

**PROSPECTUS**

BIOMX INC.



**Up to 2,305,869 Shares of Common Stock Issuable Upon Exercise of Pre-Funded Warrants**  
**Up to 5,939,383 Shares of Common Stock Issuable Upon Exercise of Common Warrants**  
**Up to 6,955,528 Shares of Common Stock Issuable Upon Exercise of New Warrants**  
**Offered by the Selling Securityholders Named Herein**

This prospectus relates to the resale by the selling securityholders named in this prospectus or their permitted transferees (the "Selling Securityholders") of (i) up to 2,305,869 shares (the "Pre-Funded Warrant Shares") of common stock, \$0.0001 par value per share (the "Common Stock") issuable upon exercise of pre-funded warrants (the "Pre-Funded Warrants"), (ii) up to 5,939,383 shares of Common Stock (the "Common Warrant Shares") issuable upon exercise of common warrants (the "Common Warrants") and (iii) up to 6,955,528 shares of Common Stock (the "New Warrant Shares", and together with the Pre-Funded Warrant Shares and the Common Warrant Shares, the "Warrant Shares") issuable upon exercise of new warrants (the "New Warrants", and together with the Pre-Funded Warrants and the Common Warrants, the "Warrants"). The Pre-Funded Warrants and Common Warrants were issued to the selling securityholders pursuant to that certain Securities Purchase Agreement, dated February 25, 2025, by and among the Company and the investors signatory thereto (the "Securities Purchase Agreement") and the New Warrants were issued to the selling securityholders pursuant to certain Inducement Letter, dated February 25, 2025, by and among the Company and the holders signatory thereto (the "Inducement Letter"), in connection with certain transactions that closed on February 27, 2025 (the "Offering").

The securities that may be sold by the Selling Securityholders are referred to in this prospectus as the "Offered Securities." We will not receive any of the proceeds from the sale by the Selling Securityholders of the Offered Securities; however, we will receive the exercise price of the Warrants upon any exercise of the Warrants by payment of cash, with an exercise price of \$0.0001, \$0.9306, \$0.9306 per share for the Pre-Funded Warrants, Common Warrants and New Warrants, respectively. We will bear all costs, expenses and fees in connection with the registration of the Offered Securities, including with regard to compliance with state securities or "blue sky" laws. The Selling Securityholders will bear all commissions and discounts, if any, attributable to their sale of the Offered Securities, except as otherwise expressly set forth under "Plan of Distribution" beginning on page 13 of this prospectus.

This prospectus describes the general manner in which the Offered Securities may be offered and sold. If necessary, the specific manner in which the Offered Securities may be offered and sold will be described in one or more supplements to this prospectus. Any prospectus supplement may add, update or change information contained in this prospectus. You should carefully read this prospectus, and any applicable prospectus supplement, as well as the documents incorporated by reference herein or therein before you invest in any of our securities.

The Selling Securityholders may offer, sell or distribute Offered Securities publicly or through private transactions. If the Selling Securityholders use underwriters, dealers or agents to sell Offered Securities, we will name them and describe their compensation in a prospectus supplement. The price to the public of those securities and the net proceeds the Selling Securityholders expect to receive from that sale will also be set forth in a prospectus supplement.

Our Common Stock is currently quoted on the NYSE American Stock Market ("NYSE American") under the symbol "PHGE." On April 10, 2025, the last reported sale price of our Common Stock on NYSE American was \$0.5289 per share.

*Investment in our Common Stock involves risk. See "Risk Factors" beginning on page 3 of this prospectus, in any applicable prospectus supplement and in the documents which are incorporated by reference herein. You should carefully read this prospectus, any applicable prospectus supplement, together with the documents we incorporate by reference, before you invest in our Common Stock.*

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

**The date of the prospectus is April 23, 2025.**

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You should rely only on the information contained in this prospectus or a supplement to this prospectus, including the information incorporated herein by reference. Neither we nor the Selling Securityholders have authorized anyone to provide you with different information. This prospectus is not an offer to sell securities, and it is not soliciting an offer to buy securities, in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus or any supplement to this prospectus, whether or not incorporated herein by reference, is accurate as of any date other than the date indicated in those documents.

For investors outside of the United States: Neither we nor any of the Selling Securityholders have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

As used in this prospectus, the terms “we,” “us,” and “our” mean BiomX Inc. and our wholly-owned subsidiaries, unless otherwise indicated.

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## PROSPECTUS SUMMARY

This summary only highlights the more detailed information appearing elsewhere in this prospectus. As this is a summary, it does not contain all of the information that you should consider in making an investment decision. You should read this entire prospectus carefully, as well as any information incorporated herein by reference, including the information under “Risk Factors” and our financial statements and the related notes, before investing.

This prospectus describes the general manner in which the Selling Securityholders identified in this prospectus, or any of their transferees, may offer from time to time (i) up to 2,305,869 Pre-Funded Warrant Shares issuable upon exercise of the Pre-Funded Warrants, (ii) up to 5,939,383 Common Warrant Shares issuable upon exercise of the Common Warrants and (iii) up to 6,955,528 New Warrant Shares issuable upon exercise of the New Warrants. If necessary, the specific manner in which the Offered Securities may be offered and sold will be described in a supplement to this prospectus, which supplement may also add, update or change any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and any applicable prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus or any prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

### Our Company

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.

### Corporate Information

The mailing address of our principal executive office is 22 Einstein St., Floor 4, Ness Ziona, Israel 7414003 and our telephone number is (+972) 72-394-2377. Our website address is [www.biomx.com](http://www.biomx.com). The information found on the website is not part of, and is not incorporated into, this prospectus.

