for the First Floor Expansion Premises by the Rent Adjustment Percentage (i.e., 3%) and adding the resulting amount to the monthly Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided in Section 4 of the Lease.

ii. **Second Floor Expansion Premises**. During the Term, the Base Rent for the Second Floor Expansion Premises shall be increased on each anniversary of the Second Floor Expansion Premises Commencement Date (which date shall constitute the Adjustment Date), by multiplying the monthly Base Rent payable immediately before such Adjustment Date for the Second Floor Expansion Premises by the Rent Adjustment Percentage (i.e., 3%) and adding the resulting amount to the monthly Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided in Section 4 of the Lease.

iii. **Base Rent Adjustment for Additional First Floor Expansion Premises Tenant Improvement Allowance** . If Tenant elects in writing to use the Additional First Floor Expansion Premises Tenant Improvement Allowance, Base Rent for the First Floor Additional Expansion Premises shall also be increased as of the date or dates on which Tenant uses the Additional First Floor Expansion Premises Tenant Improvement Allowance pursuant to Section 5 of the Work Letter (such increase to be calculated based on the amount of the Additional First Floor Expansion Premises Tenant Improvement Allowance used by Tenant, such amount to be amortized over the Base Term based on an interest rate of 9% per annum; the resulting amount so amortized shall be added to the monthly installments of Base Rent for the Existing Premises (until the First Floor Expansion Premises Commencement Date) or for the First Floor Additional Expansion Premises (from and after the First Floor Expansion Premises Commencement Date)). Such increase based on the use of the Additional First Floor Expansion Premises Tenant Improvement Allowance shall in no event be subject to increase on the Adjustment Date by the Rent Adjustment Percentage.

b. **Base Rent Abatement for Additional Expansion Premises.**

i. **First Floor Expansion Premises Base Rent Abatement** . [***]

ii. **Second Floor Expansion Premises Base Rent Abatement** . [***]

7. **Changes to Defined Terms**. Effective as of the dates set forth below, the following amendments are hereby made to the definitions contained in the Basic Lease Provisions.

a. Effective as of the First Floor Expansion Premises Commencement Date, the defined term " **Premises**" shall be deleted in its entirety and replaced with the following:

"**Premises**: That portion of the Project, containing approximately [***] rentable square feet, as determined by Landlord, consisting of (i) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A** attached hereto ("**Existing Premises**"), (ii) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A-1** attached hereto ("**Expansion Premises**"), and (iii) approximately [***] rentable square feet as shown as the hatched area on **Exhibit A-2** attached hereto ("**First Floor Expansion Premises**"; together with the Existing Premises and the Expansion Premises, the "**Premises**"). EwingCole, Landlord's architect, has measured the area of the Premises pursuant to the 1996 Standard Method of Measuring Floor Area in Office Buildings as adopted by the Building Owners and Managers Association (ANSI/BOMA Z65.1-1996) ("**BOMA Standards**"). Tenant acknowledges receipt of such measurement, and such measurement shall be conclusive as to the area of the Premises."

a. Effective as of the Second Floor Expansion Premises Commencement Date, the defined term " **Premises**" shall be deleted in its entirety and replaced with the following:

"**Premises**: That portion of the Project, containing approximately [***] rentable square feet, as determined by Landlord, consisting of (i) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A** attached hereto ("**Existing Premises**"), (ii) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A-1** attached hereto ("**Expansion Premises**"), (iii) approximately [***] rentable square feet as shown as the hatched area on **Exhibit A-2** attached hereto ("**First Floor Expansion Premises**"), and (iv) approximately [***] rentable square feet as shown as the hatched area on **Exhibit A-3** attached hereto ("**Second Floor Expansion Premises**"; together with the Existing Premises, the Expansion Premises, and the First Floor Expansion Premises, the "**Premises**"). EwingCole, Landlord's architect, has measured the area of the Premises pursuant to the 1996 Standard Method of Measuring Floor Area in Office Buildings as adopted by the Building Owners and Managers Association (ANSI/BOMA Z65.1-1996) ("**BOMA Standards**"). Tenant acknowledges receipt of such measurement, and such measurement shall be conclusive as to the area of the Premises."

b. Effective as of the First Floor Expansion Premises Commencement Date, the defined term " **Rentable Area of Premises**" shall mean approximately [***] rentable square feet.

c. Effective as of the Second Floor Expansion Premises Commencement Date, the defined term " **Rentable Area of Premises**" shall mean approximately [***] rentable square feet.

d. Effective as of the First Floor Expansion Premises Commencement Date, the defined term " **Tenant's Share of Operating Expenses**" shall mean [***]%.

e. Effective as of the Second Floor Expansion Premises Commencement Date, the defined term " **Tenant's Share of Operating Expenses**" shall mean [***]%.

8. **Amendment to Section 7(c) (Loading Dock)**. Effective as of the Second Floor Expansion Premises Commencement Date, Section 7(c) of the Lease is hereby amended by deleting that provision in its entirety and replacing it with the following new Section 7(c):

(c) **Loading Dock**. The Building contains a loading dock ("**Loading Dock**"). Tenant shall have the exclusive right to use the Loading Dock 24 hours per day, 7 days per week, in accordance with the Legal Requirements and the terms and conditions of this paragraph. During any period of replacement, repair, or maintenance of the Loading Dock when it is not operational, Landlord shall have no obligation to provide Tenant with alternative, supplemental, temporary, or back-up loading docks. Landlord makes no warranties of any kind, express or implied, with respect to the Loading Dock, and Landlord disclaims any such warranties. Without limiting the foregoing, Tenant expressly acknowledges and agrees that Landlord does not guaranty or warrant that the Loading Dock will be operational at all times, will be of sufficient capacity to accommodate Tenant's use thereof, will be free of Hazardous Materials, or will function or perform adequately, and Landlord shall not be liable for any damages resulting from the failure of the Loading Dock. Although the Loading Dock does not form a part of the Premises, the provisions of this Lease (i) governing Tenant's use, operation, and enjoyment of the Premises, (ii) imposing obligations on Tenant for matters occurring in, on, within, or about the Premises or arising out of the use or occupancy of the Premises (including, but not limited to, those obligations relating to insurance, indemnification, Hazardous Materials Clearance, and environmental requirements), or (iii) limiting Landlord's liability, shall apply with equal force to Tenant's use of the Loading Dock. The terms and provisions of this paragraph shall survive the expiration or earlier termination of this Lease.

9. **Amendment to Section 10 (Parking)**. Effective as of the First Expansion Premises Commencement Date, Section 10 of the Lease is hereby amended by adding the following at the end thereof: [***]

10. **Amendment to Section 38(a) (Monument Sign) and 38(b) (Identification Signage)**. Effective as of the Second Amendment Effective Date, Section 38 of the Lease is hereby amended by deleting Sections 38(a) and 38(b) in their entirety and replacing them with the following Sections 38(a) and 38(b):

(a) **Monument Sign**. Landlord shall install, at its expense, and maintain throughout the Term as part of the Operating Expenses Tenant's name on the existing monument sign serving the Project. Tenant's rights under this paragraph are exclusive to Tenant.

