UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-1 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) 2834

(Primary Standard Industrial Classification Code Number)

83-2273741 (I.R.S. Employer Identification Number)

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Eliem Therapeutics, Inc. 23515 NE Novelty Hill Road, Suite B221 #125 Redmond, WA 98053 (425) 276-2300

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Robert Azelby
Chief Executive Officer
Eliem Therapeutics, Inc.
23515 NE Novelty Hill Road, Suite B221 #125
Redmond, WA 98053
(425) 276-2300

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

Copies to:

	Copies to:	
Alan Hambelton Sonya Erickson Julia Stark Cooley LLP 1700 Seventh Avenue Seattle, WA 98101 (206) 452-8756	James B. Bucher Executive Vice President and General Counsel Eliem Therapeutics, Inc. 23515 NE Novelty Hill Road, Suite B221 #125 Redmond, WA 98053 (425) 276-2300	Brian J. Cuneo Phillip S. Stoup Latham & Watkins LLP 140 Scott Drive Menlo Park, CA (650) 328-4600
pproximate date of commencement of	proposed sale to the public: As soon as practicable after the effective	re date of this registration statement.
any of the securities being registered on 933 check the following box: \Box	this Form are to be offered on a delayed or continuous basis pursuant	to Rule 415 under the Securities Act o
	ecurities for an offering pursuant to Rule 462(b) under the Securities at number of the earlier effective registration statement for the same of	
-	filed pursuant to Rule 462(c) under the Securities Act, check the follower effective registration statement for the same offering. \Box	owing box and list the Securities Act
-	filed pursuant to Rule 462(d) under the Securities Act, check the follower effective registration statement for the same offering. \Box	owing box and list the Securities Act
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Large accelerated filer \Box Accelerated filer

Non-accelerated filer	\boxtimes	Smaller reporting company
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Emerging growth company

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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 to Section 7(a)(2)(B) of the Securities Act. \Box

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price Per Share(3)	Proposed Maximum Aggregate Offering Price(3)	Amount of Registration Fee(4)
Common stock, par value \$0.0001 per share	460,000	\$12.50	\$5,750,000	\$628

- (1) Includes 60,000 shares that the underwriters have the option to purchase.
- (2) The Registrant is registering 460,000 shares pursuant to this Registration Statement, which shares are in addition to the 6,900,000 shares registered pursuant to the Registration Statement on Form S-1 (File No. 333-257980).
- (3) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(a) of the Securities Act of 1933, as amended.
- (4) The registration fee is based upon the public offering price.

This R	egistration	Statement	shall be	ecome e	ffective 1	upon fi	ling i	n accor	dance	with l	Rule -	462(b)) unde	r the	Secur	ities /	Act of	1933,	as aı	nende	ځd.

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

Pursuant to Rule 462(b) under the Securities Act of 1933, as amended, Eliem Therapeutics, Inc. (the "*Registrant*") is filing this Registration Statement on Form S-1 (this "*Registration Statement*") with the Securities and Exchange Commission (the "*Commission*"). This Registration Statement relates to the public offering of securities contemplated by the Registration Statement on Form S-1, as amended (File No. 333-257980) (the "*Prior Registration Statement*"), which the Registrant originally filed with the Commission on July 16, 2021, and which the Commission declared effective on August 9, 2021

The Registrant is filing this Registration Statement for the sole purpose of increasing the aggregate number of shares of common stock offered by the Registrant by 460,000 shares, 60,000 of which may be sold by the Registrant in the event the underwriters exercise their option to purchase additional shares of the Registrant's common stock to cover over-allotments. The additional shares that are being registered for issuance and sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in the Calculation of Registration Fee table contained in the Prior Registration Statement. The information set forth in the Prior Registration Statement and all exhibits to the Prior Registration Statement.

The required opinion and consents are listed on the Exhibit Index below and filed herewith.

EXHIBIT INDEX

Exhibit No.	<u>Description</u>
5.1	Form of Opinion of Cooley LLP.
23.1	Consent of independent registered public accounting firm.
23.2	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Power of Attorney (incorporated by reference to Exhibit 24.1 of the Registration Statement on Form S-1 (File No. 333-257980) filed on July 16, 2021).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Redmond, State of Washington, on August 9, 2021.

ELIEM THERAPEUTICS, INC.

By: /s/ Robert Azelby
Robert Azelby
Chief Executive Officer

POWER OF ATTORNEY

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

	Signature /s/ Robert Azelby	Title Chief Executive Officer and Director	Date August 9, 2021
	Robert Azelby	(Principal Executive Officer)	71ugust 3, 2021
	/s/ Erin M. Lavelle Erin M. Lavelle	Executive Vice President, Chief Operating Officer and Chief Financial Officer (<i>Principal Financial and Accounting Officer</i>)	August 9, 2021
	Erin M. Lavelle	Financial Officer (Principal Financial and Accounting Officer)	
	*	Director	August 9, 2021
	Andrew Levin, M.D., Ph.D.		
	*	Director	August 9, 2021
	Judith Dunn, Ph.D.	Director	11ugust 3, 2021
	*	Discrete	A.,
	Leone Patterson	Director	August 9, 2021
	Econe Fatterson		
	*	Director	August 9, 2021
	Liam Ratcliffe, M.D., Ph.D.		
	*	Director	August 9, 2021
	Adam Rosenberg		8 ,
	*	Director	August 9, 2021
	Simon Tate	Director	71ugust 3, 2021
*By:	/s/ Robert Azelby		
	Robert Azelby		
	Attorney-in-Fact		



Alan D. Hambelton

August 9, 2021

Eliem Therapeutics, Inc. 23515 NE Novelty Hill Road, Suite B221 #125 Redmond. WA 98053

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-1 (the "*Registration Statement*") with the Securities and Exchange Commission pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended, covering an underwritten public offering of up to 460,000 shares of the Company's common stock, par value \$0.0001 per share ("*Shares*"). The Registration Statement incorporates by reference the registration statement on Form S-1 (No. 333-257980), which was declared effective on August 9, 2021 (the "*Prior Registration Statement*"), including the prospectus that is part of the Prior Registration Statement (the "*Prospectus*").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement, the Prior Registration Statement and the Prospectus, (b) the Company's Amended and Restated Certificate of Incorporation, as amended, and Amended and Restated Bylaws, each as currently in effect, (c) the forms of the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, filed as Exhibits 3.2 and 3.4, to the Prior Registration Statement, respectively, each of which is to be in effect upon the closing of the offering contemplated by the Prior Registration Statement and (d) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other 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 the certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than by the Company where due 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 against payment therefor as described in the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable.

Cooley LLP 1700 Seventh Avenue Suite 1900 Seattle, WA 98101-1355 t: (206) 452-8700 f: (206) 452-8800 cooley.com

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Prior Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.
Sincerely,
Cooley LLP
By: /s/ Alan Hambelton

August 9, 2021 Page Two

Alan Hambelton

Cooley LLP 1700 Seventh Avenue Suite 1900 Seattle, WA 98101-1355 t: (206) 452-8700 f: (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-1 of our report dated May 12, 2021, except for the effects of the reverse stock split discussed in Note 13 to the consolidated financial statements, as to which the date is August 2, 2021, relating to the financial statements, which appears in Amendment No. 3 to the Registration Statement on Form S-1 (No. 333-257980) of Eliem Therapeutics, Inc. We also consent to the reference to us under the heading "Experts" in Amendment No. 3 to the Registration Statement on Form S-1 (No. 333-257980) incorporated by reference in this Registration Statement.

/s/ PricewaterhouseCoopers LLP Seattle, Washington August 9, 2021