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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, DC 20549

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**SCHEDULE 13D/A**

**Under the Securities Exchange Act of 1934**  
**(Amendment No. 9)\***

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**Biora Therapeutics, Inc.**  
(Name of Issuer)

**Common Stock, par value \$0.001 per share**  
(Title of Class of Securities)

**74319F107**  
(CUSIP Number)

**Andrew C. Hyman, Esq.**  
**Athyrium Capital Management, LP**  
**505 Fifth Avenue, 18th Floor**  
**New York, New York 10017**  
**(212) 402-6925**

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

**December 18, 2023**  
(Date of Event Which Requires Filing of This Statement)

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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.

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**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.

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\* 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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1	Name of reporting person Athyrium Opportunities III Co-Invest 1 LP	
2	Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 11,351,996
	9	Sole dispositive power 0
	10	Shared dispositive power 11,351,996
11	Aggregate amount beneficially owned by each reporting person 11,351,996	
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) 34.9%	
14	Type of reporting person PN	

1	Name of reporting person Athyrium Opportunities III Acquisition LP	
2	Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 537,331
	9	Sole dispositive power 0
	10	Shared dispositive power 537,331
11	Aggregate amount beneficially owned by each reporting person 537,331	
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) 1.7%	
14	Type of reporting person PN	

1	Name of reporting person Athyrium Opportunities III Acquisition 2 LP	
2	Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 4,141,865
	9	Sole dispositive power 0
	10	Shared dispositive power 4,141,865
11	Aggregate amount beneficially owned by each reporting person 4,141,865	
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) 12.7%	
14	Type of reporting person PN	

1	Name of reporting person Athyrium Opportunities 2020 LP	
2	Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 183,333
	9	Sole dispositive power 0
	10	Shared dispositive power 183,333
11	Aggregate amount beneficially owned by each reporting person 183,333	
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) 0.6%	
14	Type of reporting person PN	

1	Name of reporting person Jeffrey A. Ferrell	
2	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 16,214,525
	9	Sole dispositive power 0
	10	Shared dispositive power 16,214,525
11	Aggregate amount beneficially owned by each reporting person 16,214,525	
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) 49.9%	
14	Type of reporting person IN	

1	Name of reporting person Athyrium Opportunities Associates Co-Invest LLC	
2	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 11,351,996
	9	Sole dispositive power 0
	10	Shared dispositive power 11,351,996
11	Aggregate amount beneficially owned by each reporting person 11,351,996	
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) 34.9%	
14	Type of reporting person OO	

1	Name of reporting person Athyrium Funds GP Holdings LLC	
2	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 16,214,525
	9	Sole dispositive power 0
	10	Shared dispositive power 16,214,525
11	Aggregate amount beneficially owned by each reporting person 16,214,525	
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) 49.9%	
14	Type of reporting person OO	



1	Name of reporting person Athyrium Opportunities Associates III LP	
2	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 4,862,529
	9	Sole dispositive power 0
	10	Shared dispositive power 4,862,529
11	Aggregate amount beneficially owned by each reporting person 4,862,529	
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) 15.0%	
14	Type of reporting person PN	

1	Name of reporting person Athyrium Opportunities Associates III GP LLC	
2	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds OO	
5	Check box if disclosure of legal proceedings is required pursuant to Items 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 4,862,529
	9	Sole dispositive power 0
	10	Shared dispositive power 4,862,529
11	Aggregate amount beneficially owned by each reporting person 4,862,529	
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) 15.0%	
14	Type of reporting person OO	

## Explanatory Note

This Amendment No. 9 amends and supplements the Schedule 13D originally filed by the Reporting Persons (as defined below) with the Securities and Exchange Commission (the “SEC”) on July 6, 2020, (as amended to date, this “Schedule 13D”). Except as may be described herein, none of the Reporting Persons or, to the knowledge of the Reporting Persons, none of the Covered Persons (as defined below), has had any transactions in the Common Stock (as defined below) during the past 60 days. On January 3, 2023, the Company (as defined below) effected a reverse stock split (the “Reverse Stock Split”) of the Company’s Common Stock at a ratio of 25:1. The share and per share amounts reported in this Schedule 13D give effect to the Reverse Stock Split for all periods presented herein.

### Item 1. Security and Issuer.

This Schedule 13D relates to the common stock, par value \$0.001 per share (“Common Stock”), of Biora Therapeutics, Inc., a Delaware corporation (the “Company”). The address of the principal executive offices of the Company is 4330 La Jolla Village Drive, Suite 300, San Diego, California 92122.

### Item 2. Identity and Background.

(a)-(c) & (f) This Schedule 13D is filed jointly by the following persons pursuant to Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended (the “Exchange Act”):

- (1) Athyrium Opportunities III Co-Invest 1 LP, a Delaware limited partnership (“Co-Invest LP”), is an investment partnership engaged in the business of making equity and debt investments;
- (2) Athyrium Opportunities III Acquisition LP, a Delaware limited partnership (“Acquisition LP”), is an investment partnership engaged in the business of making equity and debt investments;
- (3) Athyrium Opportunities III Acquisition 2 LP, a Delaware limited partnership (“Acquisition 2 LP” and, together with Acquisition LP, the “AOIII Acquisition Funds”), is an investment partnership engaged in the business of making equity and debt investments;
- (4) Athyrium Opportunities 2020 LP, a Delaware limited partnership (“2020 LP” and, together with Co-Invest LP and the AOIII Acquisition Funds, the “Funds”), is an investment partnership engaged in the business of making equity and debt investments;
- (5) Athyrium Opportunities Associates III GP LLC, a Delaware limited liability company (“Associates III GP”), is engaged in the business of being the general partner of Associates III LP;
- (6) Athyrium Opportunities Associates Co-Invest LLC, a Delaware limited liability company (“Associates Co-Invest”), is engaged in the business of being the general partner of Co-Invest LP;
- (7) Athyrium Funds GP Holdings LLC, a Delaware limited liability company (“GP Holdings”), is engaged in the business of being the managing member of Associates Co-Invest and Associates III GP (as defined below);
- (8) Athyrium Opportunities Associates III LP, a Delaware limited partnership (“Associates III LP”), is engaged in the business of being the general partner of the AOIII Acquisition Funds and 2020 LP; and
- (9) Jeffrey A. Ferrell is an individual citizen of the United States whose principal occupation is to serve as the Managing Member of GP Holdings and the President of Associates III GP and Associates Co-Invest.

