SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D

[Rule 13d-101]

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO § 24.1 3d-1 (a) AND AMENDMENTS THERETO FILED PURSUANT TO § 240.13D-2(a)

(Amendment No.)*

BiomX Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

09090D103

(CUSIP Number)

David Clark
Deerfield Management Company, L.P.
345 Park Avenue South, 12th
Floor, New York,
New York 10010
(212) 551-1600

With a copy to:

Jonathan D. Weiner, Esq. Mark D. Wood, Esq. Katten Muchin Rosenman LLP 50 Rockefeller Plaza New York, New York 10020 (212) 940-8800

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

March 15, 2024

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of \S 240.13d-l(e), 240.13d-l(g), check the following bo \square .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240. l 3d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No. 09090D103

1	NAMES OF REPORTING PERSONS	
	Deerfield Private Design Fund V, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	(a) □ (b) ⊠
3	SEC USE ONLY	
AF	SOURCE OF FUNDS	
	WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)	
6	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	

	7	SOLE VOTING POWER			
NUMBER OF		0			
SHARES BENEFICIALLY	8	SHARED VOTING POWER			
OWNED BY EACH		3,055,049 (1)			
REPORTING	9	SOLE DISPOSITIVE POWER			
PERSON WITH		0			
	10	SHARED DISPOSITIVE POWER			
		3,055,049 (1)			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	3,055,049 (1)				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* □				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
	5.53%				
14	TYPE OF REPOR	TING PERSON			
	PN				

(1) The number of shares of Common Stock beneficially owned by the Reporting Person does not include (i) an aggregate of 53,840,000 shares of Common Stock underlying 53,840 shares of Series X Preferred Stock, which will become convertible into Common Stock (subject to a beneficial ownership limitation), if at all, upon the occurrence of certain conditions (as described in Item 6), or (ii) an aggregate of 20,897,175 shares of Common Stock underlying warrants that will become exercisable for Common Stock (subject to a beneficial ownership limitation), if at all, upon the occurrence of certain conditions (as described in Item 6).

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		SCHEDULE 13D	
CUSIP No. 09090D1	03		Page 3 of 15 Pages
1	NAMES OF R	REPORTING PERSONS	
	Deerfield Mgr	nt V. I. P	
2		APPROPRIATE BOX IF A MEMBER OF A GROUP*	(a) 🗆
			(b) ⊠
3	SEC USE ON	LY	
4	SOURCE OF	FUNDS	
	AF		
5		ISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)	
6	CITIZENSHII	P OR PLACE OF ORGANIZATION	
	Delaware		
	7	SOLE VOTING POWER	
NUMBER OF		0	
SHARES BENEFICIALLY	8	SHARED VOTING POWER	
OWNED BY		3,055,049 (2)	
EACH REPORTING	9	SOLE DISPOSITIVE POWER	
PERSON WITH		0	
*******	10	SHARED DISPOSITIVE POWER	
		3,055,049 (2)	
11	AGGREGATI	E AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	3,055,049 (2)		
12	CHECK BOX	IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*	
13	PERCENT OF	F CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	5.53%		_
		-	