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## ABOUT THIS OFFERING

The Selling Securityholders identified in this prospectus are offering on a resale basis a total of (i) up to 2,305,869 Pre-Funded Warrant Shares issuable upon exercise of the Pre-Funded Warrants, (ii) up to 5,939,383 Common Warrant Shares issuable upon exercise of the Common Warrants and (iii) up to 6,955,528 New Warrant Shares issuable upon exercise of the New Warrants.

### Common Stock offered by the Selling Securityholders

Up to 15,200,780 shares.

<b>Risk factors</b>	Before investing in our securities, you should carefully read and consider the information set forth in “Risk Factors” on page 3.
<b>Use of proceeds</b>	We will not receive any proceeds from the offering of the Offered Securities by the Selling Securityholders, except for the Warrants’ exercise price paid for the Common Stock offered hereby and issuable upon the exercise of the Warrants for an exercise price of \$0.0001, \$0.9306, \$0.9306 per share for the Pre-Funded Warrants, Common Warrants and New Warrants, respectively. See “Use of Proceeds” on page 6.
<b>Trading market and symbol</b>	The Company’s Common Stock trades on the NYSE American under the symbol “PHGE.”

## RISK FACTORS

An investment in our securities carries a significant degree of risk. You should carefully consider before you decide to purchase our securities the risks, uncertainties and assumptions discussed under the heading “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, which is incorporated herein by reference, as updated or superseded by the risks and uncertainties described under similar headings in other documents that are filed after the date thereof and incorporated by reference into this prospectus. Any one of these risks and uncertainties has the potential to cause material adverse effects on our business, prospects, financial condition and operating results, which could cause actual results to differ materially from any forward-looking statements expressed by us and a significant decrease in the value of our securities. Refer to “Cautionary Statement Regarding Forward-Looking Statements.”

We may not be successful in preventing the material adverse effects that any of these risks and uncertainties may cause. These potential risks and uncertainties may not be a complete list of the risks and uncertainties facing us. There may be additional risks and uncertainties that we are presently unaware of, or presently consider immaterial, that may become material in the future and have a material adverse effect on us. You could lose all or a significant portion of your investment due to any of these risks and uncertainties.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The statements contained in this prospectus and the documents we incorporate by reference herein or therein that are not historical facts are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. Such forward-looking statements may be identified by, among other things, the use of forward-looking terminology such as “believes,” “intends,” “plans,” “expects,” “may,” “will,” “should,” “estimates,” “plans,” “anticipates” or the negative thereof or other variations thereon or comparable terminology, and similar expressions are intended to identify forward-looking statements.

We remind readers that forward-looking statements are merely predictions and therefore inherently subject to uncertainties and other factors and involve known and unknown risks that could cause the actual results, performance, levels of activity, or our achievements, or industry results, to be materially different from any future results, performance, levels of activity, achievements or industry results, expressed or implied by such forward-looking statements. Such uncertainties and other factors include, but are not limited to:

- the ability to generate revenues, and raise sufficient financing to meet working capital requirements;
- the unpredictable timing and cost associated with our approach to developing product candidates using phage technology and potential success thereof;
- political, economic and military instability in the State of Israel, additional potential conflicts with other Middle Eastern countries and the continuation of the proposed judicial and other legislation reform by the Israeli government;
- 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;
- 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 described in the documents incorporated by reference in this prospectus.

The factors discussed herein, including those risks described under the heading “Risk Factors” herein and in the documents we incorporate by reference could cause actual results and developments to be materially different from those expressed in or implied by such statements. In addition, historic results of scientific research, clinical and preclinical trials do not guarantee that the conclusions of future research or trials would not suggest different conclusions. Also, historic results referred to this prospectus and the documents we incorporate by reference may be interpreted differently in light of additional research, clinical and preclinical trials results. Except as required by law we undertake no obligation to publicly update such forward-looking statements to reflect subsequent events or circumstances.

#### USE OF PROCEEDS

All of the Offered Securities offered by the Selling Securityholders pursuant to this prospectus will be sold by the Selling Securityholders for their account. We will not receive any of the proceeds from these sales except with respect to amounts received by us upon the exercise of the Warrants for cash. Upon exercise of such Warrants, we will receive the applicable cash exercise price paid by the holders of the Warrants.

#### SELLING SECURITYHOLDERS

(i) Up to 2,305,869 Pre-Funded Warrant Shares issuable upon exercise of the Pre-Funded Warrants, (ii) up to 5,939,383 Common Warrant Shares issuable upon exercise of the Common Warrants and (iii) up to 6,955,528 New Warrant Shares issuable upon exercise of the New Warrants may be offered for resale, from time to time, by the Selling Securityholders identified in the table below.

On February 25, 2025, we entered into the Securities Purchase Agreement and the Inducement Letter in connection with the Offering. Under the terms of the Securities Purchase Agreement, we issued (i) in a registered direct offering: (a) up to 2,828,283 shares of Common Stock and (ii) registered pre-funded warrants to purchase up to 805,231 shares of Common Stock and (ii) in a concurrent private placement: (a) Pre-Funded Warrants to purchase up to 2,305,869 Pre-Funded Warrant Shares at an exercise price of \$0.0001 per share and (b) Common Warrants to purchase up to 5,939,383 Common Warrant Shares at an exercise price of \$0.9306 per share. Under the terms of the Inducement Letter, we issued (i) New Warrants to purchase up to 6,955,528 New Warrant Shares at an exercise price of \$0.9306 per share and (ii) amended and restated warrants (the “A&R Warrants”) to purchase up to 2,994,419 shares of Common Stock.

Pursuant to the Securities Purchase Agreement and the Inducement Letter, we agreed to prepare and file, at our sole expense, the registration statement of which this prospectus forms a part and to use our commercially reasonable efforts to cause such registration statement to be declared effective under the Securities Act of 1933, as amended (the “Securities Act”), after the filing thereof.

