UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

MINERALYS THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

	Delaware		84-1966887	
	or Other Jurisdiction ration or Organization)		(I.R.S. Employer Identification No.)	
		150 N. Radnor Chester Road, Suite F200 Radnor, PA 19087 888-378-6240		
		(Address of Principal Executive Offices)		
	MINERALYS	THERAPEUTICS, INC. 2020 EQUITY INC THERAPEUTICS, INC. 2023 INCENTIVE APEUTICS, INC. 2023 EMPLOYEE STOC	AWARD PLAN	
		(Full Title of the Plans)		
		Jon Congleton Chief Executive Officer Mineralys Therapeutics, Inc. 150 N. Radnor Chester Road, Suite F200 Radnor, PA 19087 (888) 378-6240		
	(Name, Addres	ss and Telephone Number, Including Area Code, of Ago	nt for Service)	
		Copies to: Cheston J. Larson Matthew T. Bush Latham & Watkins LLP 12670 High Bluff Drive San Diego, CA 92130		
	k whether the registrant is a large accelerated file r reporting company" and "emerging growth com		er reporting company. See the definitions of "large accelerated filer,"	
arge accelerated filer			Accelerated filer	
Non-accelerated filer	E		Smaller reporting company Emerging growth company	×
	a company, indicate by check mark if the registra n $7(a)(2)(B)$ of the Securities Act. \square	nt has elected not to use the extended transition period f	or complying with any new or revised financial accounting standards	
roposed sales to take pla	ce as soon after the effective date of the registr	ration statement as awards granted under the above-	named plans are granted, exercised and/or distributed.	

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of Form S-8 will be sent or given to participants as specified by Rule 428(b)(1) of the Securities Act. These documents and the documents incorporated by reference into this registration statement pursuant to Item 3 of Part II of this registration statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

In this registration statement, Mineralys Therapeutics, Inc. is sometimes referred to as "Registrant," "we," "us" or "our."

Item 3. Incorporation of Documents by Reference.

The Securities and Exchange Commission ("SEC") allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this registration statement, and later information filed with the SEC will update and supersede this information. We hereby incorporate by reference into this registration statement the following documents previously filed with the SEC:

- (a) The prospectus filed by the Registrant with the SEC pursuant to Rule 424(b) under the Securities Act, on February 10, 2023 relating to the registration statement on Form S-1, as amended (Registration No. 333-269282), which contains the Registrant's audited financial statements for the latest fiscal year for which such statements have been filed: and
- (b) The description of the Registrant's common stock set forth in the Registrant's registration statement on Form 8-A12B (Registration No. 001-41614), filed by the Registrant with the SEC under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on February 6, 2023, including any amendments or reports filed for the purpose of updating such description.

In addition, all documents filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the filing of this registration statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which de-registers all securities then remaining unsold shall be deemed to be incorporated by reference into this registration statement and to be a part hereof from the date of filing such documents, except as to specific sections of such statements as set forth therein. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein modifies or superseded for purposes of this registration statement to the extent that a statement contained in any subsequently filed document which also is incorporated by reference herein modifies or supersedes such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Under no circumstances shall any information furnished under Item 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our certificate of incorporation provides that no director of the Registrant shall be personally liable to it or its

stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Our amended and restated certificate of incorporation provides that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our amended and restated certificate of incorporation currently in effect provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with each of our directors and officers. These indemnification agreements may require us, among other things, to indemnify our directors and officers for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or officer in any action or proceeding arising out of his or her service as one of our directors or officers, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit			Filed			
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
3.3	Form of Amended and Restated Certificate of Incorporation	S-1/A	333-269282	3.3	February 2, 2023	
3.4	Form of Amended and Restated Bylaws	S-1	333-269282	3.4	January 18, 2023	
4.1	Specimen stock certificate evidencing the shares of common stock	S-1/A	333-269282	4.1	February 2, 2023	
5.1	Opinion of Latham & Watkins LLP					X
10.1	Mineralys Therapeutics, Inc. 2020 Equity Incentive Plan, as amended, including form of stock option agreement and form of restricted stock agreement thereunder	S-1/A	333-269282	10.1	February 2, 2023	
10.2	Mineralys Therapeutics, Inc. 2023 Incentive Award Plan and form of stock option agreement and restricted stock unit agreement thereunder	S-1/A	333-269282	10.2	February 2, 2023	
10.3	Mineralys Therapeutics, Inc. 2023 Employee Stock Purchase Plan	S-1/A	333-269282	10.3	February 2, 2023	
23.1	Consent of Independent Registered Public Accounting Firm					X
23.2	Consent of Latham & Watkins LLP (included in Exhibit 5.1)					X
24.1	Power of Attorney (see signature page)					X
107	Calculation of Filing Fee Table					X

Item 9. Undertakings.