14	TYPE OF REP	ORTING PERSON	
	PN		
(2) Comprised of si	hares of Commo	n Stock held by Deerfield Private Design Fund V, L.P. See Footnote 1.	
CUSIP No. 09090D1	03	SCHEDULE 13D	Page 4 of 15 Pages
			Tugo i or re ruges
1	NAMES OF RE	EPORTING PERSONS	
		hcare Innovations Fund II, L.P.	
2	CHECK THE A	APPROPRIATE BOX IF A MEMBER OF A GROUP*	(a) □ (b) ⊠
3	SEC USE ONL	V	
3	BEC OBE ONE	•	
4	SOURCE OF F	UNDS	
	WC		
5		SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)	
6	CITIZENSHIP	OR PLACE OF ORGANIZATION	
	Delaware		
	7	SOLE VOTING POWER	
NUMBER OF		0	
SHARES BENEFICIALLY	8	SHARED VOTING POWER	
OWNED BY EACH		3,055,049 (3)	
REPORTING	9	SOLE DISPOSITIVE POWER	
PERSON WITH		0	
	10	SHARED DISPOSITIVE POWER	
		3,055,049 (3)	
11		AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
12	3,055,049 (3)	IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*	
12	CHECK BOX I	F THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
13	PERCENT OF	CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	5.53%		
14		ORTING PERSON	
	PN		
		nmon Stock beneficially owned by the Reporting Person does not include (i) an aggregate of 53,840,000 shares of of Series X Preferred Stock, which will become convertible into Common Stock (subject to a beneficial ownership lin	
occurrence o	of certain condition	ons (as described in Item 6), or (ii) an aggregate of 20,897,175 shares of Common Stock underlying warrants that v	
for Common	Stock (subject to	o a beneficial ownership limitation), if at all, upon the occurrence of certain conditions (as described in Item 6).	
		SCHEDULE 13D	
CUSIP No. 09090D1	03		Page 5 of 15 Pages
1	NAMES OF RE	EPORTING PERSONS	
	Deerfield Mgm	t HIF II, L.P.	
2		APPROPRIATE BOX IF A MEMBER OF A GROUP*	(a) 🗆
			(b) ⊠
3	SEC USE ONL		

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5	CHECK IF DIS	SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)				
6	CITIZENSHIP	OR PLACE OF ORGANIZATION				
	Delaware					
	7	SOLE VOTING POWER				
NUMBER OF						
SHARES	8	SHARED VOTING POWER				
BENEFICIALLY	8	SHARED VOLING LOWER				
OWNED BY EACH		3,055,049 (4)				
REPORTING	9	SOLE DISPOSITIVE POWER				
PERSON WITH		0				
WIII	10	SHARED DISPOSITIVE POWER				
		3,055,049 (4)				
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
	3,055,049 (4)					
12		IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)					
		()				
	5.53%					
14	TYPE OF REPORTING PERSON					
	PN					

(4) Comprised of shares of Common Stock held by Deerfield Healthcare Innovations Fund II, L.P. See Footnote 3.

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CUSIP No. 09090D1	.03		Page 6 of 15 Pages			
1	NAMES OF RE	EPORTING PERSONS				
	Deerfield Management Company, L.P.					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*					
3	SEC USE ONLY					
4	SOURCE OF F	UNDS				
	AF					
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)					
6	CITIZENSHIP	OR PLACE OF ORGANIZATION				
	Delaware					
	7	SOLE VOTING POWER				
NUMBER OF		0				
SHARES BENEFICIALLY	8	SHARED VOTING POWER				
OWNED BY EACH		6,110,098 (5)				
REPORTING PERSON	9	SOLE DISPOSITIVE POWER				
WITH		0				
	10	SHARED DISPOSITIVE POWER				
		6,110,098 (5)				
11	AGGREGATE	AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
	6,110,098 (5)					

12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	11.06%	
14	TYPE OF REPORTING PERSON	
	PN	

(5) Comprised of shares of Common Stock held by Deerfield Private Design Fund V, L.P. and Deerfield Healthcare Innovations Fund II, L.P. See Footnotes 1 and 3.

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IP OR PLACE OF ORGANIZATION				
s of America				
SOLE VOTING POWER				
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SHARED VOTING POWER				
6,110,098 (6)				
SOLE DISPOSITIVE POWER				
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SHARED DISPOSITIVE POWER				
6 110 098 (6)				
6,110,098 (6) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*				
OF CLASS REPRESENTED BY AMOUNT IN ROW (11)				
EPORTING PERSON				
	0 SHARED VOTING POWER 6,110,098 (6) SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 6,110,098 (6) TE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON)			

(6) Comprised of shares of Common Stock held by Deerfield Private Design Fund V, L.P. and Deerfield Healthcare Innovations Fund II, L.P. See Footnotes 1 and 3.

