

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

Parabilis Medicines, Inc.

(Name of Issuer)

Common Stock, \$0.0001 par value

(Title of Class of Securities)

(CUSIP Number)

06/30/2026

(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)

SCHEDULE 13G

CUSIP No.

Names of Reporting Persons

1ARCH Venture Fund XII, L.P.

Check the appropriate box if a member of a Group (see instructions)

2☐ (a)
☐ (b)

3Sec Use Only

Citizenship or Place of Organization

4DELAWARE

Number of
Shares
Beneficially

5

Sole Voting Power

0.00

Owned by Each Reporting Person With:	6	Shared Voting Power
		6,412,780.00
		Sole Dispositive Power
	7	0.00
		Shared Dispositive Power
	8	6,412,780.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person	
		6,412,780.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)	
		☐
11	Percent of class represented by amount in row (9)	
		5.3 %
12	Type of Reporting Person (See Instructions)	
		PN

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons	
	ARCH Venture Partners XII, L.P.	
	Check the appropriate box if a member of a Group (see instructions)	
2	☐ (a)	
	☐ (b)	
3	Sec Use Only	
4	Citizenship or Place of Organization	
	DELAWARE	
	Sole Voting Power	
5		0.00
	Shared Voting Power	
6		6,412,780.00
	Sole Dispositive Power	
7		0.00
	Shared Dispositive Power	
8		6,412,780.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person	
		6,412,780.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)	
		☐
11	Percent of class represented by amount in row (9)	
		5.3 %

12 Type of Reporting Person (See Instructions)

PN

SCHEDULE 13G

CUSIP No.

1 Names of Reporting Persons

ARCH Venture Partners XII, LLC

Check the appropriate box if a member of a Group (see instructions)

2 ☐ (a)

☐ (b)

3 Sec Use Only

Citizenship or Place of Organization

4 DELAWARE

Sole Voting Power

5 0.00

Number of
Shares

Shared Voting Power

Beneficially
Owned by

6 6,412,780.00

Each
Reporting

7 Sole Dispositive Power

Person
With:

0.00

Shared Dispositive

8 Power

6,412,780.00

Aggregate Amount Beneficially Owned by Each Reporting Person

9 6,412,780.00

Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

10 ☐

Percent of class represented by amount in row (9)

11 5.3 %

Type of Reporting Person (See Instructions)

12 OO

SCHEDULE 13G

CUSIP No.

Names of Reporting Persons

1 Robert Nelsen

Check the appropriate box if a member of a Group (see instructions)

2 ☐ (a)

☐ (b)

3	Sec Use Only
4	Citizenship or Place of Organization
	UNITED STATES
	Sole Voting Power
5	0.00
	Shared Voting Power
6	6,412,780.00
	Sole Dispositive Power
7	0.00
	Shared Dispositive
8	Power
	6,412,780.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person
	6,412,780.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)
	☐
11	Percent of class represented by amount in row (9)
	5.3 %
12	Type of Reporting Person (See Instructions)
	IN

SCHEDULE 13G

CUSIP No.

1	Names of Reporting Persons
	Keith Crandell
	Check the appropriate box if a member of a Group (see instructions)
2	☐ (a)
	☐ (b)
3	Sec Use Only
4	Citizenship or Place of Organization
	UNITED STATES
	Sole Voting Power
5	0.00
	Shared Voting Power
6	6,412,780.00
	Sole Dispositive Power
7	0.00
	Shared Dispositive
8	Power
	6,412,780.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person

	6,412,780.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)
	☐
11	Percent of class represented by amount in row (9)
	5.3 %
12	Type of Reporting Person (See Instructions)
	IN

SCHEDULE 13G

CUSIP No.

	Names of Reporting Persons
1	Kristina Burow
	Check the appropriate box if a member of a Group (see instructions)
2	☐ (a)
	☐ (b)
3	Sec Use Only
4	Citizenship or Place of Organization
	UNITED STATES
	Sole Voting Power
5	0.00
	Shared Voting Power
6	6,412,780.00
	Sole Dispositive Power
7	0.00
	Shared Dispositive
8	Power
	6,412,780.00
9	Aggregate Amount Beneficially Owned by Each Reporting Person
	6,412,780.00
10	Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)
	☐
11	Percent of class represented by amount in row (9)
	5.3 %
12	Type of Reporting Person (See Instructions)
	IN

SCHEDULE 13G

CUSIP No.

1 Names of Reporting Persons
Steven Gillis
Check the appropriate box if a member of a Group (see instructions)

2 ☐ (a)
☐ (b)

3 Sec Use Only
Citizenship or Place of Organization

4 UNITED STATES

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person
With:

5 Sole Voting Power
0.00
6 Shared Voting Power
6,412,780.00
7 Sole Dispositive Power
0.00
8 Shared Dispositive
Power

9 Aggregate Amount Beneficially Owned by Each Reporting Person

6,412,780.00
Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)

10 ☐
Percent of class represented by amount in row (9)

11 5.3 %
Type of Reporting Person (See Instructions)

12 IN

SCHEDULE 13G

Item 1.

(a) Name of issuer:
Parabilis Medicines, Inc.
Address of issuer's principal executive offices:
(b) 30 Acorn Park Drive, Cambridge, MA 02140

Item 2.

