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

SCHEDULE 13D

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

Vor Biopharma Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

929033108

(CUSIP Number)

Paul A. Stone
Chief Legal Officer
5AM Venture Management, LLC
501 2nd Street, Suite 350
San Francisco, CA 94107
(415) 993-8565

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

February 14, 2024

(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 Rule 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 ("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 5AM Ventures VI, L.P.
2.	Check the Appropriate Box if a Member of a Group (See Instructions)
(a)	<input type="checkbox"/>
(b)	<input checked="" type="checkbox"/> (1)
3.	SEC Use Only
4.	Source of Funds (See Instructions) WC
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
6.	Citizenship or Place of Organization Delaware
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power 0
	8. Shared Voting Power 4,595,089 shares of Common Stock (2)
	9. Sole Dispositive Power 0
	10. Shared Dispositive Power 4,595,089 shares of Common Stock (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 4,595,089 shares of Common Stock (2)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 6.8% (3)
14.	Type of Reporting Person (See Instructions) PN

- (1) This Schedule 13D is filed by 5AM Ventures VI, L.P. ("5AM VI"), 5AM Partners VI, LLC ("5AM Partners VI"), 5AM Opportunities I, L.P. ("5AM Opportunities"), 5AM Opportunities I (GP), LLC ("5AM Opportunities GP"), Andrew J. Schwab ("Schwab") and Dr. Kush Parmar ("Dr. Parmar"), with 5AM VI, 5AM Partners VI, 5AM Opportunities, 5AM Opportunities GP and Schwab, collectively, the "Reporting Persons". The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.
- (2) These shares are held by 5AM VI. Schwab and Dr. Parmar, as Managing Members of 5AM Partners VI, share voting and investment authority over the shares held by 5AM VI.
- (3) This percentage is calculated based upon 67,805,687 shares of Common Stock outstanding as of November 3, 2023, as reported in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission (the "SEC") on November 7, 2023.

1.	Names of Reporting Persons 5AM Partners VI, LLC
2.	Check the Appropriate Box if a Member of a Group (See Instructions)
(a)	<input type="checkbox"/>
(b)	<input checked="" type="checkbox"/> (1)
3.	SEC Use Only
4.	Source of Funds (See Instructions) AF
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
6.	Citizenship or Place of Organization Delaware
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power 0
	8. Shared Voting Power 4,595,089 shares of Common Stock (2)
	9. Sole Dispositive Power 0
	10. Shared Dispositive Power 4,595,089 shares of Common Stock (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 4,595,089 shares of Common Stock (2)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 6.8% (3)
14.	Type of Reporting Person (See Instructions) OO

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) Includes 4,595,089 shares held by 5AM VI. Schwab and Dr. Parmar, as Managing Members of 5AM Partners VI, share voting and investment authority over the shares held by 5AM VI.
- (3) This percentage is calculated based upon 67,805,687 shares of Common Stock outstanding as of November 3, 2023, as reported in the Issuer’s Quarterly Report on Form 10-Q filed with the SEC on November 7, 2023.

1.	Names of Reporting Persons 5AM Opportunities I, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a)	<input type="checkbox"/>
	(b)	<input checked="" type="checkbox"/> (1)
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,766,634 shares of Common Stock (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,766,634 shares of Common Stock (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,766,634 shares of Common Stock (2)	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11) 2.6% (3)	
14.	Type of Reporting Person (See Instructions) PN	

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) These shares are held by 5AM Opportunities. Schwab and Dr. Parmar, as Managing Members of 5AM Opportunities GP, share voting and investment authority over the shares held by 5AM Opportunities.
- (3) This percentage is calculated based upon 67,805,687 shares of Common Stock outstanding as of November 3, 2023, as reported in the Issuer’s Quarterly Report on Form 10-Q filed with the SEC on November 7, 2023.