On February 25, 2025, in connection with the Securities Purchase Agreement and the Inducement Letter, we entered into a Registration Rights Agreement (the “Registration Rights Agreement”) pursuant to which we agreed to prepare and file a resale registration statement with respect to the Offered Securities and to use our commercially reasonable efforts to cause the registration statement to be declared effective by the SEC within a specified time frame.

To our knowledge, within the past three years, none of the Selling Securityholders has held a position as an officer or a director of ours, nor had any other material relationship of any kind with us or any of our affiliates, except to the extent set forth in the footnotes to the table below.

A Selling Securityholder who is an affiliate of a broker-dealer and any participating broker-dealer may be deemed to be an “underwriter” within the meaning of the Securities Act and any commissions or discounts given to any such Selling Securityholder or broker-dealer may be regarded as underwriting commissions or discounts under the Securities Act. To our knowledge, except to the extent set forth in the footnotes to the table below, none of the Selling Securityholders are affiliates of broker-dealers and there are no participating broker-dealers.

The term “Selling Securityholder” also includes any transferees, pledgees, donees, or other successors in interest to the Selling Securityholder named in the table

below.

The following table sets forth the number of Offered Securities (i) known to us to be beneficially owned by each of the Selling Securityholders as of April 11, 2025, (ii) being offered hereby by each of the Selling Securityholders and (iii) beneficially owned by each of the Selling Securityholders after giving effect to the sale by a Selling Securityholder of all of its Offered Securities. The following table also sets forth the percentage of Common Stock beneficially owned by each of the Selling Securityholders after giving effect to the sale by a Selling Securityholder of all Offered Securities, based on 24,966,053 shares of Common Stock outstanding as of April 11, 2025. For purposes of the table below, we have assumed, upon termination of this offering, none of the Offered Securities will be beneficially owned by any of the Selling Securityholders, and we have further assumed that a Selling Securityholder will not acquire beneficial ownership of any additional securities during the offering.

The Selling Securityholders are not making any representation that any of the Offered Securities covered by this prospectus will be offered for sale. Because we do not know how long each of the Selling Securityholders will hold the Offered Securities, whether any will exercise the Warrants and, upon such exercise, how long each such Selling Securityholders will hold the shares of Common Stock before selling them, and because each of the Selling Securityholders may dispose of all, none or some portion of its securities, no estimate can be given as to the number of securities that will be beneficially owned by a Selling Securityholder upon completion of this offering. In addition, each Selling Securityholder may have sold, transferred or otherwise disposed of its securities in transactions exempt from the registration requirements of the Securities Act after the date on which the information in the table is presented.

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We may amend or supplement this prospectus from time to time in the future to update or change this Selling Securityholders list and the securities that may be resold.

Selling Shareholders	Shares of Common Stock Beneficially Owned Before Offering		Maximum Number of Shares of Common Stock Offered	Shares of Common Stock Beneficially Owned After Offering	
	Number	Percentage(1)	Offered	Number	Percentage(1)
Entities affiliated with Deerfield Management Company, L.P. (2)	15,558,445	9.99%	3,223,728(3)	12,334,717	9.99%
Cystic Fibrosis Foundation (4)	2,494,109	9.99%	2,839,846(5)	2,494,109	9.99%
NCP RFM LP (6)	2,494,109	9.99%	230,653(7)	2,494,109	9.99%
Nantahala Capital Partners LP (6)	2,494,109	9.99%	271,306(8)	2,494,109	9.99%
Pinehurst Partners, LP (6)	2,494,109	9.99%	187,488(9)	2,494,109	9.99%
Blackwell Partners LLC - Series A (6)	2,494,109	9.99%	810,626(10)	2,494,109	9.99%
District 2 Capital Fund LP (11)	541,123	2.17%	1,608,029(12)	541,123	2.17%
Alyeska Master Fund, L.P. (13)	1,590,738	6.37%	725,338(14)	1,590,738	6.37%
AIGH Investment Partners, LP (15)	1,566,944	6.28%	533,123(16)	1,566,944	6.28%
WVP Emerging Manager Onshore Fund, LLC – AIGH Series (15)	1,566,944	6.28%	192,215(17)	1,566,944	6.28%
Telmina Limited (18)	932,681	3.74%	900,380(19)	932,681	3.74%
3i, LP (20)	270,561	1.08%	804,015(21)	270,561	1.08%
YA II PN, Ltd. (22)	375,479	1.50%	398,213(23)	375,479	1.50%
Lytton-Kambara Foundation (24)	729,496	2.92%	455,408(25)	729,496	2.92%
ADAR1 Partners, LP (26)	1,162,196	4.66%	455,408(27)	1,162,196	4.66%
Allostery Master Fund LP (28)	940,629	3.77%	455,408(29)	940,629	3.77%
Alumni Capital LP (30)	135,281	*	402,009(31)	135,281	*
Kingsbrook Opportunities Master Fund LP (32)	97,931	*	94,595(33)	97,931	*
Boothbay Absolute Return Strategies, LP (34)	162,376	*	149,028(35)	162,376	*
Boothbay Diversified Alpha Master Fund LP (36)	12,950	*	12,950(37)	12,950	*
Red Hook Fund LP (38)	214,915	*	214,915(39)	214,915	*
Warberg WF XII LP (40)	107,458	*	107,458(41)	107,458	*
Richard Molinsky (42)	27,056	*	80,402(43)	27,056	*
Abraham D. Sofaer (44)	243,109	*	32,695(45)	243,109	*
Norm Gitis (46)	136,036	*	15,544(47)	136,036	*