(b) **Identification Signage**. From and after the Second Amendment Effective Date (as defined in the Second Amendment to Lease between Landlord and Tenant), Tenant shall have the right, at its sole option, cost, and expense and in compliance with all applicable Legal Requirements, to install and affix to the façade of the Building a single mounted, backlit illuminated sign as desired by Tenant and permitted by applicable Legal Requirements (and related electrical connections and equipment) bearing the then-current name and the corporate logo of Tenant ("**Identification Signage**"). Such right shall be personal to Adaptive Phage Therapeutics, Inc., except in case of a Permitted Assignment. Landlord hereby approves the Identification Signage attached hereto as a part hereof as **Exhibit D**. Tenant shall, at its sole cost and expense, maintain the Identification Signage in good order and repair and shall have the right to replace, renovate, and/or update the Identification Signage from time to time, subject to Landlord's approval, which approval shall not be unreasonably withheld, delayed, or conditioned. On the expiration or earlier termination of the Term, Tenant shall, at its sole cost and expense, (i) remove the Identification Signage in a good and workmanlike manner and in compliance with all applicable Legal Requirements, and (ii) repair any damage to the façade or appearance of the Building caused by installation, replacement, renovation, updating and/or removal of the Identification Signage, ordinary wear and tear and damage by casualty excepted.

11. **Amendment to Section 39 (Relocation to Another Project).** [***]

12. **Deletion of Section 41 (Right to Expand)**. [***]

13. **Reception Desk.** [***]

14. **Non-Disturbance**. As of the Second Amendment Effective Date, the Project is not encumbered by any mortgage, deed of trust, or ground lease created by Landlord. Notwithstanding anything herein or in the Lease to the contrary, Tenant shall not have any obligation to subordinate the Lease (and the Lease shall not be subordinate) to the lien of any mortgage, deed of trust, or ground lease unless the holder of such mortgage or deed of trust, or the ground lessor, as applicable, enters into a subordination, non-disturbance, and attornment agreement with Tenant in a form that is mutually and reasonably acceptable to Tenant and such party.

15. **Exterior Repairs**. [***]

16. **Capital Budget**. On or before December 1 of each calendar year, Landlord shall provide Tenant with a copy of Landlord's capital budget for the Building for the ensuing calendar year, which capital budget shall set forth in reasonable detail the capital improvements that Landlord intends to make with respect to the Building during such ensuing calendar year. If Tenant reasonably believes that that the capital budget does not include any capital improvements that should be made during the applicable calendar year period, then within 30 days after Tenant's written request, Landlord and Tenant shall meet and, in good faith, discuss Tenant's concerns. In all events, however, Landlord shall retain the sole authority and discretion whether to make any capital improvements with respect to the Building.

17. **Miscellaneous**.

a. **Entire Agreement**. The Lease, as amended by this Second 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 Second Amendment, may be amended only by an agreement in writing, signed by the parties hereto.

b. **Binding Effect**. This Second 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. **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 Second Amendment and that no Broker brought about this transaction, other than CBRE, Inc. (" **CBRE**"). CBRE shall be paid by Landlord pursuant to a separate agreement between Landlord and CBRE. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than CBRE, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this Second Amendment.

d. **Ratification; Conflicts**. Except as amended and/or modified by this Second 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 Second Amendment. In the event of any conflict between the provisions of this Second Amendment and the provisions of the Lease, the provisions of this Second Amendment shall prevail. Regardless of whether specifically amended by this Second 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 Second Amendment.

e. **Counterparts/Electronic Signatures**. This Second 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, such as DocuSign) 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 Second Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

[SIGNATURES APPEAR ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have executed this Second Amendment under seal as of the day and year first above written.

TENANT:

ADAPTIVE PHAGE THERAPEUTICS, INC.,
a Delaware corporation

By: */s/ Greg Merril*
Name: Greg Merril
Title: CEO

LANDLORD:

ARE-708 QUINCE ORCHARD, LLC,
a Delaware limited liability company

By: ARE-GP 708 Quince Orchard QRS CORP., a Maryland corporation, managing member

By: */s/ Gregory Kay*

Name: Gregory Kay
Title: Vice President, Real Estate Legal Affairs

Exhibit 10.31

THIRD AMENDMENT TO LEASE AGREEMENT

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

THIS THIRD AMENDMENT TO LEASE AGREEMENT ("**this Third Amendment**") is dated as of July 15, 2021 (" **Third Amendment Effective Date**"), by and between **ARE-708 QUINCE ORCHARD, LLC**, a Delaware limited liability company, having an address at 26 North Euclid Avenue, Pasadena, California 91101 ("**Landlord**"), and **ADAPTIVE PHAGE THERAPEUTICS, INC.**, a Delaware corporation, having an address at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878 ("**Tenant**").

RECITALS

A. Landlord and Tenant have entered into that certain Lease Agreement (" **Original Lease**") dated as of August 9, 2019, as amended by that certain letter agreement dated August 7, 2019, that certain letter agreement dated October 28, 2020, that certain First Amendment to Lease Agreement dated as of October 28, 2020 ("**First Amendment**"), and that certain Second Amendment to Lease Agreement dated July 8, 2021 (" **Second Amendment**"; together with the Original Lease, the letter agreements, the First Amendment, and the Second Amendment, the " **Lease**"), wherein Landlord leased to Tenant certain premises containing approximately [***] rentable square feet ("**Existing Premises**") located at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878, as more particularly described in the Lease.

B. Pursuant to the Second Amendment, the Second Floor Expansion Premises (as defined in the Second Amendment) is currently leased by the LaunchLab Tenants (as defined in the Second Amendment). Tenant's leasing of the Second Floor Expansion Premises is contingent on the satisfaction of the LaunchLab Tenant Contingency (as defined in the Second Amendment).

C. One of the LaunchLab Tenants, Labsero LLC, a Maryland limited liability company (" **Labsero**"), has vacated that portion of the Second Floor Expansion Premises known as Suite 250-E containing approximately [***] rentable square feet ("**Suite 250-E**"), as shown as the hatched area on **Exhibit A-3** attached hereto.

D. Tenant desires to lease Suite 250-E from Landlord, and Landlord desires to lease Suite 250-E to Tenant, for the period beginning on the Third Amendment Effective Date and, unless earlier terminated in accordance with the terms of the Lease, ending on the date that is one day before the Second Floor Expansion Premises Commencement Date.

E. From and after the Second Floor Expansion Premises Commencement Date, Suite 250-E shall form a part of the Second Floor Expansion Premises.

F. Landlord and Tenant desire to amend the Lease, among other things, to expand the Existing Premises by adding Suite 250-E, all on the terms and conditions set forth in this Third Amendment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recitals, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree that the Lease is amended as follows:

1. **Definitions; Recitals**. Terms used in this Third Amendment but not otherwise defined shall have the meanings set forth in the Lease. The Recitals form an integral part of this Third Amendment and are hereby incorporated by reference.