The persons described in (1) through (9) above are referred to herein as the “Reporting Persons.” A list of the directors, executive officers, managers, members and partners, as applicable, of each Reporting Person (collectively, the “Covered Persons”) is attached hereto as Annex A and is incorporated by reference herein. To the knowledge of the Reporting Persons, each of the Covered Persons that is a natural person is a United States citizen.

The principal business address of each of the Reporting Persons and each associated Covered Person is c/o Athyrium Capital Management, LP, 505 Fifth Avenue, Floor 18, New York, New York 10017.

(d) During the last five years, none of the Reporting Persons or, to their knowledge, none of the Covered Persons, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years, none of the Reporting Persons or, to their knowledge, none of the Covered Persons, has been a 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.

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

On October 27, 2017, the Company and Co-Invest LP entered into a Series B Preferred Stock Purchase Agreement (the “2017 Series B Stock Purchase Agreement”), which provided for the sale of shares of Series B Preferred Stock for an aggregate purchase price of \$50.0 million.

On August 27, 2019, the Company and Acquisition LP entered into a Series B Preferred Stock Purchase Agreement pursuant to which Acquisition LP purchased shares of Series B Preferred Stock for an aggregate purchase price of \$25.0 million.

On November 12, 2019, the Company and Acquisition LP entered into a Series B Stock Preferred Stock Purchase Agreement (the “2019 Series B Stock Purchase Agreement”) pursuant to which Acquisition LP purchased additional shares of Series B Preferred Stock for an aggregate purchase price of \$25.0 million. Also on November 12, 2019, Acquisition 2 LP acquired all of the securities of the Company held by Acquisition LP.

On December 19, 2019 and February 28, 2020, Acquisition 2 LP purchased additional shares of Series B Preferred Stock pursuant to the 2019 Series B Stock Purchase Agreement for an aggregate purchase price of \$25.0 million and \$10.0 million, respectively.

On March 31, 2020, Co-Invest LP and the Company entered into the First Amendment to the Credit Agreement (the “Credit Agreement Amendment”) providing for the payment in shares of the Company’s Series B Preferred Stock of the interest on the amount outstanding under the applicable credit agreement.

On April 3, 2020, the Company and Acquisition 2 LP entered into a Series B Preferred Stock Purchase Agreement pursuant to which Acquisition 2 LP purchased additional shares of Series B Preferred Stock for an aggregate purchase price of \$10.0 million.

On May 8, 2020, the Company and 2020 LP entered into a Note Purchase Agreement pursuant to which 2020 LP purchased an unsecured convertible promissory note (the “Convertible Promissory Note”) with an annual interest rate of 8.0% and in an aggregate principal amount of \$15.0 million.

In connection with the consummation of the Company’s initial public offering of its Common Stock, the Series B Preferred Stock and the Convertible Promissory Note converted, automatically and without any additional consideration, into 732,794 and 50,000 shares, respectively, of Common Stock. Further, on June 23, 2020, in connection with the initial public offering of the Company’s Common Stock, 2020 LP purchased 133,333 shares of Common Stock. The funds used to purchase such shares were composed of the investment capital of 2020 LP.

On December 7, 2020, the Company consummated a follow-on public offering of its Common Stock and a concurrent private placement of its 7.25% convertible senior notes due 2025 (the “7.25% Convertible Notes”). Acquisition 2 purchased 165,137 shares of Common Stock, and Acquisition LP purchased an aggregate principal amount of \$25,000,000 of the 7.25% Convertible Notes in connection with the offerings. Such shares of Common Stock were purchased for an aggregate purchase price of \$13.5 million, and such 7.25% Convertible Notes were purchased for \$25.0 million in cash, in each case at the same price offered to the public. The funds used to purchase such shares and 7.25% Convertible Notes, as applicable, were composed of the investment capital of the applicable Fund. At the same time, Co-Invest LP consummated an agreement to receive an aggregate principal amount of \$78,500,000 of the 7.25% Convertible Notes and \$95,833.33 in cash in exchange for the cancellation of the \$78.6 million in principal and accrued and unpaid interest outstanding, as well as a prepayment penalty, under the Company’s credit agreement for which Co-Invest LP acted as the lender and collateral agent.

On June 1, 2021, Acquisition LP and Co-Invest LP entered into a Consent and Waiver Agreement and, on May 27, 2021, a Stock Issuance Agreement (the “Stock Issuance Agreement”), each with the Company, pursuant to which Acquisition LP and Co-Invest LP agreed to forgo and waive their right to receive interest in cash due on the 7.25% Convertible Notes held by Acquisition LP and Co-Invest LP, in exchange for the issuance of shares of Common Stock equal to \$3,626,812.50, the amount of cash interest so waived. Pursuant to the Stock Issuance Agreement, Acquisition LP acquired 12,252 shares of Common Stock and Co-Invest LP acquired 38,472 shares of Common Stock.