Name of person filing:
(a) ARCH Venture Fund XII, L.P. ("AVF XII"); ARCH Venture Partners XII, L.P. ("AVP XII LP"); ARCH Venture Partners XII, LLC ("AVP XII LLC") (collectively, the "Reporting Entities" and individually, each a "Reporting Entity"); and Keith Crandell ("Crandell"), Robert Nelsen ("Nelsen"), Kristina Burow ("Burow") and Steven Gillis ("Gillis") (collectively, the "Investment Committee" and individually, each a "Committee Member"). The Reporting Entities and the Committee Members collectively are referred to as the "Reporting Persons." The Reporting Persons are filing this report with respect to shares of Common Stock, par value \$0.0001 per share (the "Common Stock") of Parabilis Medicines, Inc. (the "Issuer").
Address or principal business office or, if none, residence:
(b) The business address of each of the Reporting Persons is 8755 West Higgins Road, Suite 1025, Chicago, IL, 60631.
(c) Citizenship:

AVF XII and AVP XII LP are limited partnerships organized under the laws of the State of Delaware. AVP XII LLC is a limited liability company organized under the laws of the State of Delaware. Each Committee Member is a US citizen.

Title of class of securities:

- (d) Common Stock, \$0.0001 par value
- (e) CUSIP No.:

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

Item 4. Ownership

Amount beneficially owned:

- (a) AVF XII is the record owner of 6,412,780 shares of Common Stock (the "Record Shares") as of June 30, 2026. AVP XII LP, as the sole general partner of AVF XII, may be deemed to beneficially own the Record Shares. AVP XII LLC, as the sole general partner of AVP XII, may be deemed to beneficially own the Record Shares. As Committee Members of AVP XII LLC, each Committee Member may also be deemed to share the power to direct the disposition and vote of the Record Shares. Each Reporting Person disclaims beneficial ownership of such shares of Common Stock except for the shares, if any, such Reporting Person holds of record.

Percent of class:

- (b) The information required by Item 4(b) is incorporated by reference to Row 11 of the cover pages hereto. The percentages set forth on the cover sheet for each Reporting Person are based upon 121,952,030 shares of Common Stock outstanding as of August 10, 2026, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 13, 2026. %
- (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote:
See row 5 of the cover pages.
 - (ii) Shared power to vote or to direct the vote:
See row 6 of the cover pages.
 - (iii) Sole power to dispose or to direct the disposition of:
See row 7 of the cover pages.
 - (iv) Shared power to dispose or to direct the disposition of:
See row 8 of the cover pages.

Item 5. Ownership of 5 Percent or Less of a Class.

Item 6. Ownership of more than 5 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:
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.

ARCH Venture Fund XII, L.P.

Signature: ARCH Venture Partners XII, L.P.

Name/Title: its General Partner

Date: 08/14/2026

Signature: ARCH Venture Partners XII, LLC

Name/Title: its General Partner

Date: 08/14/2026

Signature: /s/ Mark McDonnell*

Name/Title: Mark McDonnell, as Attorney-in-Fact for Keith
Crandell, Managing Director

Date: 08/14/2026

ARCH Venture Partners XII, L.P.

Signature: ARCH Venture Partners XII, LLC

Name/Title: its General Partner

Date: 08/14/2026

Signature: /s/ Mark McDonnell*

Name/Title: Mark McDonnell, as Attorney-in-Fact for Keith
Crandell, Managing Director

Date: 08/14/2026

ARCH Venture Partners XII, LLC

Signature: /s/ Mark McDonnell*

Name/Title: Mark McDonnell, as Attorney-in-Fact for Keith
Crandell, Managing Director

Date: 08/14/2026

Robert Nelsen

Signature: /s/ Mark McDonnell*

Name/Title: Mark McDonnell, as Attorney-in-Fact for Robert
Nelsen

Date: 08/14/2026

Keith Crandell

Signature: /s/ Mark McDonnell*

Name/Title: Mark McDonnell, as Attorney-in-Fact for Keith
Crandell

Date: 08/14/2026

Kristina Burow

Signature: /s/ Mark McDonnell*

Name/Title: Mark McDonnell, as Attorney-in-Fact for Kristina
Burow

Steven Gillis

Date: 08/14/2026

Signature: /s/ Mark McDonnell*

Name/Title: Mark McDonnell, as Attorney-in-Fact for Steven
Gillis

Date: 08/14/2026

Comments accompanying signature: This Schedule 13G was executed by Mark McDonnell pursuant to a Power of Attorney filed as Exhibit 24 to the Form 3 relating to the beneficial ownership of shares of Neumora Therapeutics, Inc. by the Reporting Persons filed with the Securities and Exchange Commission on September 14, 2023 and incorporated herein in its entirety by reference.

Exhibit Information

Exhibit 1 - Joint Filing Agreement

AGREEMENT

Pursuant to Rule 13d-1-(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13G need be filed with respect to the ownership by each of the undersigned of shares of stock of Parabilis Medicines, Inc.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original.

Dated: August 14, 2026

ARCH VENTURE FUND XII, L.P.

By: ARCH Venture Partners XII, L.P.
its General Partner

By: ARCH Venture Partners XII, LLC
its General Partner

By: _____
*
Keith Crandell
Managing Director

ARCH VENTURE PARTNERS XII, L.P.

By: ARCH Venture Partners XII, LLC
its General Partner

By: _____
*
Keith Crandell
Managing Director

ARCH VENTURE PARTNERS XII, LLC

By: _____
*
Keith Crandell
Managing Director

*
Keith Crandell

*
Robert Nelsen

*
Kristina Burow

*
Steven Gillis

* By: /s/ Mark McDonnell
Mark McDonnell as
Attorney-in-Fact

* This Agreement of Joint Filing was executed by Mark McDonnell pursuant to a Power of Attorney filed as Exhibit 24 to the Form 3 relating to the beneficial ownership of shares of Neumora Therapeutics, Inc. by the Reporting Persons filed with the Securities Exchange Commission on September 14, 2023 and incorporated herein in its entirety by reference.
