

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

SCHEDULE 13D

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

Mineralys Therapeutics, Inc.
(Name of Issuer)

Common Stock
(Title of Class of Securities)

603170101
(CUSIP Number)

Abrar Hussain
Samsara BioCapital
628 Middlefield Road
Palo Alto, CA 94301
650-285-4270
(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

February 14, 2023
(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 Rule 13d-1(e), Rule 13d-1(f) or Rule 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(b) 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	
	Samsara BioCapital, L.P.	
2	Check the Appropriate Box if a Member of a Group	(a) [] (b) []
3	SEC Use Only	
4	Source of Funds (See Instructions)	
	OO	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) []	
6	Citizenship or Place of Organization	
	Delaware	
	7	Sole Voting Power
		0
	8	Shared Voting Power
		4,519,361
	9	Sole Dispositive Power
		0
	10	Shared Dispositive Power
		4,519,361
11	Aggregate Amount Beneficially Owned by Each Reporting Person	
	4,519,361	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares []	
13	Percent of Class Represented by Amount in Row (11)	
	11.1%	
14	Type of Reporting Person	
	PN	

1	Names of Reporting Persons	
	Samsara BioCapital GP, LLC	
2	Check the Appropriate Box if a Member of a Group	(a) [] (b) []
3	SEC Use Only	
4	Source of Funds (See Instructions)	
	OO	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) []	
6	Citizenship or Place of Organization	
	Delaware	
	7	Sole Voting Power
		0
	8	Shared Voting Power
		4,519,361
	9	Sole Dispositive Power
		0
	10	Shared Dispositive Power
		4,519,361
11	Aggregate Amount Beneficially Owned by Each Reporting Person	
	4,519,361	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares []	
13	Percent of Class Represented by Amount in Row (11)	
	11.1%	
14	Type of Reporting Person	
	OO (Limited Liability Company)	

1	Names of Reporting Persons	
	Srinivas Akkaraju	
2	Check the Appropriate Box if a Member of a Group	(a) [] (b) []
3	SEC Use Only	
4	Source of Funds (See Instructions)	
	OO	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) []	
6	Citizenship or Place of Organization	
	USA	
	7	Sole Voting Power
		2,444
	8	Shared Voting Power
		4,519,361
	9	Sole Dispositive Power
		2,444
	10	Shared Dispositive Power
		4,519,361
11	Aggregate Amount Beneficially Owned by Each Reporting Person	
	4,521,805	
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares [=]	
13	Percent of Class Represented by Amount in Row (11)	
	11.1%	
14	Type of Reporting Person	
	IN	

Item 1. Security and Issuer.

This statement on Schedule 13D (the “Schedule 13D”) relates to the Common Stock, par value \$0.0001 per share (“Common Stock”), of Mineralys Therapeutics, Inc., a Delaware corporation (the “Issuer”), whose principal executive offices are located at 150 N. Radnor Chester Road, Suite F200, Radnor, Pennsylvania 19087.

Item 2. Identity and Background.

The Schedule 13D is being filed by the following persons (each a “Reporting Person” and, collectively, the “Reporting Persons”):

Samsara BioCapital, L.P. (“Samsara LP”);
Samsara BioCapital GP, LLC (“Samsara LLC”); and
Srinivas Akkaraju, M.D., Ph.D.

Samsara LP and Samsara LLC are organized under the laws of the State of Delaware. Dr. Akkaraju is a citizen of the United States of America. The Reporting Persons are principally engaged in the business of investing in securities, including of the Issuer. The address of the Reporting Persons is 628 Middlefield Road, Palo Alto, CA 94301.

During the last five years, none of the Reporting Persons (i) has been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) were a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

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

Prior to the Issuer’s initial public offering (the “IPO”), Samsara LP acquired preferred shares of the Issuer in a series of financing transactions for aggregate consideration of approximately \$24.5 million. In connection with the completion of the IPO, on February 14, 2023, the preferred shares held by Samsara LP automatically converted into 3,581,861 shares of Common Stock.

Also on February 14, 2023, Samsara LP purchased 937,500 shares of Common Stock in the IPO at a price of \$16.00 per share. Samsara LP obtained the funds for these acquisitions through capital contributions from its partners.

In addition, on February 9, 2023, the Issuer granted Dr. Akkaraju an option to purchase 44,000 shares of Common Stock at \$16.00 per share in consideration for his continued service as a non-employee director of the Issuer. The option vests in 36 monthly installments beginning on March 9, 2023.

Item 4. Purpose of Transaction.*Registration Rights*

Prior to the IPO, the Issuer granted Samsara LP, as well as other holders of the Issuer's convertible preferred stock and certain holders of its common stock, certain registration rights pursuant to the Amended and Restated Investors' Rights Agreement, dated June 1, 2022, as amended, by and among the Issuer and the stockholders party thereto (the "Investor Rights Agreement. Specifically the Issuer has granted Samsara LP demand, short-form and piggyback registration rights, which will terminate upon the earlier of (i) five years after the closing of the IPO or (ii) with respect to a particular holder, such time as Rule 144 or another similar exemption under the Securities Act of 1933, as amended, is available for the sale of all shares by such holder without limitation during a three-month period without registration.

The foregoing description of the Investor Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of such agreement filed as an exhibit to this Schedule 13D, and incorporated herein by reference.

Lock-Up Agreement

In connection with the IPO, the Reporting Persons entered into a letter agreement (the "Lock-Up Agreement"), with the several underwriters for the IPO (the "Underwriters"). Pursuant to the Lock-Up Agreement, the Reporting Persons agreed, without the prior written consent of the Underwriters and subject to limited exceptions, not to offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise dispose of, directly or indirectly, or enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock or such other securities for a period of 180 days after the date of the final prospectus used in the IPO (the "Lock-Up Period").

