

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

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 2, 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 4,662,402
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,662,402
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,662,402	
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) 11.1%	
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 4,662,402
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 4,662,402
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,662,402	
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) 11.1%	
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 3,792,157
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 3,792,157
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,792,157	
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) 9.0%	
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 3,792,157
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 3,792,157
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,792,157	
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) 9.0%	
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 485,083
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 485,083
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 485,083	
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) 1.2%	
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 485,083
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 485,083
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 485,083	
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) 1.2%	
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 8,454,559
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 8,454,559
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 8,454,559	
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) 20.1%	
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 9,098,600
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 9,098,600
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9,098,600	
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) 21.6%	
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 9,098,600
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 9,098,600
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9,098,600	
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) 21.6%	
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 9,098,600
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 9,098,600
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9,098,600	
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) 21.6%	
14	TYPE OF REPORTING PERSON IN	

Explanatory Note: The following constitutes the Schedule 13D filed by the undersigned (the “Schedule 13D”). The Reporting Persons (as defined below) initially filed a Schedule 13G with respect to the securities of the Issuer pursuant to Rule 13d-1(c) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), on June 29, 2020 and subsequently filed amendments thereto. As of November 2, 2023, the Reporting Persons may be deemed to beneficially own in the aggregate in excess of 20% of the outstanding Shares (as defined below) of the Issuer (as defined below). Accordingly, the Reporting Persons are no longer eligible to report their beneficial ownership with respect to the securities of the Issuer on Schedule 13G and, in accordance with Rule 13d-1(f) of the Exchange Act, the Reporting Persons are transitioning to a Schedule 13D.

Item 1. Security and Issuer.

This statement relates to the Common Shares, no par value (the “Shares”), of Repare Therapeutics Inc., a corporation under the Business Corporations Act (Québec) (the “Issuer”). The address of the principal executive offices of the Issuer is 7171 Frederick-Banting, Building 2, St-Laurent, Québec, Canada H4S 1Z9.

Item 2. Identity and Background.

(a) This statement is filed by:

- (i) Biotechnology Value Fund, L.P., a Delaware limited partnership (“BVF”);
- (ii) BVF I GP LLC, a Delaware limited liability company (“BVF GP”), which serves as general partner of BVF;
- (iii) Biotechnology Value Fund II, L.P., a Delaware limited partnership (“BVF2”);
- (iv) BVF II GP LLC, a Delaware limited liability company (“BVF2 GP”), which serves as general partner of BVF2;
- (v) Biotechnology Value Trading Fund OS LP, a Cayman Islands limited partnership (“Trading Fund OS”);
- (vi) BVF Partners OS Ltd., a Cayman Islands limited liability company (“Partners OS”), which serves as general partner of Trading Fund OS;
- (vii) BVF GP Holdings LLC, a Delaware limited liability company (“BVF GPH”), which is the sole member of each of BVF GP and BVF2 GP;
- (viii) BVF Partners L.P., a Delaware limited partnership (“Partners”), which serves as the investment manager of each of BVF, BVF2, Trading Fund OS and a certain managed account (the “Partners Managed Account”), and as the sole member of Partners OS;
- (ix) BVF Inc., a Delaware corporation, which serves as general partner of Partners and the managing member of BVF GPH; and
- (x) Mark N. Lampert, who serves as the sole officer and director of BVF Inc.

Each of the foregoing is referred to as a “Reporting Person” and collectively as the “Reporting Persons.” Each of the Reporting Persons is party to that certain Joint Filing Agreement, as further described in Item 6. Accordingly, the Reporting Persons are hereby filing a joint Schedule 13D.

(b) The business address of BVF, BVF GP, BVF2, BVF2 GP, BVF GPH, Partners, BVF Inc. and Mr. Lampert is 44 Montgomery St., 40th Floor, San Francisco, California 94104. The business address of Trading Fund OS and Partners OS is PO Box 309 Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

(c) The principal business of each of BVF, BVF2 and Trading Fund OS is investing in securities. The principal business of BVF GP, BVF2 GP and Partners OS is serving as the general partner of BVF, BVF2 and Trading Fund OS, respectively. The principal business of BVF GPH is serving as the sole member of each of BVF GP and BVF2 GP. The principal business of Partners is serving as the investment manager of each of BVF, BVF2, Trading Fund OS and the Partners Managed Account, and as the sole member of Partners OS. The principal business of BVF Inc. is serving as the general partner of Partners and as the managing member of BVF GPH. Mr. Lampert is the sole officer and director of BVF Inc.

(d) No Reporting Person has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) No Reporting Person 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) Mr. Lampert is a citizen of the United States of America.

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

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 4,662,402 Shares owned directly by BVF is approximately \$77,901,402, including brokerage commissions. The aggregate purchase price of the 3,792,157 Shares owned directly by BVF2 is approximately \$58,908,992, including brokerage commissions. The aggregate purchase price of the 485,083 Shares owned directly by Trading Fund OS is approximately \$7,725,489, including brokerage commissions. The aggregate purchase price of the 158,958 Shares held in the Partners Managed Account is approximately \$2,448,924, including brokerage commissions.

Item 4. Purpose of Transaction.

