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

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No. 1)*

AXSOME THERAPEUTICS, INC.

(Name of Issuer)

Common Stock, Par Value \$0.0001
(Title of Class of Securities)

05464T104
(CUSIP Number)

December 31, 2023
(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 the disclosures provided in a prior cover page.

The information required in 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. | Names of Reporting Persons I.R.S. Identification No. of Above Persons (Entities Only) Fairmount Funds Management LLC | |
| 2. | Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3. | SEC Use Only | |
| 4. | Citizenship or Place of Organization Delaware | |
| Number of Shares Beneficially Owned by Each Reporting Person With | 5. | Sole Voting Power 0 |
| | 6. | Shared Voting Power 2,360,077 ⁽¹⁾ |
| | 7. | Sole Dispositive Power 0 |
| | 8. | Shared Dispositive Power 2,360,077 ⁽¹⁾ |
| 9. | Aggregate Amount Beneficially Owned by Each Reporting Person 2,360,077 ⁽¹⁾ | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="checkbox"/> | |
| 11. | Percent of Class Represented by Amount in Row (9) 4.9% ⁽²⁾ | |
| 12. | Type of Reporting Person (See Instructions) IA | |

(1) The shares reported herein for the Reporting Person represent 2,360,077 shares of the Issuer's Common Stock held by Fairmount Healthcare Fund II LP ("Fund II").

(2) Calculated based on 47,319,547 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as disclosed on Form 10-Q filed by the Issuer with the Securities and Exchange Commission on November 6, 2023.

| | | |
|--|--|--|
| 1. | Names of Reporting Persons I.R.S. Identification No. of Above Persons (Entities Only) | |
| | Peter Harwin | |
| 2. | Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3. | SEC Use Only | |
| 4. | Citizenship or Place of Organization United States | |
| Number of Shares Beneficially Owned by Each Reporting Person With | 5. | Sole Voting Power 0 |
| | 6. | Shared Voting Power 2,360,077 ⁽¹⁾ |
| | 7. | Sole Dispositive Power 0 |
| | 8. | Shared Dispositive Power 2,360,077 ⁽¹⁾ |
| 9. | Aggregate Amount Beneficially Owned by Each Reporting Person 2,360,077 ⁽¹⁾ | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="checkbox"/> | |
| 11. | Percent of Class Represented by Amount in Row (9) 4.9% ⁽²⁾ | |
| 12. | Type of Reporting Person (See Instructions) HC, IN | |

(1) The shares reported herein for the Reporting Person represent 2,360,077 shares of the Issuer's Common Stock held by Fairmount Healthcare Fund II LP ("Fund II").

(2) Calculated based on 47,319,547 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as disclosed on Form 10-Q filed by the Issuer with the Securities and Exchange Commission on November 6, 2023.

| | | |
|--|--|--|
| 1. | Names of Reporting Persons I.R.S. Identification No. of Above Persons (Entities Only) | |
| | Tomas Kiselak | |
| 2. | Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3. | SEC Use Only | |
| 4. | Citizenship or Place of Organization Slovak Republic | |
| Number of Shares Beneficially Owned by Each Reporting Person With | 5. | Sole Voting Power 0 |
| | 6. | Shared Voting Power 2,360,077 ⁽¹⁾ |
| | 7. | Sole Dispositive Power 0 |
| | 8. | Shared Dispositive Power 2,360,077 ⁽¹⁾ |
| 9. | Aggregate Amount Beneficially Owned by Each Reporting Person 2,360,077 ⁽¹⁾ | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="checkbox"/> | |
| 11. | Percent of Class Represented by Amount in Row (9) 4.9% ⁽²⁾ | |
| 12. | Type of Reporting Person (See Instructions) HC, IN | |

(1) The shares reported herein for the Reporting Person represent 2,360,077 shares of the Issuer's Common Stock held by Fairmount Healthcare Fund II LP ("Fund II").