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement,
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) to reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) to include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if this registration statement is on Form S-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement, relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (h) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Radnor, State of Pennsylvania, on February 10, 2023.

MINERALYS THERAPEUTICS, INC.

By: /s/ Jon Congleton

Jon Congleton

Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Mineralys Therapeutics, Inc., hereby severally constitute and appoint Jon Congleton and Adam Levy, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities held on the dates indicated.

Signature	Title	Date	
/s/ Jon Congleton Jon Congleton	Chief Executive Officer (principal executive officer)	February 10, 2023	
/s/ Adam Levy Adam Levy	Chief Financial Officer (principal financial and accounting officer)	February 10, 2023	
/s/ Brian Taylor Slingsby, M.D., Ph.D., M.P.H. Brian Taylor Slingsby, M.D., Ph.D., M.P.H.	Executive Chairman	February 10, 2023	
/s/ Srinivas Akkaraju, M.D., Ph.D. Srinivas Akkaraju, M.D., Ph.D.	— Director	February 10, 2023	
/s/ Alexander Asam, Ph.D. Alexander Asam, Ph.D.	— Director	February 10, 2023	
/s/ Derek DiRocco, Ph.D. Derek DiRocco, Ph.D.	— Director	February 10, 2023	
/s/ Olivier Litzka, Ph.D. Olivier Litzka, Ph.D.	— Director	February 10, 2023	
/s/ Takeshi Takahashi, M.B.A. Takeshi Takahashi, M.B.A.	— Director	February 10, 2023	

CALCULATION OF FILING FEE TABLE

Form S-8

(Form Type)

Mineralys Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common stock, \$0.0001 par value per share	Rule 457(c) and Rule 457(h)	8,928,065 shares (2)	\$16.00 (3)	\$142,849,040	\$110.20 per \$1,000,000	\$15,741.97
Equity	Common stock, \$0.0001 par value per share	Rule 457(h)	1,071,935 shares (4)	\$16.00 (3)	\$17,150,960	\$110.20 per \$1,000,000	\$1,890.04
Equity	Common stock, \$0.0001 par value per share	Rule 457(h)	1,365,442 shares (5)	\$0.98 (6)	\$1,338,133	\$110.20 per \$1,000,000	\$147.46
Equity	Common stock, \$0.0001 par value per share	Rule 457(c) and Rule 457(h)	1,600,000 shares (7)	\$16.00 (3)	\$25,600,000	\$110.20 per \$1,000,000	\$2,821.12
	Total Off	fering Amounts			\$186,938,133		\$20,600.59
	Total F	ee Offsets (8)		•			\$0
	Net	Fee Due		•			\$20,600.59