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This Schedule 13D is filed by (i) Deerfield Private Design Fund V, L.P. ("Deerfield Private Design V"), (ii) Deerfield Mgmt V, L.P. ("Deerfield Mgmt V, L.P. ("Deerfield Mgmt V, L.P. ("Deerfield Mgmt HIF II"), (v) Deerfield Mgmt V, Deerfield Mgmt V, Deerfield HIF II, Deerfield Mgmt HIF II, Deerfield Mgmt HIF II, Deerfield Mgmt V, Deerfield HIF II, Deerfield Mgmt HIF II, the "Reporting Person"), with respect to the Common Stock of BiomX Inc. Deerfield Private Design V and Deerfield HIF II are referred to herein, collectively, as the "Funds" and each as a "Fund."

This Statement on Schedule 13D relates to the shares of common stock, par value\$0.0001 per share (the "Common Stock"), of BiomX Inc., a Delaware corporation (the "Company"). The address of the Company's principal executive offices is 22 Einstein St., Floor 4, Ness Ziona, Israel.

Item 2. Identity and Background.

- (a) This Statement is filed by the Reporting Persons as a joint statement pursuant to Rule 13d-l(k) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act")
- (b) The address of the principal business and/or principal office of each Reporting Person is 345 Park Avenue South, 12th Floor, New York, New York 10010.
- (c) Flynn is the managing member of the general partner of each of Deerfield Mgmt V, Deerfield Mgmt HIF II and 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. Each Fund purchases, holds and sells securities and other investment products. Schedule A hereto sets forth information regarding persons referred in Instruction C to Schedule 13D.
- (d) During the last five years, none of the Reporting Persons, nor, to the best of each Reporting Person's knowledge, any of the persons listed on Schedule A attached hereto, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) None of the Reporting Persons has, during the last five years, been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) Each of Deerfield Private Design V GP, Deerfield Private Design V, Deerfield Healthcare II GP, Deerfield Healthcare II GP, and Deerfield Management is organized under the laws of the State of Delaware. Flynn is a citizen of the United States of America.

The Reporting Persons have entered into a Joint Filing Agreement, a copy of whichis attached hereto as Exhibit 99.1.

Item 3. Source and Amount of Funds or Other Consideration.

Prior to the Company's acquisition of Adaptive Phage Therapeutics, Inc., a Delaware corporation ("APT"), by way of merger pursuant to which, among other things, APT merged with an into a wholly owned subsidiary of the Company (the "Merger"), each Fund purchased 13,333,333 shares ("Series B-1 Shares") of Series B-1 Preferred Stock of APT. In addition, prior to the consummation of the Merger, each Fund converted a Secured Promissory Note issued by APT (as borrower) to such Fund with a stated principal amount of \$1,083,333.22 ("Convertible Note") into 3,649,101 shares (the "Note Conversion Shares") of Series B-1 Preferred Stock of APT, pursuant to the terms of such Convertible Note and the Note Conversion and Cancellation Agreement by and among the APT, the Funds and other parties named therein.

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As a result of the Merger, all of the Series B-1 Shares and Note Conversion Shares were cancelled and converted into an aggregate of (x) 6,110,098 shares (the "Merger Common Shares") of Common Stock, (y) 26,980 shares (the "Merger Preferred Shares") of the Company's newly-designated Series X Non-Voting Convertible Preferred Stock, par value \$0.0001 per share ("Series X Preferred Stock"), each share of which will be convertible (if at all) into 1,000 shares of Common Stock (subject to certain conditions, including the receipt of requisite stockholder approval, and limitations described below), and (z) warrants exercisable for an aggregate of 1,444,350 shares of Common Stock at an exercise of \$5.00 per share of Common Stock, which can be exercised (if at all) at any time after the approval of the Stockholder Approval Matters (as defined below) by the stockholders of the Company and will expire on January 28, 2027 (the "Merger Warrants"). The number of shares of Common Stock, the number of shares of Common Stock issuable upon conversion of Series X Preferred Stock (to the extent it becomes convertible), and the number of shares of Common Stock issuable upon exercise of the Merger Warrants (to the extent they become exercisable) acquired by each Fund upon closing of the Merger were:

