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

# SCHEDULE 13G

(Rule 13d-102)

# INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(b)

(Amendment No. 1)<sup>1</sup>

89bio, Inc.
(Name of Issuer)
Common Stock, par value \$0.001 per share
(Title of Class of Securities)
282559103
(CUSIP Number)
December 31, 2022
(Date of Event Which Requires Filing of this Statement)
Check the appropriate box to designate the rule pursuant to which this Schedule is filed:
□ Rule 13d-1(b)
⊠ Rule 13d-1(c)
□ Rule 13d-1(d)
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 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, <i>see</i> the <i>Notes</i> ).

1	NAME OF REPOR	TING PERSON	
		y Value Fund, L.P.	
2	CHECK THE APPI	ROPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠
			(b) □
3	SEC USE ONLY		
3	SEC COL CIVEI		
4	CITIZENSHIP OR	PLACE OF ORGANIZATION	
	Delaware		
NUMBER OF	5	SOLE VOTING POWER	
SHARES		SOLL VOTINGTOWER	
BENEFICIALLY		0	
OWNED BY	6	SHARED VOTING POWER	
EACH REPORTING		1 004 626 (1)	
PERSON WITH	7	1,904,636 (1) SOLE DISPOSITIVE POWER	
TERSOIT WITH	,	SOLL DISTOSITIVE TO WER	
		0	
	8	SHARED DISPOSITIVE POWER	
		1,904,636 (1)	
9	AGGREGATE AM	OUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	11001201121111		
	1,904,636 (1)		
10	CHECK BOX IF TI	HE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	PERCENT OF CLA	ASS REPRESENTED BY AMOUNT IN ROW (9)	
• • •			
	3.6% (1)		
12	TYPE OF REPORT	ING PERSON	
	PN		

(1) Consisting of 1,904,636 Shares (as defined below) underlying certain Warrants (as defined below).

1	NAME OF REPORT	TING PERSON	
1	TVIIVIE OF REFORM	THO LEROOT	
	BVF I GP LLO		
2	CHECK THE APPR	OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) □
	GEGLIGE ONLY		
3	SEC USE ONLY		
4	CITIZENSHIP OR I	PLACE OF ORGANIZATION	
	Delaware		
NUMBER OF	5	SOLE VOTING POWER	
SHARES BENEFICIALLY		0	
OWNED BY	6	SHARED VOTING POWER	
EACH	O O	SIMILE VOINGTOWER	
REPORTING		1,904,636 (1)	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
	8	0 SHARED DISPOSITIVE POWER	
	8	SHARED DISPOSITIVE POWER	
		1,904,636 (1)	
9	AGGREGATE AMO	DUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	1,904,636 (1)	TE A CODE CATE AND ADDRESS OF THE ANALYSIS OF	
10	CHECK BOX IF TE	HE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	PERCENT OF CLA	SS REPRESENTED BY AMOUNT IN ROW (9)	
	3.6% (1)		
12	TYPE OF REPORTI	ING PERSON	
	00		
12	3.6% (1) TYPE OF REPORTI	ING PERSON	

(1) Consisting of 1,904,636 Shares underlying certain Warrants.

1	NAME OF REPORT	ING PERSON	
		Value Fund II, L.P.	
2	CHECK THE APPRO	OPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠
			(b) □
3	SEC USE ONLY		
3	SEC OSE ONE		
4	CITIZENSHIP OR P	LACE OF ORGANIZATION	
	D.L.		
NUMBER OF	Delaware 5	SOLE VOTING POWER	
SHARES	3	SOLE VOTINGTOWER	
BENEFICIALLY		0	
OWNED BY	6	SHARED VOTING POWER	
EACH		1 200 140 (1)	
REPORTING PERSON WITH	7	1,398,148 (1) SOLE DISPOSITIVE POWER	
TERSON WITH	/	SOLE DISPOSITIVE POWER	
		0	
	8	SHARED DISPOSITIVE POWER	
		1 200 140 (1)	
9	AGGDEGATE AMO	1,398,148 (1) UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	AGGREGATE AMO	ONI DENERICIALLI OWNED DI LACII REI ORTINGI ERSON	
	1,398,148 (1)		
10	CHECK BOX IF TH	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	PERCENT OF CLAS	SS REPRESENTED BY AMOUNT IN ROW (9)	
11	1 Litebiti of Chi	on the thousand by the control of th	
	2.7% (1)		
12	TYPE OF REPORTI	NG PERSON	
	PN		
	PIN		

(1) Consisting of 1,398,148 Shares underlying certain Warrants.