On June 14, 2021, the Company consummated a private placement of units (the “Private Placement”), with each unit consisting of one share of Common Stock and the right to buy an additional share of Common Stock for the exercise price specified in the warrant conferring such right (the “Common Stock Warrant”). In connection with the Private Placement, Acquisition 2 LP purchased 323,886 units with an aggregate purchase price of \$20.0 million. On November 6, 2022, the Company and Acquisition 2 LP agreed to amend the Common Stock Warrant (as amended, the “Amended Warrant”) to reduce the exercise price to \$8.22 per share of Common Stock. The Amended Warrant is exercisable at any time on or after May 9, 2023 and until May 9, 2028, but not thereafter.

On November 6, 2022, Acquisition LP and Co-Invest LP entered into an Interest Waiver and Securities Issuance Agreement and a Securities Purchase Agreement (collectively, the “Interest Waiver Agreements”), in each case with the Company, pursuant to which Acquisition LP and Co-Invest LP agreed to forego and waive their right to receive an aggregate amount of \$3,751,875 in cash interest due on the 7.25% Convertible Notes held by Acquisition LP and Co-Invest LP, in exchange for the issuance of shares of Common Stock and warrants to purchase an additional share of Common Stock (the “Second Common Stock Warrant”). In connection with the Interest Waiver Agreements, Acquisition LP acquired 120,833 shares of Common Stock and the right to purchase 120,833 shares of Common Stock pursuant to the Second Common Stock Warrant and Co-Invest LP acquired 379,416 shares of Common Stock and the right to purchase 379,416 shares of Common Stock pursuant to the Second Common Stock Warrant. The Second Common Stock Warrant has an exercise price of \$8.22 per share and is exercisable at any time on or after May 9, 2023 and until May 9, 2028, but not thereafter.

On September 18, 2023, the Company, Acquisition LP and Co-Invest LP entered into a Convertible Notes Exchange Agreement for Common Stock and Warrants (the “September 2023 Exchange Agreement”) whereby (i) Acquisition LP exchanged \$12,077,000 aggregate principal amount of 7.25% Convertible Notes for (1) 2,230,690 shares of the Common Stock, pre-funded warrants to purchase 1,787,209 shares of Common Stock (“September 2023 Pre-Funded Warrants”) and warrants to purchase 4,017,899 shares of Common Stock (“September 2023 Warrants”), all to be issued to Acquisition LP pursuant to the terms of the September 2023 Exchange Agreement, and (2) accrued and unpaid interest paid in cash on the 7.25% Convertible Notes exchanged to, but excluding, the closing date and (ii) Co-Invest LP exchanged \$37,923,000 aggregate principal amount of 7.25% Convertible Notes for (1) 7,004,591 shares of Common Stock, September 2023 Pre-Funded Warrants to purchase 5,612,017 shares of Common Stock, September 2023 Warrants to purchase 12,616,608 shares of Common Stock, all to be issued to Co-Invest LP pursuant to the terms of the September 2023 Exchange Agreement, and (2) accrued and unpaid interest paid in cash on the 7.25% Convertible Notes exchanged to, but excluding, the closing date. The September 2023 Pre-Funded Warrants have an exercise price of \$0.001 per share and are exercisable at any time on or after September 18, 2023 until such September 2023 Pre-Funded Warrants have been fully exercised in accordance with their terms. The September 2023 Warrants have an exercise price of \$3.01 per share and are exercisable at any time on or after September 18, 2023 until September 18, 2026. Each of the September 2023 Pre-Funded Warrants and the September 2023 Warrants are subject to certain exercise limitations, including a limitation on the ability to exercise if the holder’s beneficial ownership of Common Stock (together with its affiliates and certain attribution parties) would exceed 49.9% of the outstanding Common Stock.

On December 18, 2023, the Company, Acquisition LP and Co-Invest LP entered into a Convertible Notes Purchase Agreement (the “December 2023 Purchase Agreement”) whereby (i) Acquisition LP purchased \$1,680,000 aggregate principal amount of 11.00% / 13.00% Convertible Senior Secured Notes due 2028 (the “11.00% / 13.00% Convertible Notes”) and warrants to purchase 503,872 shares of Common Stock (such warrants, “December 2023 Additional Warrants”), which warrants were issued to and are directly held by Acquisition LP pursuant to the terms of the Purchase Agreement, from the Company in exchange for \$1,680,000 in interest that had accrued but not yet been paid to Acquisition LP under the 7.25% Convertible Notes, and (ii) Co-Invest LP purchased \$5,273,000 aggregate principal amount of 11.00% / 13.00% Convertible Notes and December 2023 Additional Warrants to purchase 1,581,500 shares of Common Stock from the Company in exchange for \$5,273,000 in interest that had accrued but not yet been paid to Co-Invest LP under the 7.25% Convertible Notes. On December 18, 2023, the Company, Acquisition LP and Co-Invest LP entered into a Convertible Notes Exchange Agreement for New Notes and Common Stock or Warrants (the “December 2023 Exchange Agreement”) whereby (i) Acquisition LP exchanged (1) \$3,360,000 aggregate principal amount of 7.25% Convertible Notes directly held by Acquisition LP for \$2,520,000 aggregate principal amount of 11.00% / 13.00% Convertible Notes, together with accrued and unpaid interest on the 7.25% Convertible Notes exchanged, and (2) \$9,563,000 aggregate principal amount of 7.25% Convertible Notes for warrants to purchase 1,217,109 shares of Common Stock (“December 2023 Exchange Warrants”), which warrants were issued to and are directly held by Acquisition LP pursuant to the terms of the December 2023 Exchange Agreement, together with accrued and unpaid interest on the 7.25% Convertible Notes exchanged, and (ii) Co-Invest LP exchanged (1) \$10,546,000 aggregate principal amount of 7.25% Convertible Notes directly held by Co-Invest LP for \$7,910,000 aggregate principal amount of 11.00% / 13.00% Convertible Notes, together with accrued and unpaid interest on the 7.25% Convertible Notes exchanged, and (2) \$30,031,000 aggregate principal amount of 7.25% Convertible Notes for December 2023 Exchange Warrants to purchase 3,822,127 shares of Common Stock, together with accrued and unpaid interest on the 7.25% Convertible Notes exchanged. All accrued and unpaid interest on 7.25% Convertible Notes exchanged pursuant to the December 2023 Exchange Agreement was used to pay, in part, the purchase price owing pursuant to the December 2023 Purchase Agreement. The 11.00% / 13.00% Convertible Notes are subject to certain limitations on conversion, and limitations on the Company’s ability to issue Common Stock to satisfy obligations under the 11.00% / 13.00% Convertible Notes, including a limitation on the ability of the holder to convert or the Company to issue Common Stock if the holder’s beneficial ownership of Common Stock (together with its affiliates and certain attribution parties) would, in the case of Acquisition LP and Co-Invest LP, exceed 49.9% of the outstanding Common Stock. The December 2023 Additional Warrants have an exercise price of \$5.00 per share and are exercisable at any time on or after December 19, 2023 until December 19, 2028. The December 2023 Exchange Warrants have an exercise price of \$5.50 per share and are exercisable at any time on or after December 19, 2023 until December 19, 2028. Each of the December 2023 Additional Warrants and the December 2023 Exchange Warrants are subject to certain exercise limitations, including a limitation on the ability to exercise if the holder’s beneficial ownership of Common Stock (together with its affiliates and certain attribution parties) would exceed 49.9% of the outstanding Common Stock.