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2. **Addition of Suite 250-E**. Effective as of the Third Amendment Effective Date, the Existing Premises is hereby expanded to include Suite 250-E (Suite 250-E, together with the Existing Premises, are hereinafter collectively referred to as the "**Premises**"). The area of the Existing Premises and Suite 250-E total [***] rentable square feet. **Exhibit A-3** attached hereto, which depicts Suite 250-E, shall be added to the Lease as **Exhibit A-3**. Upon request of Landlord or Tenant, each party shall execute and deliver a written acknowledgement of the Third Amendment Effective Date and the date that is one day before the Second Floor Expansion Premises Commencement Date when such dates are established in the form attached hereto as **Exhibit B**; provided, however, that a party's failure to execute and deliver any such acknowledgements shall not affect Landlord's or Tenant's rights under this Third Amendment.

a. **Delivery of Suite 250-E**. Landlord shall deliver Suite 250-E to Tenant on the Third Amendment Effective Date in its broom clean, "as is" condition, free and clear of Labsero's property (each, a "**Delivery,**" "**Delivered**," or "**Deliver**"). If Landlord fails to Deliver timely Suite 250-E, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Third Amendment and the Lease with respect to Suite 250-E shall not be void or voidable.

b. **Acceptance**. Except as set forth in this Third Amendment, if applicable: (i) Tenant shall accept Suite 250-E in its "as is" condition as of the Third Amendment Effective Date; (ii) Landlord shall have no obligation for any defects in Suite 250-E, and (iii) Tenant's taking possession of Suite 250-E shall be conclusive evidence that Tenant accepts Suite 250-E and that Suite 250-E was in good condition at the time possession was taken, including, but not limited to, all cabinetry and casework, uninterruptable power supply systems, power surge protectors, emergency generator, communication systems, security systems, chemical fume hoods, and other fixed equipment located in Suite 250-E and to the extent such items exist. Notwithstanding the foregoing provisions of this paragraph, Tenant shall have a period of 60 days after the Third Amendment Effective Date to reasonably identify in writing any latent defects in the mechanical, electrical, and plumbing systems and the structural components serving Suite 250-E. For purposes of this paragraph, "**latent defects**" means those material defects in such systems and/or components that could not have been identified or discovered through a reasonable inspection of such systems or components conducted by a qualified technician. Landlord will promptly repair such identified latent defects (subject to Landlord's reasonable confirmation that such defects are, in fact, latent defects).

c. **Condition**. Neither Landlord nor any of its agents has made any representation or warranty with respect to the condition of all or any portion of Suite 250-E and/or the suitability of Suite 250-E for the conduct of Tenant's business, and Tenant waives any implied warranty that Suite 250-E is suitable for the Permitted Use. Tenant shall use Suite 250-E only for the Permitted Use under the Lease in compliance with the provisions of Section 7 of the Lease.

d. **Permits**. Subject to the provisions of Sections 2.b above, Landlord shall have no obligation to perform any work at the Building in connection with Tenant's occupancy of Suite 250-E or obtain any permits, approvals, or entitlements related to Tenant's specific use of Suite 250-E or Tenant's business operations therein. Tenant shall be responsible for obtaining a certificate of occupancy for Suite 250-E.

e. **Decommissioning of Suite 250-E**. By no later than the Third Amendment Effective Date, Landlord shall, at no expense to Tenant, (i) cause Suite 250-E to be decommissioned in accordance with applicable Legal Requirements, (ii) deliver to Tenant (after receipt of a non-reliance letter from Tenant in form and substance reasonably acceptable to Landlord and its environmental consultant) a decommissioning report obtained by Landlord in connection with the decommissioning of Suite 250-E, and (iii) deliver to Tenant in good working order the systems and equipment located in Suite 250-E as of the Third Amendment Effective Date.

3. **Amendment to Second Amendment**. For the period between the Third Amendment Effective Date and the day before the Second Floor Expansion Premises Commencement Date, Suite 250-E will not form a part of the Second Floor Expansion Premises, Labsero will not constitute a LaunchLab Tenant, and the LaunchLab Tenant Contingency shall not apply to Suite 250-E. Accordingly, effective as of the Third Amendment Effective Date and continuing through the day before the Second Floor Expansion Premises Commencement Date, Section 3.b of the Second Amendment is hereby amended by adding the following at the end thereof:

A former LaunchLab Tenant, Labsero LLC, a Maryland limited liability company, no longer leases that portion of the Second Floor Expansion Premises known as Suite 250-E. Landlord has leased Suite 250-E to Tenant pursuant to the terms and conditions of a certain Third Amendment to Lease Agreement between Landlord and Tenant. Accordingly, the provisions of this paragraph shall not apply to Suite 250-E, and Labsero shall not constitute one of the LaunchLab Tenants.

4. **Base Rent and Operating Expenses for Suite 250-E Until Day Before Second Floor Expansion Premises Commencement Date** . The term of the Lease for Suite 250-E shall begin on the Third Amendment Effective Date and, unless earlier terminated in accordance with the terms and conditions of this Third Amendment and the Lease, shall end on the date that is the day before the Second Floor Expansion Premises Commencement Date. Accordingly, (a) Tenant shall continue to pay Base Rent with respect to the Existing Premises at the rates set forth in the Lease, (b) commencing on the Third Amendment Effective Date (but subject to the Suite 250-E Base Rent Abatement [as defined below]) and continuing through the date that is the day before the Second Floor Expansion Premises Commencement Date, (i) Base Rent for Suite 250-E shall be payable at the rate of $4,871 per month, (ii) Tenant shall have no obligation to pay its share of Operating Expenses for Suite 250-E, and (iii) Base Rent for Suite 250-E shall be increased on each anniversary of the Third Amendment Effective Date (which date shall constitute the Adjustment Date), by multiplying the monthly Base Rent payable immediately before such Adjustment Date for Suite 250-E by the Rent Adjustment Percentage (i.e., 3%) and adding the resulting amount to the monthly Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided in Section 4 of the Lease.

a. **Suite 250-E Base Rent Abatement**. [***]

5. **Base Rent and Operating Expenses for Suite 250-E From and After Second Floor Expansion Premises Commencement Date** . Commencing on the Second Floor Expansion Premises Commencement Date and continuing for the balance of the Term, Suite 250-E shall for all purposes form a part of the Second Floor Expansion Premises and all provisions of the Lease that apply to the Second Floor Expansion Premises from and after the Second Floor Expansion Premises Commencement Date shall apply to Suite 250-E. Accordingly, (a) the payment of Base Rent for the Second Floor Expansion Premises as set forth in the Second Amendment shall include the payment of Base Rent for Suite 250-E on the same terms and conditions as applicable to the Second Floor Expansion Premises, (b) Tenant shall pay its share of Operating Expenses for Suite 250-E and for the balance of the Second Floor Expansion Premises, (c) Base Rent for the Second Floor Expansion Premises (including Suite 250-E) shall be increased as more fully set forth in the Second Amendment, (d) the Second Floor Expansion Premises Base Rent Abatement shall apply to Suite 250-E and the balance of the Second Floor Expansion Premises, (e) the Second Floor Expansion Premises Tenant Improvement Allowance shall apply to Suite 250-E and the balance of the Second Floor Expansion Premises, and the Term of the Lease for Suite 250-E shall be identical to the Term of the Lease for the Second Floor Expansion Premises as set forth in the Second Amendment.