1.	Names of Reporting Persons 5AM Opportunities I (GP), LLC
2.	Check the Appropriate Box if a Member of a Group (See Instructions)
(a)	<input type="checkbox"/>
(b)	<input checked="" type="checkbox"/> (1)
3.	SEC Use Only
4.	Source of Funds (See Instructions) AF
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
6.	Citizenship or Place of Organization Delaware
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power 0
	8. Shared Voting Power 1,766,634 shares of Common Stock (2)
	9. Sole Dispositive Power 0
	10. Shared Dispositive Power 1,766,634 shares of Common Stock (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,766,634 shares of Common Stock (2)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 2.6% (3)
14.	Type of Reporting Person (See Instructions) OO

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) Includes 1,766,634 shares held by 5AM Opportunities. Schwab and Dr. Parmar, as Managing Members of 5AM Opportunities GP, share voting and investment authority over the shares held by 5AM Opportunities.
- (3) This percentage is calculated based upon 67,805,687 shares of Common Stock outstanding as of November 3, 2023, as reported in the Issuer’s Quarterly Report on Form 10-Q filed with the SEC on November 7, 2023.

1.	Names of Reporting Persons Andrew J. Schwab
2.	Check the Appropriate Box if a Member of a Group (See Instructions)
(a)	<input type="checkbox"/>
(b)	<input checked="" type="checkbox"/> (1)
3.	SEC Use Only
4.	Source of Funds (See Instructions) AF
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
6.	Citizenship or Place of Organization United States
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power 0
	8. Shared Voting Power 6,361,723 shares of Common Stock (2)
	9. Sole Dispositive Power 0
	10. Shared Dispositive Power 6,361,723 shares of Common Stock (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 6,361,723 shares of Common Stock (2)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 9.4% (3)
14.	Type of Reporting Person (See Instructions) IN

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) Includes (i) 4,595,089 shares held by 5AM VI; and (ii) 1,766,634 shares held by 5AM Opportunities. Schwab and Dr. Parmar, as Managing Members of 5AM Partners VI, share voting and investment authority over the shares held by 5AM VI. Schwab and Dr. Parmar, as Managing Members of 5AM Opportunities GP, share voting and investment authority over the shares held by 5AM Opportunities.
- (3) This percentage is calculated based upon 67,805,687 shares of Common Stock outstanding as of November 3, 2023, as reported in the Issuer’s Quarterly Report on Form 10-Q filed with the SEC on November 7, 2023.

1.	Names of Reporting Persons Dr. Kush Parmar
2.	Check the Appropriate Box if a Member of a Group (See Instructions)
(a)	<input type="checkbox"/>
(b)	<input checked="" type="checkbox"/> (1)
3.	SEC Use Only
4.	Source of Funds (See Instructions) AF
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
6.	Citizenship or Place of Organization United States
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power 0
	8. Shared Voting Power 6,361,723 shares of Common Stock (2)
	9. Sole Dispositive Power 0
	10. Shared Dispositive Power 6,361,723 shares of Common Stock (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 6,361,723 shares of Common Stock (2)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 9.4% (3)
14.	Type of Reporting Person (See Instructions) IN

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) Includes (i) 4,595,089 shares held by 5AM VI; and (ii) 1,766,634 shares held by 5AM Opportunities. Schwab and Dr. Parmar, as Managing Members of 5AM Partners VI, share voting and investment authority over the shares held by 5AM VI. Schwab and Dr. Parmar, as Managing Members of 5AM Opportunities GP, share voting and investment authority over the shares held by 5AM Opportunities.
- (3) This percentage is calculated based upon 67,805,687 shares of Common Stock outstanding as of November 3, 2023, as reported in the Issuer’s Quarterly Report on Form 10-Q filed with the SEC on November 7, 2023.