\* Less than 1%

- (1) Any securities not outstanding which are subject to options, warrants, rights or conversion privileges are deemed to be outstanding for the purpose of computing the percentage of outstanding securities of the class owned by such selling stockholder but are not deemed to be outstanding for the purpose of computing the percentage of the class by any other selling stockholder.
- (2) The shares of Common Stock beneficially owned consist of (A) (i) 1,247,054 shares of common stock, (ii) 4,795,700 shares of Common Stock issuable upon conversion of shares of Series X Preferred Stock (subject to the Beneficial Ownership Limitation (as defined below)) and (iii) 1,736,469 shares of common stock issuable upon exercise of warrants that were exercisable as of April 11, 2025, or will become exercisable within 60 days thereafter, in each case, held directly by Deerfield Private Design Fund V, L.P., and (B) (i) 1,247,054 shares of Common Stock, (ii) 4,795,700 shares of Common Stock issuable upon conversion of shares of Series X Preferred Stock (subject to the Beneficial Ownership Limitation (as defined below)) and (iii) 1,736,469 shares of Common Stock issuable upon exercise of warrants (subject to the Beneficial Ownership Limitation) that were exercisable as of April 11, 2025, or will become exercisable within 60 days thereafter, in each case, held directly by Deerfield Healthcare Innovations Fund II, L.P. Such amounts exclude an aggregate of 3,223,728 shares of Common Stock issuable upon exercise of the New Warrants (subject to the Beneficial Ownership Limitation) as such New Warrants will only become exercisable, if at all, following stockholder approval. The terms of the Series X Preferred Stock and provisions of the warrants restrict the conversion of such shares or the exercise of such warrants, as applicable, to the extent that, upon such conversion or exercise, the number of shares of Common Stock then beneficially owned by the holder and its affiliates and any other person or entities with which such holder would constitute a Section 13(d) "group" would exceed 9.99% of the total number of shares of Common Stock then outstanding (the "Beneficial Ownership Limitation"). Accordingly, notwithstanding the number of shares reported, each of Deerfield Private Design Fund V, L.P. and Deerfield Healthcare Innovations Fund II, L.P. (and each other person that may be deemed to beneficially own shares of common stock held directly by either of them) disclaims beneficial ownership of the shares of Common Stock issuable upon conversion of Series X Preferred Stock and the exercise of such warrants to the extent that upon such conversion or exercise the number of shares beneficially owned by all reporting persons hereunder, in the aggregate, would exceed the Beneficial Ownership Limitation.

Mr. Flynn is the managing member of the general partner of each of Deerfield Mgmt V, L.P. ("Deerfield Mgmt V") and Deerfield Mgmt HIF II, L.P. ("Deerfield Mgmt HIF II") and Deerfield Management Company, L.P. ("Deerfield Management"). Deerfield Mgmt V is the general partner of Deerfield Private Design Fund V, L.P. Deerfield Mgmt HIF II is the general partner of Deerfield Healthcare Innovations Fund II, L.P. and Deerfield Management is the investment manager of each Fund. As a result, Deerfield Management and Mr. Flynn have shared voting power and shared dispositive power over the securities held by the Funds, Deerfield Mgmt V has shared voting power and shared dispositive power over the securities held by Deerfield Private Design Fund V, L.P. and Deerfield Mgmt HIF II shared voting power and shared dispositive power over the securities held by Deerfield HIF II. The address for Deerfield is 345 Park Avenue South, 12th Floor, New York, New York 10010.

- (3) Represents 1,611,864 New Warrant Shares beneficially owned by each of Deerfield Private Design Fund V, L.P. and Deerfield Healthcare Innovations Fund II, L.P.
- (4) Represents 2,494,109 shares of Common Stock and excludes (i) 1,308,800 shares of Common Stock issuable upon conversion of 13,088 shares of Series X Preferred Stock (subject to a 9.99% beneficial ownership limitation), (ii) 1,081,750 shares of Common Stock issuable upon exercise of the Common Warrants (subject to a 9.99% beneficial ownership limitation), (iii) 1,174,859 shares of Common Stock issuable upon exercise of the New Warrants (subject to a 9.99% beneficial ownership blocker), (iv) 375,399 shares of Common Stock issuable upon exercise of the A&R Warrants, (v) 583,237 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a 9.99% beneficial ownership limitation) and (vi) 591,622 shares of Common Stock issuable upon exercise of registered Pre-Funded Warrants (subject to a 9.99% beneficial ownership limitation). Such New Warrants, Common Warrants and Pre-Funded Warrants will only be exercisable following stockholder approval.

The address of Cystic Fibrosis Foundation is 4550 Montgomery Ave., Suite 1100N Bethesda, MD 20814.

- (5) Represents (i) 583,237 Pre-Funded Warrant Shares, (ii) 1,081,750 New Warrant Shares, and (iii) 1,174,859 Common Warrant Shares.
- (6) Represents 2,494,109 shares of Common Stock and excludes (i) 865,300 shares of Common Stock issuable upon exercise of the New Warrants (subject to a beneficial ownership limitation of 9.99%), (ii) 424,191 shares of Common Stock issuable upon exercise of the Common Warrants (subject to a beneficial ownership limitation of 9.99%), (iii) 101,791 shares of Common Stock issuable upon exercise of the A&R Warrants, (iv) 210,582 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a 9.99% beneficial ownership limitation), and (v) 213,609 shares of Common Stock issuable upon exercise of registered Pre-Funded Warrants (subject to a 9.99% beneficial ownership limitation). Such New Warrants, Common Warrants and Pre-Funded Warrants will only be exercisable following stockholder approval.

