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

**FORM S-8
REGISTRATION STATEMENT**
Under
THE SECURITIES ACT OF 1933

LARIMAR THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

20-3857670
(I.R.S. Employer
Identification No.)

Three Bala Plaza East, Suite 506
Bala Cynwyd, Pennsylvania
(Address of Principal Executive Offices)

19004
(Zip Code)

Larimar Therapeutics, Inc. 2020 Equity Incentive Plan
(Full title of the plan)

Carole S. Ben-Maimon, M.D.
President and Chief Executive Officer
Larimar Therapeutics, Inc.
Three Bala Plaza East, Suite 506
Bala Cynwyd, Pennsylvania 19004
(Name and address of agent for service)

(844) 511-9056
(Telephone number, including area code, of agent for service)

Copies to:

Rachael M. Bushey, Esq.
Jennifer L. Porter, Esq.
Goodwin Procter LLP
3025 John F Kennedy Blvd
Philadelphia, PA 19104
(445) 207-7805

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 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

Accelerated filer
Smaller reporting company
Emerging growth company

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.

EXPLANATORY NOTE

This Registration Statement is being filed for the purpose of registering an additional 3,323,616 shares of common stock, par value \$0.001 per share (the “Common Stock”), of Larimar Therapeutics, Inc. (the “Registrant”) that were added to the shares authorized for issuance under the Larimar Therapeutics, Inc. 2020 Equity Incentive Plan (the “Plan”) as a result of the operation of an automatic annual increase provision included therein and for which a Registration Statement on Form S-8 relating to the same employee benefit plan is effective.

The Registrant previously filed Registration Statements on Form S-8 (File Nos. 333-249287, 333-270535, 333-277946 and 333-286062) with the Securities and Exchange Commission (the “Commission”) to register 9,062,861 shares of Common Stock that were authorized for issuance under the Plan. Upon the effectiveness of this Registration Statement, an aggregate of 12,386,477 shares of Common Stock will be registered for issuance from time to time under the Plan. Pursuant to General Instruction E to Form S-8, the contents of the Registration Statements on Form S-8 (File Nos. [333-249287](#), [333-270535](#), [333-277946](#) and [333-286062](#)) filed with the Commission on October 2, 2020, March 14, 2023, March 14, 2024 and March 24, 2025 are incorporated herein by reference except to the extent supplemented, amended or superseded by the information set forth herein. Only those items of Form S-8 containing new information not contained in the earlier registration statement are presented herein.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents of the Registrant filed with the Commission are incorporated by reference in this Registration Statement as of their respective dates:

- (a) the Registrant’s Annual Report on Form 10-K for the year ended [December 31, 2025](#), filed with the Commission on March 19, 2026;
- (b) the Registrant’s Current Reports on Form 8-K (in each case other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports related to such items) filed with the Commission on [January 12, 2026](#), [January 22, 2026](#), [February 24, 2026](#), [February 27, 2026](#) and [March 9, 2026](#); and
- (c) the description of the Registrant’s Common Stock contained in the Registration Statement on [Form 8-A](#) filed with the Commission on June 18, 2014 (File No. 001-36510), together with any amendment thereto filed with the Commission for the purpose of updating such description.

All documents subsequently filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (other than information furnished under Item 2.02 or 7.01 of Form 8-K and exhibits furnished on such form that relate to such items unless such form expressly provides to the contrary) prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters 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.

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 in any subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement.

Item 8. Exhibits.

The following documents are filed as exhibits to this Registration Statement:

Exhibit Number	Description of Exhibit
3.1	<u>Ninth Amended and Restated Certificate of Incorporation of Larimar Therapeutics, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-36510) filed on June 24, 2014).</u>
3.2	<u>Certificate of Amendment of Ninth Amended and Restated Certificate of Incorporation of Zafgen, Inc. related to the Reverse Stock Split, dated May 28, 2020 (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-36510) filed on June 2, 2020).</u>
3.3	<u>Certificate of Amendment of Ninth Amended and Restated Certificate of Incorporation of Zafgen, Inc. related to the Name Change, dated May 28, 2020 (incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K (File No. 001-36510) filed on June 2, 2020).</u>
3.4	<u>Certificate of Amendment of Ninth Amended and Restated Certificate of Incorporation of Larimar Therapeutics, Inc., dated May 31, 2024 (incorporated herein by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-36510) filed on August 8, 2024).</u>
3.5	<u>Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-36510) filed on December 17, 2025).</u>
3.6	<u>Certificate of Amendment to Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-36510) filed on January 22, 2026).</u>
3.7	<u>Amended and Restated Bylaws of Larimar Therapeutics, Inc. (incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K (File No. 001-36510) filed on June 24, 2014).</u>
5.1*	<u>Opinion of Goodwin Procter LLP.</u>
23.1*	<u>Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm for Larimar Therapeutics, Inc.</u>
23.2*	<u>Consent of Goodwin Procter LLP (contained in Exhibit 5.1).</u>
24.1*	<u>Power of Attorney (included on the signature page of this Registration Statement).</u>
99.1#	<u>Larimar Therapeutics, Inc. 2020 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K/A (File No. 001-36510) filed on September 29, 2020).</u>
99.2#	<u>Form of Stock Option Grant Notice and Award Agreement (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K/A (File No. 001-36510) filed on September 29, 2020).</u>
99.3#	<u>Form of Restricted Stock Unit Award Agreement (incorporated herein by reference to Exhibit 10.3 to the Company's Annual Report on Form 10-K (File No. 001-36510) filed on March 14, 2024).</u>
99.4#	<u>Form of Performance-Based Restricted Stock Unit Award Agreement (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-36510) filed on January 27, 2025).</u>
107*	<u>Filing Fee Table.</u>

* Filed herewith

Denotes management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Bala Cynwyd, Commonwealth of Pennsylvania, on March 19, 2026.

LARIMAR THERAPEUTICS, INC.

/s/ Carole S. Ben-Maimon, M.D.

Carole S. Ben-Maimon, M.D.

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints each of Carole S. Ben-Maimon, M.D. and Michael Celano as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments thereto), 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, proxy, 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 for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact, proxy and agent, or his substitute, 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 and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Carole S. Ben-Maimon, M.D.</u> Carole S. Ben-Maimon, M.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	March 19, 2026
<u>/s/ Michael Celano</u> Michael Celano	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 19, 2026
<u>/s/ Joseph Truitt</u> Joseph Truitt	Chairman, Board of Directors	March 19, 2026
<u>/s/ Thomas E. Hamilton</u> Thomas E. Hamilton	Director	March 19, 2026
<u>/s/ Jonathan Leff</u> Jonathan Leff	Director	March 19, 2026
<u>/s/ Jeffrey W. Sherman, M.D., FACP</u> Jeffrey W. Sherman, M.D., FACP	Director	March 19, 2026
<u>/s/ Frank Thomas</u> Frank Thomas	Director	March 19, 2026



Goodwin Procter LLP
3025 John F Kennedy Blvd
Philadelphia, PA 19104

goodwinlaw.com
+1 445 207 7800

March 19, 2026

Larimar Therapeutics, Inc.
Three Bala Plaza East, Suite 506
Bala Cynwyd, PA 19004

Re: Securities Being Registered under Registration Statement on Form S-8

We have acted as your counsel in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to an aggregate of 3,323,616 shares (the "Shares") of Common Stock, \$0.001 par value per share ("Common Stock"), of Larimar Therapeutics, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2020 Equity Incentive Plan (the "Plan").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinion set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

For purposes of the opinion set forth below, we have assumed that, at the time Shares are issued, the total number of then unissued Shares, when added to the number of shares of Common Stock issued, subscribed for, or otherwise committed to be issued, does not exceed the number of shares of Common Stock authorized by the Company's certificate of incorporation.

The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, when delivered against payment therefor in accordance with the terms of the Plan, will be validly issued, fully paid and nonassessable.

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in *74 Business Lawyer* 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ GOODWIN PROCTER LLP
GOODWIN PROCTER LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Larimar Therapeutics, Inc. of our report dated March 19, 2026 relating to the financial statements, which appears in Larimar Therapeutics, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2025.

/s/ PricewaterhouseCoopers LLP
Philadelphia, Pennsylvania
March 19, 2026