Explanatory Note: This Amendment No. 1 (the “Amendment”), which amends the Schedule 13D filed with the Securities and Exchange Commission (the “SEC”) on February 19, 2021 (the “Original Schedule 13D”) filed on behalf of 5AM Ventures VI, L.P. (“5AM VI”), 5AM Partners VI, LLC (“5AM Partners VI”), 5AM Opportunities I, L.P. (“5AM Opportunities”), 5AM Opportunities I (GP), LLC (“5AM Opportunities GP”), Andrew J. Schwab (“Schwab”) and Dr. Kush Parmar (“Dr. Parmar” and, with 5AM Partners VI, 5AM VI, 5AM Opportunities, 5AM Opportunities GP and Schwab, collectively, the “Reporting Persons”), relates to the Common Stock of Vor Biopharma Inc., a Delaware corporation (the “Issuer” or “Vor”). This Amendment to the Original Schedule 13D is being filed solely to update the beneficial ownership percentages of the Reporting Persons resulting from an increase in the total number of shares of Common Stock outstanding and not due to any transaction by the Reporting Persons.

Item 5. Interest in Securities of the Issuer

Item 5 of the Original Schedule 13D is hereby amended and restated as follows:

(a) – (b). The following information with respect to the ownership of the Common Stock of the Issuer by the persons filing this statement on Schedule 13D is provided as of February 14, 2024:

Reporting Persons	Shares Held Directly	Sole Voting Power	Shared Voting Power(1)	Sole Dispositive Power	Shared Dispositive Power (1)	Beneficial Ownership	Percentage of Class (3)
5AM VI	4,595,089	0	4,595,089	0	4,595,089	4,595,089	6.8%
5AM Partners VI (1)	0	0	4,595,089	0	4,595,089	4,595,089	6.8%
5AM Opportunities	1,766,634	0	1,766,634	0	1,766,634	1,766,634	2.6%
5AM Opportunities GP (2)	0	0	1,766,634	0	1,766,634	1,766,634	2.6%
Schwab (1) (2)	0	0	6,361,723	0	6,361,723	6,361,723	9.4%
Dr. Parmar (1) (2)	0	0	6,361,723	0	6,361,723	6,361,723	9.4%

(1) Includes 4,595,089 shares of Common Stock held by 5AM VI. Schwab and Dr. Parmar, as Managing Members of 5AM Partners VI, share voting and investment authority over the shares held by 5AM VI.

(2) Includes 1,766,634 shares of Common Stock held by 5AM Opportunities. Schwab and Dr. Parmar, as Managing Members of 5AM Opportunities GP, share voting and investment authority over the shares held by 5AM Opportunities.

(3) This percentage is calculated based upon 67,805,687 shares of Common Stock outstanding as of November 3, 2023, as reported in the Issuer’s Quarterly Report on Form 10-Q filed with the SEC on November 7, 2023.

(c) Except as set forth herein, none of the Reporting Persons has effected any transactions in shares of the Issuer’s Common Stock during the last 60 days.

(d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, the shares of Common Stock beneficially owned by any of the Reporting Persons.

(e) Not applicable.

Item 7. Material to be Filed as Exhibits

A. Joint Filing Agreement as required by Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (incorporated by reference to the Original Schedule 13D, filed on February 19, 2021).

B. Amended and Restated Investors’ Rights Agreement, dated June 30, 2020 (incorporated by reference to Exhibit 4.2 to the Issuer’s Registration Statement on Form S-1 (SEC 333-252175), filed with the SEC on February 3, 2021).

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, 2024

5AM Ventures VI, L.P.

By: 5AM Partners VI, LLC
its General Partner

By: /s/ Andrew J. Schwab
Name: Andrew J. Schwab
Title: Managing Member

5AM Partners VI, LLC

By: /s/ Andrew J. Schwab
Name: Andrew J. Schwab
Title: Managing Member

/s/ Andrew J. Schwab
Andrew J. Schwab

5AM Opportunities I, L.P.

By: 5AM Opportunities I (GP), LLC
its General Partner

By: /s/ Andrew J. Schwab
Name: Andrew J. Schwab
Title: Managing Member

5AM Opportunities I (GP), LLC

By: /s/ Andrew J. Schwab
Name: Andrew J. Schwab
Title: Managing Member

/s/ Dr. Kush Parmar
Dr. Kush Parmar

ATTENTION

Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).