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

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

#### BIOMX INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware		2836	8	82-3364020				
`	ate or other jurisdiction of (Primary Standard Industrial			(I.R.S. Employer				
incorporation or organizat	zation) Classification Code Number) Identification No.)							
		708 Quince Orchard Rd, Suite 205 Gaithersburg, MD 20878						
		(844) 972-0500						
(Address, inc	cluding zip code, and tele	phone number, including area code, of R	degistrant's principal executive off	ices)				
AMENDED AN	ND RESTATED CHARD	OAN HEALTHCARE ACQUISITION CO (Full title of the plans)	ORP. LONG-TERM INCENTIVE	PLAN				
		Marina Wolfson						
		BiomX Inc.						
		708 Quince Orchard Rd, Suite 205						
		Gaithersburg, MD 20878 (844) 972-0500						
(Nam	ne. address, including zin	code, and telephone number, including	area code, of agent for service)					
(2.14	-e, add: e55,e.adg 2-p	tout, and temphone number, menumg	area coue, or agent for service,					
		Copies to: Howard E. Berkenblit Sullivan & Worcester LLP One Post Office Square Boston, Massachusetts 02109 (617) 338-2800						
		d filer, an accelerated filer, a non-accelerate company" in Rule 12b-2 of the Exchange		any. See the definitions of				
Large accelerated filer		Ad	ccelerated filer					
Non-accelerated filer	$\boxtimes$		naller reporting company	$\boxtimes$				
		Er	nerging growth company					
If an emerging growth company, indicate accounting standards provided pursuant		istrant has elected not to use the extended to be Securities Act. $\square$	ransition period for complying with	any new or revised financial				

#### EXPLANATORY NOTE

On January 2, 2020, BiomX Inc., or the Company, filed a Registration Statement on Form S-8 (File No. 333-235777), or, as amended, the Original Registration Statement, with the Securities and Exchange Commission, or the Commission, to register an aggregate of 100 shares of Common Stock of the Company that may be issued pursuant to the Chardan Healthcare Acquisition Corp. 2019 Omnibus Long-Term Incentive Plan, or the 2019 Plan, as well as 314,836 shares of Common Stock of the Company that may be issued pursuant to the 2015 Employee Stock Option Plan for Key Employees of BiomX Ltd., as amended.

The 2019 Plan was originally adopted by the Board on September 17, 2019 and subsequently approved by our stockholders on October 23, 2019 and further amended on August 28, 2023.

As previously reported in connection with the merger agreement, or the Merger Agreement, entered into on March 6, 2024, by and among the Company, BTX Merger Sub I, Inc., BTX Merger Sub II, LLC and Adaptive Phage Therapeutics, Inc., on July 9, 2024, the Company's stockholders approved an amendment and restatement of the 2019 Plan, or the Amended Plan, pursuant to which shares of Common Stock equal to 15% of the fully-diluted outstanding equity interests of the Company immediately following the completion of the merger contemplated by the Merger Agreement (after giving effect to the conversion of the Series X Non-Voting Convertible Preferred Stock, par value \$0.0001 per share to the Company's shares of Common Stock and the exercise of the warrants as described in the Proxy Statement filed with the Securities and Exchange Commission, or the SEC, on June 17, 2024) will be reserved for issuance to the Company's employees, directors, consultants and other service providers.

On August 26, 2024, the Company effected a one-for-ten (1:10) reverse stock split of its shares of Common Stock, or the Reverse Split, such that every ten (10) shares of Common Stock issued and outstanding as of August 26, 2024, were converted into one (1) share of Common Stock. All quantities of Common Stock and per share data presented herein give retroactive effect to the Reverse Split.

The Company is filing this Registration Statement on Form S-8 to register an additional 7,192,482 shares of Common Stock of the Company, such that an aggregate amount of 7,800,000 shares of Common Stock may be issued in connection with securities awards, which have been granted or may hereafter be granted under the Amended Plan. The 7,192,482 shares of Common Stock of the Company being registered hereunder for the Amended Plan are comprised of: (i) 1,567,795 shares of Common Stock subject to awards granted on July 11, 2024; and (ii) 5,624,687 shares of Common Stock available for issuance.

Pursuant to General Instruction E to Form S-8, the contents of the Original Registration Statement are incorporated herein by reference, except for Item 3 and Item 8 of Part II of the Original Registration Statement, which are being updated by this Registration Statement.

# PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference.

The following documents filed with the Securities and Exchange Commission, or the Commission, by BiomX Inc., or the Registrant, pursuant to the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, or the Exchange Act, are hereby incorporated by reference in this Registration Statement:

- (a) The Registrant's Annual Report on Form 10-K for the year ended December 31, 2023, filed with the Commission on April 4, 2024;
- (b) The Registrant's Quarterly Reports on Form 10-Q for the quarter ended March 31, 2024, filed with the Commission on May 20, 2024, and for the quarter ended June 30, 2024, filed with the Commission on August 14, 2024;
- (c) The Registrant's Current Reports on Form 8-K filed on March 6, 2024 (Items 1.01 and 3.02 and exhibits 2.1, 3.1, 4.1, 4.2, 4.3, 10.1, 10.2, 99.1 and 99.2 only), March 18, 2024 (as amended by the Registrant's Current Reports on Form 8-K/A filed on March 21, 2024 and May 30, 2024), April 15, 2024, May 30, 2024, July 9, 2024, July 29, 2024 and August 16, 2024; and
- (d) The description of the Registrant's common stock, warrants and units contained in the Registration Statement on Form 8-A filed on December 13, 2018, under the Exchange Act, as amended by Exhibit 4.1 the Registrant's Annual Report on Form 10-K for the year ended December 31, 2023, and including any further amendment or report filed or to be filed for the purpose of updating such description.

All documents that the Registrant subsequently files pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement indicating that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents; provided, however, that documents or information deemed to have been furnished and not filed shall not be incorporated by reference into this Registration Statement.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

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#### Item 8. Exhibits.

The following exhibits are filed or incorporated by reference as part of this Registration Statement:

Exhibit No.	Description
4.1	Composite Copy of the Amended and Restated Certificate of Incorporation of BiomX Inc., as amended to date (Incorporated by reference to Exhibit 3.1 of BiomX Inc.'s Quarterly Report on Form 10-Q filed with the Commission on August 14, 2024).
4.2	Amended and Restated Bylaws of BiomX Inc. (incorporated by reference to Exhibit 3.3 of BiomX Inc.'s Current Report on Form 8-K filed with the Commission on November 1, 2019).
4.3	Form of Certificate of Designation of Series X Preferred Stock (Incorporated by reference to Exhibit 3.1 of BiomX Inc.'s Current Report on Form 8-K filed with the Commission on March 6, 2024).
5.1*	Opinion of Sullivan & Worcester LLP
23.1*	Consent of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited.
24.1*	Power of Attorney (included on the signature pages to this Registration Statement)
99.1	Amended and Restated Chardan Healthcare Acquisition Corp. Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 of the BiomX Inc.'s Current Report on Form 8-K filed with the Commission on July 9, 2024)
107*	Filing Fee Table

\* Filed herewith.

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#### **SIGNATURES**

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Ness Ziona, Israel, on this 12 day of September, 2024.

Jonathan Solomon Chief Executive Officer

### POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each of the undersigned constitutes and appoints each of Mr. Jonathan Solomon and Ms. Marina Wolfson, and each or any one of them, as the undersigned's true and lawful attorneys-in-fact and agents, with full powers of substitution and resubstitution, for the undersigned and in the undersigned's name, place and stead, in any and all capacities, to sign any and all amendments (including pre-effective and post-effective amendments) to this Registration Statement and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto such attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Russell Greig Dr. Russell Greig	Chairman of the Board of Directors	September 12, 2024
/s/ Jonathan Solomon Jonathan Solomon	Chief Executive Officer (Principal Executive Officer) and Director	September 12, 2024
/s/ Marina Wolfson Marina Wolfson	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	September 12, 2024
/s/ Susan Blum Susan Blum	Director	September 12, 2024
/s/ Jesse Goodman Dr. Jesse Goodman	Director	September 12, 2024
/s/ Jonathan Leff Jonathan Leff	Director	September 12, 2024
/s/ Gregory Merril Gregory Merril	Director	September 12, 2024
/s/ Alan Moses Dr. Alan Moses	Director	September 12, 2024
/s/ Eddie Williams Eddie Williams	Director	September 12, 2024
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Sullivan & Worcester LLP One Post Office Square Boston, MA 02109

617 338 2800 sullivanlaw.com

September 12, 2024

BiomX Inc. 708 Quince Orchard Rd, Suite 205 Gaithersburg, MD 20878

#### Re: Registration of Shares under the Amended and Restated Chardan Healthcare Acquisition Corp. Long-Term Incentive Plan