1	NAME OF REPORT	ING PERSON	
-			
	BVF II GP LLO		
2	CHECK THE APPRO	OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) □
3	SEC USE ONLY		
4	CITIZENSHIP OR P	LACE OF ORGANIZATION	<u> </u>
'	CITIZENSIIII ORT	ENCE OF ORGANIZATION	
	Delaware		
NUMBER OF	5	SOLE VOTING POWER	
SHARES			
BENEFICIALLY		0	
OWNED BY EACH	6	SHARED VOTING POWER	
REPORTING		1,398,148 (1)	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
	·		
		0	
	8	SHARED DISPOSITIVE POWER	
		1 200 140 (1)	
9	ACCDECATE AMO	1,398,148 (1) UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
,	AGGREGATE AMO	UNI BENEFICIALLI OWNED BI EACH REFORTING FERSON	
	1,398,148 (1)		
10	CHECK BOX IF TH	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	DED CENTE OF CLASS	OR DEDDEGENITED DV AMOUNT BY DOW (A)	
11	PERCENT OF CLAS	S REPRESENTED BY AMOUNT IN ROW (9)	
	2.7% (1)		
12	TYPE OF REPORTIN	NG PERSON	
	OO		

(1) Consisting of 1,398,148 Shares underlying certain Warrants.

1	NAME OF REPORT	ING PERSON	
	Biotechnology	Value Trading Fund OS LP	
2		OPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠
			(b) □
3	SEC USE ONLY		
4	CITIZENSHIP OR P	LACE OF ORGANIZATION	
	Cayman Island		
NUMBER OF SHARES	5	SOLE VOTING POWER	
BENEFICIALLY		0	
OWNED BY EACH	6	SHARED VOTING POWER	
REPORTING		166,453 (1)	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0	
	8	SHARED DISPOSITIVE POWER	
		166,453 (1)	
9	AGGREGATE AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	166,453 (1)		
10	CHECK BOX IF TH	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	PERCENT OF CLAS	SS REPRESENTED BY AMOUNT IN ROW (9)	
10	Less than 1% (	·	
12	TYPE OF REPORTI	NG PERSON	
	PN		

(1) Consisting of 166,453 Shares underlying certain Warrants.

1	NAME OF REPORT	ING PERSON	
	BVF Partners (		
2	CHECK THE APPRO	OPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠
			(b) □
3	SEC USE ONLY		
3	SEC USE ONLI		
4	CITIZENSHIP OR P	LACE OF ORGANIZATION	
NUMBER OF	Cayman Island	SOLE VOTING POWER	
SHARES	3	SOLE VOTING POWER	
BENEFICIALLY		0	
OWNED BY	6	SHARED VOTING POWER	
EACH			
REPORTING		166,453 (1)	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0	
	8	SHARED DISPOSITIVE POWER	
		166,453 (1)	
9	AGGREGATE AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	166 452 (1)		
10	166,453 (1)	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
10	CHECK BOX II TH	E AGGREGATE AMOUNT IN ROW (3) EXCLUDES CERTAIN SHARES	
11	PERCENT OF CLAS	SS REPRESENTED BY AMOUNT IN ROW (9)	
	I and them 10/ /	1\	
12	Less than 1% (		
12	TITE OF KEI OKIII	NO I ERDON	
	СО		

(1) Consisting of 166,453 Shares underlying certain Warrants.

1	NAME OF REPORT	ING PERSON	
	BVF GP Holdi		
2	CHECK THE APPRO	OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) □
3	SEC USE ONLY		
3	SEC USE ONLY		
4	CITIZENSHIP OR P	LACE OF ORGANIZATION	
ATTA (DED OF	Delaware	COLE MOTING POWER	
NUMBER OF SHARES	5	SOLE VOTING POWER	
BENEFICIALLY		0	
OWNED BY	6	SHARED VOTING POWER	
EACH			
REPORTING		3,302,784 (1)	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0	
	8	SHARED DISPOSITIVE POWER	-
	. CODEC INC.	3,302,784 (1)	
9	AGGREGATE AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	3,302,784 (1)		
10		E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	DED CENTE OF CLAS	OR DEDDEGENTED DV AMOUNT BY DOW (0)	
11	PERCENT OF CLAS	S REPRESENTED BY AMOUNT IN ROW (9)	
	6.1% (1)		
12	TYPE OF REPORTI	NG PERSON	
	00		

(1) Consisting of 3,302,784 Shares underlying certain Warrants.