	Shares of Common Stock	Shares of Common Stock underlying Series X Preferred Stock (to the extent it becomes convertible)	Shares of Common Stock underlying Merger Warrants (to the extent they become exercisable)
Deerfield Private Design Fund V, L.P.	3,055,049	13,490,000	722,175
Deerfield Healthcare Innovations Fund II, L.P.	3,055,049	13,490,000	722,175

Further, in connection with the Merger, on March 15, 2024, pursuant to that certain Securities Purchase Agreement (the 'PIPE Purchase Agreement"), dated as of March 6, 2024, by and among the Company and the parties named therein, the Funds acquired an aggregate of 80,700 shares of Series X Preferred Stock (each share of which will be convertible (if at all) into 1,000 shares of Common Stock (subject to certain conditions, including the receipt of requisite stockholder approval, and limitations described below)) and warrants exercisable (if at all) for an aggregate of 40,350,000 shares of Common Stock (subject to certain conditions and limitations described below) (the Private Placement Warrants"), at a combined purchase price of \$231.10 per share of Series X Preferred Stock and accompanying Private Placement Warrants being exercisable for 500 shares of Common Stock per share of Series X Preferred Stock purchased in the private placement). The number of shares of Common Stock issuable upon conversion of Series X Preferred Stock (to the extent it becomes convertible) and the number of shares of Common Stock issuable upon exercise of the Private Placement Warrants (to the extent they become exercisable) acquired by each Fund upon closing of the Private Placement were:

	Shares of Common Stock underlying Series X Preferred Stock (to the extent it becomes convertible)	Shares underlying Private Placement Warrants (to the extent exercisable)
Deerfield Private Design Fund V, L.P.	40,350,000	20,175,000
Deerfield Healthcare Innovations Fund II, L.P.	40,350,000	20,175,000

Except as otherwise indicated herein, Deerfield Private Design V and Deerfield HIF II utilized their respective working capital to purchase theshares of Common Stock reported herein. Shares of Common Stock beneficially owned by the Reporting Persons are or may be held from time to time by the applicable Fund in margin accounts established with their respective brokers or banks, and a portion of the purchase price for the Common Stock may have been obtained through margin borrowing. Common Stock positions held in margin accounts may be pledged as collateral security for the repayment of debt balances in the margin accounts.

Item 4. Purpose of Transaction.

The information set forth in Items 3 and 6 is incorporated herein by reference.

The Reporting Persons have acquired the shares reported herein for investment purposes.

In connection with the Merger, and as contemplated by the Merger Agreement, Jonathan Leff, a partner of Deerfield Management, was appointed to the board of directors of the Company, and continues to serve in such capacity.

The Reporting Persons may communicate with members of the board of directors, members of the Company's management and/or shareholders of the Company from time to time with respect to potential investment and acquisition opportunities and the financing thereof (which may include discussions regarding debt and/or equity financing that could be provided, in whole or in part, by the Funds and/or affiliated funds), strategic and operational matters and such other matters as the Reporting Persons may deem appropriate from time to time. Such matters are likely to include plans or proposals specified in clauses (a) through (j) of Item 4 of the Form of Schedule 13D, but the Reporting Persons have made no determination to pursue, and may not pursue, any such plan or proposal.

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Depending on various factors and subject to the obligations described herein, the Reporting Persons may take such actions withrespect to their investments in the Company as they deem appropriate, including, without limitation, purchasing additional shares of Common Stock or other financial instruments related to the Company orselling some or all of their beneficial or economic holdings, engaging in hedging or similar transactions with respect to the securities relating to the Company and/or otherwise changing their intention with respect to any and all matters referred to in Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer.

