

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

SCHEDULE 13D
(Rule 13d-101)

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

(Amendment No. 1)¹

Repare Therapeutics Inc.
(Name of Issuer)

Common Shares, no par value
(Title of Class of Securities)

760273102
(CUSIP Number)

JAMES KRATKY
BVF PARTNERS L.P.
44 Montgomery St., 40th Floor
San Francisco, California 94104
(415) 525-8890

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

November 15, 2023
(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 §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7 for other parties to whom copies are to be sent.

¹ 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*).

1	NAME OF REPORTING PERSON Biotechnology Value Fund, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 5,309,432
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 5,309,432
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,309,432	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 12.6%	
14	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON BVF I GP LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 5,309,432
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 5,309,432
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,309,432	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 12.6%	
14	TYPE OF REPORTING PERSON OO	

1	NAME OF REPORTING PERSON Biotechnology Value Fund II, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,308,573
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,308,573
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,308,573	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 10.2%	
14	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON BVF II GP LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 4,308,573
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,308,573
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,308,573	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 10.2%	
14	TYPE OF REPORTING PERSON OO	

1	NAME OF REPORTING PERSON Biotechnology Value Trading Fund OS LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 548,938
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 548,938
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 548,938	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 1.3%	
14	TYPE OF REPORTING PERSON PN	

1	NAME OF REPORTING PERSON BVF Partners OS Ltd.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 548,938
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 548,938
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 548,938	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 1.3%	
14	TYPE OF REPORTING PERSON CO	

1	NAME OF REPORTING PERSON BVF GP Holdings LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 9,618,005
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 9,618,005
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9,618,005	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 22.8%	
14	TYPE OF REPORTING PERSON OO	

1	NAME OF REPORTING PERSON BVF Partners L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 10,333,600
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 10,333,600
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 10,333,600	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 24.5%	
14	TYPE OF REPORTING PERSON PN, IA	

1	NAME OF REPORTING PERSON BVF Inc.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 10,333,600
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 10,333,600
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 10,333,600	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 24.5%	
14	TYPE OF REPORTING PERSON CO	

1	NAME OF REPORTING PERSON Mark N. Lampert	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 10,333,600
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 10,333,600
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 10,333,600	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 24.5%	
14	TYPE OF REPORTING PERSON IN	

The following constitutes Amendment No. 1 to the Schedule 13D filed by the undersigned (“Amendment No. 1”). This Amendment No. 1 amends the Schedule 13D as specifically set forth herein.

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

Item 3 is hereby amended and restated to read as follows:

The securities of the Issuer purchased by each of BVF, BVF2 and Trading Fund OS, and held in the Partners Managed Account, were purchased with working capital (which may, at any given time, include margin loans made by brokerage firms in the ordinary course of business).

The aggregate purchase price of the 5,309,432 Shares owned directly by BVF is approximately \$81,209,952, including brokerage commissions. The aggregate purchase price of the 4,308,573 Shares owned directly by BVF2 is approximately \$61,550,932, including brokerage commissions. The aggregate purchase price of the 548,938 Shares owned directly by Trading Fund OS is approximately \$8,052,392, including brokerage commissions. The aggregate purchase price of the 166,657 Shares held in the Partners Managed Account is approximately \$2,489,249, including brokerage commissions.

Item 5. Interest in Securities of the Issuer.

Items 5(a)-(c) are hereby amended and restated to read as follows:

(a) The aggregate percentage of Shares reported owned by each person named herein is based on 42,129,651 Shares outstanding as of November 3, 2023 as reported in the Issuer’s Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2023.

As of the close of business on the date hereof, (i) BVF beneficially owned 5,309,432 Shares, representing percentage ownership of approximately 12.6% of the Shares outstanding, (ii) BVF2 beneficially owned 4,308,573 Shares, representing percentage ownership of approximately 10.2% of the Shares outstanding, and (iii) Trading Fund OS beneficially owned 548,938 Shares, representing percentage ownership of approximately 1.3% of the Shares outstanding.

BVF GP, as the general partner of BVF, may be deemed to beneficially own the 5,309,432 Shares beneficially owned by BVF, representing percentage ownership of approximately 12.6% of the Shares outstanding.

BVF2 GP, as the general partner of BVF2, may be deemed to beneficially own the 4,308,573 Shares beneficially owned by BVF2, representing percentage ownership of approximately 10.2% of the Shares outstanding.