**Item 4. Purpose of Transaction.**

The Reporting Persons acquired the securities reported herein for investment purposes and intend to review their investments in the Company on a continuing basis. Depending on various factors, including but not limited to the Company's financial position and strategic direction, price levels of the Common Stock, conditions in the securities markets, various laws and regulations applicable to the Company and companies in its industry and the Reporting Persons' ownership in the Company, and general economic and industry conditions, the Reporting Persons may in the future take actions with respect to their investment in the Company as they deem appropriate, including changing their current intentions, with respect to any or all matters required to be disclosed herein. Without limiting the foregoing, and subject to any applicable limitations described in Item 6 below, the Reporting Persons may, from time to time, acquire or cause affiliates to acquire additional shares of Common Stock or other securities of the Company (including any combination or derivative thereof), dispose, or cause affiliates to dispose, of some or all of their Common Stock or other securities of the Company or continue to hold, or cause affiliates to hold, Common Stock or other securities of the Company.

In addition, the Reporting Persons have had and intend to continue having discussions, from time to time, with management and the board of directors of the Company, and may engage with other stockholders or securityholders of the Company and other relevant parties, or take other actions concerning, the Company's business, lines of business, operations, strategy, previously announced restructuring, plans and prospects; any extraordinary corporate transactions (including, but not limited to, a merger, reorganization or liquidation); sales of a material amount of assets or divestitures; a change in the board of directors or management; a material change in the Company's capitalization, capital structure or dividend policies; other material changes in the Company's business, lines of business, or corporate structure; or similar actions.

Except as set forth herein, or as would occur upon completion of any of the matters discussed herein, the Reporting Persons have no present plans, proposals or intentions which would result in or relate to any of the transactions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D. Although the foregoing reflects activities presently contemplated by the Reporting Persons and each other individuals named in Item 2 with respect to the Company, the foregoing is subject to change at any time.

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

**Item 5. Interest in Securities of the Issuer.**

**(a)-(b)** The information contained on the cover pages of this Schedule 13D is incorporated herein by reference.

The Reporting Persons beneficially own in the aggregate 16,214,525 shares of Common Stock, which represents approximately 49.9% of the outstanding shares of Common Stock. All calculations of percentage ownership in this Schedule 13D are based on (i) 27,209,277 shares of Common Stock outstanding as of December 18, 2023 as disclosed in the Company's Current Report on Form 8-K filed with the SEC on December 18, 2023 after giving effect to the transactions completed on December 19, 2023, *plus* (ii) shares issuable upon conversion of the 11.00% / 13.00% Convertible Notes held by the Reporting Persons, to the extent the 11.00% / 13.00% Convertible Notes are then convertible and the resulting shares are considered beneficially owned under applicable rules promulgated under the Exchange Act, *plus* (iii) shares underlying the Amended Warrant, the Second Common Stock Warrant, the September 2023 Pre-Funded Warrants, the September 2023 Warrants, the December 2023 Additional Warrants and the December 2023 Exchange Warrants, to the extent such warrants are then exercisable and the resulting shares are considered beneficially owned under applicable rules promulgated under the Exchange Act.

To the knowledge of the Reporting Persons, none of the Covered Persons directly owns any shares of Common Stock; provided, however, that because of each Covered Persons' status as a director, executive officer, manager, member or partner of a Reporting Person, a Covered Person may be deemed to be the beneficial owner of the shares of Common Stock beneficially owned by such Reporting Person. Except to the extent of their pecuniary interest, each of the Covered Persons disclaims beneficial ownership of the shares of the Common Stock reported herein and the filing of this Schedule 13D shall not be construed as an admission that any such Covered Person is the beneficial owner of any securities covered by this statement.

**(c)** Except as described herein, none of the Reporting Persons or, to their knowledge, none of the Covered Persons, has had any transactions in the Common Stock during the past 60 days.

**(d)** Except as set forth herein, to the knowledge of the Reporting Persons, no other person has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, any shares of Common Stock.