(2) Calculated based on 47,319,547 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as disclosed on Form 10-Q filed by the Issuer with the Securities and Exchange Commission on November 6, 2023.

| | | |
|--|---|--|
| 1. | Names of Reporting Persons I.R.S. Identification No. of Above Persons (Entities Only) Fairmount Healthcare Fund II L.P. | |
| 2. | Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3. | SEC Use Only | |
| 4. | Citizenship or Place of Organization Delaware | |
| Number of Shares Beneficially Owned by Each Reporting Person With | 5. | Sole Voting Power 0 |
| | 6. | Shared Voting Power 2,360,077 ⁽¹⁾ |
| | 7. | Sole Dispositive Power 0 |
| | 8. | Shared Dispositive Power 2,360,077 ⁽¹⁾ |
| 9. | Aggregate Amount Beneficially Owned by Each Reporting Person 2,360,077 ⁽¹⁾ | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="checkbox"/> | |
| 11. | Percent of Class Represented by Amount in Row (9) 4.9% ⁽²⁾ | |
| 12. | Type of Reporting Person (See Instructions) PN | |

(1) The shares reported herein for the Reporting Person represent 2,360,077 directly owned shares of the Issuer's Common Stock.

(2) Calculated based on 47,319,547 shares of the Issuer's Common Stock outstanding as of October 31, 2023, as disclosed on Form 10-Q filed by the Issuer with the Securities and Exchange Commission on November 6, 2023.

| | | |
|--|--|-----------------------------------|
| 1. | Names of Reporting Persons I.R.S. Identification No. of Above Persons (Entities Only) | |
| | Fairmount Healthcare Fund L.P. | |
| 2. | Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3. | SEC Use Only | |
| 4. | Citizenship or Place of Organization Delaware | |
| Number of Shares Beneficially Owned by Each Reporting Person With | 5. | Sole Voting Power 0 |
| | 6. | Shared Voting Power 0 |
| | 7. | Sole Dispositive Power 0 |
| | 8. | Shared Dispositive Power 0 |
| 9. | Aggregate Amount Beneficially Owned by Each Reporting Person 0 | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="checkbox"/> | |
| 11. | Percent of Class Represented by Amount in Row (9) 0.0% | |
| 12. | Type of Reporting Person (See Instructions) PN | |

Item 1.

- (a) **Name of Issuer:** Axsome Therapeutics, Inc.
- (b) **Address of Issuer's Principal Executive Offices:** One World Trade Center, 22nd Floor, New York, NY 10007

Item 2.

This Amendment No. 1 to Schedule 13G amends and restates the statements on Schedule 13G originally filed on July 7, 2023.

- (a) **Name of Person(s) Filing:** This joint statement on Schedule 13G is being filed by Fairmount Funds Management LLC ("Fairmount"), Peter Harwin, Tomas Kiselak, Fairmount Healthcare Fund II L.P. ("Fund II"), and Fairmount Healthcare Fund L.P. ("Fund I"). Fairmount, Mr. Harwin, Mr. Kiselak, Fund II, and Fund I are collectively referred to herein as the "Reporting Persons."

The Common Stock reported herein includes Common Stock beneficially owned directly by Fund II. Fairmount Healthcare Fund GP LLC is the general partner of Fund I. Fairmount Healthcare Fund II GP LLC is the general partner of Fund II. The controlling persons of Fairmount are Mr. Harwin and Mr. Kiselak. Fairmount serves as investment adviser for Fund I and Fund II (together, the "Funds") and may be deemed a beneficial owner, for purposes of Section 13(d) of the Act, of any securities of the Issuer held by the Funds. The Funds have delegated to Fairmount the sole power to vote and the sole power to dispose of all securities held in the Funds' portfolios, including the shares of the Issuer's Common Stock reported herein. Because the Funds have divested voting and investment power over the reported securities and cannot revoke such delegation on less than 61 days' notice, the Funds disclaim beneficial ownership of the securities for purposes of Section 13(d) of the Act and therefore disclaim any obligation to report ownership of the reported securities under Section 13(d) of the Act. As managing members of Fairmount, Mr. Harwin and Mr. Kiselak may be deemed beneficial owners, for purposes of Section 13(d) of the Act, of any securities of the Issuer beneficially owned by Fairmount. Fairmount, Mr. Harwin, and Mr. Kiselak disclaim beneficial ownership of the securities reported in this Schedule 13G Statement (the "Statement") other than for the purpose of determining their obligations under Section 13(d) of the Act, and the filing of the Statement shall not be deemed an admission that any of Fairmount, Mr. Harwin, or Mr. Kiselak is the beneficial owner of such securities for any other purpose.

