UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

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Under the Securities Exchange Act of 1934 (Amendment No. 4)*

Progenity, Inc.

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)

> November 24, 2021 (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-l(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.

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			
	Athyrium Opportunities III Co-Invest 1 LP			
2	Check (a) □		opropriate box if a member of a group* b) ⊠	
3	SEC u	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	f disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizer	ship o	or place of organization	
	Delaw	are		
		7	Sole voting power	
	mber of		0	
	hares eficially	8	Shared voting power	
	ned by		27,361,457	
re	each porting	9	Sole dispositive power	
	erson with		0	
		10	Shared dispositive power	
			27,361,457	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	27,361			
12	Check	box if	f the aggregate amount in Row (11) excludes certain shares	
13	Percent of class represented by amount in Row (11)			
	12.7%			
14	Type o	f repo	rting person	
	PN			

1	Name of reporting person			
	Athyrium Opportunities III Acquisition LP			
2	Check (a) □	the ap (l	propriate box if a member of a group* o) ⊠	
3	SEC u	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizer	ship o	or place of organization	
	Delaw	are		
		7	Sole voting power	
	mber of		0	
ben	hares eficially	8	Shared voting power	
	ned by each		7,256,543	
rej	porting	9	Sole dispositive power	
	erson with		0	
		10	Shared dispositive power	
			7,256,543	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	7,256,5			
12	Check	box if	the aggregate amount in Row (11) excludes certain shares	
13	Percent of class represented by amount in Row (11)			
	3.4%			
14	Type o	f repo	rting person	
	PN			

1	Name of reporting person			
	Athyrium Opportunities III Acquisition 2 LP			
2	Check (a) □		opropriate box if a member of a group* b) ☑	
3	SEC us	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	f disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizer	ship o	or place of organization	
	Delaw	are		
•		7	Sole voting power	
	mber of		0	
ben	hares eficially	8	Shared voting power	
	ned by each		27,925,812	
	porting	9	Sole dispositive power	
	erson with		0	
		10	Shared dispositive power	
			27,925,812	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	27,925	,812		
12			f the aggregate amount in Row (11) excludes certain shares	
13	Percen	t of cl	ass represented by amount in Row (11)	
	12.9%			
14	Type o	f repo	rting person	
	PN			

1	Name of reporting person			
	Athyrium Opportunities 2020 LP			
2	Check (a) □		propriate box if a member of a group* b) ☑	
3	SEC u	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizer	ship o	or place of organization	
	Delawa	are		
		7	Sole voting power	
Nu	mber of		0	
	hares eficially	8	Shared voting power	
ow	ned by		4,583,333	
	each porting	9	Sole dispositive power	
	erson with		0	
		10	Shared dispositive power	
			4,583,333	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	4,583,3			
12	Check box if the aggregate amount in Row (11) excludes certain shares			
13	Percent of class represented by amount in Row (11)			
	2.1%			
14	Type o	f repo	rting person	
	PN			

1	Name of reporting person			
	Jeffrey A. Ferrell			
2	(a) 🗆	(l	propriate box if a member of a group o) ⊠	
3	SEC us	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizen	ship o	or place of organization	
	United	State	S S	
		7	Sole voting power	
	mber of		0	
	hares eficially	8	Shared voting power	
οw	ned by		67,127,145	
	each porting	9	Sole dispositive power	
	erson with		0	
	With	10	Shared dispositive power	
			67,127,145	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	67,127	,145		
12	Check	box if	the aggregate amount in Row (11) excludes certain shares	
13	Percen	t of cl	ass represented by amount in Row (11)	
	31.1%			
14	Type o	f repo	rting person	
	IN			

1	Name of reporting person			
	Athyrium Opportunities Associates Co-Invest LLC			
2	Check (a) □		propriate box if a member of a group o) ⊠	
3	SEC us	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizer	ship o	or place of organization	
	Delaw	are		
		7	Sole voting power	
	mber of		0	
	hares eficially	8	Shared voting power	
ow	ned by		27,361,457	
	each porting	9	Sole dispositive power	
	erson with		0	
	WILLI	10	Shared dispositive power	
			27,361,457	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	27,361	,457		
12	Check	box if	the aggregate amount in Row (11) excludes certain shares	
13				
	12.7%			
14	Type o	f repo	rting person	
	00			