The Reporting Persons acquired the Shares based on the Reporting Persons' belief that such Shares, when acquired, were undervalued and represented an attractive investment opportunity. Depending upon overall market conditions, other investment opportunities available to the Reporting Persons, and the availability of securities of the Issuer at prices that would make the purchase or sale of such securities desirable, the Reporting Persons may endeavor to increase or decrease their position in the Issuer through, among other things, the purchase or sale of securities of the Issuer on the open market or in private transactions or otherwise, on such terms and at such times as the Reporting Persons may deem advisable.

The Reporting Persons remain passive investors in the Issuer and are filing the Schedule 13D solely as a result of beneficially owning in excess of 20% of the outstanding Shares (see Explanatory Note above). The Reporting Persons have not acquired the Shares with a purpose or effect of changing or influencing control of the Issuer and no Reporting Person has any present plan or proposal which would relate to or result in any of the matters set forth in subparagraphs (a) - (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer.

(a) The aggregate percentage of Shares reported owned by each person named herein is based on 42,094,446 Shares outstanding as of August 1, 2023 as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 9, 2023.

As of the close of business on the date hereof, (i) BVF beneficially owned 4,662,402 Shares, representing percentage ownership of approximately 11.1% of the Shares outstanding, (ii) BVF2 beneficially owned 3,792,157 Shares, representing percentage ownership of approximately 9.0% of the Shares outstanding, and (iii) Trading Fund OS beneficially owned 485,083 Shares, representing percentage ownership of approximately 1.2% of the Shares outstanding.

BVF GP, as the general partner of BVF, may be deemed to beneficially own the 4,662,402 Shares beneficially owned by BVF, representing percentage ownership of approximately 11.1% of the Shares outstanding.

BVF2 GP, as the general partner of BVF2, may be deemed to beneficially own the 3,792,157 Shares beneficially owned by BVF2, representing percentage ownership of approximately 9.0% of the Shares outstanding.

Partners OS, as the general partner of Trading Fund OS, may be deemed to beneficially own the 485,083 Shares beneficially owned by Trading Fund OS, representing percentage ownership of approximately 1.2% 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 8,454,559 Shares beneficially owned in the aggregate by BVF and BVF2, representing percentage ownership of approximately 20.1% 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 9,098,600 Shares beneficially owned in the aggregate by BVF, BVF2 and Trading Fund OS and held in the Partners Managed Account, including 158,958 Shares held in the Partners Managed Account, representing percentage ownership of approximately 21.6% 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 9,098,600 Shares beneficially owned by Partners, representing percentage ownership of approximately 21.6% of the Shares outstanding.

Mr. Lampert, as the sole director and officer of BVF Inc., may be deemed to beneficially own the 9,098,600 Shares beneficially owned by BVF Inc., representing percentage ownership of approximately 21.6% 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 8,939,642 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 during the past sixty days.

(d) No person other than the Reporting Persons is known to have the right to receive, or the power to direct the receipt of dividends from, or proceeds from the sale of, the Shares.

(e) Not applicable.

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

On November 3, 2023, the Reporting Persons entered into a Joint Filing Agreement in which the Reporting Persons agreed to the joint filing on behalf of each of them of statements on Schedule 13D with respect to securities of the Issuer to the extent required by applicable law. A copy of this agreement is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

BVF GP and BVF2 GP are the general partners of each of BVF and BVF2, respectively, pursuant to their limited partnership agreements, which provide BVF GP and BVF2 GP with broad authority over the activities and assets of BVF and BVF2. Pursuant to such limited partnership agreements, BVF GP and BVF2 GP are entitled to allocations based on realized and unrealized gains on the respective assets of BVF and BVF2.

Partners is the sole member of Partners OS and the investment manager of BVF, BVF2 and Trading Fund OS pursuant to their respective investment management agreements which authorize Partners, among other things, to invest the funds of BVF, BVF2 and Trading Fund OS in the securities of the Issuer and other securities and to vote, exercise or convert and dispose of such securities. Pursuant to such investment management agreements, Partners is entitled to receive fees based on assets under management and allocations based on realized and unrealized gains on such assets from each of BVF, BVF2 and Trading Fund OS.

Pursuant to investment management agreement with the Partners Managed Account, Partners and BVF Inc. have authority, among other things, to invest funds of the Partners Managed Account in the securities of the Issuer and other securities and to vote, exercise or convert and dispose of such securities. Pursuant to such investment management agreement, Partners and BVF Inc. receive fees based on realized and unrealized gains thereon.

Other than as described herein, there are no contracts, arrangements, understandings or relationships among the Reporting Persons, or between the Reporting Persons and any other person, with respect to the securities of the Issuer.

Item 7. Material to be Filed as Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	Joint Filing Agreement by and among the Reporting Persons, dated November 3, 2023.

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 3, 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 During the Past Sixty Days**

<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	218,979	3.6000	11/02/2023
	<u>BIOTECHNOLOGY VALUE FUND II, L.P.</u>		
Common Shares	492,251	3.6000	11/02/2023
	<u>BIOTECHNOLOGY VALUE TRADING FUND OS LP</u>		
Common Shares	72,479	3.6000	11/02/2023
	<u>BVF PARTNERS L.P.</u> <u>(Through the Partners Managed Account)</u>		
Common Shares	22,903	3.6000	11/02/2023

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k)(1)(iii) 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 dated November 3, 2023 (including amendments thereto) with respect to the Common Shares, no par value, of Repare Therapeutics Inc. This Joint Filing Agreement shall be filed as an Exhibit to such Statement.

Dated: November 3, 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