Nantahala Capital Management, LLC is a Registered Investment Adviser and has been delegated the legal power to vote and/or direct the disposition of such securities on behalf of the selling stockholder as a General Partner, Investment Manager, or Sub-Advisor and would be considered the beneficial owner of such securities. The above shall not be deemed to be an admission by the record owners or the selling stockholder that they are themselves beneficial owners of these securities for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or any other purpose. Wilnot Harkey and Daniel Mack are managing members of Nantahala Capital Management, LLC and may be deemed to have voting and dispositive power over the shares held by the selling stockholder. The pre-funded warrants are subject to a beneficial ownership limitation of 9.99, which such limitation restricts the selling stockholder from exercising that portion of the pre-funded warrants that would result in the selling stockholder and its affiliates owning, after exercise, a number of shares of common stock in excess of the beneficial ownership limitation.

The address of Nantahala Capital Management, LLC and NCP RFM LP is 130 Main St, New Canaan, Connecticut 06840. The address of Pinehurst Partners, LP is Corporation Trust Center 1209 Orange Street, Wilmington, DE 19801. The address of Blackwell Partners LLC – Series A is 280 South Mangum Street, Suite 210, Durham, NC 27701.

- (7) Represents (i) 32,379 Pre-Funded Warrant Shares, (ii) 133,050 New Warrant Shares, and (iii) 65,224 Common Warrant Shares.

- (8) Represents (i) 38,086 Pre-Funded Warrant Shares, (ii) 156,500 New Warrant Shares, and (iii) 76,720 Common Warrant Shares.
- (9) Represents (i) 26,320 Pre-Funded Warrant Shares, (ii) 108,150 New Warrant Shares, and (iii) 53,018 Common Warrant Shares.
- (10) Represents (i) 113,797 Pre-Funded Warrant Shares, (ii) 467,600 New Warrant Shares, and (iii) 229,229 Common Warrant Shares.
- (11) Represents 541,123 shares of Common Stock and excludes (i) 1,074,576 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), and (ii) 533,453 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants. Such Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

The address of District 2 Capital Fund LP is 14 Wall Street, 2<sup>nd</sup> Floor, Huntington, NY 11743.

- (12) Represents (i) 533,453 Pre-Funded Warrant Shares, and (ii) 1,074,576 Common Warrant Shares.
- (13) Represents 1,590,738 shares of Common Stock and excludes (i) 292,638 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 9.99%), and (ii) 432,700 shares of Common Stock issuable upon exercise of the New Warrants (subject to a beneficial ownership limitation of 9.99%). Such New Warrants and Common Warrants will only be exercisable following stockholder approval.

The address of Alyeska Master Fund, L.P. is 77 W. Wacker, Suite 700, Chicago, IL 60601.

- (14) Represents (i) 432,700 New Warrant Shares, and (ii) 292,638 Common Warrant Shares.
- (15) Represents (i) 1,182,923 shares of Common Stock held by AIGH Investment Partners, L.P. (“AIGH LP”), and (ii) 384,021 shares of Common Stock held by WVP Emerging Manager Onshore Fund, LLC - AIGH Series (“WVP-AIGH”). Excludes (i) 432,700 shares of Common Stock issuable upon exercise of the New Warrants (subject to a beneficial ownership limitation of 9.99%), and (ii) 292,638 shares of Common Stock issuable upon exercise of the Common Warrants (subject to a beneficial ownership limitation of 9.99%). Such New Warrants and Common Warrants will only be exercisable following stockholder approval.

AIGH Capital Management, LLC (“AIGH CM”), as an Advisor or Sub-Advisor of AIGH LP and WVP-AIGH, may be deemed to beneficially own the securities held by AIGH LP and WVP-AIGH. Mr. Hirschman, as Managing Member of AIGH CM and president of AIGH Investment Partners, L.L.C (“AIGH LLC”), may be deemed to beneficially own the securities held by AIGH CM and AIGH LLC. The principal business address of Mr. Hirschman and each such entity is 6006 Berkeley Avenue, Baltimore, MD 21209.

- (16) Represents (i) 324,900 New Warrant Shares, and (ii) 208,223 Common Warrant Shares.
- (17) Represents (i) 107,800 New Warrant Shares, and (ii) 84,415 Common Warrant Shares.

- (18) Represents 932,681 shares of Common Stock and excludes (i) 514,945 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 9.99%), (ii) 129,800 shares of Common Stock issuable upon exercise of the New Warrants (subject to a beneficial ownership limitation of 9.99%), and (iii) 255,635 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 9.99%). Such New Warrants, Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

Telmina Limited is a BVI company with an address at C/O Geneva Trust Company (GTC) S.A., 34 Rue de l'athenee, PO Box 393, 1211 Geneva 12, Switzerland, whose shares are registered through its parent, treasury, company Centaurus Investments Limited.

- (19) Represents (i) 129,800 New Warrant Shares, (ii) 514,945 Common Warrant Shares, and (iii) 255,635 Pre-Funded Warrant Shares.
- (20) Represents 270,561 shares of Common Stock and excludes (i) 537,288 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), and (ii) 266,727 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%). Such New Warrants and Common Warrants will only be exercisable following stockholder approval.

3i Management LLC is the general partner of 3i, LP, and Maier Joshua Tarlow is the manager of 3i Management LLC. As such, Mr. Tarlow exercises sole voting and investment discretion over securities beneficially owned directly or indirectly by 3i, LP and 3i Management LLC. Mr. Tarlow disclaims beneficial ownership of the securities beneficially owned directly by 3i, LP and indirectly by 3i Management LLC. The business address of each of the aforementioned parties is 2 Wooster Street, 2nd Floor, New York, NY 10013. We have been advised that none of Mr. Tarlow, 3i Management LLC, or 3i, LP is a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, or an affiliate or associated person of a FINRA member or independent broker-dealer.

