### SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

### **SCHEDULE 13D/A**

### Under the Securities Exchange Act of 1934 (Amendment No. 7)\*

# **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, 18<sup>th</sup> Floor

### Boston, MA 02116 Attn: Peter Kolchinsky

Telephone: 617.778.2500

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

August 9, 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.                            | Nar               | nes of                     | Reporting Persons.  |
|-------------------------------|-------------------|----------------------------|---|
|                               | RA                | Capit                      | al Management, L.P.   |
| 2.                            | Che               | eck the                    | Appropriate Box if a Member of a Group (See Instructions)                         |
|                               | (a)               |                            |   |
|                               | (b)               |                            |   |
| 3.                            | SEC               | C Use (                    | Dnly  |
| 4.                            | Sou<br>AF         |                            | Funds (See Instructions)  |
| 5.                            | Che               | eck if E                   | Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) $\Box$ |
| 6.                            |                   | izenshi<br><b>aware</b>    | p or Place of Organization  |
|                               |                   | 7.                         | Sole Voting Power<br>0  |
| Number<br>Shares<br>Beneficia | illy              | 8.                         | Shared Voting Power<br>12,874,814   |
| Owned l<br>Each<br>Reportin   | ıg                | 9.                         | Sole Dispositive Power 0  |
| Person W                      | 7ith              | 10.                        | Shared Dispositive Power<br>12,874,814  |
| 11.                           |                   | gregate<br><b>874,81</b> 4 | Amount Beneficially Owned by Each Reporting Person<br>4                           |
| 12.                           | Che               | eck if tl                  | ne Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) 🛛      |
| 13.                           |                   | cent of<br>7% <sup>1</sup> | Class Represented by Amount in Row (11)   |
| 14.                           | Тур<br><b>IA,</b> |                            | eporting Person (See Instructions)  |
|                               |                   |                            |   |

<sup>&</sup>lt;sup>1</sup> 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 48,722 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 76,938,750 outstanding shares of Common Stock of the Issuer, based on 75,480,884 outstanding shares of Common Stock of the Issuer as reported in the Issuer's Form 10-Q filed with the Securities and Exchange Commission ("SEC") on August 9, 2023, and giving effect to the stock options and warrants referenced herein. In addition, this filing corrects the calculation of vested options in the prior filing made on March 30, 2023. Since the March 30, 2023 filing no transactions have occurred.

| 1.                            | Nam                    | es of  | Reporting Persons.  |
|-------------------------------|------------------------|--------|---|
|                               | Peter                  | r Kol  | chinsky   |
| 2.                            | Chec<br>(a)            | k the  | Appropriate Box if a Member of a Group (See Instructions)                         |
|                               | (b)                    |        |   |
| 3.                            | SEC                    | Use    | Only  |
| 4.                            | Soure<br>AF            |        | Funds (See Instructions)  |
| 5.                            | Chec                   |        | Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) $\Box$ |
| 6.                            | Citiz<br><b>Unit</b>   |        | p or Place of Organization<br>ates  |
|                               |                        | 7.     | Sole Voting Power<br>0  |
| Number<br>Shares<br>Beneficia | s 8<br>ally            | 8.     | Shared Voting Power<br>12,874,814   |
| Owned<br>Each<br>Reporti      | ng                     | 9.     | Sole Dispositive Power<br>0   |
| Person V                      |                        | 10.    | Shared Dispositive Power<br>12,874,814  |
| 11.                           | Aggr<br><b>12,8</b> 7  |        | e Amount Beneficially Owned by Each Reporting Person<br><b>4</b>                  |
| 12.                           | Chec                   | k if t | he Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) 🛛      |
| 13.                           | Perce<br><b>16.7</b> 9 |        | Class Represented by Amount in Row (11)   |
| 14.                           | Туре<br><b>НС,</b>     |        | eporting Person (See Instructions)  |

<sup>&</sup>lt;sup>2</sup> 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 48,722 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 76,938,750 outstanding shares of Common Stock of the Issuer, based on 75,480,884 outstanding shares of Common Stock of the Issuer as reported in the Issuer's Form 10-Q filed with the Securities and Exchange Commission ("SEC") on August 9, 2023, and giving effect to the stock options and warrants referenced herein. In addition, this filing corrects the calculation of vested options in the prior filing made on March 30, 2023. Since the March 30, 2023 filing no transactions have occurred.