1	NAME OF REPORT	ING PERSON	
	BVF Partners I	P	
2		OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) □
3	SEC USE ONLY		
4	CITIZENSHIP OR P	LACE OF ORGANIZATION	
	Delaware		
NUMBER OF SHARES	5	SOLE VOTING POWER	
BENEFICIALLY		0	
OWNED BY EACH	6	SHARED VOTING POWER	
REPORTING		3,521,126 (1)	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0	
	8	SHARED DISPOSITIVE POWER	
	A CORECATE AND	3,521,126 (1)	
9	AGGREGATE AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	3,521,126 (1)	E ACORECATE AMOUNT BUROW (IV) EVOLUTIES CERTARI SHARES	
10	CHECK BOX IF TH	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	DEDCENT OF CLAS	SS REPRESENTED BY AMOUNT IN ROW (9)	
11		55 REFRESENTED DI AMOUNT IN ROW (9)	
12	6.5% (1) TYPE OF REPORTI	NIC DED SON	
12		NO I ERSON	
	PN, IA		

(1) Consisting of 3,521,126 Shares underlying certain Warrants.

1	NAME OF REPORT	ING PERSON	
	BVF Inc.		
2		OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) 🗆
3	SEC USE ONLY		
3	SEC USE ONL!		
	CAMPAGE VICTOR OF P	7 L GT OF OF OF OLD WITHOUT	
4	CITIZENSHIP OR P	LACE OF ORGANIZATION	
	Delaware		
NUMBER OF SHARES	5	SOLE VOTING POWER	
BENEFICIALLY		0	
OWNED BY	6	SHARED VOTING POWER	
EACH REPORTING		3,521,126 (1)	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0	
	8	SHARED DISPOSITIVE POWER	
		2.521.12(71)	
9	AGGREGATE AMO	3,521,126 (1) UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	3,521,126 (1)	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	П
10	CHECK BOX II TII	E NOOKEONTE NIMOONT IN KOW (7) ENCEODES CERTAIN STERKES	
11	DED CENT OF CLAS	CC DEDDECENTED DV AMOUNT IN DOW (0)	
11	PERCENT OF CLAS	SS REPRESENTED BY AMOUNT IN ROW (9)	
	6.5% (1)		
12	TYPE OF REPORTI	NG PERSON	
	СО		

(1) Consisting of 3,521,126 Shares underlying certain Warrants.

1	NAME OF REPORT	ING PERSON	
	Mark N. Lamp	ert	
2		OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) □
3	SEC USE ONLY		
4	CITIZENSHIP OR P	LACE OF ORGANIZATION	
	United States		
NUMBER OF SHARES	5	SOLE VOTING POWER	
BENEFICIALLY	_	0	
OWNED BY EACH	6	SHARED VOTING POWER	
REPORTING		3,521,126 (1)	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
	_	0	
	8	SHARED DISPOSITIVE POWER	
		3,521,126 (1)	
9	AGGREGATE AMO	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
10	3,521,126 (1)	E A CODEC ATE AMOUNT DANGE (A) EVOLVIDES CEDITADA SUA DES	
10	CHECK BOX IF TH	E AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	DED CENT OF CLAS	OG DEDDEGENTED DV AMOUNT DI DOW (0)	
11	PERCENT OF CLAS	SS REPRESENTED BY AMOUNT IN ROW (9)	
12	6.5% (1)	NO DEDGON	
12	TYPE OF REPORTI	NU PERSUN	
	IN		

(1) Consisting of 3,521,126 Shares underlying certain Warrants.

### Item 1(a). Name of Issuer:

89bio, Inc., a Delaware corporation (the "Issuer").