6. **Changes to Defined Terms**. Effective as of the dates set forth below and notwithstanding any contrary provision contained in the Second Amendment, the following amendments are hereby made to the definitions contained in the Basic Lease Provisions.

a. Effective as of the First Floor Expansion Premises Commencement Date, the defined term " **Premises**" shall be deleted in its entirety and replaced with the following:

" **Premises**: That portion of the Project, containing approximately [***] rentable square feet, as determined by Landlord, consisting of (i) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A** attached hereto ("**Existing Premises**"), (ii) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A-1** attached hereto ("**Expansion Premises**"), (iii) approximately [***] rentable square feet as shown as the hatched area on **Exhibit A-2** attached hereto ("**First Floor Expansion Premises**"), and (iv) approximately [***] rentable square feet as shown on the hatched area on **Exhibit A-3** attached hereto and known as Suite 250-E (" **Suite 250-E**"; together with the Existing Premises, the Expansion Premises, and the First Floor Expansion Premises, the "**Premises**"). EwingCole, Landlord's architect, has measured the area of the Premises pursuant to the 1996 Standard Method of Measuring Floor Area in Office Buildings as adopted by the Building Owners and Managers Association (ANSI/BOMA Z65.1-1996) ("**BOMA Standards**"). Tenant acknowledges receipt of such measurement, and such measurement shall be conclusive as to the area of the Premises."

b. Effective as of the First Floor Expansion Premises Commencement Date, the defined term " **Rentable Area of Premises**" shall mean approximately [***] rentable square feet.

c. Effective as of the First Floor Expansion Premises Commencement Date, the defined term " **Tenant's Share of Operating Expenses**" shall mean [***]%.[1]

7. **Technical Amendments**. The Second Amendment is hereby amended as follows: [***]

8. **Miscellaneous**.

a. **Entire Agreement**. The Lease, as amended by this Third 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 Third Amendment, may be amended only by an agreement in writing, signed by the parties hereto.

[1] Because it is LaunchLab space, Suite 250-E has not been included in the calculation of Tenant's Share of Operating Expenses.

b. **Binding Effect**. This Third 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. **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 Third Amendment and that no Broker brought about this transaction, other than CBRE, Inc. (" **CBRE**"). CBRE shall be paid by Landlord pursuant to a separate agreement between Landlord and CBRE. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than CBRE, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this Third Amendment.

d. **Ratification; Conflicts**. Except as amended and/or modified by this Third 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 Third Amendment. In the event of any conflict between the provisions of this Third Amendment and the provisions of the Lease, the provisions of this Third Amendment shall prevail. Regardless of whether specifically amended by this Third 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 Third Amendment.

e. **Counterparts/Electronic Signatures**. This Third 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, such as DocuSign) 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 Third Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

[**SIGNATURES APPEAR ON NEXT PAGE**]

IN WITNESS WHEREOF, the parties hereto have executed this Third Amendment under seal as of the day and year first above written.

TENANT:

ADAPTIVE PHAGE THERAPEUTICS, INC.,
a Delaware corporation

By: */s/ Greg Merril*
Name: Greg Merril
Title: CEO

LANDLORD:

ARE-708 QUINCE ORCHARD, LLC,
a Delaware limited liability company

By: ARE-GP 708 Quince Orchard QRS CORP.,
a Maryland corporation,
managing member

By: */s/ Gregory Kay*
Name: Gregory Kay
Title: Vice President,
Real Estate Legal Affairs

Exhibit 10.32

FOURTH AMENDMENT TO LEASE AGREEMENT

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

THIS FOURTH AMENDMENT TO LEASE AGREEMENT ("**this Fourth Amendment**") is dated as of September 27 , 2022 ("**Fourth Amendment Effective Date**"), by and between **ARE-708 QUINCE ORCHARD, LLC** , a Delaware limited liability company, having an address at 26 North Euclid Avenue, Pasadena, California 91101 ("**Landlord**"), and **ADAPTIVE PHAGE THERAPEUTICS, INC.** , a Delaware corporation, having an address at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878 ("**Tenant**").

RECITALS

A. Landlord and Tenant have entered into that certain Lease Agreement (" **Original Lease**") dated as of August 9, 2019, as amended by that certain letter agreement dated August 7, 2019, that certain letter agreement dated October 28, 2020, that certain First Amendment to Lease Agreement dated as of October 28, 2020 ("**First Amendment**"), that certain Second Amendment to Lease Agreement dated July 8, 2021 (" **Second Amendment**"), and that certain Third Amendment to Lease Agreement dated July 15, 2021 ("**Third Amendment**"; together with the Original Lease, the letter agreements, the First Amendment, the Second Amendment, and the Third Amendment, the "**Lease**"), wherein Landlord leased to Tenant certain premises containing approximately [***] rentable square feet ("**Existing Premises**") located at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878, as more particularly described in the Lease.

B. As of the Second Amendment Effective Date (i.e., July 8, 2021), the Second Floor Expansion Premises (as defined in the Second Amendment) was leased to certain LaunchLab Tenants (as defined in the Second Amendment).

C. One of the LaunchLab Tenants, Labsero LLC, a Maryland limited liability company, previously vacated that portion of the Second Floor Expansion Premises known as Suite 250-E containing approximately [***] rentable square feet ("**Suite 250-E**"), and Tenant has leased Suite 250-E from Landlord pursuant to the terms and conditions of the Third Amendment.

D. The remaining LaunchLab Tenant, Caring Cross, Inc., a Maryland corporation (" **Caring Cross**"), currently leases that portion of the Second Floor Expansion Premises known as (i) Suite 250-C containing approximately [***] rentable square feet ("**Suite 250-C**"), and (ii) Suite 250-D containing approximately [***] rentable square feet ("**Suite 250-D**"; together with Suite 250-C, " **Suites 250-C/250D**").

E. Caring Cross intends to vacate Suites 250-C/250-D by September 30, 2022.

F. Tenant desires to lease Suites 250-C/250-D from Landlord, and Landlord desires to lease Suites 250-C/250-D to Tenant, for the period beginning on October 1, 2022 ("**Suites 250-C/250-D Commencement Date**") and, unless earlier terminated in accordance with the terms of the Lease, ending on the date that is one day before the Second Floor Expansion Premises Commencement Date (i.e., November 1, 2023)

G. Tenant's leasing of the Second Floor Expansion Premises is contingent on the satisfaction of the LaunchLab Tenant Contingency (as defined in the Second Amendment).

H. From and after the Suites 250-C/250-D Commencement Date, Suites 250-C/250-D shall form a part of the Second Floor Expansion Premises.

I. Landlord and Tenant desire to amend the Lease, among other things, to expand the Existing Premises by adding Suites 250-C/250-D and to provide certain abatement of Base Rent for Suites 250-C/250-D, all on the terms and conditions set forth in this Fourth Amendment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recitals, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree that the Lease is amended as follows:

1. **Definitions; Recitals**. Terms used in this Fourth Amendment but not otherwise defined shall have the meanings set forth in the Lease. The Recitals form an integral part of this Fourth Amendment and are hereby incorporated by reference.

2. **Addition of Suites 250-C/250-D**. Effective as of the Suites 250-C/250-D Commencement Date, the Existing Premises is hereby expanded to include Suites 250-C/250-D (Suites 250-C/250-D, together with the Existing Premises, are hereinafter collectively referred to as the "**Premises**"). The area of the Existing Premises and Suites 250-C/250-D total [***] rentable square feet. **Exhibit A-4** attached hereto, which depicts Suites 250-C/250-D, shall be added to the Lease as **Exhibit A-4**. Upon request of Landlord or Tenant, each party shall execute and deliver a written acknowledgement of the Suites 250- C/250-D Commencement Date and the date that is one day before the Second Floor Expansion Premises Commencement Date when such dates are established in the form attached hereto as **Exhibit B**; provided, however, that a party's failure to execute and deliver any such acknowledgements shall not affect Landlord's or Tenant's rights under this Fourth Amendment.

a. **Delivery of Suites 250-C/250-D**. Landlord shall deliver Suites 250-C/250-D to Tenant on the Suites 250-C/250-D Commencement Date in their broom clean, "as is" condition, free and clear of Caring Cross's property (each, a "**Delivery,**" "**Delivered**," or "**Deliver**"). If Landlord fails to Deliver timely Suites 250-C/250-D, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Fourth Amendment and the Lease with respect to Suites 250-C/250-D shall not be void or voidable.