- (b) **Address of Principal Business Office:** The principal business office of the Reporting Persons is c/o Fairmount Funds Management LLC, 200 Barr Harbor Drive, Suite 400, West Conshohocken, PA 19428.
- (c) **Citizenship:** Fairmount is a Delaware limited liability company. Mr. Harwin is a United States citizen. Mr. Kiselak is a Slovak Republic citizen. Fund II and Fund I are each a Delaware limited partnership.
- (d) **Title of Class of Securities:** Common stock, Par Value \$0.0001 ("Common Stock")
- (e) **CUSIP Number:** 05464T104

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable.

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
- (k) Group, in accordance with §240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution: _____.
-

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount Beneficially Owned:

As of the date of this filing, Fund II held 2,360,077 shares of Common Stock.

(b) Percent of Class:

See the response(s) to Item 11 on the attached cover page(s).

(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote:

See the response(s) to Item 5 on the attached cover page(s).

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

See the response(s) to Item 6 on the attached cover page(s).

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

See the response(s) to Item 7 on the attached cover page(s).

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

See the response(s) to Item 8 on the attached cover page(s).

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

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following .

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

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which 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

Not applicable.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

By signing below I certify that, to the best of my 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, other than activities solely in connection with a nomination under § 240.14a-11.

Signature

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

Dated: February 14, 2024

FAIRMOUNT FUNDS MANAGEMENT LLC

| | |
|------------------------|-------------------|
| By: /s/ Peter Harwin | /s/ Tomas Kiselak |
| Name: Peter Harwin | Tomas Kiselak |
| Title: Managing Member | Managing Member |

PETER HARWIN

By: /s/ Peter Harwin

TOMAS KISELAK

By: /s/ Tomas Kiselak

FAIRMOUNT HEALTHCARE FUND II L.P.

By: Fairmount Healthcare Fund II GP LLC

| | |
|----------------------|-------------------|
| By: /s/ Peter Harwin | /s/ Tomas Kiselak |
| Name: Peter Harwin | Tomas Kiselak |
| Title: Member | Member |

FAIRMOUNT HEALTHCARE FUND L.P.

By: Fairmount Healthcare Fund GP LLC

| | |
|----------------------|-------------------|
| By: /s/ Peter Harwin | /s/ Tomas Kiselak |
| Name: Peter Harwin | Tomas Kiselak |
| Title: Member | Member |

Exhibit A

Joint Filing Agreement

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned and each other person executing this joint filing agreement (this "Agreement") agree as follows:

(i) The undersigned and each other person executing this Agreement are individually eligible to use the Schedule 13G to which this Exhibit is attached and such Schedule 13G is filed on behalf of the undersigned and each other person executing this Agreement; and

(ii) The undersigned and each other person executing this Agreement are responsible for the timely filing of such Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of the undersigned or any other person executing this Agreement is responsible for the completeness or accuracy of the information statement concerning any other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same instrument.

Dated: February 14, 2024

FAIRMOUNT FUNDS MANAGEMENT LLC

| | |
|------------------------|-------------------|
| By: /s/ Peter Harwin | /s/ Tomas Kiselak |
| Name: Peter Harwin | Tomas Kiselak |
| Title: Managing Member | Managing Member |

PETER HARWIN

By: /s/ Peter Harwin

TOMAS KISELAK

By: /s/ Tomas Kiselak

FAIRMOUNT HEALTHCARE FUND II L.P.

By: Fairmount Healthcare Fund II GP LLC

| | |
|----------------------|-------------------|
| By: /s/ Peter Harwin | /s/ Tomas Kiselak |
| Name: Peter Harwin | Tomas Kiselak |
| Title: Member | Member |

FAIRMOUNT HEALTHCARE FUND L.P.

By: Fairmount Healthcare Fund GP LLC

| | |
|----------------------|-------------------|
| By: /s/ Peter Harwin | /s/ Tomas Kiselak |
| Name: Peter Harwin | Tomas Kiselak |
| Title: Member | Member |