(a)

Deerfield Mgmt V, L.P.

Number of shares: 3,055,049 (comprised of shares held by Deerfield Private Design Fund V, L.P.)

Percentage of Shares: 5.53%*

(2) Deerfield Private Design Fund V, L.P.

Number of shares: 3,055,049 Percentage of Shares: 5.53%*

(3) Deerfield Mgmt HIF II, L.P., L.P.

Number of shares: 3,055,049 (comprised of shares held by Deerfield Healthcare Innovations Fund II, L.P.)

Percentage of Shares: 5.53%*

(4) Deerfield Healthcare Innovations Fund II, L.P.

Number of shares: 3,055,049 Percentage of Shares: 5.53%*

(5) Deerfield Management

Number of shares: 6,110,098 (comprised of shares held by Deerfield Private Design Fund V, L.P. and Deerfield Healthcare Innovations Fund II, L.P.)

Percentage of Shares: 11.06%*

(6) Flynn

Number of shares: 6,110,098 (comprised of shares held by Deerfield Private Design Fund V, L.P. and Deerfield Healthcare Innovations Fund II, L.P.)

Percentage of Shares: 11.06%*

*Throughout this report, the percentage of outstanding shares of Common Stock beneficially owned by the Reporting Persons reflects (i) 46,055,109 shares of Common Stock outstanding as of March 4, 2024, based on representations made by the Company in the Merger Agreement, plus (ii) 9,164,967 shares of Common Stock issued pursuant to the Merger Agreement.

(b)

(1) Deerfield Mgmt V, L.P.

Sole power to vote or direct the vote: 0 Shared power to vote or direct the vote: 3,055,049 Sole power to dispose or to direct the disposition: 0 Shared power to dispose or direct the disposition: 3,055,049

(2) <u>Deerfield Private Design Fund V, L.P.</u>

Sole power to vote or direct the vote: 0 Shared power to vote or direct the vote: 3,055,049

Sole power to dispose or to direct the disposition: 0 Shared power to dispose or direct the disposition: 3,055,049

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(3) <u>Deerfield Mgmt HIF II, L.P.</u>

Sole power to vote or direct the vote: 0 Shared power to vote or direct the vote: 3,055,049 Sole power to dispose or to direct the disposition: 0 Shared power to dispose or direct the disposition: 3,055,049

(4) <u>Deerfield Healthcare Innovations Fund II, L.P.</u>

Sole power to vote or direct the vote: 0 Shared power to vote or direct the vote: 3,055,049 Sole power to dispose or to direct the disposition: 0 Shared power to dispose or direct the disposition: 3,055,049

5) <u>Deerfield Management</u>

Sole power to vote or direct the vote: 0 Shared power to vote or direct the vote: 6,110,098 Sole power to dispose or to direct the disposition: 0 Shared power to dispose or direct the disposition: 6,110,098

(6) Flynn

Sole power to vote or direct the vote: 0 Shared power to vote or direct the vote: 6,110,098 Sole power to dispose or to direct the disposition: 0 Shared power to dispose or direct the disposition: 6,110,098

Flynn is the managing member of the general partner of each of Deerfield Mgmt V and Deerfield Mgmt HIF II and 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. Each Fund purchases, holds and sells securities and other investment products. Schedule A hereto sets forth information regarding persons referred in Instruction C to Schedule 13D.

- (c) Except as set forth in Items 3, 4 and 6 of this Schedule 13D, no Reporting Person has effected any transactions in the Common Stock during the past 60 days.
- (d) Not applicable
- (e) Not applicable.