1	Name of reporting person			
	Athyrium Funds GP Holdings LLC			
2	Check (a) □		propriate box if a member of a group) ⊠	
3	SEC u	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizer	ship o	or place of organization	
	Delaw	are		
		7	Sole voting power	
	mber of		0	
	hares eficially	8	Shared voting power	
	ned by each		67,127,145	
rej	porting	9	Sole dispositive power	
	erson with		0	
		10	Shared dispositive power	
			67,127,145	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	67,127			
12	Check box if the aggregate amount in Row (11) excludes certain shares			
13	Percen	t of cl	ass represented by amount in Row (11)	
	31.1%			
14	Type o	f repo	rting person	
	00			

1	Name of reporting person			
	Athyrium Opportunities Associates III LP			
2	Check (a) □		opropriate box if a member of a group b) ⊠	
3	SEC us	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	f disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizer	ship o	or place of organization	
	Delawa	are		
		7	Sole voting power	
Nu	mber of		0	
	shares eficially	8	Shared voting power	
ow	ned by		39,765,688	
	each porting	9	Sole dispositive power	
	erson with		0	
	**101	10	Shared dispositive power	
			39,765,688	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	39,765			
12				
13	Percent of class represented by amount in Row (11)			
	18.4%			
14	Type o	f repo	rting person	
	PN			

1	Name of reporting person			
	Athyrium Opportunities Associates III GP LLC			
2	Check (a) □		opropriate box if a member of a group b) ⊠	
3	SEC us	se onl	y	
4	Source	of fu	nds	
	00			
5	Check	box if	f disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizer	ship o	or place of organization	
	Delaw	are		
		7	Sole voting power	
	mber of		0	
	shares eficially	8	Shared voting power	
ow	ned by		39,765,688	
	each porting	9	Sole dispositive power	
	erson with		0	
	WILLI	10	Shared dispositive power	
			39,765,688	
11	Aggreg	gate ar	nount beneficially owned by each reporting person	
	39,765	,688		
12			f the aggregate amount in Row (11) excludes certain shares	
13	Percen	t of cl	ass represented by amount in Row (11)	
	18.4%			
14	Type o	f repo	rting person	
	00			

Explanatory Note

This Amendment No. 4 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"). Prior to November 24, 2021, certain of the Reporting Persons were deemed to beneficially own shares of Common Stock (as defined below) owned by certain affiliates of Neuberger Berman Group LLC ("Neuberger Berman") over which such Reporting Persons had shared voting and/or dispositive power. As a result, certain affiliates of Neuberger Berman (the "Neuberger Berman Entities") were deemed to be members of a "group" with the Reporting Persons for purposes of Section 13(d)(3) of the Securities Exchange Act of 1934 (the "Exchange Act") and the rules and regulations promulgated thereunder. Because, as of November 24, 2021, the Reporting Persons no longer have shared voting or dispositive power over any Common Stock owned by the Neuberger Berman Entities, the Reporting Persons are not deemed to have beneficial ownership over any Common Stock owned by the Neuberger Berman Entities, the Neuberger Berman Entities no longer form a "group" with the Reporting Persons and the Common Stock reported in this Section 13D does not include any Common Stock which may be owned by the Neuberger Berman Entities. None of the Reporting Persons or the Neuberger Berman Entities or, to the knowledge of the Reporting Persons, none of the Covered Persons, has had any transactions in the Common Stock during the past 60 days.

Item 1. Security and Issuer.

This Schedule 13D relates to the common stock, par value \$0.001 per share ("Common Stock"), of Progenity, Inc., a Delaware corporation (the "Company"). The address of the principal executive offices of the Company is 4330 La Jolla Village Drive, Suite 200, 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 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 ("<u>Acquisition LP</u>"), 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 ("<u>Acquisition 2 LP</u>" and, together with Acquisition LP, the "<u>AOIII Acquisition Funds</u>"), 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 ("<u>Associates III GP</u>"), 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 ("<u>GP Holdings</u>"), 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, except for Elin Strong, who is a citizen of Norway.

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 at a purchase price of \$3.53 per share for an aggregate purchase price of \$50.0 million. Also on October 27, 2017, the Company issued the Warrant (as defined below) to Co-Invest LP providing the right to purchase additional shares of Series B Preferred Stock.

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 at \$2.75 per share 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 at \$2.25 per share for an aggregate purchase price of \$25.0 million. The conversion price of the Series B Preferred Stock and exercise price of the Warrant were lowered from \$2.75 to \$2.25 per share (or \$13.90 per share as a result of the reverse stock split effected on June 10, 2020). 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, at a purchase price of \$2.25 per share.

