

**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934**

(Amendment No. 2)\*

**MINERALYS THERAPEUTICS, INC.**

(Name of Issuer)

**Common Stock**

(Title of Class of Securities)

**603170101**

(CUSIP Number)

**Abrar Hussain**  
**Samsara BioCapital GP, LLC, 628 Middlefield Road**  
**Palo Alto, CA, 94301**  
**(650) 285-4270**

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

**03/13/2025**

(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. ☐

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).

**SCHEDULE 13D**

**CUSIP No.** 603170101

1	Name of reporting person Samsara BioCapital, L.P.
2	Check the appropriate box if a member of a Group (See Instructions) <input type="checkbox"/> (a) <input checked="" type="checkbox"/> (b)
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 0.00
	8	Shared Voting Power 5,674,916.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 5,674,916.00
11	Aggregate amount beneficially owned by each reporting person 5,674,916.00	
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) 9.0 %	
14	Type of Reporting Person (See Instructions) PN	

## SCHEDULE 13D

CUSIP No.	603170101
-----------	-----------

1	Name of reporting person Samsara BioCapital GP, LLC
2	Check the appropriate box if a member of a Group (See Instructions) <input type="checkbox"/> (a) <input checked="" type="checkbox"/> (b)
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 0.00
	8	Shared Voting Power 5,674,916.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 5,674,916.00
11	Aggregate amount beneficially owned by each reporting person 5,674,916.00	
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) 9.0 %	
14	Type of Reporting Person (See Instructions) OO	

## SCHEDULE 13D

CUSIP No.	603170101
-----------	-----------

1	Name of reporting person Srinivas Akkaraju	
2	Check the appropriate box if a member of a Group (See Instructions) <input type="checkbox"/> (a) <input checked="" type="checkbox"/> (b)	
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 61,389.00
	8	Shared Voting Power 5,674,916.00
	9	Sole Dispositive Power 61,389.00
	10	Shared Dispositive Power 5,674,916.00

11	<b>Aggregate amount beneficially owned by each reporting person</b> 5,736,305.00
12	<b>Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)</b> <input type="checkbox"/>
13	<b>Percent of class represented by amount in Row (11)</b> 9.1 %
14	<b>Type of Reporting Person (See Instructions)</b> IN

## SCHEDULE 13D

### Item 1. Security and Issuer

- (a) **Title of Class of Securities:**  
Common Stock
- (b) **Name of Issuer:**  
MINERALYS THERAPEUTICS, INC.
- (c) **Address of Issuer's Principal Executive Offices:**  
150 N. Radnor Chester Road, Suite F200, Radnor, PENNSYLVANIA , 19087.

#### Item 1 Comment:

This Amendment No. 2 (this "Amendment No. 2" or this "Schedule 13D/A") amends and supplements the statement on Schedule 13D originally filed with the Securities and Exchange Commission (the "SEC") on February 24, 2023, and amended on February 12, 2024 (as amended, the "Statement") by the Reporting Persons. Unless otherwise defined herein, capitalized terms used in this Amendment No. 2 shall have the meanings ascribed to them in the Statement. Unless amended or supplemented below, the information in the Statement remains unchanged.

### Item 3. Source and Amount of Funds or Other Consideration

Item 3 of the Statement is hereby amended and supplemented as follows:

On March 13, 2025, Samsara LP purchased 600,000 shares of common stock at a price of \$13.50 per share from the underwriter of the Issuer's public offering (the "2025 Offering"). The aggregate purchase price for all securities acquired by Samsara LP in the 2025 Offering was \$8.1 million, which was funded by the working capital of Samsara LP.

### Item 5. Interest in Securities of the Issuer

- (a) Rows 11 and 13 of each Reporting Person's cover page to this Schedule 13D/A set forth the aggregate number of shares of common stock and percentages of the shares of common stock beneficially owned by such Reporting Person and are incorporated by reference. The percentage set forth in each row 13 is based upon the sum of: (i) 49,835,637 shares of common stock outstanding as of February 7, 2025, as reported in the Issuer's Annual Report on Form 10-K filed with the SEC on February 12, 2025; (ii) 12,962,962 shares of common stock issued in the 2025 Offering as disclosed in the Issuer's prospectus supplement dated March 11, 2025 filed with the SEC on March 12, 2025; and (iii) with respect to Dr. Akkaraju, 61,389 shares of common stock issuable upon the exercise of stock options within 60 days.
- The Reporting Persons' ownership of the Issuer's securities consists of (i) 5,674,916 shares of common stock directly held by Samsara LP and (ii) a total of 49,796 vested stock options (right to buy) held by Dr. Akkaraju; and (iii) 11,593 stock options (right to buy) scheduled to vest within 60 days of this filing held by Dr. Akkaraju.
- Samsara GP is the sole general partner of Samsara LP and Dr. Akkaraju is a managing member of Samsara GP. Each of Samsara GP and Dr. Akkaraju possesses power to direct the voting and disposition of the securities held by Samsara LP.
- (b) Rows 7 through 10 of each Reporting Person's cover page to this Schedule 13D/A set forth the number of shares of common stock as to which such Reporting Person has the sole or shared power to vote or direct the vote and sole or shared power to dispose or to direct the disposition and are incorporated by reference.
- (c) Except as set forth below, none of the Reporting Persons has effected any transactions with respect to the securities of the Issuer during the past sixty 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 securities beneficially owned by any of the Reporting Persons.
- (e) Not applicable.

### Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer

Item 6 of the Statement is hereby amended and supplemented as follows:

#### Lock-up Agreement

Each of the Issuer's executive officers and directors, including Dr. Akkaraju, have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 60 days from March 11, 2025 without first obtaining the written consent of BofA Securities, Inc., Evercore Group L.L.C. and Goldman Sachs & Co. LLC, subject to specified exceptions, including sales pursuant to existing trading plans established under Rule 10b5-1 under the Exchange Act.

#### Item 7. Material to be Filed as Exhibits.

##### Exhibit 99.1 Joint Filing Agreement

Exhibit 99.2 Form of Lock-up From Directors and Officers (incorporated by reference to Exhibit A to the Underwriting Agreement filed as Exhibit 1.1 to the Issuer's Current Report on Form 8-K, filed with the SEC on March 12, 2025).

#### 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.

#### Samsara BioCapital, L.P.

Signature: /s/ Srinivas Akkaraju  
Name/Title: By Samsara BioCapital GP, LLC, its General Partner,  
By Srinivas Akkaraju, Managing Member  
Date: 03/17/2025

#### Samsara BioCapital GP, LLC

Signature: /s/ Srinivas Akkaraju  
Name/Title: By Srinivas Akkaraju, Managing Member  
Date: 03/17/2025

#### Srinivas Akkaraju

Signature: /s/ Srinivas Akkaraju  
Name/Title: Srinivas Akkaraju  
Date: 03/17/2025

JOINT FILING AGREEMENT

We, the undersigned, hereby express our agreement that the Schedule 13D (or any amendments thereto) relating to the common stock of Mineralys Therapeutics, Inc. is filed on behalf of each of us.

Dated: March 17, 2025

**Samsara BioCapital, L.P.**

By: Samsara BioCapital GP, LLC  
its General Partner

By: /s/ Srinivas Akkaraju  
Name: Srinivas Akkaraju  
Title: Managing Member

**Samsara BioCapital GP, LLC**

By: /s/ Srinivas Akkaraju  
Name: Srinivas Akkaraju  
Title: Managing Member

/s/ Srinivas Akkaraju  
Srinivas Akkaraju