| 1.                            | Nai       | nes of                     | Reporting Persons.  |
|-------------------------------|-----------|----------------------------|---|
|                               | Raj       | jeev Sl                    | nah   |
| 2.                            |           | eck the                    | Appropriate Box if a Member of a Group (See Instructions)                         |
|                               | (a)       |                            |   |
|                               | (b)       |                            |   |
| 3.                            | SEC       | C Use                      | Only  |
| 4.                            | Sou<br>AF |                            | Funds (See Instructions)  |
| 5.                            | Che       | eck if I                   | Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) $\Box$ |
| 6.                            |           | izenshi<br>ited St         | p or Place of Organization<br>ates  |
|                               |           | 7.                         | Sole Voting Power<br>0  |
| Number<br>Shares<br>Beneficia | illy      | 8.                         | Shared Voting Power<br>12,874,814   |
| Owned l<br>Each<br>Reportir   | ıg        | 9.                         | Sole Dispositive Power<br>0   |
| Person W                      | 'ith      | 10.                        | Shared Dispositive Power<br>12,874,814  |
| 11.                           |           | gregate<br>874,81          | e Amount Beneficially Owned by Each Reporting Person<br><b>4</b>                  |
| 12.                           | Che       | eck if t                   | he Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) 🛛      |
| 13.                           |           | cent of<br>7% <sup>3</sup> | Class Represented by Amount in Row (11)   |
| 14.                           |           | e of R<br><b>, IN</b>      | eporting Person (See Instructions)  |

<sup>&</sup>lt;sup>3</sup> 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 48,722 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 76,938,750 outstanding shares of Common Stock of the Issuer, based on 75,480,884 outstanding shares of Common Stock of the Issuer as reported in the Issuer's Form 10-Q filed with the Securities and Exchange Commission ("SEC") on August 9, 2023, and giving effect to the stock options and warrants referenced herein. In addition, this filing corrects the calculation of vested options in the prior filing made on March 30, 2023. Since the March 30, 2023 filing no transactions have occurred.

| 1.                            | Nai       | mes of                     | Reporting Persons.  |
|-------------------------------|-----------|----------------------------|---|
|                               | RA        | Capit                      | al Healthcare Fund, L.P.  |
| 2.                            | Che       | eck the                    | Appropriate Box if a Member of a Group (See Instructions)                         |
|                               | (a)       |                            |   |
|                               | (b)       |                            |   |
| 3.                            | SEG       | C Use                      | Only  |
| 4.                            | Sou<br>WC |                            | Funds (See Instructions)  |
| 5.                            | Che       |                            | Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) $\Box$ |
| 6.                            |           | izenshi<br>l <b>aware</b>  | p or Place of Organization  |
|                               |           | 7.                         | Sole Voting Power<br>0  |
| Number<br>Shares<br>Beneficia | illy      | 8.                         | Shared Voting Power<br>12,490,034   |
| Owned Each<br>Reportin        | ng        | 9.                         | Sole Dispositive Power 0  |
| Person W                      | 'ith      | 10.                        | Shared Dispositive Power<br>12,490,034  |
| 11.                           |           | gregate<br><b>490,03</b>   | e Amount Beneficially Owned by Each Reporting Person<br><b>4</b>                  |
| 12.                           | Che       | eck if t                   | he Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) 🛛      |
| 13.                           |           | cent of<br>6% <sup>4</sup> | Class Represented by Amount in Row (11)   |
| 14.                           | Typ<br>PN | be of R                    | eporting Person (See Instructions)  |

<sup>&</sup>lt;sup>4</sup> 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 75,480,884 outstanding shares of Common Stock of the Issuer based on the Issuer's Form 10-Q filed with the SEC on August 9, 2023.