On March 31, 2020, Co-Invest LP and the Company entered into the First Amendment to the Credit Agreement (the "<u>Credit Agreement Amendment</u>") 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 at \$2.25 per share 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 18,319,853 and 1,250,000 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 3,333,333 shares of Common Stock at a price of \$15.00 per share. 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 4,128,440 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 \$3.27 per share of Common Stock 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, for a price of \$2.86 per share. Pursuant to the Stock Issuance Agreement, Acquisition LP acquired 306,308 shares of Common Stock and Co-Invest LP acquired 961,807 shares of Common Stock.

On June 14, 2021, the Company consummated a private placement of units (the "<u>Private Placement</u>"), 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 "<u>Common Stock Warrant</u>"). In connection with the Private Placement, Acquisition 2 LP purchased 8,097,166 units for a price of \$2.47 per unit and with an aggregate purchase price of \$20.0 million.

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 capitalization 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 67,127,145 shares of Common Stock, which represents approximately 31.1% of the outstanding shares of Common Stock. All calculations of percentage ownership in this Schedule 13D are based on (i) 178,848,606 shares of Common Stock outstanding as disclosed in the Company's prospectus filed with the SEC on November 22, 2021, and (ii) *plus* the shares issuable upon conversion of the 7.25% Convertible Notes held by the Reporting Persons and upon exercise of the Warrant and the Common Stock Warrant by the Reporting Persons.

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) 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 "<u>Athyrium Parties</u>") entered into a fourth amended and restated investors' rights agreement (the "<u>Investors' Rights Agreement</u>") 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) five years after the completion of the Company's initial public offering, (ii) 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.

Series B Preferred Stock Purchase Warrant

On October 27, 2017, the Company issued a Series B Preferred Stock Purchase Warrant (as amended, modified, restated, refinanced, replaced or supplemented from time to time, the "Warrant") to Co-Invest LP as registered holder. Following the initial public offering of the Company, the Warrant is exercisable into 400,160 shares of Common Stock at an exercise price of \$13.90 per share, at any time on or prior to its expiration on October 27, 2022.

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 "<u>Indenture</u>"), 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 initial conversion rate is 278.0094 shares of Common Stock per \$1,000 principal amount of 7.25% Convertible Notes, which represents an initial conversion price of approximately \$3.60 per share of Common Stock. The conversion rate and conversion price 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.

Common Stock Warrant

On June 14, 2021, the Company issued a Common Stock Warrant to Acquisition 2 LP as registered holder. The Common Stock Warrant is exercisable into 8,097,166 shares of Common Stock at an exercise price of \$2.84 per share, at any time and from time to time prior to its expiration on June 14, 2026.

The foregoing summary of the Investors' Rights Agreement, Warrant, 7.25% Convertible Notes and Common Stock Warrant 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 Securities Exchange Act of 1934, as amended, 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.
- Exhibit 99.6 Series B Preferred Stock Purchase Warrant (Incorporated by reference to Exhibit 4.2 of the Company's Registration Statement on Form S-1 filed on May 27, 2020).
- Exhibit 99.7 First Amendment to Series B Preferred Stock Purchase Warrant (Incorporated by reference to Exhibit 4.3 of the Company's Registration Statement on Form S-1 filed on May 27, 2020).

Exhibit 99.8	Second Amendment to Series B Preferred Stock Purchase Warrant (Incorporated by reference to Exhibit 4.4 of the Company's Registration Statement on Form S-1 filed on May 27, 2020).
Exhibit 99.9	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 99.10	<u>Indenture</u> , <u>dated as of December 7, 2020</u> , <u>between the Company and The Bank of New York Mellon Trust Company</u> , <u>N.A.</u> , <u>as trustee (Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on December 7, 2020)</u> .
Exhibit 99.11	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).

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 November 26, 2021.

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

Name: 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: <u>/s/ Andrew Hyman</u>

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:

Name Principal Occupation

Athyrium Funds GP Holdings LLC N/A (Managing Member)

Jeffrey A. Ferrell President
Jeremy D. Lack 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:

Name Principal Occupation

Athyrium Funds GP Holdings LLC

N/A (Managing Member)

Jeffrey A. Ferrell President
Jeremy D. Lack 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

NOTICE AND WAIVER

Reference is made to that certain Fourth Amended and Restated Investors' Rights Agreement, dated as of August 27, 2019, as amended by Amendment No. 1 on November 10, 2020, as further amended by Amendment No. 2 on December 7, 2020, and as further amended by Amendment No. 3 on May 31, 2021, by and among Progenity, Inc., a Delaware corporation (the "Company"), and certain investors party thereto (the "Investors' Rights Agreement").