b. **Acceptance**. Except as set forth in this Fourth Amendment, if applicable: (i) Tenant shall accept Suites 250-C/250-D in their "as is" condition as of the Suites 250-C/250-D Commencement Date; (ii) Landlord shall have no obligation for any defects in Suites 250-C/250-D, and (iii) Tenant's taking possession of Suites 250-C/250-D shall be conclusive evidence that Tenant accepts Suites 250-C/250-D and that Suites 250-C/250-D were in good condition at the time possession was taken, including, but not limited to, all cabinetry and casework, uninterruptable power supply systems, power surge protectors, emergency generator, communication systems, security systems, chemical fume hoods, and other fixed equipment located in Suites 250-C/250-D and to the extent such items exist. Notwithstanding the foregoing provisions of this paragraph, Tenant shall have a period of 60 days after the Suites 250-C/250-D Commencement Date to reasonably identify in writing any latent defects in the mechanical, electrical, and plumbing systems

and the structural components serving Suites 250-C/250-D. For purposes of this paragraph, "**latent defects**" means those material defects in such systems and/or components that could not have been identified or discovered through a reasonable inspection of such systems or components conducted by a qualified technician. Landlord will promptly repair such identified latent defects (subject to Landlord's reasonable confirmation that such defects are, in fact, latent defects).

c. **Condition**. Neither Landlord nor any of its agents has made any representation or warranty with respect to the condition of all or any portion of Suites 250-C/250-D and/or the suitability of Suites 250-C/250-D for the conduct of Tenant's business, and Tenant waives any implied warranty that Suites 250-C/250-D are suitable for the Permitted Use. Tenant shall use Suites 250-C/250-D only for the Permitted Use under the Lease in compliance with the provisions of Section 7 of the Lease.

d. **Permits**. Subject to the provisions of Sections 2.b above, Landlord shall have no obligation to perform any work at the Building in connection with Tenant's occupancy of Suites 250-C/250-D or obtain any permits, approvals, or entitlements related to Tenant's specific use of Suites 250-C/250-D or Tenant's business operations therein. Tenant shall be responsible for obtaining a certificate of occupancy for Suites 250-C/250-D.

3. **Amendment to Second Amendment**. For the period between the Suites 250-C/250-D Commencement Date and the day before the Second Floor Expansion Premises Commencement Date, Suites 250-C/250-D will not form a part of the Second Floor Expansion Premises, Caring Cross will not constitute a LaunchLab Tenant, and the LaunchLab Tenant Contingency shall not apply to Suites 250- C/250-D. Accordingly, effective as of the Suites 250-C/250-D Commencement Date and continuing through the day before the Second Floor Expansion Premises Commencement Date, Section 3.b of the Second Amendment is hereby amended by adding the following at the end thereof:

> A former LaunchLab Tenant, Caring Cross, Inc., a Maryland corporation, no longer leases that portion of the Second Floor Expansion Premises known as Suites 250-C/250-D. Landlord has leased Suites 250-C/250-D to Tenant pursuant to the terms and conditions of a certain Fourth Amendment to Lease Agreement between Landlord and Tenant. Accordingly, the provisions of this paragraph shall not apply to Suites 250-C/250-D, and Caring Cross shall not constitute one of the LaunchLab Tenants.

4. **Base Rent and Operating Expenses for Suites 250-C/250-D Until Day Before Second Floor Expansion Premises Commencement Date**. The term of the Lease for Suites 250-C/250-D shall begin on the Suites 250-C/250-D Commencement Date and, unless earlier terminated in accordance with the terms and conditions of this Fourth Amendment and the Lease, shall end on October 31, 2023, which is the date that is the day before the Second Floor Expansion Premises Commencement Date. Accordingly, (a) Tenant shall continue to pay Base Rent with respect to the Existing Premises at the rates set forth in the Lease, (b) subject to the Suites 250-C/250-D Base Rent Abatement (as defined below), commencing on the Suites 250-C/250-D Commencement Date and continuing through the date that is the day before the Second Floor Expansion Premises Commencement Date, (i) Base Rent for Suites 250-C/250-D shall be payable at the rate of $10,034.26 per month and shall not be adjusted during this time period, and (ii) Tenant shall have no obligation to pay its share of Operating Expenses for Suites 250-C/250-D.

a. **Suites 250-C/250-D Base Rent Abatement**. Notwithstanding anything to the contrary contained in this Fourth Amendment or the Lease, but provided Tenant is not then in Default, Landlord hereby grants Tenant an abatement of the Base Rent for Suites 250-C/250-D payable during the period beginning on the Suites 250-C/250-D Commencement Date and ending 1 month thereafter ("**Suites 250-C/250-D Base Rent Abatement**"). For the avoidance of doubt, if the Suites 250-C/250-D Commencement Date occurs on the first day of a month, the Suites 250-C/250-D Base Rent Abatement will be measured from that date. If the Suites 250-C/250-D Commencement Date occurs on a day other than the first day of a month, the Suites 250-C/250-D 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 Suites 250-C/250-D due in accordance with the provisions of this Fourth Amendment and the Lease.

5. **Base Rent and Operating Expenses for Suites 250-C/250-D From and After Second Floor Expansion Premises Commencement Date** . Commencing on the Second Floor Expansion Premises Commencement Date and continuing for the balance of the Term, Suites 250-C/250-D shall for all purposes form a part of the Second Floor Expansion Premises and all provisions of the Lease that apply to the Second Floor Expansion Premises from and after the Second Floor Expansion Premises Commencement Date shall apply to Suites 250-C/250-D. Accordingly, (a) the payment of Base Rent for the Second Floor Expansion Premises as set forth in the Second Amendment shall include the payment of Base Rent for Suites 250-C/250-D on the same terms and conditions as applicable to the Second Floor Expansion Premises, (b) Tenant shall pay its share of Operating Expenses for Suites 250-C/250-D and for the balance of the Second Floor Expansion Premises, (c) Base Rent for the Second Floor Expansion Premises (including Suites 250-C/250-D) shall be increased as more fully set forth in the Second Amendment, (d) the Second Floor Expansion Premises Base Rent Abatement shall apply to Suites 250- C/250-D and the balance of the Second Floor Expansion Premises, (e) the Second Floor Expansion Premises Tenant Improvement Allowance shall apply to Suites 250-C/250-D and the balance of the Second Floor Expansion Premises, and the Term of the Lease for Suites 250-C/250-D shall be identical to the Term of the Lease for the Second Floor Expansion Premises as set forth in the Second Amendment.