### Item 1(b). Address of Issuer's Principal Executive Offices:

142 Sansome Street, Second Floor San Francisco, California 94104

### Item 2(a). Name of Person Filing

Item 2(b). Address of Principal Business Office or, if None, Residence

Item 2(c). Citizenship

Biotechnology Value Fund, L.P. ("BVF") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware

BVF I GP LLC ("BVF GP") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware

Biotechnology Value Fund II, L.P. ("BVF2") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware

BVF II GP LLC ("BVF2 GP") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware

Biotechnology Value Trading Fund OS LP ("Trading Fund OS")
PO Box 309 Ugland House
Grand Cayman, KY1-1104
Cayman Islands
Citizenship: Cayman Islands

BVF Partners OS Ltd. ("Partners OS") PO Box 309 Ugland House Grand Cayman, KY1-1104 Cayman Islands Citizenship: Cayman Islands

BVF GP Holdings LLC ("BVF GPH") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware

BVF Partners L.P. ("Partners") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware

BVF Inc.

44 Montgomery St., 40th Floor San Francisco, California 94104

Citizenship: Delaware

Mark N. Lampert ("Mr. Lampert") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: United States

Each of the foregoing is referred to as a "Reporting Person" and collectively as the "Reporting Persons."

#### Item 2(d). **Title of Class of Securities:**

Common Stock, par value \$0.001 per share (the "Shares")

#### Item 2(e). **CUSIP Number:**

282559103

#### If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a: Item 3.

	/x/	Not applicable.
(a)	//	Broker or dealer registered under Section 15 of the Exchange Act.
(b)	//	Bank as defined in Section 3(a)(6) of the Exchange Act.
(c)	//	Insurance company as defined in Section 3(a)(19) of the Exchange Act.
(d)	//	Investment company registered under Section 8 of the Investment Company Act.
(e)	//	An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).
(f)	//	An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
(g)	//	A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).
(h)	//	A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act.
(i)	//	A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act.
(j)	//	A non-U.S. institution, in accordance with Rule 13d-1(b)(1)(ii)(J).
(k)	//	Group, in accordance with Rule 13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J), please specify the type of institution:

### Item 4. Ownership

### (a) Amount beneficially owned:

As of the close of business on December 31, 2022, the Reporting Persons hold an aggregate of 7,042,252 common warrants (the "Warrants") exercisable for an aggregate of 3,521,126 Shares. Each Warrant is exercisable for 0.5 Shares at an exercise price of \$5.325 per Share. The Warrants are immediately exercisable and will expire on the second anniversary of the original issuance date. A holder of a Warrant will not be entitled to exercise any portion of such Warrant that, upon giving effect to such exercise, would cause the aggregate number of Shares beneficially owned by such holder (together with its affiliates and any other persons whose beneficial ownership of Shares would be aggregated with the holder for purposes of Section 13(d) of the Securities Exchange Act of 1934) to exceed 9.99% of the total number of then issued and outstanding Shares, as such percentage ownership is determined in accordance with the terms of the Warrant (the "Warrants Blocker"). As of December 31, 2022, the Warrants Blocker does not limit the exercise of any of the Warrants held by the Reporting Persons.

As of the close of business on December 31, 2022 (i) BVF beneficially owned 1,904,636 Shares underlying the 3,809,271 Warrants held by it; (ii) BVF2 beneficially owned 1,398,148 Shares underlying the 2,796,296 Warrants held by it; and (iii) Trading Fund OS beneficially owned 166,453 Shares underlying the 332,905 Warrants held by it.

BVF GP, as the general partner of BVF, may be deemed to beneficially own the 1,904,636 Shares beneficially owned by BVF.

BVF2 GP, as the general partner of BVF2, may be deemed to beneficially own the 1,398,148 Shares beneficially owned by BVF2.

Partners OS, as the general partner of Trading Fund OS, may be deemed to beneficially own the 166,453 Shares beneficially owned by Trading Fund OS.

BVF GPH, as the sole member of each of BVF GP and BVF2 GP, may be deemed to beneficially own the 3,302,784 Shares beneficially owned in the aggregate by BVF and BVF2.

Partners, as the investment manager of BVF, BVF2 and Trading Fund OS, and the sole member of Partners OS, may be deemed to beneficially own the 3,469,236 Shares beneficially owned in the aggregate by BVF, BVF2 and Trading Fund OS and the 51,890 Shares underlying 103,780 Warrants held in a certain Partners managed account (the "Partners Managed Account").

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 3,521,126 Shares

beneficially owned by Partners.