| Item 1. | . Security and Issuer   |  |
|---------|---|--|
|         | Item 1 of the Statement is amended and supplemented as follows:   |  |
|         | This Amendment No. 7 (this "Amendment No. 7" or this "13D/A") amends and supplements the statement on the Schedule 13D original with the Securities and Exchange Commission (the "SEC") on November 13, 2019, and amended on July 10, 2020, September 21, 2020 2021, July 6, 2022, October 21, 2022, and March 30, 2023 (as amended, the "Statement"), filed by RA Capital Management, L.P., Dr. F. Mr. Shah, and RA Capital Healthcare Fund, L.P. with respect to the common stock, par value \$0.001 per share (the "Common Stock"), Inc., a Delaware corporation (the "Issuer"). Unless otherwise defined herein, capitalized terms used in this Amendment No. 4 shall have meanings ascribed to them in the Statement. Unless amended or supplemented below, the information in the Statement remains unchanged or supplemented below.  | 0, June 2,<br>Kolchinsky,<br>of 89bio,<br>e the  |
| Item 2. | 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 H<br>Fund, L.P. (the "Fund"), who are collectively referred to herein as the "Reporting Persons". The agreement among the Reporting Person<br>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<br>1. The Reporting Persons ownership of the Issuer's securities include (1) 11,081,584 Common Stock shares held directly by the Fund,<br>of 48,722 vested stock options (right to buy), (3) 694 stock options (right to buy) which shall vest within 60 days of this filing, (4) a tot<br>2,816,900 warrants ("Warrants"), with each Warrant exercisable for one-half a share of Common Stock, through which the Fund has a r<br>acquire 1,408,450 Common Stock shares subject to a Beneficial Ownership Blocker detailed below, and (5) 335,364 Common Stock sh<br>directly by RA Capital Nexus Fund, L.P. (the "Nexus Fund"). The Warrants contain a provision (the "Beneficial Ownership Blocker") v<br>precludes exercise of the warrants to the extent that, following exercise, the Reporting Persons, together with their affiliates and other a<br>parties, would beneficially own more than 19.99% of the Ordinary Shares outstanding. RA Capital Healthcare Fund GP, LLC is the g<br>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<br>Capital Management GP, LLC, of which Dr. Kolchinsky and Mr. Shah are the controlling persons. RA Capital serves as investment adv<br>Fund and the Nexus Fund. The Fund and the Nexus Fund have delegated to RA Capital the sole power to vote and the sole power<br>of all securities held in the Fund's and the Nexus Fund have delegated to RA Capital the sole power to vote and the sole power<br>of all securities held in the Fund's and the Nexus Fund have delegated to RA Capital the sole power to vote and the sole power<br>of all securities theld in the Nexus Y in the Sus Youtfolio, includin | ns to file<br>o as Exhibit<br>(2) a total<br>al of<br>right to<br>hares held<br>which<br>ttribution<br>eneral<br>s RA<br>riser for the<br>Issuer held<br>to dispose<br>Because<br>not revoke<br>purposes of<br>Act. As<br>my<br>he<br>ng of this |
| (b)     | The address of the principal business office of each of the Reporting Persons is 200 Berkeley Street, 18 <sup>th</sup> 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.

| tem 5.            | Interest in Securitie   | es of the Issuer     |                           |                  |       |  |  |  |
|-------------------|---|----------------------|---------------------------|------------------|-------|--|--|--|
| Item 5            | 5 of the Statement is h   | ereby amended and re | stated in its entirety to | read as follows: |       |  |  |  |
| is                | (a) The information set forth in rows 11 and 13 of the cover pages to this 13D/A is incorporated by reference. The percentage set forth in row 13 is based on 75,480,884 outstanding shares of Common Stock, as reported by the Issuer in its Form 10-Q filed with the SEC on August 9, 2023.   |                      |                           |                  |       |  |  |  |
| (b) T             | <ul> <li>(b) The information set forth in rows 7 through 10 of the cover pages to this 13D/A and Item 2 above is incorporated by reference.</li> <li>(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:<sup>5</sup></li> </ul> |                      |                           |                  |       |  |  |  |
|                   |   |                      |                           |                  |       |  |  |  |
|                   | Transaction   | Purchaser            | Date                      | No. Shares       | Price |  |  |  |
|                   | /est Stock Option<br>Right to Buy)  | RA Capital           | 15-June-2023              | 347              | (1)   |  |  |  |
| (H                | est Stock Option<br>Right to Buy)   | RA Capital           | 15-July-2023              | 347              | (1)   |  |  |  |
| (H                | /est Stock Option<br>Right to Buy)  | RA Capital           | 15-August-2023            | 347              | (1)*  |  |  |  |
|                   | /est Stock Option<br>Right to Buy)  | RA Capital           | 15-September-<br>2023     | 347              | (1)*  |  |  |  |
| w<br>to           | (1) 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, 20 with the remaining two thirds vesting in equal monthly installments over the following two years, subject to Dr. DiRocco's continued serve to the Issuer through each vesting date.       |                      |                           |                  |       |  |  |  |
| *                 | * Represents future vesting options within 60 days from the filing date of this 13D/A.  |                      |                           |                  |       |  |  |  |
|                   | ) 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) N             | Not applicable.   |                      |                           |                  |       |  |  |  |
| em 7. N           | Aaterial to be Filed as   | s Exhibits           |                           |                  |       |  |  |  |
| Item              | 7 of the Statement is a   | amended and supplem  | ented by the following    | :                |       |  |  |  |
| Exhi <sup>1</sup> | bit 1 Joint Filing Ag   | reement              |                           |                  |       |  |  |  |

<sup>&</sup>lt;sup>5</sup> 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 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 August 11, 2023

RA CAPITAL MANAGEMENT, L.P.

By: <u>/s/ Peter Kolchinsky</u> 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 August 11, 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