Notice of Registration of Shares.

The Company is considering an "at-the-market" offering of its shares of common stock (the "Common Stock") pursuant to its registration statement on Form S-3 (the "ATM Offering") filed with the Securities and Exchange Commission, in accordance with the Securities Act of 1933, as amended (the "Securities Act") on July 30, 2021 and declared effective on August 6, 2021 (the "Registration Statement"). Pursuant to Subsection 2.2 of the Investors' Rights Agreement, the Company is obligated to (i) provide notice to Investors of the Company's intention if the Company proposes to register any of its Common Stock under the Securities Act in connection with the public offering of such securities and (ii) cause to be registered all of the Registrable Securities (as defined in the Investors' Rights Agreement) that Investors have requested to be included in such registration, subject to the provisions of Subsection 2.7 of the Investors' Rights Agreement. Notice is hereby being delivered by the Company pursuant to Subsection 2.2 of the Investors' Rights Agreement.

Confirmation of Certain Matters; Waivers.

Subsection 4.4 of the Investors' Rights Agreement allows any term of the Investors Rights' Agreement to be waived by written consent of the holders of a majority of Registrable Securities outstanding. By countersigning below, each of the undersigned Investors (i) acknowledges receipt of notice of the ATM Offering provided by the Company pursuant to Section 2.2 of the Investors' Rights Agreement; and (ii) waives its rights under Section 2.2 of the Investors' Rights Agreement to request that the Company include any Registrable Securities in the Registration Statement. Notwithstanding the foregoing, the waivers provided above shall be effective only as to the ATM Offering and shall in no way affect or impair any of the undersigned Investors' other rights under the Investors' Rights Agreement or any other agreement between the Company and any of the undersigned Investors.

Each of the signatories hereto understands that this waiver shall be automatically terminated and be of no further force and effect if (a) the Company notifies the sales agents of the ATM Offering that it does not intend to proceed with the ATM Offering, (b) the sales agreement for the ATM Offering does not become effective, or (c) the prospectus used to sell Common Stock in the ATM Offering is not filed by December 31, 2021.

IN WITNESS HEREOF, the parties have executed this Notice and Waiver as of the date first written above.

PROGENITY, INC.

By: /s/ Erid d'Esparbes
Name: Eric d'Esparbes

Name: Eric d'Esparbes
Title: Chief Financial Officer

[Signature Page to Notice and Waiver]

ATHYRIUM OPPORTUNITIES 2020 LP

By: Athyrium Opportunities Associates III LP, its General Partner

By: Athyrium Opportunities Associates III GP LLC,

the General Partner of Athyrium Opportunities Associates III LP

By /s/ Rashida Adams

Name: Rashida Adams Title: Authorized Signatory

ATHYRIUM OPPORTUNITIES FUND (A) LP

By: Athyrium Opportunities Associates LP,

its General Partner

By: Athyrium Opportunities Associates GP LLC,

the General Partner of Athyrium Opportunities Associates LP

By /s/ Andrew Hyman

Name: Andrew Hyman Title: Authorized Signatory

ATHYRIUM OPPORTUNITIES FUND (B) LP

By: Athyrium Opportunities Associates LP,

its General Partner

By: Athyrium Opportunities Associates GP LLC,

the General Partner of Athyrium Opportunities Associates LP

By /s/ Andrew Hyman

Name: Andrew Hyman Title: Authorized Signatory

[Signature Page to Notice and Waiver]

ATHYRIUM OPPORTUNITIES III ACQUISITION 2 LP

By: Athyrium Opportunities Associates III LP, its General Partner

By: Athyrium Opportunities Associates III GP LLC,

the General Partner of Athyrium Opportunities Associates III LP

By /s/ Rashida Adams

Name: Rashida Adams Title: Authorized Signatory

ATHYRIUM OPPORTUNITIES III ACQUISITION LP

By: Athyrium Opportunities Associates III LP,

its General Partner

By: Athyrium Opportunities Associates III GP LLC,

the General Partner of Athyrium Opportunities Associates III LP

By /s/ Rashida Adams

Name: Rashida Adams Title: Authorized Signatory

ATHYRIUM OPPORTUNITIES III CO-INVEST 1 LP

By: Athyrium Opportunities Associates Co-Invest LLC,

its General Partner

By /s/ Rashida Adams

Name: Rashida Adams Title: Authorized Signatory

[Signature Page to Notice and Waiver]