SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934 (Amendment No. 8)*

89BIO, INC.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

282559103

(CUSIP Number)

RA Capital Management, L.P. 200 Berkeley Street, 18th Floor Boston, MA 02116 Attn: Peter Kolchinsky Telephone: 617.778.2500

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

December 11, 2023

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of \$ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 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, as amended ("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.	1. Names of Reporting Persons.					
	RA Capital Management, L.P.					
2.	(a)	eck the A	Appropriate Box if a Member of a Group (See Instructions)			
	(b)					
3.	SE	C Use O	nly			
4.	Soi AF		Sunds (See Instructions)			
5.	Che	eck if Di	isclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)			
 6. Citizenship or Place of Organization Delaware 			or Place of Organization			
		7.	Sole Voting Power 0			
Number Shares Beneficia	s ally	8.	Shared Voting Power 12,875,855			
Owned Each Reporti	ng	9.	Sole Dispositive Power 0			
Person W	Vith	10.	Shared Dispositive Power 12,875,855			
11.		gregate . 875,855	Amount Beneficially Owned by Each Reporting Person			
12.	Che	eck if th	e Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13.		cent of (6% ¹	Class Represented by Amount in Row (11)			
14.		e of Rej PN	porting Person (See Instructions)			

¹ The Reporting Person is the beneficial owner of 11,416,948 shares of the Issuer's Common Stock as well as conversion shares underlying each of 49,763 vested stock options (right to buy) and 694 stock options (right to buy) which shall vest within 60 days held by Dr. Derek DiRocco for the benefit of RA Capital, and 2,816,900 warrants through which the Reporting Person has the right to acquire 1,408,450 Common Stock Shares. The percentage calculation assumes that there are 94,664,990 outstanding shares of Common Stock of the Issuer, based on 90,773,651 outstanding shares of Common Stock of the Issuer as reported in the Issuer's Prospectus filed with the Securities and Exchange Commission ("SEC") on December 8, 2023, and giving effect to an additional 2,432,432 Common Stock shares sold pursuant to the underwriters' option, and also giving effect to the stock options and warrants referenced herein.

1.	Names of Reporting Persons.					
	Peter Kolchinsky					
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a)					
	(b)					
3.	SE	C Use O	nly			
4.						
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)					
6.	Citizenship or Place of Organization United States					
		7.	Sole Voting Power 0			
Number Shares Beneficia	lly	8.	Shared Voting Power 12,875,855			
Owned I Each Reportin	ng	9.	Sole Dispositive Power 0			
Person W	ith	10.	Shared Dispositive Power 12,875,855			
11.		gregate A 875,855	Amount Beneficially Owned by Each Reporting Person			
12.	Che	eck if the	e Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13.	Percent of Class Represented by Amount in Row (11) 13.6% ²					
14.		be of Rep C, IN	porting Person (See Instructions)			

 2 The Reporting Person is the beneficial owner of 11,416,948 shares of the Issuer's Common Stock as well as conversion shares underlying each of 49,763 vested stock options (right to buy) and 694 stock options (right to buy) which shall vest within 60 days held by Dr. Derek DiRocco for the benefit of RA Capital, and 2,816,900 warrants through which the Reporting Person has the right to acquire 1,408,450 Common Stock Shares. The percentage calculation assumes that there are 94,664,990 outstanding shares of Common Stock of the Issuer, based on 90,773,651 outstanding shares of Common Stock of the Issuer as reported in the Issuer's Prospectus filed with the Securities and Exchange Commission ("SEC") on December 8, 2023, and giving effect to an additional 2,432,432 Common Stock shares sold pursuant to the underwriters' option, and also giving effect to the stock options and warrants referenced herein.

1.	Names of Reporting Persons.					
	Rajeev Shah					
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a)					
	(b)					
3.	SE	C Use O	nly			
4.						
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)					
6.	Citizenship or Place of Organization United States					
		7.	Sole Voting Power 0			
Number Shares Beneficia	lly	8.	Shared Voting Power 12,875,855			
Owned I Each Reportin	ng	9.	Sole Dispositive Power 0			
Person W	7ith	10.	Shared Dispositive Power 12,875,855			
11.		gregate 4 875,855	Amount Beneficially Owned by Each Reporting Person			
12.	Che	eck if the	e Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13.	Percent of Class Represented by Amount in Row (11) 13.6% ³					
14.		be of Rep C, IN	porting Person (See Instructions)			

³ The Reporting Person is the beneficial owner of 11,416,948 shares of the Issuer's Common Stock as well as conversion shares underlying each of 49,763 vested stock options (right to buy) and 694 stock options (right to buy) which shall vest within 60 days held by Dr. Derek DiRocco for the benefit of RA Capital, and 2,816,900 warrants through which the Reporting Person has the right to acquire 1,408,450 Common Stock Shares. The percentage calculation assumes that there are 94,664,990 outstanding shares of Common Stock of the Issuer, based on 90,773,651 outstanding shares of Common Stock of the Issuer as reported in the Issuer's Prospectus filed with the Securities and Exchange Commission ("SEC") on December 8, 2023, and giving effect to an additional 2,432,432 Common Stock shares sold pursuant to the underwriters' option, and also giving effect to the stock options and warrants referenced herein.

