

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

SCHEDULE 13G

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

Unity Biotechnology, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

91381U 10 1

(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. Name of Reporting Persons
Venrock Associates VII, L.P.

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

(a) (1)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:

6. Shared Voting Power
2,680,039(2)

7. Sole Dispositive Power
0

8. Shared Dispositive Power
2,680,039(2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
2,680,039(2)

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

11. Percent of Class Represented by Amount in Row (9)
6.3%(3)

12. Type of Reporting Person (See Instructions)
PN

-
- (1) Venrock Associates VII, L.P., Venrock Partners VII, L.P. and Venrock Management VII, LLC are members of a group for the purposes of this Schedule 13G.
- (2) Consists of 2,474,163 shares owned by Venrock Associates VII, L.P. and 205,876 shares owned by Venrock Partners VII, L.P.
- (3) This percentage is calculated based upon 42,322,562 shares of the Issuer's common stock outstanding as of October 31, 2018, as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2018.

1. Name of Reporting Persons
Venrock Partners VII, L.P.

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

(a) (1)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:

6. Shared Voting Power
2,680,039(2)

7. Sole Dispositive Power
0

8. Shared Dispositive Power
2,680,039(2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
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11. Percent of Class Represented by Amount in Row (9)
6.3%(3)

12. Type of Reporting Person (See Instructions)
PN

-
- (1) Venrock Associates VII, L.P., Venrock Partners VII, L.P. and Venrock Management VII, LLC are members of a group for the purposes of this Schedule 13G.
- (2) Consists of 2,474,163 shares owned by Venrock Associates VII, L.P. and 205,876 shares owned by Venrock Partners VII, L.P.
- (3) This percentage is calculated based upon 42,322,562 shares of the Issuer's common stock outstanding as of October 31, 2018, as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2018.

1. Name of Reporting Persons
Venrock Management VII, LLC

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

(a) (1)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware

5. Sole Voting Power
0

Number of Shares Beneficially Owned by Each Reporting Person With:

6. Shared Voting Power
2,680,039(2)

7. Sole Dispositive Power
0

8. Shared Dispositive Power
2,680,039(2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
2,680,039(2)

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

11. Percent of Class Represented by Amount in Row (9)
6.3%(3)

12. Type of Reporting Person (See Instructions)
OO

-
- (1) Venrock Associates VII, L.P., Venrock Partners VII, L.P. and Venrock Management VII, LLC are members of a group for the purposes of this Schedule 13G.
- (2) Consists of 2,474,163 shares owned by Venrock Associates VII, L.P. and 205,876 shares owned by Venrock Partners VII, L.P.
- (3) This percentage is calculated based upon 42,322,562 shares of the Issuer's common stock outstanding as of October 31, 2018, as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 7, 2018.

Introductory Note: This Schedule 13G is filed on behalf of Venrock Associates VII, L.P., a limited partnership organized under the laws of the State of Delaware (“VA7”), Venrock Partners VII, L.P., a limited partnership organized under the laws of the State of Delaware (“VP7”) and Venrock Management VII, LLC, a limited liability company organized under the laws of the State of Delaware (“VM7” and together with VA7 and VP7, the “Venrock Entities”) in respect of the common stock of Unity Biotechnology, Inc.

Item 1.

- (a) Name of Issuer
Unity Biotechnology, Inc.

- (b) Address of Issuer’s Principal Executive Offices
3280 Bayshore Boulevard, Suite 100
Brisbane, California 94005

Item 2.

- (a) Name of Person Filing
Venrock Associates VII, L.P.
Venrock Partners VII, L.P.
Venrock Management VII, LLC

- (b) Address of Principal Business Office or, if none, Residence

New York Office:	Palo Alto Office:	Boston Office:
7 Bryant Park 23rd Floor New York, NY 10018	3340 Hillview Avenue Palo Alto, CA 94304	34 Farnsworth Street 3rd Floor Boston, MA 02210

- (c) Citizenship
All of the Venrock Entities were organized in Delaware.

- (d) Title of Class of Securities
Common Stock, par value \$0.0001 per share.

- (e) CUSIP Number
91381U 10 1

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:

Not applicable

Item 4. Ownership

(a) Amount Beneficially Owned as of December 31, 2018:

Venrock Associates VII, L.P.	2,680,039(1)
Venrock Partners VII, L.P.	2,680,039(1)
Venrock Management VII, LLC	2,680,039(1)

(b) Percent of Class as of December 31, 2018:

Venrock Associates VII, L.P.	6.3%
Venrock Partners VII, L.P.	6.3%
Venrock Management VII, LLC	6.3%

(c) Number of shares as to which the person has, as of December 31, 2018:

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

Venrock Associates VII, L.P.	0
Venrock Partners VII, L.P.	0
Venrock Management VII, LLC	0

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

Venrock Associates VII, L.P.	2,680,039(1)
Venrock Partners VII, L.P.	2,680,039(1)
Venrock Management VII, LLC	2,680,039(1)

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

Venrock Associates VII, L.P.	0
Venrock Partners VII, L.P.	0
Venrock Management VII, LLC	0

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

Venrock Associates VII, L.P.	2,680,039(1)
Venrock Partners VII, L.P.	2,680,039(1)
Venrock Management VII, LLC	2,680,039(1)

(1) These shares are owned directly as follows: 2,474,163 shares are owned by Venrock Associates VII, L.P. and 205,876 shares are owned by Venrock Partners VII, L.P. Venrock Management VII, LLC is the general partner of both Venrock Associates VII, L.P. and Venrock Partners VII, L.P.

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 a Group

Not Applicable

Item 10. Certification

Not applicable.

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.

Dated: February 14, 2019

Venrock Associates VII, L.P.

By: Venrock Management VII, LLC
Its: General Partner

By: /s/ David L. Stepp
Name: David L. Stepp
Its: Authorized Signatory

Venrock Partners VII, L.P.

By: Venrock Management VII, LLC
Its: General Partner

By: /s/ David L. Stepp
Name: David L. Stepp
Its: Authorized Signatory

Venrock Management VII, LLC

By: /s/ David L. Stepp
Name: David L. Stepp
Its: Authorized Signatory

EXHIBITS

A: Joint Filing Agreement

EXHIBIT A

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the undersigned agree to the joint filing on behalf of each of them of a statement on Schedule 13G (including amendments thereto) with respect to the common stock of Unity Biotechnology, Inc. and further agree that this agreement be included as an exhibit to such filing. Each party to the agreement expressly authorizes each other party to file on its behalf any and all amendments to such statement. Each party to this agreement agrees that this joint filing agreement may be signed in counterparts.

In evidence whereof, the undersigned have caused this Agreement to be executed on their behalf this 14th day of February, 2019.

Venrock Associates VII, L.P.

By: Venrock Management VII, LLC
Its: General Partner

By: /s/ David L. Stepp
Name: David L. Stepp
Its: Authorized Signatory

Venrock Partners VII, L.P.

By: Venrock Management VII, LLC
Its: General Partner

By: /s/ David L. Stepp
Name: David L. Stepp
Its: Authorized Signatory

Venrock Management VII, LLC

By: /s/ David L. Stepp
Name: David L. Stepp
Its: Authorized Signatory