**(e)** Not applicable.

**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.****Fourth Amended and Restated Investors' Rights Agreement**

On August 27, 2019, Co-Invest LP, Acquisition LP and certain of their affiliates (the "Athyrium Parties") entered into a fourth amended and restated investors' rights agreement (the "Investors' Rights Agreement") with the Company and the other stockholders of the Company. The Investors' Rights Agreement provides that the stockholders of the Company have certain registration rights described below. On November 12, 2019, in connection with its acquisition of the securities of the Company previously held by Acquisition LP, Acquisition 2 LP signed a joinder agreement to the Investors' Rights Agreement and became one of the Athyrium Parties discussed below.

The registration rights described below will expire (i) with respect to any Athyrium Party, at the time such Athyrium Party can sell all of its registrable securities under Rule 144 or another similar exemption under the Securities Act of 1933, as amended (the “Securities Act”), without limitation during a three-month period without registration, or (iii) upon termination of the Investors’ Rights Agreement.

The key registration rights under the Investors’ Rights Agreement are as follows:

- *Demand Registration Rights.* At any time beginning 210 days after the effective date of the registration statement for the Company’s initial public offering, the holders of 50% or more of the registrable securities then outstanding may make a written request that the Company register all or a portion of their shares, subject to certain specified exceptions and conditions. The Company will then prepare and file a registration statement as requested, unless, in the good faith judgment of the Company’s board of directors, such registration would be seriously detrimental to the Company and its stockholders and filing should be deferred.
- *Piggyback Registration Rights.* Subject to certain specified exceptions, if the Company proposes to register any of its securities under the Securities Act either for its own account or for the account of other stockholders, the holders of shares having registration rights are entitled to written notice and certain “piggyback” registration rights allowing them to include their shares in the Company’s registration statement. These registration rights are subject to specified conditions and limitations, including the right of the underwriters, in their sole discretion, to limit the number of shares included in any such offering under certain circumstances, but not below 15% of the total amount of securities included in such offering, unless all securities, other than the Company’s securities, are entirely excluded from the offering.
- *Form S-3 Registration Rights.* At any time after the Company is qualified to file a registration statement on Form S-3, and subject to limitations and conditions, the holders of 50% or more of the registrable securities then outstanding are entitled to written notice of such registration and may make a written request that the Company prepare and file a registration statement on Form S-3 under the Securities Act covering their shares. The Company will then prepare and file the Form S-3 registration statement as requested, unless, in the good faith judgment of the Company’s board of directors, such registration would be seriously detrimental to the Company and its stockholders and filing should be deferred.

On November 10, 2020, the Company and the other stockholders party thereto entered into Amendment No. 1 to the Investors’ Rights Agreement in order to provide for the registration of the shares of Common Stock issued or issuable upon conversion of the Convertible Promissory Note.

On December 7, 2020, the Company and the other stockholders party thereto entered into Amendment No. 2 to the Investors’ Rights Agreement in order to provide for the registration of the shares of Common Stock issued or issuable upon conversion of the 7.25% Convertible Notes.

On May 31, 2021, the Company and the other stockholders party thereto entered into Amendment No. 3 to the Investors’ Rights Agreement in order to provide for the registration of the shares of Common Stock issued pursuant to the Stock Issuance Agreement.

On August 19, 2021, in connection with the proposed sale by the Company of Common Stock and warrants to purchase Common Stock pursuant to the Company’s registration statement on Form S-3 filed with the SEC on July 30, 2021 (the “Shelf Registration Statement”), the Company and the stockholders party to the Investors’ Rights Agreement entered into that certain Notice and Waiver, pursuant to which such stockholders waived their respective right to request that the Company include the securities registrable pursuant to the Investor Rights Agreement among the securities registered on the Shelf Registration Statement.

On September 18, 2023, in connection with the transactions contemplated by the September 2023 Exchange Agreement, the Company and the other stockholders party thereto entered into Amendment No. 4 to the Investors’ Rights Agreement in order to provide for the registration of the shares of Common Stock issued pursuant to the September 2023 Exchange Agreement and issuable pursuant to the terms of the September 2023 Pre-Funded Warrants and the September 2023 Warrants.

#### 7.25% Convertible Notes

On December 7, 2020, the Company issued a new series of 7.25% Convertible Notes. The 7.25% Convertible Notes were issued pursuant to, and are governed by, an indenture (the “Indenture”), dated as of December 7, 2020, by and between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee. The conversion rate is 11.1204 shares of Common Stock per \$1,000 principal amount of 7.25% Convertible Notes. The conversion rate will be subject to customary adjustments upon the occurrence of certain events. In addition, if certain corporate events that constitute a “Make-Whole Fundamental Change” (as defined in the Indenture) occur, then the conversion rate will, in certain circumstances, be increased for a specified period of time.

As part of the December 2023 Exchange Agreement, Acquisition LP and Co-Invest LP consented to an amendment to the terms of the Indenture governing the 7.25% Convertible Notes to permit the issuance of the 11.00% / 13.00% Convertible Notes. Following the completion of the transactions contemplated by the December 2023 Purchase Agreement and the December 2023 Exchange Agreement, the Reporting Persons no longer beneficially owned any 7.25% Convertible Notes.

#### Common Stock Warrant and Amended Warrant

On June 14, 2021, the Company issued a Common Stock Warrant to Acquisition 2 LP as registered holder. On November 6, 2022, the Company and Acquisition 2 LP agreed to amend the Common Stock Warrant. This Amended Warrant is exercisable for 323,886 shares of Common Stock at an exercise price of \$8.22 per share, at any time on or after May 9, 2023 and prior to May 9, 2028.