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Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Merger Warrants

The Merger Warrants may be exercised (for cash or to the extent a registration statement is not available for the resale of shares underlying the Merger Warrants, on a cashless (net) exercise basis), if at all, at any time following approval by the Company's stockholders of certain matters (the "Stockholder Approval Matters") specified in the Merger Agreement, including the issuance of Common Stock in connection with (i) the conversion of the Series X Preferred Stock issued pursuant to the Merger Agreement and the PIPE Purchase Agreement, (ii) the exercise of the Merger Warrants and (iii) the exercise of the Private Placement Warrants, and prior to their expiration on January 28, 2027. The exercise price of the Merger Warrants is \$5.00 per share of Common Stock, subject to customary adjustments for stock dividends, stock splits, reclassifications and the like. The Merger Warrants are subject to a beneficial ownership limitation, which restricts the exercise of such warrants to the extent that, upon such 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 foregoing description of the Merger Warrants does not purport to be complete and is qualified in its entirety by reference to the full text of the Merger Warrant, the form of which is filed or incorporated by reference as Exhibit 1 to this Schedule 13D.

Private Placement Warrants

The Private Placement Warrants may be exercised (for cash or to the extent a registration statement is not available for the resale of shares underlying the Private Placement Warrants, on a cashless (net) exercise basis), if at all, at any time following approval by the Company's stockholders of the Stockholder Approval Matters and prior to their expiration on the 24-month anniversary of the date on which they are first exercisable. The exercise price of the Private Placement Warrants is \$0.2311 per share of Common Stock, subject to customary adjustments for stock dividends, stock splits, reclassifications and the like. The Private Placement Warrants are subject to a beneficial ownership limitation, which restricts the exercise of such warrants to the extent that, upon such 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 foregoing description of the Private Placement Warrants does not purport to be complete and is qualified in its entirety by reference to the full text of the Private Placement Warrant, the form of which is filed or incorporated by reference as Exhibit 2 to this Schedule 13D.

Series X Preferred Stock; Certificate of Designation

The powers, preferences, rights, qualifications, limitations and restrictions applicable to the Series X Preferred Stock are governed by the Certificate of Designation of Preferences, Rights and Limitations of the Series X Preferred Stock (the "Certificate of Designation"), which was filed by the Company with the Secretary of State of the State of Delaware prior to the closing of the Merger.

Holders, including the Funds, of Series X Preferred Stock are entitled to receive dividends on shares of Series X Preferred Stock equal to, on an as-if-converted-to-Common-Stock basis, and in the same form as, dividends actually paid on shares of the Common Stock. The Series X Preferred Stock ranks on parity with the Common Stock as to distributions upon the liquidation, dissolution or winding up of the Company.

Except as set forth in the Certificate of Designation or as required by the Delaware General Corporation Law, the Series X Preferred Stock does not have voting rights. The Certificate of Designation prohibits the Company from taking certain actions, including (i) consummating a Fundamental Transaction (as defined in the Certificate of Designation), or (ii) reclassifying the outstanding Common Stock, in each case prior to obtaining the Conversion Approval (as defined below), without the affirmative vote or written approval, agreement or waiver of the holders of 70% of the then outstanding shares of the Series X Preferred Stock (the "Requisite Holders").

The Certificate of Designation provides that, effective as of 5:00 p.m. Eastern time on the fourth (4th) Business Day after the date that the Corporation's stockholders approve the conversion of the Series X Non-Voting Preferred Stock into shares of Common Stock in accordance with the listing rules of the NYSE American (the "Conversion Approval"), each share of Series X Preferred Stock will automatically convert into 1,000 shares of Common Stock, subject to certain limitations, including that a holder of

Series X Preferred Stock is prohibited from converting shares of Series X Preferred Stock into shares of Common Stock to the extent that, after giving effect to such conversion, 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 a specified percentage (established by the holder between 0% and 19.99%). Each Fund has elected to be subject to a 9.99% beneficial ownership limitation in accordance with the Certificate of Designation.