- (21) Represents (i) 266,727 Pre-Funded Warrant Shares and (ii) 537,288 Common Warrant Shares.
- (22) Represents 375,479 shares of Common Stock and excludes (i) 386,846 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), and (ii) 11,367 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%). Such New Warrants and Common Warrants will only be exercisable following stockholder approval.

The address of YA II PN, Ltd. is 1012 Springfield Avenue, Mountainside, NJ 07092.

- (23) Represents (i) 11,367 Pre-Funded Warrant Shares and (ii) 386,846 Common Warrant Shares.
- (24) Represents 729,496 shares of Common Stock and excludes (i) 159,752 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), (ii) 79,306 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%), and (iii) 216,350 shares of Common Stock issuable upon exercise of the New Warrants. Such New Warrants, Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

The address of Lytton-Kambara Foundation is 467 Central Park West 17-A, New York, NY 10025.

- (25) Represents (i) 79,306 Pre-Funded Warrant Shares, (ii) 216,350 New Warrant Shares, and (iii) 159,752 Common Warrant Shares.
- (26) Represents 1,162,196 shares of Common Stock and excludes (i) 159,752 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), (ii) 79,306 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%), and (iii) 216,350 shares of Common Stock issuable upon exercise of the New Warrants. Such New Warrants and Common Warrants will only be exercisable following stockholder approval.

The address of ADAR1 Partners, LP is 3503 Wild Cherry Drive, Building 9, Austin TX 78738.

- (27) Represents (i) 79,306 Pre-Funded Warrant Shares, (ii) 216,350 New Warrant Shares, and (iii) 159,752 Common Warrant Shares.
- (28) Represents 940,629 shares of Common Stock and excludes (i) 159,752 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), (ii) 79,306 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%), and (iii) 216,350 shares of Common Stock issuable upon exercise of the New Warrants. Such New Warrants, Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

The address of Allosterly Master Fund LP is One Stamford Plaza, 9th Floor, 263 Tresser Boulevard, Stamford, CT 06901.

- (29) Represents (i) 79,306 Pre-Funded Warrant Shares, (ii) 216,350 New Warrant Shares, and (iii) 159,752 Common Warrant Shares.
- (30) Represents 135,281 shares of Common Stock and excludes (i) 268,645 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), and (ii) 133,364 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%). Such New Warrants and Common Warrants will only be exercisable following stockholder approval.

The address of Alumni Capital LP is 80 S.W. 8<sup>th</sup> Street Suite 2000, Miami, FL 33131.

- (31) Represents (i) 133,364 Pre-Funded Warrant Shares and (ii) 268,645 Common Warrant Shares.
- (32) Represents 97,931 shares of Common Stock and excludes (i) 21,363 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), (ii) 8,332 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%), and (iii) 64,900 shares of Common Stock issuable upon exercise of the New Warrants. Such New Warrants, Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

Kingsbrook Partners LP ("Kingsbrook Partners") is the investment manager of Kingsbrook Opportunities Master Fund LP ("Kingsbrook Opportunities") and consequently has voting control and investment discretion over securities held by Kingsbrook Opportunities. Kingsbrook Opportunities GP LLC ("Opportunities GP") is the general partner of Kingsbrook Opportunities and may be considered the beneficial owner of any securities deemed to be beneficially owned by Kingsbrook Opportunities. KB GP LLC ("GP LLC") is the general partner of Kingsbrook Partners and may be considered the beneficial owner of any securities deemed to be beneficially owned by Kingsbrook Partners. Ari J. Storch, Adam J. Chill and Scott M. Wallace are the sole managing members of Opportunities GP and GP LLC and as a result may be considered beneficial owners of any securities deemed beneficially owned by Opportunities GP and GP LLC. Each of Kingsbrook Partners, Opportunities GP, GP LLC and Messrs. Storch, Chill and Wallace disclaim beneficial ownership of these securities. Kingsbrook's address is 689 Fifth Avenue, 12th Floor, New York, NY 10022.

- (33) Represents (i) 8,332 Pre-Funded Warrant Shares, (ii) 64,900 New Warrant Shares, and (iii) 21,363 Common Warrant Shares.
- (34) Represents 162,376 shares of Common Stock and excludes (i) 85,452 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), (ii) 33,326 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%), and (iii) 30,250 shares of Common Stock issuable upon exercise of the New Warrants. Such New Warrants, Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

Boothbay Absolute Return Strategies LP, a Delaware limited partnership (the “Boothbay ARS Fund”), is managed by Boothbay Fund Management, LLC, a Delaware limited liability company (the “Boothbay Adviser”). The Boothbay Adviser, in its capacity as the investment manager of the Boothbay ARS Fund, has the power to vote and the power to direct the disposition of all securities held by the Boothbay ARS Fund. Ari Glass is the Managing Member of the Boothbay Adviser. Each of the Boothbay ARS Fund, the Boothbay Adviser and Mr. Glass disclaim beneficial ownership of these securities, except to the extent of any pecuniary interest therein. The Boothbay ARS Fund’s address is c/o Boothbay Fund Management, LLC, 140 East 45th Street, 14th Floor, New York, NY 10017.

- (35) Represents (i) 33,326 Pre-Funded Warrant Shares, (ii) 30,250 New Warrant Shares, and (iii) 85,452 Common Warrant Shares.
- (36) Represents 12,950 shares of Common Stock and excludes 12,950 shares of Common Stock issuable upon exercise of the New Warrants. Such New Warrants and Common Warrants will only be exercisable following stockholder approval.