#### Second Common Stock Warrant

On November 9, 2022, the Company issued the Second Common Stock Warrant to Acquisition LP and Co-Invest LP in connection with the Interest Waiver Agreements. The Second Common Stock Warrant is exercisable for 500,249 shares of Common Stock, has an exercise price of \$8.22 per share of Common Stock and is exercisable at any time between May 9, 2023 and prior to its expiration on May 9, 2028.

#### September 2023 Pre-Funded Warrants

On September 18, 2023, pursuant to the terms of the September 2023 Exchange Agreement, the Company issued (i) September 2023 Pre-Funded Warrants to purchase 1,787,209 shares of Common Stock to Acquisition 2 LP and (ii) September 2023 Pre-Funded Warrants to purchase 5,612,017 shares of Common Stock to Co-Invest LP. The September 2023 Pre-Funded Warrants have an exercise price of \$0.001 per share and are exercisable at any time on or after September 18, 2023 until such September 2023 Pre-Funded Warrants have been fully exercised in accordance with their terms. Each of the September 2023 Pre-Funded Warrants are subject to certain exercise limitations, including a limitation on the ability to exercise if the holder's beneficial ownership of Common Stock (together with its affiliates and certain attribution parties) would exceed 49.9% of the outstanding Common Stock.

#### September 2023 Warrants

On September 18, 2023, pursuant to the terms of the September 2023 Exchange Agreement, the Company issued (i) September 2023 Warrants to purchase 4,017,899 shares of Common Stock to Acquisition 2 LP and (ii) September 2023 Warrants to purchase 12,616,608 shares of Common Stock to Co-Invest LP. The September 2023 Warrants have an exercise price of \$3.01 per share and are exercisable at any time on or after September 18, 2023 until September 18, 2026. Each of the September 2023 Warrants are subject to certain exercise limitations, including a limitation on the ability to exercise if the holder's beneficial ownership of Common Stock (together with its affiliates and certain attribution parties) would exceed 49.9% of the outstanding Common Stock.

#### 11.00% / 13.00% Convertible Notes

On December 19, 2023, the Company issued a new series of 11.00% / 13.00% Convertible Notes. The 11.00% / 13.00% Convertible Notes were issued pursuant to, and are governed by, an indenture, dated as of December 19, 2023, by and between the Company and GLAS Trust Company LLC, as trustee and collateral agent. The 11.00% / 13.00% Convertible Notes are the Company's senior secured obligations and are secured by substantially all of the Company's and its subsidiaries' assets.

Interest on the 11.00% / 13.00% Convertible Notes is payable in cash, or at the Company's election subject to certain limitations, with a combination of cash and shares of Common Stock ("blended payments") or, with the agreement of the applicable holder, through payment-in-kind. The 11.00% / 13.00% Convertible Notes will accrue interest at a rate of 11.00% per annum in the case of cash payment and 13.00% in the case of blended payments or payments-in-kind, payable semi-annually in arrears on June 1 and December 1 of each year, with the initial payment on June 1, 2024. On December 19, 2023, the Company, Acquisition LP and Co-Invest LP agreed that payments of interest on 11.00% / 13.00% Convertible Notes held by Acquisition LP and Co-Invest LP would be made as payments-in-kind until Acquisition LP and Co-Invest LP provide five business days advance notice to the Company revoking this election.

The 11.00% / 13.00% Convertible Notes will mature on the earlier of December 19, 2028 and the date that is 90 days prior to the maturity of the 7.25% Convertible Notes solely to the extent there are 7.25% Convertible Notes outstanding in a principal amount equal to or greater than \$5,000,000 as of such date, unless earlier repurchased, redeemed or converted.

At any time from the December 19, 2023 and before the close of business on the second scheduled trading day immediately before the maturity date, noteholders may convert their 11.00% / 13.00% Convertible Notes at their option into shares of Common Stock, together, if applicable, with cash in lieu of any fractional share, at the then-applicable conversion rate. The initial conversion rate is 641.02564 shares of Common Stock per \$1,000 principal amount of 11.00% / 13.00% Convertible Notes, which represents an initial conversion price of approximately \$1.56 per share of Common Stock. Noteholders that convert their Notes will be entitled to an additional premium payment representing the amount of certain of the remaining interest payments on the 11.00% / 13.00% Convertible Notes as specified in the indenture, which the Company may settle in cash, shares of common stock, or a combination, subject to the terms of the indenture. The conversion rate and conversion price will be subject to customary adjustments upon the occurrence of certain events. The 11.00% / 13.00% Convertible Notes are subject to certain limitations on conversion, and limitations on the Company's ability to issue Common Stock to satisfy obligations under the 11.00% / 13.00% Convertible Notes, including a limitation on the ability of the holder to convert or the Company to issue Common Stock if the holder's beneficial ownership of Common Stock (together with its affiliates and certain attribution parties) would, in the case of Acquisition LP and Co-Invest LP, exceed 49.9% of the outstanding Common Stock.



The 11.00% / 13.00% Convertible Notes are redeemable, in whole and not in part, at the Company's option at any time on or after December 19, 2024, and in some circumstances prior to that date, at a cash redemption price equal to the principal amount of the 11.00% / 13.00% Convertible Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, but only if the last reported sale price per share of the Common Stock exceeds 150% of the conversion price on (i) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date the Company sends the related redemption notice; and (2) the trading day immediately before the date the Company sends such notice.

If certain corporate events that constitute a "Fundamental Change" (as defined in the indenture) occur, then noteholders may require the Company to repurchase their 11.00% / 13.00% Convertible Notes at a cash repurchase price equal to the principal amount of the 11.00% / 13.00% Convertible Notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date. The definition of Fundamental Change includes certain business combination transactions involving the Company and certain de-listing events with respect to the Common Stock.

