

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549



SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 1)*

AVROBIO, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

05455M100

(CUSIP Number)

December 31, 2018

(Date of Event which Requires Filing of this Statement)

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 ("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 Names of Reporting Persons.
I.R.S. Identification Nos. of above persons (entities only)

Cormorant Global Healthcare Master Fund, LP

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization.

Cayman Islands

5 Sole Voting Power

0 shares

6 Shared Voting Power

243,451 shares

Number
of Shares
Beneficially
Owned by
Each
Reporting
Person With

Refer to Item 4 below.

7 Sole Dispositive Power

0 shares

8 Shared Dispositive Power

243,451 shares

Refer to Item 4 below.

9 Aggregate Amount Beneficially Owned by Each Reporting Person

243,451 shares

Refer to Item 4 below.

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
 N/A

11 Percent of Class Represented by Amount in Row (9)*

1.02%

Refer to Item 4 below.

12 Type of Reporting Person (See Instructions)

PN (Partnership)

1 Names of Reporting Persons.
I.R.S. Identification Nos. of above persons (entities only)

Cormorant Global Healthcare GP, LLC

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization.

Delaware

5 Sole Voting Power

0 shares

6 Shared Voting Power

243,451 shares

Number
of Shares
Beneficially
Owned by
Each
Reporting
Person With

Refer to Item 4 below.

7 Sole Dispositive Power

0 shares

8 Shared Dispositive Power

243,451 shares

Refer to Item 4 below.

9 Aggregate Amount Beneficially Owned by Each Reporting Person

243,451 shares

Refer to Item 4 below.

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
 N/A

11 Percent of Class Represented by Amount in Row (9)*

1.02%

Refer to Item 4 below.

12 Type of Reporting Person (See Instructions)

OO (Limited Liability Company)

1 Names of Reporting Persons.
I.R.S. Identification Nos. of above persons (entities only)

Cormorant Private Healthcare Fund I, LP

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization.

Delaware

5 Sole Voting Power

0 shares

6 Shared Voting Power

1,056,763 shares

Number
of Shares
Beneficially
Owned by
Each
Reporting
Person With

Refer to Item 4 below.

7 Sole Dispositive Power

0 shares

8 Shared Dispositive Power

1,056,763 shares

Refer to Item 4 below.

9 Aggregate Amount Beneficially Owned by Each Reporting Person

1,056,763 shares

Refer to Item 4 below.

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
 N/A

11 Percent of Class Represented by Amount in Row (9)*

4.41%

Refer to Item 4 below.

12 Type of Reporting Person (See Instructions)

PN (Partnership)

1 Names of Reporting Persons.
I.R.S. Identification Nos. of above persons (entities only)
Cormorant Private Healthcare GP, LLC

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization.
Delaware

5 Sole Voting Power
0 shares

6 Shared Voting Power
Number of Shares 1,056,763 shares
Beneficially Owned by Each Reporting Person With Refer to Item 4 below.

7 Sole Dispositive Power
0 shares

8 Shared Dispositive Power
1,056,763 shares
Refer to Item 4 below.

9 Aggregate Amount Beneficially Owned by Each Reporting Person
1,056,763 shares
Refer to Item 4 below.

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
 N/A

11 Percent of Class Represented by Amount in Row (9)*
4.41%
Refer to Item 4 below.

12 Type of Reporting Person (See Instructions)
OO (Limited Liability Company)

1 Names of Reporting Persons.
I.R.S. Identification Nos. of above persons (entities only)

Cormorant Asset Management, LP

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization.

Delaware

5 Sole Voting Power

0 shares

6 Shared Voting Power

1,357,784 shares

Number
of Shares
Beneficially
Owned by
Each
Reporting
Person With

Refer to Item 4 below.

7 Sole Dispositive Power

0 shares

8 Shared Dispositive Power

1,357,784 shares

Refer to Item 4 below.

9 Aggregate Amount Beneficially Owned by Each Reporting Person

1,357,784 shares

Refer to Item 4 below.

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
 N/A

11 Percent of Class Represented by Amount in Row (9)*

5.67%

Refer to Item 4 below.

12 Type of Reporting Person (See Instructions)

PN (Partnership)

1 Names of Reporting Persons.
I.R.S. Identification Nos. of above persons (entities only)

Bihua Chen

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization.

United States

5 Sole Voting Power

0 shares

6 Shared Voting Power

1,357,784 shares

Number
of Shares
Beneficially
Owned by
Each
Reporting
Person With

Refer to Item 4 below.

7 Sole Dispositive Power

0 shares

8 Shared Dispositive Power

1,357,784 shares

Refer to Item 4 below.

9 Aggregate Amount Beneficially Owned by Each Reporting Person

1,357,784 shares

Refer to Item 4 below.

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

N/A

11 Percent of Class Represented by Amount in Row (9)*

5.67%

Refer to Item 4 below.

12 Type of Reporting Person (See Instructions)

IN (Individual)

CUSIP NO. 05455M100

Item 1.

- (a) Name of Issuer
AVROBIO, Inc.
- (b) Address of Issuer's Principal Executive Offices
One Kendall Square, Building 300, Suite 201, Cambridge, MA 02139

Item 2.