The foregoing description of the Lock-Up Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of such agreement, the form of which is filed as an exhibit to this Schedule 13D and is incorporated herein by reference.

General

The Reporting Persons acquired the securities described in this Schedule 13D for investment purposes and intend to review their investments in the Issuer on a continuing basis. Any actions the Reporting Persons might undertake may be made at any time and from time to time without prior notice and will be dependent upon the Reporting Persons' review of numerous factors, including, but not limited to: an ongoing evaluation of the Issuer's business, financial condition, operations and prospects; price levels of the Issuer's securities; general market,

industry and economic conditions; the relative attractiveness of alternative business and investment opportunities; and other future developments.

The Reporting Persons may acquire additional securities of the Issuer, or retain or sell all or a portion of the securities then held, in the open market or in privately negotiated transactions. In addition, the Reporting Persons may engage in discussions with management, the Issuer's board of directors (the "Board"), and securityholders of the Issuer and other relevant parties or encourage, cause or seek to cause the Issuer or such persons to consider or explore extraordinary corporate transactions, such as: a merger, reorganization or other transaction that could result in the de-listing or de-registration of the Common Stock; sales or acquisitions of assets or businesses; changes to the capitalization or distribution policy of the Issuer; or other material changes to the Issuer's business or corporate structure, including changes in management or the composition of the Board. There can be no assurance, however, that the Reporting Persons will propose such a transaction, that any proposed transaction would receive the requisite approvals from the respective governing bodies and unitholders, as applicable, or that any such transaction would be successfully implemented.

Other than as described above, the Reporting Persons do not currently have any plans or proposals that relate to, or would result in, any of the matters listed in Items 4(a)–(j) of Schedule 13D, although, depending on the factors discussed herein, the Reporting Persons may change their purpose or formulate different plans or proposals with respect thereto at any time.

Item 5. Interest in Securities of the Issuer.

(a) – (b)

The ownership information presented below represents beneficial ownership of Class A Common Stock of the Issuer as of the date hereof, based upon 40,856,653 shares of Common Stock outstanding as of February 14, 2023.

Reporting Person	Amount beneficially owned	Percent of class:	Sole power to vote or to direct the vote:	Shared power to vote or to direct the vote:	Sole power to dispose or to direct the disposition of:	Shared power to dispose or to direct the disposition of:
Samsara BioCapital, L.P.	4,519,361	11.1%	0	4,519,361	0	4,519,361
Samsara BioCapital GP, LLC	4,519,361	11.1%	0	4,519,361	0	4,519,361
Srinivas Akkaraju	4,521,805	11.1%	2,444	4,519,361	2,444	4,519,361

Samsara LP is the record holder of 4,519,361 shares of Common Stock. Samsara LLC is the general partner of Samsara LP and may be deemed to beneficially own the shares held by Samsara LP. Dr. Akkaraju has voting and investment power over the shares held by Samsara LP and, accordingly, may be deemed to beneficially own the shares held by Samsara LP.

In addition, Dr. Akkaraju holds an option to purchase shares of Common Stock that will be exercisable with respect to 2,444 shares of Common Stock within 60 days of the date hereof.

- (c) Except as described in Items 3 and 4, during the past 60 days, the Reporting Persons have not effected any transactions in the Common Stock.
- (d) None.
- (e) Not applicable.

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

Item 4 above summarizes certain provisions of the Investor Rights Agreement and Lock-Up Agreement and is incorporated herein by reference. A copy of each such agreement is attached as an exhibit to this Schedule 13D, and is incorporated herein by reference.

Except as set forth herein, neither the Reporting Persons nor any Related Person has any contracts, arrangements, understandings or relationships (legal or otherwise) with any person with respect to any securities of the Issuer, including but not limited to any contracts, arrangements, understandings or relationships concerning the transfer or voting of such securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or losses, or the giving or withholding of proxies.

Item 7. Materials to be Filed as Exhibits

Exhibit Number	Description
1	Joint Filing Agreement.
2	Amended and Restated Investors' Rights Agreement, dated June 1, 2022, as amended, by and among the Issuer and certain of its stockholders (incorporated by reference to Exhibit 4.2 to the Issuer's Registration Statement on Form S-1 (File No. 333-269282)).
3	Form of Lock-Up Agreement (incorporated by reference to the Form of Underwriting Agreement filed as Exhibit 1.1 the Issuer's Registration Statement on Form S-1 (File No. 333-269282)).

SIGNATURES

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.

Date: February 24, 2023

SAMSARA BIOCAPITAL, L.P.

By: /s/ Abrar Hussain
Name: Abrar Hussain
Title: Attorney-in-Fact

SAMSARA BIOCAPITAL GP, LLC

By: /s/ Abrar Hussain
Name: Abrar Hussain
Title: Attorney-in-Fact

SRINIVAS AKKARAJU, M.D., PH.D.

By: /s/ Abrar Hussain
Name: Abrar Hussain
Title: Attorney-in-Fact

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that they are jointly filing this statement on Schedule 13D. Each of them is responsible for the timely filing of such statement and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

IN WITNESS WHEREOF, the undersigned hereby execute this Joint Filing Agreement as of the 24th day of February, 2023.

SAMSARA BIOCAPITAL, L.P.

By: /s/ Abrar Hussain _____
Name: Abrar Hussain
Title: Attorney-in-Fact

SAMSARA BIOCAPITAL GP, LLC

By: /s/ Abrar Hussain _____
Name: Abrar Hussain
Title: Attorney-in-Fact

SRINIVAS AKKARAJU, M.D., PH.D.

By: /s/ Abrar Hussain _____
Name: Abrar Hussain
Title: Attorney-in-Fact