1.	1. Names of Reporting Persons.					
	RA	Capital	Healthcare Fund, L.P.			
2.	(a)	eck the A	Appropriate Box if a Member of a Group (See Instructions)			
	(b)					
3.	SEC	C Use O	nly			
4.	Sou WC		unds (See Instructions)			
5.						
6.		zenship aware	ip or Place of Organization e			
		7.	Sole Voting Power 0			
Number Shares		8.	Shared Voting Power			
Beneficia			12,490,034			
Owned Each Reportin	ng	9.	Sole Dispositive Power 0			
Person W	ith	10.	Shared Dispositive Power 12,490,034			
11.	-	gregate A 490,034	Amount Beneficially Owned by Each Reporting Person			
12.	Che	eck if the	e Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13.		cent of (2% ⁴	Class Represented by Amount in Row (11)			
14.	Typ PN		porting Person (See Instructions)			

⁴ The Reporting Person is the beneficial owner of 11,081,584 shares of the Issuer's Common Stock and 2,816,900 warrants through which the Reporting Person has the right to acquire 1,408,450 Common Stock shares. The percentage calculation assumes that there are 94,614,533 outstanding shares of Common Stock of the Issuer, based on 90,773,651outstanding shares of Common Stock of the Issuer as reported in the Issuer's Prospectus filed with the SEC on December 8, 2023, and giving effect to an additional 2,432,432 Common Stock shares sold pursuant to the underwriters' option and also giving effect to the warrants referenced herein.

Item 1. Security and Issuer

Item 1 of the Statement is amended and supplemented as follows:

This Amendment No. 8 (this "Amendment No. 8" or this "13D/A") amends and supplements the statement on the Schedule 13D originally filed with the Securities and Exchange Commission (the "SEC") on November 13, 2019, and amended on July 10, 2020, September 21, 2020, June 2, 2021, July 6, 2022, October 21, 2022, March 30, 2023, and August 11, 2023 (as amended, the "Statement"), filed by RA Capital Management, L.P., Dr. Kolchinsky, Mr. Shah, and RA Capital Healthcare Fund, L.P. with respect to the common stock, par value \$0.001 per share (the "Common Stock"), of 89bio, Inc., a Delaware corporation (the "Issuer"). Unless otherwise defined herein, capitalized terms used in this Amendment No. 8 shall have the meanings ascribed to them in the Statement. Unless amended or supplemented below, the information in the Statement remains unchanged.

Item 2. Identity and Background

Item 2 of the Statement is amended and restated in its entirety to read as follows:

(a) This 13D/A is being filed on behalf of RA Capital Management, L.P. ("RA Capital"), Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the "Fund"), who are collectively referred to herein as the "Reporting Persons". The agreement among the Reporting Persons to file this 13D/A jointly in accordance with Rule 13d-1(k) of the Securities Exchange Act of 1934, as amended (the "Act"), is attached hereto as Exhibit 1.

The Reporting Persons ownership of the Issuer's securities include (1) 11,081,584 Common Stock shares held directly by the Fund, (2) a total of 49,763 vested stock options (right to buy), (3) 694 stock options (right to buy) which shall vest within 60 days of this filing, (4) a total of 2,816,900 warrants ("Warrants"), with each Warrant exercisable for one-half a share of Common Stock, through which the Fund has a right to acquire 1,408,450 Common Stock shares subject to the Warrant Beneficial Ownership Blocker detailed below, (5) a total of 1,081,081 pre-funded warrants ("PFWs"), through which the Fund has the right to acquire 1,081,081 Common Stock shares subject to the PFW Beneficial Ownership Blocker detailed below, and (6) 335,364 Common Stock shares held directly by RA Capital Nexus Fund, L.P. (the "Nexus Fund"). The Warrants contain a provision (the "Warrant Beneficial Ownership Blocker") which precludes exercise of the Warrants to the extent that, following the exercise, the Reporting Persons, together with their affiliates and other attribution parties, would beneficially own more than 19.99% of the Issuer's Common Stock outstanding. The PFWs contain a provision ("the PFW Beneficial Ownership Blocker") which precludes exercise of the with their affiliates and other attribution parties, would beneficially own more than 9.99% of the Issuer's Common Stock outstanding.

