### 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)

2836 (Primary Standard Industrial 82-3364020

(I.R.S. Employer Identification No.)

22 Einstein St., Floor 4 Ness Ziona, Israel

**Classification Code Number)** 

+972 723942377 (Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

CHARDAN HEALTHCARE ACQUISITION CORP. 2019 OMNIBUS LONG-TERM INCENTIVE PLAN (Full title of the plans)

> Avraham Gabay BiomX Inc. 22 Einstein St., Floor 4 Ness Ziona, Israel +972 723942377

(Name, address, including zip code, and telephone number, including area code, of agent for service)

*Copies to:* Howard E. Berkenblit Sullivan & Worcester LLP One Post Office Square Boston, Massachusetts 02109 (617) 338-2800

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

Large accelerated filer Non-accelerated filer  $\times$ 

Delaware

(State or other jurisdiction of

incorporation or organization)

Accelerated filer	
Smaller reporting company	X
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 7(a)(2)(B) of the Securities Act.

### 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 1,000 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 3,148,360 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.

Pursuant to the 2019 Plan, the number of shares of Common Stock of the Company made available under the 2019 Plan will automatically increase 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, or the Evergreen Mechanism.

In accordance with the Evergreen Mechanism, the number of shares of Common Stock of the Company reserved under the 2019 Plan increased by 914,741, 930,813, 1,190,129 and 1,199,291 shares of Common Stock effective January 1, 2020, January 1, 2021, January 1, 2022 and January 1, 2023, respectively. Further, in accordance with the Evergreen Mechanism, the number of shares of Common Stock of the Company reserved under the 2019 Plan increased by 1,839,197 shares of Common Stock effective January 1, 2024.

The Company is filing this Registration Statement on Form S-8 to register an additional 1,839,197 shares of Common Stock of the Company, which may be issued in connection with securities awards, which have been granted or may hereafter be granted under the 2019 Plan.

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 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, and the Registrant's Current Report on Form 8-K/A filed on March 21, 2024; and
- (c) 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, including any 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.

### 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 the Exhibit 3.1 of BiomX Inc.'s Quarterly Report on Form 10-Q filed with the Commission on November 9, 2022).
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	Chardan Healthcare Acquisition Corp. 2019 Omnibus Long-Term Incentive Plan (incorporated by reference to Exhibit 10.10 of the BiomX Inc.'s Current Report on Form 8-K filed with the Commission on November 1, 2019)
107*	Filing Fee Table
* Filed herew	vith.

II-2

### 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 3<sup>rd</sup> day of April, 2024.

BIOMX INC.

By /s/ Jonathan Solomon

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, Ms. Marina Wolfson and Mr. Avraham Gabay, 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 linents 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	April 3, 2024
/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/ Jesse Goodman Jesse Goodman	Director	April 3, 2024
/s/ Jonathan Leff Jonathan Leff	Director	April 3, 2024
/s/ Gregory Louis Merril Gregory Louis Merril	Director	April 3, 2024
/s/ Alan Moses Dr. Alan Moses	Director	April 3, 2024
/s/ Eddie Williams Eddie Williams	Director	April 3, 2024

# II-3



Sullivan & Worcester LLP One Post Office Square Boston, MA 02109

617 338 2800 sullivanlaw.com

April 3, 2024

BiomX Inc. 22 Einstein St., Floor 4 Ness Ziona, Israel 7414003

### Re: Registration of Shares under the Chardan Healthcare Acquisition Corp. 2019 Omnibus 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 1,839,197 shares of its common stock, par value \$0.0001 per share ("Common Stock"), that are to be issued under the Chardan Healthcare Acquisition Corp. 2019 Omnibus Long-Term Incentive Plan (the "2019 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 2019 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 2019 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 the BiomX Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023.

Tel-Aviv, Israel April 3, 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)(2)</sup>	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Fee Rate	Amount of registration fee
Equity	Common stock to be issued under the Chardan Healthcare Acquisition Corp. 2019 Omnibus Long-Term Incentive Plan (the "2019 Plan")	Rule 457(c) and Rule 457(h)	1,839,197	\$	625,326.98 \$	0.00014760	\$ 92.30
	Total Offering Amounts Total Fee Offsets			<u>\$</u>	625,326.98		-
	Net Fee Due						\$ 92.30

(1) Represents shares of common stock, par value \$0.0001 per share, or Common Stock, of BiomX Inc., issuable under the 2019 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) 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 March 26, 2024.