Dear Ladies and Gentlemen:

In connection with the registration under the Securities Act of 1933, as amended (the "Act"), by BiomX Inc., a Delaware corporation (the "Company"), of 7,192,482 shares of its common stock, par value \$0.0001 per share ("Common Stock"), that are to be issued under the Amended and Restated Chardan Healthcare Acquisition Corp. Long-Term Incentive Plan (the "Plan"), including shares of common stock issuable upon the exercise of options which have been or will be granted and other shares of common stock that will be granted pursuant to the provisions of the Plan (all such shares to be issued thereunder referred to herein as, the "Registered Shares"), the following opinion is furnished to you to be filed with the Securities and Exchange Commission (the "Commission") as Exhibit 5.1 to the Company's Registration Statement on Form S-8 (the 'Registration Statement') under the Act.

We have acted as counsel to the Company in connection with the Registration Statement and we have examined originals or copies, certified or otherwise identified to our satisfaction, of the Registration Statement, the Amended and Restated Certificate of Incorporation of the Company, as currently in effect, the Amended and Restated By-laws of the Company, as currently in effect, the minute books and corporate records of the Company, and such other documents as we have considered necessary and appropriate in order to furnish the opinion hereinafter set forth.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents. Other than our examination of the documents indicated above, we have made no other examination in connection with this opinion.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

Based on and subject to the foregoing, we are of the opinion that, when issued in accordance with the terms of Plan and the options or other awards granted thereunder, the Registered Shares will be duly authorized, validly issued, fully paid and nonassessable by the Company.

This opinion speaks only as of the date hereof and we assume no obligation to update or supplement this opinion if any applicable laws change after the date of this opinion letter or if we become aware after the date of this opinion letter of any facts, whether existing before or arising after the date hereof, that might change the opinions expressed above

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm in the Prospectus forming a part of the Registration Statement. In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Sullivan & Worcester LLP Sullivan & Worcester LLP

BOSTON LONDON NEW YORK TEL AVIV WASHINGTON, DC

## CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of BiomX Inc. of our report dated April 3, 2024, relating to the financial statements, which appears in BiomX Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023.

Tel-Aviv, Israel September 12, 2024 /s/ Kesselman & Kesselman Certified Public Accountants (Isr.) A member firm of PricewaterhouseCoopers International Limited

# Form S-8 (Form Type)

#### BiomX Inc.

(Exact Name of Registrant as Specified in its Charter)

## Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount registered <sup>(1)</sup>	ma offer	oposed ximum ing price r share	Proposed maximum aggregate offering price	Fee Rate		mount of gistration fee
Equity	Common stock to be issued under the Amended and Restated Chardan Healthcare Acquisition Corp. Long-Term Incentive Plan (the "Amended Plan")  Common stock to be issued under the 2019 Plan pursuant to granted options	Rule 457(c) and Rule 457(h) Rule 457(h)	5,624,687 1,567,795	<u>\$</u>	1.03 <sup>(4)</sup> 3.63 <sup>(5)(6)</sup>	\$ 5,793,427.61 \$ 5,691,095.85	\$ 0.00014760 \$ 0.00014760	<u>\$</u> \$	855.11 840.01
	Total Offering Amounts Total Fee Offsets Net Fee Due					\$11,484,523.5		\$	1,695.12

- (1) Represents shares of common stock, par value \$0.0001 per share, or Common Stock, of BiomX Inc., issuable under the Amended Plan.
- (2) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended, or the Securities Act, this registration statement also covers an indeterminate number of additional shares of Common Stock that may be issued under the 2019 Plan to prevent dilution resulting from a share split, reverse share split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Registrant.
- (3) Number of shares of Common Stock following the one-for-ten (1:10) reverse stock split of the Company's shares of Common Stock effected by the Company on August 26, 2024 (the "Reverse Split").
- (4) Estimated solely for the purpose of calculating the registration fee in accordance with Rules 457(c) and (h) under the Securities Act, based upon the average of the high and low prices of the Common Stock, as reported on the NYSE American on September 11, 2024.
- (5) Computed in accordance with Rule 457(h), solely for the purpose of calculating the registration fee, based on the exercise price for outstanding stock options granted pursuant to the Amended Plan.
- (6) Price per Common Stock following the Reverse Split.