6. **Changes to Defined Terms**. Effective as of the dates set forth below and notwithstanding any contrary provision contained in the Second Amendment, the following amendments are hereby made to the definitions contained in the Basic Lease Provisions.

a. Effective as of the Suites 250-C/250-D Commencement Date, the defined term " **Premises**" shall be deleted in its entirety and replaced with the following:

"**Premises**: That portion of the Project, containing approximately [***] rentable square feet, as determined by Landlord, consisting of the following: (i) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A** attached hereto ("**Existing Premises**"), (ii) approximately [***] rentable square feet of space as shown as the hatched area on **Exhibit A-1** attached hereto ("**Expansion Premises**"), (iii) approximately [***] rentable square feet as shown as the hatched area on **Exhibit A-2** attached hereto ("**First Floor Expansion Premises**"), (iv) approximately [***] rentable square feet as shown on the hatched area on **Exhibit A-3** attached hereto and known as Suite 250-E (" **Suite 250-E**"), (v) approximately [***] rentable square feet as shown on **Exhibit A-4** attached hereto and known as Suite 250-C (" **Suite 250-C**"), and (vi) approximately [***] rentable square feet as shown on **Exhibit A-4** attached hereto and known as Suite 250-D (" **Suite 250-D**"; together with the Existing Premises, the Expansion Premises, the First Floor Expansion Premises, Suite 250-E, and Suite 250-C, the "**Premises**"). EwingCole, Landlord's architect, has measured the area of the Premises pursuant to the 1996 Standard Method of Measuring Floor Area in Office Buildings as adopted by the Building Owners and Managers Association (ANSI/BOMA Z65.1-1996) ("**BOMA Standards**"). Tenant acknowledges receipt of such measurement, and such measurement shall be conclusive as to the area of the Premises."

b. Effective as of the Suites 250-C/250-D Commencement Date, the defined term " **Rentable Area of Premises**" shall mean approximately [***] rentable square feet.

c. Effective as of the Suites 250-C/250-D Commencement Date, the defined term " **Tenant's Share of Operating Expenses**" shall mean [***]%.[1]

[1] Because they are LaunchLab space, Suites 250-C/250-D have not been included in the calculation of Tenant's Share of Operating Expenses for the period beginning on the Suites 250-C/250-D Commencement Date and ending the day before the Second Floor Expansion Premises Commencement Date.

7. **Miscellaneous**.

a. **Entire Agreement**. The Lease, as amended by this Fourth 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 Fourth Amendment, may be amended only by an agreement in writing, signed by the parties hereto.

b. **Binding Effect**. This Fourth 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. **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 Fourth Amendment and that no Broker brought about this transaction. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this Fourth Amendment.

d. **Ratification; Conflicts**. Except as amended and/or modified by this Fourth 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 Fourth Amendment. In the event of any conflict between the provisions of this Fourth Amendment and the provisions of the Lease, the provisions of this Fourth Amendment shall prevail. Regardless of whether specifically amended by this Fourth 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 Fourth Amendment.

e. **Counterparts/Electronic Signatures**. This Fourth 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, such as DocuSign) 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 Fourth Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

[**SIGNATURES APPEAR ON NEXT PAGE**]

IN WITNESS WHEREOF, the parties hereto have executed this Fourth Amendment under seal as of the day and year first above written.

TENANT:

ADAPTIVE PHAGE THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Greg Merril
Name: Greg Merril
Title: CEO

☒ I hereby certify that the signature, name, and title above are my signature, name, and title.

LANDLORD:

ARE-708 QUINCE ORCHARD, LLC,

a Delaware limited liability company

By: ARE-GP 708 Quince Orchard QRS CORP.,
a Maryland corporation,
managing member

By: /s/ William Barrett
Name: William Barrett
Title: Vice President – Real Estate Legal Affairs

Exhibit 10.33

FIFTH AMENDMENT TO LEASE AGREEMENT

PLEASE NOTE: CERTAIN INFORMATION INDICATED WITH [***] IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

THIS FIFTH AMENDMENT TO LEASE AGREEMENT ("**this Fifth Amendment**") is dated as of February 2, 2023 (" **Fifth Amendment Effective Date**"), by and between **ARE-708 QUINCE ORCHARD, LLC,** a Delaware limited liability company, having an address at 26 North Euclid Avenue, Pasadena, California 91101 ("**Landlord**"), and **ADAPTIVE PHAGE THERAPEUTICS, INC.,** a Delaware corporation, having an address at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878 ("**Tenant**")

RECITALS

A Landlord and Tenant have entered into that certain Lease Agreement (" **Original Lease**")dated as of August 9, 2019, as amended by that certain letter agreement dated August 7, 2019, that certain letter agreement dated October 28, 2020, that certain First Amendment to Lease Agreement dated as of October 28, 2020 ("**First Amendmen**t"), that certain Second Amendment to Lease Agreement dated July 8, 2021 (" **Second Amendment**"), that certain Third Amendment to Lease Agreement dated July 15, 2021 ("**Third Amendment**"), and that certain Fourth Amendment to Lease Agreement ("**Fourth Amendment**", together with the Original Lease, the letter agreements, the First Amendment, the Second Amendment, the Third Amendment, and the Fourth Amendment, the "**Lease**"), wherein Landlord leased to Tenant certain premises containing approximately 44,080 rentable square feet ("**Existing Premises**") located at Suite 150, 708 Quince Orchard Road, Gaithersburg, Maryland 20878, as more particularly described in the Lease

B Landlord and Tenant desire to amend the Lease, among other things, to provide for Tenant's reimbursement to Landlord of the Additional Costs (as defined below), all on the terms and conditions set forth in this Fifth Amendment

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recitals, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree that the Lease is amended as follows

1 **Definitions; Recitals** Terms used in this Fifth Amendment but not otherwise defined shall have the meanings set forth in the Lease The Recitals form an integral part of this Fifth Amendment and are hereby incorporated by reference

2 **Payment of Additional Costs** Tenant owes Landlord an amount equal to $[***], which amount is summarized on **Exhibit A** attached hereto, consisting of the following (a) amounts due for the period January 2020 through December 2022 with respect to the Additional Tenant Improvement Allowance under the Original Lease used by Tenant but not yet paid to Landlord, (b) amounts due for the period July 2022 through December 2022 with respect to the Additional First Floor Expansion Premises Tenant Improvement Allowance under the Second Amendment used by Tenant but not yet paid to Landlord, and (c) the cost incurred by Landlord In 2020 to replace the cooling tower serving the Premises for which Tenant has not yet reimbursed Landlord (collectively, the **"Additional Costs")** Tenant shall pay the Additional Costs to Landlord, as Additional Rent, over a period of [***] months in equal monthly installments of $[***] each, beginning on [***], and ending [***] The monthly installments of Additional Costs shall be due at the same time that monthly installments of Base Rent are due and payable under the Lease The Additional Costs shall not be adjusted by the Rent Adjustment Percentage under Section 4 of the Lease

3 **Miscellaneous**

a **Entire Agreement; Exhibit** The Lease, as amended by this Fifth 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 Fifth Amendment, may be amended only by an agreement in writing, signed by the parties hereto Any exhibit attached to this Fifth Amendment forms an integral part hereof and is hereby incorporated by reference

b **Binding Effect** This Fifth 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 **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 Fifth Amendment and that no Broker brought about this transaction Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this Fifth Amendment

d **Ratification; Conflicts** Except as amended and/or modified by this Fifth 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 Fifth Amendment In the event of any conflict between the provisions of this Fifth Amendment and the provisions of the Lease, the provisions of this Fifth Amendment shall prevail Regardless of whether specifically amended by this Fifth 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 Fifth Amendment

e **Counterparts/Electronic Signatures** This Fifth 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 US federal ESIGN Act of 2000, such as DocuSign) 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 Fifth Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures

[SIGNATURES APPEAR ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have executed this Fifth Amendment under seal as of the day and year first above written.

TENANT:

ADAPTIVE PHAGE THERAPEUTICS, INC.,
a Delaware corporation

By: */s/ Michael J. Orndorff*
Name: Michael J. Orndorff
Title: CEO

☒ I hereby certify that the signature, name, and title above are my signature, name, and title.