The indenture contains covenants restricting the Company's ability to incur indebtedness, incur liens, make restricted payments, make asset sales and engage in transactions with affiliates, subject to certain baskets. The indenture also requires the Company to maintain minimum liquidity of \$4 million and to add future assets to the collateral securing the 11.00% / 13.00% Convertible Notes and to add future subsidiaries as guarantors of the 11.00% / 13.00% Convertible Notes.

#### December 2023 Additional Warrants

On December 19, 2023, pursuant to the terms of the December 2023 Purchase Agreement, the Company issued (i) December 2023 Additional Warrants to purchase 503,872 shares of Common Stock to Acquisition 2 LP and (ii) December 2023 Additional Warrants to purchase 1,581,500 shares of Common Stock to Co-Invest LP. The December 2023 Additional Warrants have an exercise price of \$5.00 per share and are exercisable at any time on or after December 19, 2023 until December 19, 2028. Each of the December 2023 Additional Warrants are subject to certain exercise limitations, including a limitation on the ability to exercise if the holder's beneficial ownership of Common Stock (together with its affiliates and certain attribution parties) would exceed 49.9% of the outstanding Common Stock.

#### December 2023 Exchange Warrants

On December 19, 2023, pursuant to the terms of the December 2023 Exchange Agreement, the Company issued (i) December 2023 Exchange Warrants to purchase 1,217,109 shares of Common Stock to Acquisition 2 LP and (ii) December 2023 Exchange Warrants to purchase 3,822,127 shares of Common Stock to Co-Invest LP. The December 2023 Exchange Warrants have an exercise price of \$5.50 per share and are exercisable at any time on or after December 19, 2023 until December 19, 2028. Each of the December 2023 Exchange Warrants are subject to certain exercise limitations, including a limitation on the ability to exercise if the holder's beneficial ownership of Common Stock (together with its affiliates and certain attribution parties) would exceed 49.9% of the outstanding Common Stock.

#### December 2023 Registration Rights Agreement

On December 19, 2023, in connection with the completion of the transactions contemplated by the December 2023 Purchase Agreement and the December 2023 Exchange Agreement, the Company, Acquisition LP, Acquisition 2 LP, Co-Invest LP and certain other parties thereto entered into a Registration Rights Agreement (the "December 2023 Registration Rights Agreement"), which requires the Company to register, among other things, the resale of all shares of Common Stock issuable upon conversion or exercise of, or otherwise issuable pursuant to, the 11.00% / 13.00% Convertible Notes, the December 2023 Additional Warrants or the December 2023 Exchange Warrants. The Company is required to prepare and file a registration statement with the SEC no later than five business days after the date of the agreement, and to use its commercially reasonable efforts to have the registration statement declared effective 120 days after the date of the agreement. The registration rights will expire on the earliest of (i) when a registration statement covering such securities becomes or has been declared effective by the SEC and such securities have been sold or disposed of pursuant to such effective registration statement; (ii) when such securities are held by the Company or one of its subsidiaries; and (iii) the date on which such securities may be sold by the holder thereof without volume or manner of sale restrictions under Rule 144 under the Securities Act.

The foregoing summary of the Investors' Rights Agreement, December 2023 Registration Rights Agreement, 7.25% Convertible Notes, 11.00% / 13.00% Convertible Notes, Common Stock Warrant, Amended Warrant Second Common Stock Warrant, September 2023 Exchange Agreement, September 2023 Pre-Funded Warrants, September 2023 Warrants, December 2023 Additional Warrants and December 2023 Exchange Warrants is qualified in its entirety by reference to the complete text of such agreements, copies of which are filed as exhibits hereto and are incorporated herein by reference.

Pursuant to Rule 13d-1(k) promulgated under the Exchange Act, the Reporting Persons have entered into an agreement with respect to the joint filing of this Schedule 13D, which agreement is set forth on the signature page to this Schedule 13D.

Except as described above and herein in this Schedule 13D, there are no other contracts, understandings or relationships (legal or otherwise) among the parties named in Item 2 hereto and between such persons and any person with respect to any of the common stock of the Company owned by the Funds.

