UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

Eliem Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 83-2273741 (I.R.S. Employer Identification No.)

PMB #117
2801 Centerville Road 1st Floor
Wilmington, DE
1-877-ELIEMTX (354-3689)
(Address of principal executive offices) (Zip code)

Eliem Therapeutics, Inc. 2021 Equity Incentive Plan Eliem Therapeutics, Inc. 2021 Employee Stock Purchase Plan (Full title of the plan)

Andrew Levin, M.D., Ph.D.
Executive Chairman
of the Board of Directors
Eliem Therapeutics, Inc.
PMB #117
2801 Centerville Road 1st Floor
Wilmington, DE
1-877-ELIEMTX (354-3689)

(Name and address of agent for service) (Telephone number, including area code, of agent for service)

Copy to:

Alan Hambelton Cooley LLP 1700 Seventh Avenue, Suite 1900 Seattle, Washington 98101 (206) 452-8756

emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box

EXPLANATORY NOTE

Eliem Therapeutics, Inc. (the "Registrant") is filing this Registration Statement on Form S-8 for the purpose of registering an additional (a) 1,384,972 shares of its common stock, par value \$0.0001 per share (the "Common Stock"), issuable to eligible persons under the 2021 Equity Incentive Plan, which Common Stock is in addition to the shares of Common Stock registered on the Registrant's registration statements on Form S-8 filed on August 12, 2021 (File No. 333-258771), March 7, 2022 (File No. 333-263347) and March 6, 2023 (File No. 333-270304) (together, the "Prior Forms S-8"), and (b) 276,994 shares of Common Stock issuable to eligible persons under the 2021 Employee Stock Purchase Plan, which Common Stock is in addition to the shares of Common Stock registered on the Prior Forms S-8.

PART II

ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

Pursuant to General Instruction E to Form S-8, the contents of the Prior Forms S-8 are incorporated by reference herein.

All other reports and documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items) on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part of this Registration Statement from the date of the filing of such reports and documents. 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 subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 8. EXHIBITS

Exhibit		Schedule	Incorporated by Reference File			
Number	Description	Form	Number	Exhibit	Filing Date	
4.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-40708	3.1	August 12, 2021	
4.2	Amended and Restated Bylaws of the Registrant.	S-1	333-257980	3.4	August 2, 2021	
4.3	Form of common stock certificate of the Registrant	S-1	333-257980	4.1	August 2, 2021	
5.1*	Opinion of Cooley LLP.					
23.1*	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.					
23.2*	Consent of Cooley LLP (included in Exhibit 5.1).					
24.1*	Power of Attorney (included on the signature page of this registration statement).					
99.1	2021 Equity Incentive Plan.	S-1	333-257980	10.4	August 2, 2021	
99.2	Forms of Option Agreement, Stock Option Grant Notice and Notice of Exercise under the 2021 Equity Incentive Plan.	S-1	333-257980	10.5	August 2, 2021	
99.3	Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Award Agreement under the 2021 Equity Incentive Plan.	S-1	333-257980	10.6	August 2, 2021	
99.4	2021 Employee Stock Purchase Plan.	S-1	333-257980	10.7	August 2, 2021	
107*	Filing Fee Table.					

^{*} Filed herewith

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, 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 Wilmington, State of Delaware, on this 28th day of March, 2024.

FLIEM	THER	APEUTIC	TS. INC

Ву:	/s/ Andrew Levin			
Andrew Levin, M.D., Ph.D.				
	Executive Chairman of the Roard of Directors			

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Andrew Levin as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in their name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or any of them, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Andrew Levin Andrew Levin, M.D., Ph.D.	Executive Chairman of the Board of Directors (Principal Executive and Financial Officer)	March 28, 2024
/s/ Emily Pimblett Emily Pimblett	Chief Accounting Officer (Principal Accounting Officer)	March 28, 2024
/s/ Judith Dunn Judith Dunn, Ph.D.	Director	March 28, 2024
/s/ Liam Ratcliffe Liam Ratcliffe, M.D., Ph.D.	Director	March 28, 2024
/s/ Adam Rosenberg Adam Rosenberg	Director	March 28, 2024
/s/ Simon Tate Simon Tate	Director	March 28, 2024