Boothbay Diversified Alpha Master Fund LP, a Cayman Islands limited partnership (the “Fund”), is managed by Boothbay Fund Management, LLC, a Delaware limited liability company (the “Adviser”). The Adviser, in its capacity as the investment manager of the Fund, has the power to vote and the power to direct the disposition of all securities held by the Fund. Ari Glass is the Managing Member of the Adviser. Each of the Fund, the Adviser and Mr. Glass disclaim beneficial ownership of these securities, except to the extent of any pecuniary interest therein.

- (37) Represents 12,950 New Warrant Shares.
- (38) Represents 214,915 shares of Common Stock and excludes 214,915 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%). Such Common Warrants will only be exercisable following stockholder approval.

The address of Red Hook Fund LP 44 Ball Road, Mountain Lakes, NJ 07046.

- (39) Represents 214,915 Common Warrant Shares.
- (40) Represents 107,458 shares of Common Stock and excludes 107,458 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%). Such Common Warrants will only be exercisable following stockholder approval.

The address of Warberg WF XII LP is 716 Oak Street, Winnetka, IL 60093.

- (41) Represents 107,458 Common Warrant Shares.
- (42) Represents 27,056 shares of Common Stock and excludes (i) 53,729 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), and (ii) 26,673 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%). Such Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

Richard Molinsky is a natural person with an address of 329 Chestnut Hill Road, Unit 2, Norwalk CT 06851.

- (43) Represents (i) 26,673 Pre-Funded Warrant Shares, and (ii) 53,729 Common Warrant Shares.
- (44) Represents 243,109 shares of Common Stock and excludes (i) 7,414 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), (ii) 3,681 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%), and (iii) 21,600 shares of Common Stock issuable upon exercise of the New Warrants. Such New Warrants, Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

Abraham D. Sofaer is a natural person with an address of 1200 Bryant Street, Palo Alto, CA 94301.

- (45) Represents (i) 3,681 Pre-Funded Warrant Shares, (ii) 21,600 New Warrant Shares, and (iii) 7,414 Common Warrant Shares.
- (46) Represents 136,036 shares of Common Stock and excludes (i) 3,170 shares of Common Stock issuable upon exercise of Common Warrants (subject to a beneficial ownership limitation of 4.99%), (ii) 1,574 shares of Common Stock issuable upon exercise of the Pre-Funded Warrants (subject to a beneficial ownership limitation of 4.99%), and (iii) 10,800 shares of Common Stock issuable upon exercise of the New Warrants. Such New Warrants, Pre-Funded Warrants and Common Warrants will only be exercisable following stockholder approval.

Norm Gitis is a natural person with an address of 13 Clover Lane, San Carlos, CA 94070.

- (47) Represents (i) 1,574 Pre-Funded Warrant Shares, (ii) 10,800 New Warrant Shares, and (iii) 3,170 Common Warrant Shares.

## PLAN OF DISTRIBUTION

We are registering a total of (i) up to 2,305,869 Pre-Funded Warrant Shares issuable upon exercise of the Pre-Funded Warrants, (ii) up to 5,939,383 Common Warrant Shares issuable upon exercise of the Common Warrants and (iii) up to 6,955,528 New Warrant Shares issuable upon exercise of the New Warrants issued to the Selling Securityholders to permit the sale, transfer or other disposition of the Offered Securities by the Selling Securityholders or their donees, pledgees, transferees or other successors-in-interest from time to time after the date of this prospectus. We will not receive any of the proceeds from these sales except with respect to amounts received by us upon the exercise of the Warrants for cash. Upon exercise of such Warrants, we will receive the applicable cash exercise price paid by the holders of the Warrants. We will, or will procure to, bear all fees and expenses incident to our obligation to register the Offered Securities.

The Selling Securityholders may sell all or a portion of the Offered Securities beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the Offered Securities are sold through underwriters or broker-dealers, the Selling Securityholders will be responsible for underwriting discounts (it being understood that the Selling Securityholders shall not be deemed to be underwriters solely as a result of their participation in this offering) or commissions or agent's commissions. The Offered Securities may be sold on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. The Selling Securityholders may use any one or more of the following methods when selling Offered Securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the Offered Securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- to or through underwriters or purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- broker-dealers may agree with the Selling Securityholders to sell a specified number of such Offered Securities at a stipulated price per Offered Security;
- through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The Selling Securityholders also may resell all or a portion of the Offered Securities in open market transactions in reliance upon Rule 144 under the Securities Act, as amended, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that they meet the criteria and conform to the requirements of those provisions.

Broker-dealers engaged by the Selling Securityholders may arrange for other broker-dealers to participate in sales. If the Selling Securityholders effect such transactions by selling Offered Securities to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the Selling Securityholders or commissions from purchasers of the Offered Securities for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2121.01.

In connection with sales of the Offered Securities or otherwise, the Selling Securityholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Offered Securities in the course of hedging in positions they assume. The Selling Securityholders may also sell Offered Securities short and if such short sale takes place after the date that this Registration Statement is declared effective by the Commission, the Selling Securityholders may deliver Offered Securities covered by this prospectus to close out short positions and to return borrowed Offered Securities in connection with such short sales. The Selling Securityholders may also loan or pledge Offered Securities to broker-dealers that in turn may sell such Offered Securities, to the extent permitted by applicable law. The Selling Securityholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction). Notwithstanding the foregoing, the Selling Securityholders have been advised that they may not use Offered Securities the resale of which has been registered on this registration statement to cover short sales of our Common Stock made prior to the date the registration statement, of which this prospectus forms a part, has been declared effective by the SEC.