LANDLORD:

ARE-708 QUINCE ORCHARD, LLC,
a Delaware limited liability company

By: ARE-GP 708 Quince Orchard QRS CORP.,
a Maryland corporation, managing member

By: */s/ William Barrett*
Name: William Barrett
Title: Vice President - Real Estate Legal Affairs

Exhibit 21.1

BiomX Inc.
Subsidiaries of Registrant

Subsidiary	Jurisdiction of Incorporation
BiomX Ltd.	Israel
Adaptive Phage Therapeutics, LLC.	Delaware, USA

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-235507, 333-261419, 333-272371 and 333-275935) and on Form S-8 (Nos. 333-235777, 333-254922, 333-263995 and 333-270947) of BiomX Inc. of our report dated April 3, 2024 relating to the financial statements, which appears in this Form 10-K.

Tel-Aviv, Israel
April 3, 2024

/s/ Kesselman & Kesselman
Certified Public Accountants (Isr.)
A member firm of PricewaterhouseCoopers International Limited

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13A-14(A) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Jonathan Solomon, certify that:

1. I have reviewed this Annual Report on Form 10-K of BiomX 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(s) 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)) for the registrant 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, 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 3, 2024

/s/ Jonathan Solomon
Jonathan Solomon
Chief Executive Officer
(Principal executive officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13A-14(A) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Avraham Gabay, certify that:

1. I have reviewed this Annual Report on Form 10-K of BiomX 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(s) 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)) for the registrant 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, 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 3, 2024

/s/ Avraham Gabay
Avraham Gabay
Interim Chief Financial Officer
(Principal financial officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

In connection with the Annual Report of BiomX Inc. (the "Company") on Form 10-K for the year ended December 31, 2023 as filed with the Securities and Exchange Commission (the "Report"), each of the undersigned, in the capacities and on the dates indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, that to his or her knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jonathan Solomon
Jonathan Solomon
Chief Executive Officer
(Principal executive officer)

Date: April 3, 2024

/s/ Avraham Gabay
Avraham Gabay
Interim Chief Financial Officer
(Principal financial officer)

Date: April 3, 2024

Exhibit 97.1

BiomX Inc. (the "Company")

CLAWBACK POLICY

Effective as of November 13, 2023

Background

The Board of Directors of the Company (the " **Board**") believes that it is in the best interests of the Company and its shareholders to create and maintain a culture that emphasizes integrity and accountability and that reinforces the Company's pay-for-performance compensation philosophy. The Board has therefore adopted this policy, which provides for the recoupment (or clawback) of certain executive compensation in the event of an accounting restatement resulting from material noncompliance with financial reporting requirements under the federal securities laws of the United States (the "**Policy**"). This Policy is designed to comply with Section 10D of the Securities Exchange Act of 1934, as amended (the " **Exchange Act**"), Rule 10D-1 promulgated under the Exchange Act ("**Rule 10D-1**") and the listing standards of the NYSE American LLC (" **NYSE**") under Section 811 of the NYSE American Company Guide.

Administration

This Policy shall be administered by the Compensation Committee of the Board (the " **Compensation Committee**"). Any determinations made by the Compensation Committee shall be final and binding on all affected individuals. Subject to any limitation under applicable law, the Compensation Committee may authorize and empower any officer or employee of the Company to take any and all actions necessary or appropriate to carry out the purpose and intent of this Policy (other than with respect to any recovery under this Policy involving such officer or employee).

Covered Executives

This Policy applies to the Company's current and former executive officers, as determined by the Board in accordance with Section 10D of the Exchange Act and the listing standards of the NYSE ("**Covered Executives**").

Recoupment; Accounting Restatement

In the event the Company is required to prepare an accounting restatement of its financial statements due to the Company's material noncompliance with any financial reporting requirement under the securities laws, the Compensation Committee will require prompt reimbursement or forfeiture of any excess Incentive Compensation (as defined below) received by any Covered Executive during the three completed fiscal years immediately preceding the date on which the Company is required to prepare an accounting restatement. For the sake of clarity, recoupment is required in the event of any restatement that either: (a) corrects an error in previously issued financial statements that is material to the previously issued financial statements; or (b) corrects an error not material to previously issued financial statements, but that would result in a material misstatement if (i) the error was left uncorrected in the then current period; or (ii) the error correction was recognized in the then current period. The Company's obligation to recover erroneously awarded compensation is not dependent on if or when the restated financial statements are filed. For purposes of determining the relevant recovery period, the date that the Company is required to prepare an accounting restatement as described above is the earlier to occur of: (A) the date the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare an accounting restatement as described above; or (B) the date a court, regulator, or other legally authorized body directs the Company to prepare an accounting restatement as described above. In accordance with NYSE Rule 811, this Policy is applicable to Incentive Compensation received on or after October 2, 2023.

Incentive Compensation

For purposes of this Policy, "Incentive Compensation" means any of the following, provided that such compensation is granted, earned or vested based wholly or in part on the attainment of a financial reporting measure affected by the restated financial statements:

- Annual bonuses and other short-term and long-term cash incentives.
- Stock options.
- Stock appreciation rights.
- Restricted stock.
- Restricted stock units.
- Performance shares.
- Performance units.

Financial reporting measures are measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. Stock price and total shareholder return are also financial reporting measures. A financial reporting measure need not be presented within the financial statements or included in a filing with the Securities and Exchange Commission. The Company's financial reporting measures may include, but are not limited to, the following:

- Company stock price.
- Total stockholder return.
- Revenues.

- Net income.
- Earnings before interest, taxes, depreciation and amortization (EBITDA).
- Funds from operations.
- Liquidity measures such as working capital, operating cash flow or Free Cash Flow.
- Return measures such as return on invested capital or return on assets.
- Earnings measures such as earnings per share.
- Financial ratios.

This Policy applies to all Incentive Compensation received by a Covered Executive:

- After beginning service as an executive officer;
- Who served as an executive officer at any time during the performance period for that Incentive Compensation;

- While the Company has a class of securities listed on a national securities exchange or a national securities association; and
- During the three completed fiscal years immediately preceding the date that the Company is required to prepare an accounting restatement as described in this Policy. In addition to these last three completed fiscal years, this Policy applies to any transition period (that results from a change in the Company's fiscal year) within or immediately following those three completed fiscal years. However, a transition period between the last day of the Company's previous fiscal year end and the first day of its new fiscal year that comprises a period of nine to 12 months would be deemed a completed fiscal year.

Incentive Compensation is deemed received in the Company's fiscal period during which the financial reporting measure specified in the Incentive Compensation award is attained, even if the payment or grant of the Incentive Compensation occurs after the end of that period.

Excess Incentive Compensation: Amount Subject to Recovery

The amount to be recovered will be the excess of the Incentive Compensation paid to the Covered Executive based on the erroneous data over the Incentive Compensation that would have been paid to the Covered Executive had it been based on the restated results, as determined by the Compensation Committee, and without regard to any taxes paid by or withheld from the Covered Executive. If the Compensation Committee cannot determine the amount of excess Incentive Compensation received by the Covered Executive directly from the information in the accounting restatement, then it will make its determination based on a reasonable estimate of the effect of the accounting restatement. For Incentive Compensation based on stock price or total stockholder return, where the amount of erroneously awarded compensation is not subject to mathematical recalculation directly from the information in an accounting restatement, the amount will be based on a reasonable estimate of the effect of the accounting restatement on the stock price or total stockholder return upon which the Incentive Compensation was received. In such case, the Company shall maintain documentation of the determination of that reasonable estimate and provide such documentation to NYSE.