Partners OS, as the general partner of Trading Fund OS, may be deemed to beneficially own the 548,938 Shares beneficially owned by Trading Fund OS, representing percentage ownership of approximately 1.3% of the Shares outstanding.

BVF GPH, as the sole member of each of BVF GP and BVF2 GP, may be deemed to beneficially own the 9,618,005 Shares beneficially owned in the aggregate by BVF and BVF2, representing percentage ownership of approximately 22.8% of the Shares outstanding.

Partners, as the investment manager of BVF, BVF2 and Trading Fund OS and the Partners Managed Account, and the sole member of Partners OS, may be deemed to beneficially own the 10,333,600 Shares beneficially owned in the aggregate by BVF, BVF2 and Trading Fund OS and held in the Partners Managed Account, including 166,657 Shares held in the Partners Managed Account, representing percentage ownership of approximately 24.5% of the Shares outstanding (less than 1% of the Shares outstanding are held in the Partners Managed Account).

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 10,333,600 Shares beneficially owned by Partners, representing percentage ownership of approximately 24.5% of the Shares outstanding.

Mr. Lampert, as the sole director and officer of BVF Inc., may be deemed to beneficially own the 10,333,600 Shares beneficially owned by BVF Inc., representing percentage ownership of approximately 24.5% of the Shares outstanding.

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 BVF2. Partners OS 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.

(b) Each of BVF, BVF2 and Trading Fund OS shares with Partners voting and dispositive power over the Shares each such entity beneficially owns. BVF shares with BVF GP voting and dispositive power over the Shares beneficially owned by BVF. BVF2 shares with BVF2 GP voting and dispositive power over the Shares beneficially owned by BVF2. Each of BVF GP and BVF2 GP shares with BVF GPH voting and dispositive power over the Shares each such entity beneficially owns. Trading Fund OS shares with Partners OS voting and dispositive power over the Shares beneficially owned by Trading Fund OS. Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the 10,166,943 Shares they may be deemed to beneficially own with BVF, BVF GP, BVF2, BVF2 GP, Trading Fund OS, Partners OS and BVF GPH. Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the Shares held in the Partners Managed Account.

(c) Schedule A annexed hereto lists all transactions in securities of the Issuer by the Reporting Persons since the initial filing of the Schedule 13D.

SIGNATURES

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

Dated: November 17, 2023

BIOTECHNOLOGY VALUE FUND, L.P.

By: BVF I GP LLC, its general partner

By: /s/ Mark N. Lampert
Mark N. Lampert
Chief Executive Officer

BVF I GP LLC

By: /s/ Mark N. Lampert
Mark N. Lampert
Chief Executive Officer

BIOTECHNOLOGY VALUE FUND II, L.P.

By: BVF II GP LLC, its general partner

By: /s/ Mark N. Lampert
Mark N. Lampert
Chief Executive Officer

BVF II GP LLC

By: /s/ Mark N. Lampert
Mark N. Lampert
Chief Executive Officer

BVF PARTNERS OS LTD.

By: BVF Partners L.P., its sole member

By: BVF Inc., its general partner

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

BIOTECHNOLOGY VALUE TRADING FUND OS LP

By: BVF Partners L.P., its investment manager

By: BVF Inc., its general partner

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

BVF GP HOLDINGS LLC

By: /s/ Mark N. Lampert
Mark N. Lampert
Chief Executive Officer

BVF PARTNERS L.P.

By: BVF Inc., its general partner

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

BVF INC.

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

/s/ Mark N. Lampert
MARK N. LAMPERT

SCHEDULE A**Transactions in the Securities of the Issuer Since the Initial Filing of the Schedule 13D**

<u>Class of Security</u>	<u>Securities Purchased</u>	<u>Price (\$)</u>	<u>Date of Purchase</u>
<u>BIOTECHNOLOGY VALUE FUND, L.P.</u>			
Common Shares	493,337	4.9999	11/15/2023
Common Shares	153,693	5.3837	11/16/2023
<u>BIOTECHNOLOGY VALUE FUND II, L.P.</u>			
Common Shares	390,507	4.9999	11/15/2023
Common Shares	125,909	5.3837	11/16/2023
<u>BIOTECHNOLOGY VALUE TRADING FUND OS LP</u>			
Common Shares	47,712	4.9999	11/15/2023
Common Shares	16,143	5.3837	11/16/2023
<u>BVF PARTNERS L.P.</u> <u>(Through the Partners Managed Account)</u>			
Common Shares	3,444	4.9999	11/15/2023
Common Shares	4,255	5.3837	11/16/2023