The Selling Securityholders may, from time to time, pledge or grant a security interest in some or all of the Offered Securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the Offered Securities from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, amending, if necessary, the list of Selling Securityholders to include the pledgee, transferee or other successors in interest as Selling Securityholders under this prospectus. The Selling Securityholders also may transfer and donate the Offered Securities in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The Selling Securityholders and any broker-dealer or agents participating in the distribution of the Offered Securities may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling Securityholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the applicable prospectus delivery requirements of the Securities Act including Rule 172 thereunder and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Each Selling Securityholder has informed the Company that it is not a registered broker-dealer, and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Offered Securities. Upon the Company being notified in writing by a Selling Securityholder that any material arrangement has been entered into with a broker-dealer for the sale of the Offered Securities through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such Selling Securityholder and of the participating broker-dealer(s), (ii) the number of Offered Securities involved, (iii) the price at which such Offered Securities were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In no event shall any broker-dealer receive fees, commissions and markups, which, in the aggregate, would exceed eight percent (8.0%).

Under the securities laws of some U.S. states, the Offered Securities may be sold in such states only through registered or licensed brokers or dealers. In addition, in some U.S. states the Offered Securities may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any Selling Securityholder will sell any or all of the Offered Securities registered pursuant to the shelf registration statement, of which this prospectus forms a part.

Each Selling Securityholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the Offered Securities by the Selling Securityholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the Offered Securities to engage in market-making activities with respect to the Offered Securities. All of the foregoing may affect the marketability of the Offered Securities and the ability of any person or entity to engage in market-making activities with respect to the Offered Securities.

We will pay all expenses of the registration of the Offered Securities pursuant to the Registration Rights Agreement, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; *provided, however*, that each Selling Securityholder will pay all underwriting discounts and selling commissions, if any and any related legal expenses incurred by it. We will indemnify the Selling Securityholders against certain liabilities, including some liabilities under the Securities Act, in accordance with the Registration Rights Agreement, or the Selling Securityholders will be entitled to contribution. We may be indemnified by the Selling Securityholders against certain civil liabilities set forth in the Registration Rights Agreement, including liabilities under the Securities Act, that may arise from any written information furnished to us by the Selling Securityholders specifically for use in this prospectus, in accordance with the related registration rights agreements, or we may be entitled to contribution.

## DESCRIPTION OF SECURITIES TO BE REGISTERED

*The following description of our Common Stock summarizes the material terms and provisions of our Common Stock. The following description does not purport to be complete and is subject to, and qualified in its entirety by, BiomX's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, each as may be amended, which were filed as Exhibits 3.1 and 3.2, respectively, to BiomX's Annual Report on Form 10-K for the year ended December 31, 2024, as filed with the SEC on March 25, 2025, and are incorporated by reference into the registration statement of which this prospectus forms a part, and by applicable law. The terms of BiomX's Common Stock may also be affected by Delaware law.*

Our authorized capital stock consists of 750,000,000 shares of Common Stock, and 1,000,000 shares of preferred stock, \$0.0001 par value per share, of which 147,735 shares are designated as Series X Non-Voting Convertible 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.

### Listing

Our Common Stock is listed on NYSE American under the symbol “PHGE.”

### Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is Continental Stock Transfer & Trust Company. The transfer agent and registrar's address is 1 State Street, 30th Floor, New York, NY 10004-1561.

### 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 15% 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 90<sup>th</sup> day nor earlier than the opening of business on the 120<sup>th</sup> 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.

## LEGAL MATTERS

Haynes and Boone, LLP, New York, New York, will pass upon the validity of the securities offered hereby.

## EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2024, have been so incorporated in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1C to the financial statements) of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, an independent registered public accounting firm, given upon the authority of said firm as experts in auditing and accounting.

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## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We are "incorporating by reference" certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus. Statements contained in documents that we file with the SEC and that are incorporated by reference in this prospectus will automatically update and supersede information contained in this prospectus, including information in previously filed documents or reports that have been incorporated by reference in this prospectus, to the extent the new information differs from or is inconsistent with the old information.

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2024, filed with the SEC on March 25, 2025;
- Our Current Reports on Form 8-K (other than any portions thereof deemed furnished and not filed) filed with the SEC on [February 27, 2025](#), [March 5, 2025](#), and [March 31, 2025](#); and
- The descriptions of our Common Stock and preferred stock, incorporated by reference to [Exhibit 4.1](#) to our Annual Report on [Form 10-K](#) for the year ended December 31, 2024, filed with the SEC on March 25, 2025, including any amendment or report filed or to be filed for the purpose of updating such descriptions.

All documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (1) after the date of the filing of the registration statement of which this prospectus forms a part and prior to its effectiveness and (2) until all of the securities to which this prospectus relates has been sold or the offering is otherwise terminated, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not to be considered "filed" under the Exchange Act, will be deemed to be incorporated by reference in this prospectus and any accompanying prospectus supplement and to be a part hereof from the date of filing of such documents.

We will provide a copy of the documents we incorporate by reference, at no cost, to any person who receives this prospectus. To request a copy of any or all of these documents, you should write or telephone us at 22 Einstein St., Floor 4, Ness Ziona, 7414003, Israel, Attention: Ms. Marina Wolfson, or (972) 72-394-2377.

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## WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at [www.sec.gov](http://www.sec.gov). Copies of certain information filed by us with the SEC are also available on our website at [www.biomx.com](http://www.biomx.com). Our website is not a part of this prospectus and is not incorporated by reference in this prospectus. These references to websites are inactive textual references only, and are not hyperlinks.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiary and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements. You can obtain a copy of the registration statement from the SEC's website.

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Up to 2,305,869 Shares of Common Stock Issuable Upon Exercise of Pre-Funded Warrants  
Up to 5,939,383 Shares of Common Stock Issuable Upon Exercise of Common Warrants  
Up to 6,955,528 Shares of Common Stock Issuable Upon Exercise of New Warrants  
Offered by the Selling Securityholders Named Herein



PROSPECTUS

Dated April 23, 2025

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