Method of Recoupment

The Compensation Committee will determine, in its sole discretion, the method for recouping Incentive Compensation hereunder which may include, without limitation:

- Requiring reimbursement of cash Incentive Compensation previously paid;
- Seeking recovery of any gain realized on the vesting, exercise, settlement, sale, transfer, or other disposition of any equity-based awards;
- Offsetting the recouped amount from any compensation otherwise owed by the Company to the Covered Executive in accordance with applicable law;
- Cancelling outstanding vested or unvested equity awards; and/or
- Taking any other remedial and recovery action permitted by law, as determined by the Compensation Committee.

No Indemnification

The Company shall not indemnify any Covered Executives against the loss of any Incentive Compensation recovered under this Policy or from any consequence arising therefrom.

Interpretation

The Compensation Committee is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate or advisable for the administration of this Policy. It is intended that this Policy be interpreted in a manner that is consistent with the requirements of Section 10D of the Exchange Act, Rule 10D-1, any applicable rules or standards adopted by the Securities and Exchange Commission or NYSE and the Israeli Companies Law 1999.

Effective Date

This Policy shall be effective as of the date it is adopted by the Board (the " **Effective Date**") and, in accordance with Section 811 of the NYSE American Company Guide, shall apply to Incentive Compensation that is approved, awarded or granted to Covered Executives on or after October 2, 2023.

Amendment; Termination

The Board may amend this Policy from time to time in its discretion and shall amend this Policy as it deems necessary to reflect regulations adopted by the Securities and Exchange Commission under Section 10D of the Exchange Act and to comply with any rules or standards adopted by NYSE. The Board may terminate this Policy at any time.

Other Recoupment Rights

The Board intends that this Policy will be applied to the fullest extent of any applicable law. The Board or Compensation Committee may require that any employment agreement, equity award agreement, or similar agreement entered into or amended on or after the Effective Date shall, as a condition to the grant of any benefit thereunder, require a Covered Executive to agree to abide by the terms of this Policy. Any right of recoupment under this Policy is in addition to, and not in lieu of: (a) any other remedies or rights of recoupment that may be available to the Company pursuant to the terms of any similar policy in any employment agreement, equity award agreement or similar agreement and any other legal remedies available to the Company, including termination of employment or institution of legal proceedings; and (b) any statutory recoupment requirement, including Section 304 of the Sarbanes-Oxley Act of 2022. For the avoidance of doubt, any amounts paid to the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2022 shall be considered (and may be credited) in determining any amounts recovered under this Policy.

Impracticability

The Compensation Committee shall recover any excess Incentive Compensation in accordance with this Policy unless such recovery would be impracticable, as determined in accordance with Rule 10D-1(b)(1)(iv) under the Exchange Act and the listing standards of NYSE. In order for the Company to determine that recovery would be impracticable, the Company's Compensation Committee must conclude the following:

a) The direct expense paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered after making a reasonable attempt to recover such Incentive Compensation. Note that the attempt(s) to recover must be documented by the Company and such documentation provided to NYSE;

b) Recovery would violate home country law where that law was adopted prior to November 28, 2022. Note that the Company must obtain a legal opinion of home country counsel that such recovery would result in a violation of local law and provide such opinion to NYSE; or

c) Recovery would likely cause an otherwise tax-qualified retirement plan under which benefits are broadly available to Company employees to fail to meet the requirements for qualified pension, profit-sharing and stock bonus plans under Section 401(a)(13) of the U.S. Internal Revenue Code or the minimum vesting standards under Section 411(a) of the U.S. Internal Revenue Code.

Successors

This Policy shall be binding and enforceable against all Covered Executives and their beneficiaries, heirs, executors, administrators or other legal representatives.

Exhibit Filing

A copy of this Policy shall be filed as an exhibit to the Company's annual report on Form 10-K.

ATTESTATION AND ACKNOWLEDGEMENT OF CLAWBACK POLICY FOR BIOMX INC.
(the "Company")

By my signature below, I acknowledge and agree that:

- I have received and read the attached Clawback Policy (the "Policy") of the Company.
- I hereby agree to abide by all of the terms of the Policy both during and after my employment with the Company, including, without limitation, by promptly repaying or returning any incorrectly awarded Incentive Compensation (as described in the Policy) to the Company as determined in accordance with the Policy.
- I hereby waive any claim against the Company, the Board and/or the Company's officers in connection with the implementation of the Policy.

Signature: _____

Printed Name: _____

Date: _____

Exhibit 99.1

RATIFICATION OF DEFECTIVE CORPORATE ACTION
PURSUANT TO DGCL § 204

WHEREAS, at a meeting of the Board held on March 5, 2024, the Company approved the terms of a merger agreement (the " ***Merger Agreement***") to be entered into by and among the Company, BTX Merger Sub I, Inc. a Delaware corporation, BTX Merger Sub II, LLC a Delaware limited liability company, and Adaptive Phage Therapeutics, Inc. a Delaware corporation ("***APT***"), pursuant to which the Company would acquire APT (the "***Acquisition***");

WHEREAS, at such meeting, the Board approved the issuance, pursuant to the terms and conditions of the Merger Agreement, of 9,146,967 shares (the "***Common Merger Shares***") of the Company's common stock, par value $0.0001 per share (" ***Common Stock***"), to the stockholders of APT as partial consideration for the Acquisition;

WHEREAS, on March 15, 2024, in connection with the consummation of the Acquisition, the Company issued, in addition to the Common Merger Shares, one additional share of Common Stock (the "***Excess Share***," and the issuance thereof, the "***Excess Issuance***") to a stockholder of APT;

WHEREAS, in consultation with counsel, the Board has determined that the Excess Issuance may constitute a defective corporate act and the Excess Share issued in connection therewith may constitute putative stock (as defined in Section 204(h) of the DGCL) due to the failure of the Excess Issuance to have been duly authorized by the Board in accordance with Section 152 of the DGCL; and

WHEREAS, the Board has determined that it is advisable and in the best interests of the Company and its stockholders to ratify the Excess Issuance pursuant to and in accordance with Section 204 of the DGCL.

NOW, THEREFORE, BE IT:

RESOLVED, that the Excess Issuance is a defective corporate act to be ratified hereby; and, be it further

RESOLVED, that the Excess Share constitutes putative stock; and, be it further

RESOLVED, that the nature of the failure of authorization with respect to the Excess Issuance is the failure of such issuance to have been duly authorized by the Board in accordance with Section 152 of the DGCL; and, be it further

RESOLVED, that, pursuant to and in accordance with Section 204 of the DGCL, the ratification the Excess Issuance be, and hereby is, approved, ratified, adopted and confirmed in all respects.

FURTHER INSTRUCTIONS TO OFFICERS

RESOLVED, that the officers of the Company be, and each of them hereby is, authorized and directed in the name and on behalf of the Company to take all such additional actions and to execute and deliver any and all papers, agreements, instruments, certificates and documents, and to do all such other things as they or any of them deem necessary, appropriate or desirable to carry out the purposes of the foregoing resolutions, the necessity, appropriateness or desirability of which shall be conclusively evidenced by the taking of such actions or such execution and delivery, in order to carry out fully and promptly each of the foregoing resolutions and the intent and purpose thereof; and, be it further

RESOLVED, that any and all actions whether previously or subsequently taken by the officers and directors of the Company, which are consistent with and in furtherance of the intent and purposes of the foregoing resolutions and the consummation of the transactions contemplated therein, shall be, and hereby are, in all respects, ratified, approved, and confirmed.