**Item 7. Material to be Filed as Exhibits.**

- Exhibit 99.1 Fourth Amended and Restated Investors' Rights Agreement, dated August 27, 2019, by and among the Company and certain of its stockholders (Incorporated by reference to Exhibit 4.5 of the Company's Registration Statement on Form S-1 filed on May 27, 2020).
- Exhibit 99.2 Amendment No. 1 to Fourth Amended and Restated Investors' Rights Agreement, dated as of November 10, 2020, by and among the Company and certain of its stockholders (Incorporated by reference to Exhibit 4.6 of the Company's Registration Statement on Form S-1 filed on December 1, 2020).
- Exhibit 99.3 Amendment No. 2 to Fourth Amended and Restated Investors' Rights Agreement, dated as of December 7, 2020, by and among the Company and certain of its stockholders (Incorporated by reference to Exhibit 99.3 to the Schedule 13D/A filed by the Reporting Persons on December 11, 2020).
- Exhibit 99.4 Amendment No. 3 to Fourth Amended and Restated Investors' Rights Agreement, dated as of May 31, 2021, by and among the Company and certain of its stockholders (Incorporated by reference to Exhibit 99.4 to the Schedule 13D/A filed by the Reporting Persons on June 21, 2021).
- Exhibit 99.5 Notice and Waiver, dated as of November 22, 2021, by and among the Company and certain of its stockholders (Incorporated by reference to Exhibit 99.5 to the Schedule 13D/A filed by the Reporting Persons on November 26, 2021).
- Exhibit 99.6 Amendment No. 4 to Fourth Amended and Restated Investors' Rights Agreement, dated as of September 18, 2023, by and among the Company and certain of its stockholders (Incorporated by reference to Exhibit 4.3 to of the Company's Current Report on Form 8-K filed on September 19, 2023).
- Exhibit 99.7 Form of Certificate Representing the 7.25% Convertible Notes (Incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K filed on December 7, 2020).
- Exhibit 99.8 Indenture, dated as of December 7, 2020, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee (Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on December 7, 2020).
- Exhibit 99.9 Form of Warrant (Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on June 14, 2021).
- Exhibit 99.10 Form of Securities Purchase Agreement, dated as of November 6, 2022, between the Company and the Purchasers signatory therein (Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on November 9, 2022).
- Exhibit 99.11 Form of Amended Warrant (Incorporated by reference to Exhibit 10.4 of the Company's Current Report on Form 8-K filed on November 9, 2022).
- Exhibit 99.12 Form of Warrant (Incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on November 9, 2022).
- Exhibit 99.13 Convertible Notes Exchange Agreement for Common Stock and Warrants, dated September 18, 2023, by and among, the Company, Acquisition LP, and Co-Invest LP (Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on September 19, 2023).
- Exhibit 99.14 Form of September 2023 Pre-Funded Warrant (Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on September 19, 2023).
- Exhibit 99.15 Form of September 2023 Warrant (Incorporated by reference to Exhibit 4.2 of the Company's Current Report on Form 8-K filed on September 19, 2023).
- Exhibit 99.16 Indenture, to be dated as of December 19, 2023, between the Company and GLAS Trust Company LLC (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 18, 2023).
- Exhibit 99.17 Form of December 2023 Purchase Agreement (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 18, 2023).
- Exhibit 99.18 Form of December 2023 Exchange Agreement (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 18, 2023).
- Exhibit 99.19 Form of December 2023 Additional Warrant (Incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on December 18, 2023).
- Exhibit 99.20 Form of December 2023 Exchange Warrant (Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on December 18, 2023).
- Exhibit 99.21 Form of Registration Rights Agreement, to be dated as of December 19, 2023, between the Company and the investors named therein (Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed on December 18, 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.

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 this Schedule 13D with respect to the common stock of the Company.

Dated as of December 20, 2023.

**ATHYRIUM OPPORTUNITIES 2020 LP**

By: ATHYRIUM OPPORTUNITIES ASSOCIATES III LP,  
its General Partner

By: ATHYRIUM OPPORTUNITIES  
ASSOCIATES  
III GP LLC, its General Partner

By: /s/ Andrew Hyman

Andrew Hyman

Title: Senior Vice President, Secretary

**ATHYRIUM OPPORTUNITIES III ACQUISITION LP**

By: ATHYRIUM OPPORTUNITIES ASSOCIATES III LP,  
its General Partner

By: ATHYRIUM OPPORTUNITIES  
ASSOCIATES  
III GP LLC, its General Partner

By: /s/ Andrew Hyman

Name: Andrew Hyman

Title: Senior Vice President, Secretary

**ATHYRIUM OPPORTUNITIES III ACQUISITION 2 LP**

By: ATHYRIUM OPPORTUNITIES ASSOCIATES III LP,  
its General Partner

By: ATHYRIUM OPPORTUNITIES  
ASSOCIATES  
III GP LLC, its General Partner

By: /s/ Andrew Hyman

Name: Andrew Hyman

Title: Senior Vice President, Secretary

**ATHYRIUM OPPORTUNITIES III CO-INVEST 1 LP**

By: ATHYRIUM OPPORTUNITIES ASSOCIATES  
CO-INVEST LLC, its General Partner

By: /s/ Andrew Hyman

Name: Andrew Hyman

Title: Senior Vice President, Secretary

**ATHYRIUM OPPORTUNITIES ASSOCIATES  
CO-INVEST LLC**

By: /s/ Andrew Hyman

Name: Andrew Hyman

Title: Senior Vice President, Secretary

ATHYRIUM OPPORTUNITIES ASSOCIATES III GP LLC

By: /s/ Andrew Hyman

Name: Andrew Hyman

Title: Senior Vice President, Secretary

ATHYRIUM OPPORTUNITIES ASSOCIATES III LP

By: ATHYRIUM OPPORTUNITIES ASSOCIATES III  
GP LLC, its General Partner

By: /s/ Andrew Hyman

Name: Andrew Hyman

Title: Senior Vice President, Secretary

ATHYRIUM FUNDS GP HOLDINGS, LLC

By: /s/ Jeffrey A. Ferrell

Name: Jeffrey A. Ferrell

Title: Managing Member

/s/ Jeffrey A. Ferrell

JEFFREY A. FERRELL

**ANNEX A**

Other than as set forth below, and in the Schedule 13D to which this Annex A is attached, none of the Reporting Persons have appointed any executive officers or directors.

Athyrium Opportunities Co-Invest LLC

The name and principal occupation of each of the members and executive officers of Athyrium Opportunities Co-Invest LLC are listed below:

<u>Name</u>	<u>Principal Occupation</u>
Athyrium Funds GP Holdings LLC	N/A (Managing Member)
Jeffrey A. Ferrell	President
Andrew C. Hyman	Senior Vice President, Secretary
Paul A. Wakefield	Senior Vice President
Courtney Paul	Vice President, Assistant Secretary
Elin Strong	Vice President
Rashida Adams	Vice President

Athyrium Opportunities Associates III GP LLC

The name and principal occupation of each of the members and executive officers of Athyrium Opportunities Associates III GP LLC are listed below:

<u>Name</u>	<u>Principal Occupation</u>
Athyrium Funds GP Holdings LLC	N/A (Managing Member)
Jeffrey A. Ferrell	President
Andrew C. Hyman	Senior Vice President, Secretary
Paul A. Wakefield	Senior Vice President
Courtney Paul	Vice President, Assistant Secretary
Elin Strong	Vice President
Rashida Adams	Vice President