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The Certificate of Designation further provides that if, as of the earlier to occur of (a) such time as the Parent Stockholders' Meeting (as defined in the Merger Agreement) is ultimately concluded, or (b) 5:00 p.m. Eastern time on the date that is five (5) months after the initial issuance of the Series X Non-Voting Preferred Stock (the "Deadline Date"), (x) the shares of Series X Non-Voting Preferred Stock are not convertible into Common Stock as a result of the failure to obtain the requisite stockholder approval and (y) a written request by the Requisite Holders has been delivered to the Company, then the Company will be obligated, at the request of the Requisite Holders to pay, prior to any payment in satisfaction of any redemption rights of any other class or series of capital stock of the Company, an amount in cash equal to the Fair Value (as defined in the Certificate of Designation) of the shares of Series X Non-Voting Preferred Stock held by each holder thereof.

The foregoing summary of the Certificate of Designation is not complete and is qualified in its entirety by reference to the full text thereof, the form of which is filed or incorporated by reference as Exhibit 3 to this Schedule 13D.

Registration Rights Agreement

On March 6, 2024, in connection with the Merger and the Private Placement, the Funds entered into a Registration Rights Agreement (the 'Registration Rights Agreement') with the Company. Pursuant to the Registration Rights Agreement, the Company is required to prepare and file with the SEC within 45 calendar days following the consummation of the Private Placement (the "Filing Deadline") a resale registration statement (the 'Registration Statement') with respect to (i) shares of Common Stock, Series X Preferred Stock and Merger Warrants issued pursuant to the Merger, (ii) shares of Series X Preferred Stock and Private Placement Warrants issued pursuant to the Private Placement and (iii) any shares of Common Stock issued or issuable upon (a) exercise of the Merger Warrants and the Private Placement Warrants or (b) conversion of shares of Series X Preferred Stock (the "Registration Statement to be declared effective by the SEC within 45 calendar days of the Filing Deadline (or within 75 calendar days if the SEC reviews the Registration Statement).

The foregoing summary of the Registration Rights Agreement is not complete and is qualified in its entirety by reference to the full text thereof, the form of which is filed or incorporated by reference as Exhibit 4 to this Schedule 13D.

Lock-up

Concurrently and in connection with the Merger and the Private Placement, each Fund entered into a lock-up agreement with the Company and APT, pursuant to which each Fund agreed, subject to limited exceptions, not to offer or sell, or engage in swap or similar transactions with respect to, the Merger Common Shares, the Merger Preferred Shares, the Merger Warrants and the shares of Common Stock issuable upon conversion or exercise or the Merger Preferred Shares or Merger Warrants (the "Lock-up Agreements").

The foregoing summary of the Lock-up Agreements is not complete and is qualified in its entirety by reference to the full text thereof, the form of which is filed or incorporated by reference as Exhibit 5 to this Schedule 13D.

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Item 7. Material to be Filed as Exhibits.

Exhibit Index

Exhibit 1 Form of Merger Warrants (incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed with the Securities and Exchange Commission on March 6, 2024)

Exhibit 2 Form of Private Placement Warrants (incorporated by reference to Exhibit 4.2 to the Company's Form 8-K filed with the Securities and Exchange Commission on March 6, 2024)

Exhibit 3 Form of Certificate of Designation (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed with the Securities and Exchange Commission on March 6, 2024)

Exhibit 4 Form of Registration Rights Agreement, dated as of March 6, 2024, by and among the Company and certain purchasers (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed with the Securities and Exchange Commission on March 6, 2024)

Exhibit 5 Form of Lock-up Agreement, dated as of March 6, 2024, by and among the Company and parties named therein (incorporated by reference to Exhibit 99.2 to the Company's Form 8-K filed with the Securities and Exchange Commission on March 6, 2024)

Exhibit 99.1 Joint Filing Agreement dated as of March 22, 2024, by and among the Reporting Persons *

Exhibit 99.2 Power of Attorney (previously filed as Exhibit 24 to a Form 3 with regard to BiomX Inc. filed with the Securities and Exchange Commission on March 19, 2024 by Deerfield Private Design Fund V, L.P., Deerfield Healthcare Innovations Fund II, L.P., Deerfield Mgmt V, L.P., Deerfield Mgmt HIF II, L.P., Deerfield Management Company, L.P. and James E. Flynn)

*Filed herewith

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SIGNATURE

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Dated: March 22, 2024

DEERFIELD MGMT V, L.P.