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also registers an indeterminate number of additional shares that may be issued pursuant to the above-named plans as the result of any future stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of our outstanding shares of common stock.
- (2) Represents 10,000,000 shares of common stock issuable under the Mineralys Therapeutics, Inc. 2023 Incentive Award Plan (the "2023 Plan"), which number consists of (a) 3,578,065 shares of common stock initially available for future grants under the 2023 Plan, and (b) up to an additional 5,350,000 shares of common stock that may become issuable under the 2023 Plan pursuant to its terms. To the extent outstanding awards under the 2023 Plan or the Mineralys Therapeutics, Inc. 2020 Equity Incentive Plan, as amended (the "2020 Plan") are forfeited or lapse unexercised, the shares of common stock subject to such awards will be available for future issuance under the 2023 Plan. See footnotes 4 and 5 below.
- (3) This estimate is made pursuant to Rule 457 of the Securities Act solely for purposes of calculating the registration fee. The computation is based upon the initial public offering price of the registrant's common stock set forth on the cover page of the registrant's prospectus dated February 9, 2023 relating to its initial public offering, which is also the weighted average exercise price of the outstanding options under the 2023 Plan described in footnote (4).
- (4) Represents 1,071,935 shares of common stock subject to outstanding options under the 2023 Plan. To the extent outstanding options under the 2023 Plan are forfeited or lapse unexercised, the shares of common stock subject to such awards will be available for future issuance under the 2023 Plan. See footnote 2 above. Each of the options has an exercise price per share equal to the initial public offering price of the registrant's common stock set forth on the cover page of the registrant's prospectus dated February 9, 2023 relating to its initial public offering.
- (5) Represents 1,365,442 shares of common stock subject to outstanding options under the 2020 Plan. To the extent outstanding options under the 2020 Plan are forfeited or lapse unexercised, the shares of common stock subject to such awards will be available for future issuance under the 2023 Plan. See footnote 2 above.
- (6) This estimate is made pursuant to Rule 457 of the Securities Act solely for purposes of calculating the registration fee. The Proposed Maximum Offering Price Per Share is \$0.98 per share, which is the weighted average exercise price of outstanding options granted under the 2020 Plan being registered.
- (7) Represents 1,600,000 shares of common stock issuable under the Mineralys Therapeutics, Inc. 2023 Employee Stock Purchase Plan (the "ESPP"), which number consists of (a) 400,000 shares of common stock initially available for future grants under the ESPP, and (b) up to an additional 1,200,000 shares of common stock that may become issuable under the ESPP pursuant to its terms.
- (8) The Registrant does not have any fee offsets.

OPINION OF LATHAM & WATKINS LLP

LATHAM & WATKINS LLP

February 10, 2023

Mineralys Therapeutics, Inc. 150 N. Radnor Chester Road Suite F200 Radnor, PA 19087 12670 High Bluff Drive San Diego, California 92130 Tel: +1.858.523.5400 Fax: +1.858.523.5450

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Re: Registration Statement on Form S-8; 12,965,442 shares of Common Stock, par value \$0.0001 per share

To the addressees set forth above:

We have acted as special counsel to Mineralys Therapeutics, Inc., a Delaware corporation (the "Company"), in connection with the proposed issuance of an aggregate of 12,965,442 shares of common stock, \$0.0001 par value per share (the "Shares"), of the Company, pursuant to the Company's 2023 Incentive Award Plan (the "2023 Plan"), the Company's 2020 Equity Incentive Plan, as amended (the "2020 Plan"), and the Company's 2023 Employee Stock Purchase Plan (the "ESPP," and together with the 2023 Plan and the 2020 Plan, the "Plans"). The Shares are included in a Registration Statement on Form S-8 under the Securities Act of 1933, as amended (the "Act"), filed with the Securities and Exchange Commission (the "Commission") on February 10, 2023 (the "Registration Statement"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related prospectuses, other than as expressly stated herein with respect to the issuance of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware and we express no opinion with respect to any other laws.

In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity to authentic original documents of all documents submitted to us as copies.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares have been duly registered on the books of the transfer agent and registrar

LATHAM&WATKINS LLP

therefor in the name or on behalf of the recipients, or certificates representing the Shares (in the form of the specimen certificate filed as an exhibit to the Company's Registration Statement on Form S-1) have been manually signed by an authorized officer of the transfer agent and registrar therefor, and subject to the Company completing all actions and proceedings required on its part to be taken prior to the issuance of the Shares, and when the Shares have been issued by the Company in the circumstances contemplated by the Plans for legal consideration in excess of par value, the issuance of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Sincerely,

/s/ Latham & Watkins LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement (Form S-8) pertaining to the Mineralys Therapeutics, Inc. 2020 Equity Incentive Plan, the Mineralys Therapeutics, Inc. 2023 Incentive Award Plan, and the Mineralys Therapeutics, Inc. 2023 Employee Stock Purchase Plan of our report dated October 12, 2022 (except for Note 1, as to which the date is February 2, 2023) with respect to the financial statements of Mineralys Therapeutics, Inc. included in its Registration Statement on Form S-1, as amended (No. 333-269282), filed with the Securities and Exchange Commission.

/s/Ernst & Young LLP

Denver, Colorado February 9, 2023