RA Capital Healthcare Fund GP, LLC is the general partner of the Fund and RA Capital Nexus Fund GP, LLC is the general partner of the Nexus Fund. The general partner of RA Capital is RA Capital Management GP, LLC, of which Dr. Kolchinsky and Mr. Shah are the controlling persons. RA Capital serves as investment adviser for the Fund and the Nexus Fund and may be deemed a beneficial owner, for purposes of Section 13(d) of the \the Act, of any securities of the Issuer held by the Fund or the Nexus Fund. The Fund and the Nexus Fund have delegated to RA Capital the sole power to vote and the sole power to dispose of all securities held in the Fund's and the Nexus Fund's portfolio, including the shares of the Issuer's Common Stock reported herein. Because the Fund and the Nexus Fund have divested themselves of voting and investment power over the reported securities they hold and may not revoke that delegation on less than 61 days' notice, the Fund and the Nexus Fund disclaim beneficial ownership of the securities they hold for purposes of Section 13(d) of the Act and therefore disclaim any obligation to report ownership of the reported securities under Section 13(d) of the Act. As managers of RA Capital, Dr. Kolchinsky and Mr. Shah may be deemed beneficial owners, for purposes of Section 13(d) of the Act, of any securities reported in this 13D/A other than for the purpose of determining their obligations under Section 13(d) of the Act, and the filing of this 13D/A shall not be deemed an admission that either RA Capital, Dr. Kolchinsky, or Mr. Shah is the beneficial owner of such securities for any other purpose.

- (b) The address of the principal business office of each of the Reporting Persons is 200 Berkeley Street, 18th Floor, Boston, MA 02116.
- (c) The Fund is a private investment vehicle. RA Capital provides investment management services to the Fund and the Nexus Fund. The principal occupation of Dr. Kolchinsky and Mr. Shah is investment management.
- (d) During the last five years, none of the Reporting 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 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 of final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) See Item 6 of the cover pages.

Item 3. Source and Amount of Funds or Other Consideration

Item 3 of the Statement is hereby amended and supplemented as follows:

The Reporting Persons acquired additional securities of the Issuer in the transactions described in Item 5(c) of this Amendment No. 8 pursuant to the Issuer's public offering described in the Issuer's Prospectus filed with the SEC on December 8, 2023, for an aggregate of \$9,998,918.17. The purchase was for cash and was funded by the working capital of the Fund.

Item 5. Interest in Securities of the Issuer

Item 5 of the Statement is hereby amended and restated in its entirety to read as follows:

(a) and (b) See Items 7-11 of the cover pages above and Item 2.

(c) The following table lists the Reporting Persons' transactions in Common Stock that were effected during the sixty day period to the filing of this 13D/A:⁵

Transaction	Purchaser	Date	No. Shares	Price	
Buy	The Fund	12-Dec-2023	1,081,081 (1)	\$9.24	
Vest Stock Option (Right to Buy)	RA Capital	15-Oct-2023	347	(2)	
Vest Stock Option (Right to Buy)	RA Capital	15-Nov-2023	347	(2)	
Vest Stock Option (Right to Buy)	RA Capital	15-Dec-2023	347	(2)*	
Vest Stock Option (Right to Buy)	RA Capital	15-Jan-2023	347	(2)*	

- (1) These shares represent pre-funded warrants through which the Reporting Persons have the right to acquire 1,081,081 shares of the Issuer's Common Stock subject to to the PFW Beneficial Ownership Blocker referenced above.
- (2) This option represents a right to purchase a total of 12,500 shares of the Issuer's Common Stock, one third of which vested on April 15, 2022, with the remaining two thirds vesting in equal monthly installments over the following two years, subject to Dr. DiRocco's continued service to the Issuer through each vesting date.

* Represents future vesting options within 60 days from the filing date of this 13D/A.

(d) No person (other than the Reporting Persons) is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock subject to this 13D/A.

(e) Not applicable.

Item 7. Material to be Filed as Exhibits

Item 7 of the Statement is amended and supplemented by the following:

Exhibit 1 Joint Filing Agreement

⁵ The Common Stock and percentage ownership reported in this amendment reflect an increase in the number of outstanding shares of the Issuer. The vesting options and PFWs reported in Item 5(c) did not cause a material change in the Reporting Persons' beneficial ownership.

SIGNATURES

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

Dated: December 13, 2023

RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky Name: Peter Kolchinsky Title: Authorized Signatory

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RAJEEV SHAH

/s/ Rajeev Shah

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC

Its: General Partner

By: /s/ Peter Kolchinsky

Name: Peter Kolchinsky Title: Manager Exhibit 1

JOINT FILING AGREEMENT

This Joint Filing Agreement, dated as of December 13, 2023, is by and among RA Capital Management, L.P., Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the foregoing are collectively referred to herein as the "Filers").

Each of the Filers may be required to file with the United States Securities and Exchange Commission a statement on Schedule 13G and/or 13D with respect to Common Stock, par value \$0.001 per share of 89bio, Inc. beneficially owned by them from time to time.

Pursuant to and in accordance with Rule 13(d)(1)(k) promulgated under the Securities Exchange Act of 1934, as amended, the Filers hereby agree to file a single statement on Schedule 13G and/or 13D (and any amendments thereto) on behalf of each of such parties, and hereby further agree to file this Joint Filing Agreement as an exhibit to such statement, as required by such rule.

This Joint Filing Agreement may be terminated by any of the Filers upon one week's prior written notice or such lesser period of notice as the Filers may mutually agree.

Executed and delivered as of the date first above written.

RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky Name: Peter Kolchinsky Title: Authorized Signatory

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RAJEEV SHAH

/s/ Rajeev Shah

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC

Its: General Partner

By: /s/ Peter Kolchinsky

Name: Peter Kolchinsky Title: Manager