Mr. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the 3,521,126 Shares beneficially owned by BVF Inc.

The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of any Shares owned by another Reporting Person. BVF GP disclaims beneficial ownership of the Shares beneficially owned by BVF. BVF2 GP disclaims beneficial ownership of the Shares beneficially owned by Trading Fund OS. BVF GPH disclaims beneficial ownership of the Shares beneficially owned by BVF and BVF2. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the Shares beneficially owned by BVF, BVF2 and Trading Fund OS and held in the Partners Managed Account, and the filing of this statement shall not be construed as an admission that any such person or entity is the beneficial owner of any such securities.

### (b) Percent of class:

The following percentages are based upon a denominator that is the sum of (i) 50,560,590 Shares outstanding, as of December 31, 2022, as disclosed in the Issuer's Registration Statement on Form S-3 filed with the Securities and Exchange Commission on January 31, 2023, and (ii) certain or all of the 3,521,126 Shares issuable upon the exercise of the Warrants held by the Reporting Persons, as applicable.

As of the close of business on December 31, 2022, (i) BVF beneficially owned approximately 3.6% of the outstanding Shares, (ii) BVF2 beneficially owned approximately 2.7% of the outstanding Shares, (iii) Trading Fund OS beneficially owned less than 1% of the outstanding Shares, (iv) BVF GP may be deemed to beneficially own approximately 3.6% of the outstanding Shares, (v) BVF2 GP may be deemed to beneficially own approximately 2.7% of the outstanding Shares, (vi) Partners OS may be deemed to beneficially own less than 1% of the outstanding Shares, (vii) BVF GPH may be deemed to beneficially own approximately 6.1% of the outstanding Shares, and (viii) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 6.5% of the outstanding Shares (less than 1% of the outstanding Shares are held in the Partners Managed Account).

- (c) Number of shares as to which such person has:
- (i) Sole power to vote or to direct the vote

See Cover Pages Items 5-9.

(ii) Shared power to vote or to direct the vote

See Cover Pages Items 5-9.

(iii) Sole power to dispose or to direct the disposition of

See Cover Pages Items 5-9.

(iv) Shared power to dispose or to direct the disposition of

See Cover Pages Items 5-9.

### Item 5. Ownership of Five Percent or Less of a Class.

Not Applicable.

### Item 6. Ownership of More than Five Percent on Behalf of Another Person.

BVF GPH, Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the Shares beneficially owned by BVF and BVF2. Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the Shares beneficially owned by Trading Fund OS and held in the Partners Managed Account.

# Item 7. Identification and Classification of the Subsidiary That Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not Applicable.

# Item 8. Identification and Classification of Members of the Group.

See Exhibit 99.1 to the Schedule 13G filed with the Securities and Exchange Commission on July 11, 2022.

### Item 9. Notice of Dissolution of Group.

Not Applicable.

### Item 10. Certifications.

By signing below each of the undersigned certifies that, to the best of its knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

### **SIGNATURE**

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

Dated: February 14, 2023 BIOTECHNOLOGY VALUE FUND, L.P. BIOTECHNOLOGY VALUE TRADING FUND OS LP BVF I GP LLC, its general partner By: BVF Partners L.P., its investment manager By: BVF Inc., its general partner By: /s/ Mark N. Lampert /s/ Mark N. Lampert Mark N. Lampert By: Chief Executive Officer Mark N. Lampert President BVF I GP LLC BVF GP HOLDINGS LLC /s/ Mark N. Lampert By: /s/ Mark N. Lampert Mark N. Lampert Chief Executive Officer Mark N. Lampert Chief Executive Officer BIOTECHNOLOGY VALUE FUND II, L.P. BVF PARTNERS L.P. By: BVF II GP LLC, its general partner By: BVF Inc., its general partner /s/ Mark N. Lampert Mark N. Lampert By: /s/ Mark N. Lampert Chief Executive Officer Mark N. Lampert President BVF II GP LLC BVF INC. By: /s/ Mark N. Lampert By: /s/ Mark N. Lampert Mark N. Lampert Chief Executive Officer Mark N. Lampert President BVF PARTNERS OS LTD. /s/ Mark N. Lampert

By: BVF Partners L.P., its sole member By: BVF Inc., its general partner

By: /s/ Mark N. Lampert
Mark N. Lampert

President

MARK N. LAMPERT