By: J.E. Flynn Capital V, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DEERFIELD PRIVATE DESIGN FUND V, L.P.

By: Deerfield Mgmt V, L.P., General Partner By: J.E. Flynn Capital V, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DEERFIELD MGMT HIF II, L.P.

By: J.E. Flynn Capital HIF II, LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD HEALTHCARE INNOVATIONS FUND II, L.P.

By: Deerfield Mgmt HIF II, L.P., General Partner By: J.E. Flynn Capital HIF II, LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact

DEERFIELD MANAGEMENT COMPANY, L.P.

By: Flynn Management LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

JAMES E. FLYNN

/s/ Jonathan Isler

Jonathan Isler, Attorney-in-Fact

Schedule A

General Partner of Deerfield Mgmt V, L.P.

The general partner of Deerfield Mgmt V is J.E. Flynn Capital V, LLC. The address of the principal business and/or principal office of Deerfield Mgmt V and J.E. Flynn Capital V, LLC is 345 Park Avenue South, 12th Floor, New York, NY 10010.

General Partner of Deerfield Private Design Fund V, L.P.

The general partner of Deerfield Private Design Fund V is Deerfield Mgmt V. The address of the principal business and/or principal office of Deerfield Mgmt V and Deerfield Private Design Fund V is 345 Park Avenue South, 12th Floor, New York, NY 10010.

General Partner of Deerfield Mgmt HIF II, L.P.

The general partner of Deerfield Mgmt HIF II is J.E. Flynn Capital HIF II, LLC. The address of the principal business and/or principal office of Deerfield Mgmt HIF II and J.E. Flynn Capital HIF II, LLC is 345 Park Avenue South, 12th Floor, New York, NY 10010.

General Partner of Deerfield Healthcare Innovations Fund II, L.P.

The general partner of Deerfield Healthcare Innovations Fund II is Deerfield Mgmt HIF II. The address of the principal business andor principal office of Deerfield Mgmt HIF II and Deerfield Healthcare Innovations Fund II is 345 Park Avenue South, 12th Floor, New York, NY 10010.

General Partner of Deerfield Management Company, L.P.

The general partner of Deerfield Management is Flynn Management LLC. The address of the principal business andor principal office of Deerfield Management and Flynn Management LLC is 345 Park Avenue South, 12th Floor, New York, NY 10010.

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them of a statement on Schedule 13D (including amendments thereto) with respect to the common stock, par value \$0.0001 per share, of BiomX, Inc. and further agree that this Joint Filing Agreement be included as an Exhibit to such joint filings. Each of the undersigned agrees to be responsible for the timely filing of the Schedule 13D, and for the completeness and accuracy of the information concerning itself contained therein.

In evidence thereof, the undersigned, being duly authorized, have executed this Joint Filing Agreement as of the date set forth below.

Dated: March 22, 2024

DEERFIELD MGMT V, L.P.

By: J.E. Flynn Capital V, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DDEERFIELD PRIVATE DESIGN FUND V, L.P.

By: Deerfield Mgmt V, L.P., General Partner By: J.E. Flynn Capital V, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-In-Fact

DEERFIELD HEALTHCARE INNOVATIONS FUND II, L.P.

By: Deerfield Mgmt HIF II, L.P., General Partner
By: J.E. Flynn Capital HIF II, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DEERFIELD MGMT HIF II, L.P.

By: J.E. Flynn Capital HIF II, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DEERFIELD MANAGEMENT COMPANY, L.P.

By: Flynn Management LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

JAMES E. FLYNN

/s/ Jonathan Isler

Jonathan Isler, Attorney-in-Fact