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

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**SCHEDULE 13G**  
(Rule 13d-102)

**Information to be Included in Statements Filed Pursuant  
to § 240.13d-1(b), (c) and (d) and Amendments Thereto Filed  
Pursuant to § 240.13d-2**

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

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**CABALETTA BIO, INC.**  
(Name of Issuer)

**Common Stock, \$0.00001  
par value per share  
(Title of Class of Securities)**

**12674W109**  
(CUSIP Number)

**December 31, 2023**  
(Date of Event Which Requires Filing of This Statement)

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Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934, 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).

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1	Names of Reporting Persons Bain Capital Life Sciences Opportunities III, LP	
2	Check the Appropriate Box if a Member of a Group (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC Use Only	
4	Citizenship or Place of Organization Delaware	
Number of Shares Beneficially Owned by Each Reporting Person With	5	Sole Voting Power 0 shares of Common Stock
	6	Shared Voting Power 2,000,000 shares of Common Stock
	7	Sole Dispositive Power 0 shares of Common Stock
	8	Shared Dispositive Power 2,000,000 shares of Common Stock
9	Aggregate Amount Beneficially Owned by Each Reporting Person 2,000,000 shares of Common Stock	
10	Check if the Aggregate Amount in Row (9) Excludes Certain Shares <input type="checkbox"/>	
11	Percent of Class Represented by Amount in Row 9 4.7%	
12	Type of Reporting Person PN	

**Item 1(a) Name of Issuer**

The name of the issuer to which this filing on Schedule 13G relates is Cabaletta Bio, Inc. (the "Issuer").

**Item 1(b) Address of Issuer's Principal Executive Offices**

The principal executive offices of the Issuer are located at 2929 Arch Street, Suite 600, Philadelphia, Pennsylvania 19104.

**Item 2(a) Name of Person Filing**

This Schedule 13G is being filed by Bain Capital Life Sciences Opportunities III, LP, a Delaware limited partnership (the "Reporting Person").

Bain Capital Life Sciences Investors, LLC, a Delaware limited liability company ("BCLSI"), is the manager of Bain Capital Life Sciences III General Partner, LLC, a Delaware limited liability company ("BCLS Fund III GP"), which is the general partner of Bain Capital Life Sciences Fund III, L.P., a Delaware limited partnership ("BCLS Fund III"), which is the sole member of Bain Capital Life Sciences Opportunities III GP, LLC, a Delaware limited liability company (together with the Reporting Person, BCLSI, BCLS Fund III GP and BCLS Fund III, the "Bain Capital Life Sciences Entities"), which is the general partner of the Reporting Person. As a result, BCLSI may be deemed to share voting and dispositive power with respect to the securities held by the Reporting Person.

**Item 2(b) Address of Principal Business Office or, if None, Residence**

The principal business address for each of the Bain Capital Life Sciences Entities is 200 Clarendon Street, Boston, Massachusetts 02116.

**Item 2(c) Citizenship**

Each of the Bain Capital Life Sciences Entities is organized under the laws of the State of Delaware.

**Item 2(d) Title of Class of Securities**

The class of securities of the Issuer to which this Schedule 13G relates is Common Stock, \$0.00001 par value per share ("Common Stock").

**Item 2(e) CUSIP Number**

The CUSIP number of the Common Stock is 12674W109.

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

- (a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c)  Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d)  Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e)  An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);

- (g)  A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h)  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act (15 U.S.C. 80a-3);
- (j)  A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
- (k)  Group, in accordance with §240.13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

#### Item 4 Ownership

##### (a) Amount beneficially owned:

As of the close of business on December 31, 2023, the Reporting Person held 2,000,000 shares of Common Stock, representing 4.7% of the outstanding shares of Common Stock.

The percentage of the outstanding shares of Common Stock held by the Reporting Person is based on 42,849,412 shares of Common Stock issued and outstanding as of November 3, 2023, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, filed with the Securities and Exchange Commission on November 9, 2023.

##### (b) Percent of class:

See Item 4(a) hereof.

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

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

0 shares of Common Stock

(ii) Shared power to vote or to direct the vote:

2,000,000 shares of Common Stock

(iii) Sole power to dispose or to direct the disposition of:

0 shares of Common Stock

(iv) Shared power to dispose or to direct the disposition of:

2,000,000 shares of Common Stock

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

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

**Item 6 Ownership of More Than Five Percent on Behalf of Another Person**

Not applicable.

**Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person**

Not applicable.

**Item 8 Identification and Classification of Members of the Group**

Not applicable.

**Item 9 Notice of Dissolution of Group**

Not applicable.

**Item 10 Certifications**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the Issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under § 240.14a-11.

**SIGNATURES**

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information in this statement is true, complete and correct.

Dated: February 13, 2024

**Bain Capital Life Sciences Opportunities III, LP**

By: Bain Capital Life Sciences Opportunities III GP, LLC,  
its general partner

By: Bain Capital Life Sciences Fund III, L.P.,  
its sole member

By: Bain Capital Life Sciences III General Partner, LLC,  
its general partner

By: Bain Capital Life Sciences Investors, LLC,  
its manager

By: /s/ Andrew Hack

Name: Andrew Hack

Title: Partner