- (a) Name of Person Filing
Cormorant Global Healthcare Master Fund, LP
Cormorant Global Healthcare GP, LLC
Cormorant Private Healthcare Fund I, LP
Cormorant Private Healthcare GP, LLC
Cormorant Asset Management, LP
Bihua Chen
 - (b) Address of Principal Business Office or, if none, Residence
200 Clarendon Street, 52nd Floor
Boston, MA 02116
 - (c) Citizenship
Cormorant Global Healthcare Master Fund, LP - Cayman Islands
Cormorant Global Healthcare GP, LLC - Delaware
Cormorant Private Healthcare Fund I, LP - Delaware
Cormorant Private Healthcare GP, LLC - Delaware
Cormorant Asset Management, LP - Delaware
Bihua Chen - United States
 - (d) Title of Class of Securities
Common Stock
 - (e) CUSIP Number
05455M100
-

CUSIP NO. 05455M100

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
- (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 associations 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 of 1940 (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).

Item 4. Ownership***

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount Beneficially Owned***

Cormorant Global Healthcare Master Fund, LP – 243,451 shares
Cormorant Global Healthcare GP, LLC – 243,451 shares
Cormorant Private Healthcare Fund I, LP – 1,056,763 shares
Cormorant Private Healthcare GP, LLC – 1,056,763 shares
Cormorant Asset Management, LP – 1,357,784 shares
Bihua Chen – 1,357,784 shares

(b) Percent of Class

Cormorant Global Healthcare Master Fund, LP – 1.02%
Cormorant Global Healthcare GP, LLC – 1.02%
Cormorant Private Healthcare Fund I, LP – 4.41%
Cormorant Private Healthcare GP, LLC – 4.41%
Cormorant Asset Management, LP – 5.67%
Bihua Chen – 5.67%

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

(i) sole power to vote or to direct the vote

Cormorant Global Healthcare Master Fund, LP - 0 shares
Cormorant Global Healthcare GP, LLC - 0 shares
Cormorant Private Healthcare Fund I, LP - 0 shares
Cormorant Private Healthcare GP, LLC - 0 shares
Cormorant Asset Management, LP - 0 shares
Bihua Chen - 0 shares

(ii) shared power to vote or to direct the vote

Cormorant Global Healthcare Master Fund, LP – 243,451 shares
Cormorant Global Healthcare GP, LLC – 243,451 shares
Cormorant Private Healthcare Fund I, LP – 1,056,763 shares
Cormorant Private Healthcare GP, LLC – 1,056,763 shares
Cormorant Asset Management, LP – 1,357,784 shares
Bihua Chen – 1,357,784 shares

(iii) sole power to dispose or to direct the disposition of

Cormorant Global Healthcare Master Fund, LP – 0 shares
Cormorant Global Healthcare GP, LLC – 0 shares
Cormorant Private Healthcare Fund I, LP - 0 shares
Cormorant Private Healthcare GP, LLC - 0 shares
Cormorant Asset Management, LP – 0 shares
Bihua Chen – 0 shares

(iv) shared power to dispose or to direct the disposition of

Cormorant Global Healthcare Master Fund, LP – 243,451 shares
Cormorant Global Healthcare GP, LLC – 243,451 shares
Cormorant Private Healthcare Fund I, LP – 1,056,763 shares
Cormorant Private Healthcare GP, LLC – 1,056,763 shares
Cormorant Asset Management, LP – 1,357,784 shares
Bihua Chen – 1,357,784 shares

*** Shares reported herein for Cormorant Asset Management, LP represent shares which are beneficially owned by Cormorant Global Healthcare Master Fund, LP (the "Master Fund") and Cormorant Private Healthcare Fund I, LP ("Fund I"), as reported herein, and a managed account (the "Account"). Cormorant Global Healthcare GP, LLC and Cormorant Private Healthcare GP, LLC serve as the general partners of the Master Fund and Fund I, respectively. Cormorant Asset Management, LP serves as the investment manager to the Master Fund, Fund I and the Account. Bihua Chen serves as the managing member of Cormorant Global Healthcare GP, LLC, Cormorant Private Healthcare GP, LLC and the general partner of Cormorant Asset Management, LP. Each of the Reporting Persons

disclaims beneficial ownership of the shares reported herein except to the extent of its or his pecuniary interest therein.

The percentages reported herein are calculated based upon there being 23,955,870 shares of Common Stock issued and outstanding as of November 8, 2018, as reported in the Issuer's Form 10-Q for the quarter ended September 30, 2018 filed with the Securities and Exchange Commission on November 13, 2018.

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

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. Certification

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.

Exhibits

- 1 Joint Filing Agreement by and among the Reporting Persons, incorporated by reference to Exhibit 1 to the Schedule 13G filed by the Reporting Persons with the Securities and Exchange Commission on July 2, 2018.
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CUSIP NO. 05455M100

SIGNATURE

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.

February 14, 2019

CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP
By: Cormorant Global Healthcare GP, LLC
its General Partner

By: /s/ Bihua Chen
Bihua Chen, Managing Member

CORMORANT GLOBAL HEALTHCARE GP, LLC

By: /s/ Bihua Chen
Bihua Chen, Managing Member

CORMORANT PRIVATE HEALTHCARE FUND I, LP
By: Cormorant Global Healthcare GP, LLC
its General Partner

By: /s/ Bihua Chen
Bihua Chen, Managing Member

CORMORANT PRIVATE HEALTHCARE GP, LLC

By: /s/ Bihua Chen
Bihua Chen, Managing Member

CORMORANT ASSET MANAGEMENT, LP
By: Cormorant Asset Management GP, LLC
its General Partner

By: /s/ Bihua Chen
Bihua Chen, Managing Member

/s/ Bihua Chen
Bihua Chen