Alan Hambelton T: +1 206 452 8756 ahambelton@cooley.com

March 28, 2024

Eliem Therapeutics, Inc. PMB #117 2801 Centerville Road 1st Floor Wilmington, DE 19808-1609

Ladies and Gentlemen:

We have acted as counsel to Eliem Therapeutics, Inc., a Delaware corporation (the "Company"), in connection with the filing by the Company of a Registration Statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission (the "Commission") covering the offering of up to 1,661,966 shares (the "Shares") of the Company's Common Stock, par value \$0.0001 per share ("Common Stock"), consisting of (i) 1,384,972 shares of Common Stock issuable pursuant to the Company's 2021 Equity Incentive Plan (the "2021 Plan"), and (iii) 276,994 shares of Common Stock issuable pursuant to the Company's 2021 Employee Stock Purchase Plan (together with the 2021 Plan, the "Plans").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the related prospectuses, (b) the Company's certificate of incorporation and bylaws, each as currently in effect, (c) the Plans, and (d) such other records, documents, opinions, certificates, memoranda and instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials, and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Plans, the Registration Statement and the related prospectuses, will be validly issued, fully paid and nonassessable (except as to shares issued pursuant to deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

This opinion is limited to the matters expressly set forth in this letter, and no opinion should be implied, or may be inferred, beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof and we have no obligation or responsibility to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter

Cooley LLP 1700 Seventh Avenue, Suite 1900, Seattle, WA 98101 Phone: (206) 452-8700 Fax: (206) 452-8800 Cooley.com



Eliem Therapeutics, Inc. March 28, 2024 Page Two

We consent to the filing of 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 Securities Act of 1933, as amended, or the rules and regulations of the Commission thereunder.

Sincerely,

Cooley LLP

By: /s/ Alan D. Hambelton

Alan D. Hambelton

Cooley LLP 1700 Seventh Avenue, Suite 1900, Seattle, WA 98101 Phone: (206) 452-8700 Fax: (206) 452-8800 Cooley.com

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Eliem Therapeutics, Inc. of our report dated March 28, 2024 relating to the financial statements, which appears in Eliem Therapeutics, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023.

/s/ PricewaterhouseCoopers LLP Seattle, Washington March 28, 2024

Calculation of Filing Fee Table

Form S-8 (Form Type)

Eliem Therapeutics, Inc. (Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered

Security Type	Security Class Title	Fee Calculation Rate	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, par value \$0.0001 per share, Eliem Therapeutics, Inc. 2021 Equity Incentive Plan	Other ⁽²⁾	1,384,972	\$2.82(3)	\$3,905,621	\$0.00014760	\$576
Equity	Common Stock, par value \$0.0001 per share, Eliem Therapeutics, Inc. 2021 Employee Stock Purchase Plan	Other ⁽⁴⁾	276,994	\$2.39(5)	\$662,016	\$0.00014760	\$98
Total Offering Amounts					\$4,567,637		\$674
Total Fees Previously Paid							_
Total Fee Offsets							_
Net Fee Due						\$674	

- (1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock that become issuable under the plans set forth herein by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of the Registrant's common stock, as applicable.
- (2) Represents an automatic annual increase equal to 5% of the total number of shares of the Registrant's common stock outstanding on December 31, 2023, which annual increase is provided by the Registrant's 2021 Equity Incentive Plan (the "2021 Plan").
- (3) Estimated in accordance with Rule 457(c) and (h) of the Securities Act solely for the purpose of calculating the registration fee on the basis of the average of the high and low prices of the Registrant's common stock as reported on the Nasdaq Global Market on March 22, 2024.
- (4) Represents an automatic annual increase equal to 1% of the total number of shares of the Registrant's common stock outstanding on December 31, 2023, which annual increase is provided by the Registrant's 2021 Employee Stock Purchase Plan (the "2021 ESPP").
- (5) Estimated in accordance with Rule 457(c) and (h) of the Securities Act solely for the purpose of calculating the registration fee on the basis of the average of the high and low prices of the Registrant's common stock as reported on the Nasdaq Global Market on March 22, 2024, multiplied by 85%, which is the percentage of the price per share applicable to purchases under the 2021 ESPP.