

**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 19004
(844) 511-9056**
(Address, including zip code, of principal executive offices)

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

**Carole Ben-Maimon
President and Chief Executive Officer
Larimar Therapeutics, Inc.
Three Bala Plaza East, Suite 506, Bala Cynwyd, Pennsylvania 19004
(844) 511-9056**
(Name, address and telephone number, including area code, of agent for service)

Copies to:
**Rachael M. Bushey
Jennifer Porter**
Troutman Pepper Hamilton Sanders LLP
3000 Two Logan Square
Philadelphia, Pennsylvania 19103
(215) 981-4331

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

Large accelerated filer	<input type="checkbox"/>		Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>		Smaller reporting company	<input checked="" type="checkbox"/>
			Emerging growth company	<input type="checkbox"/>

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.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common stock, \$0.001 par value per share	2,297,800(2)	\$14.90(3)	\$34,237,220.00	\$3,735.29
Common stock, \$0.001 par value per share	752,200(4)	\$12.0021(5)	\$9,027,979.62	\$984.96
Common stock, \$0.001 par value per share	763,163(6)	\$14.90(3)	\$11,371,128.70	\$1,240.60
Common stock, \$0.001 par value per share	12,788(7)	\$14.90(3)	\$190,541.20	\$20.79
Total	3,825,951		\$54,826,869.52	\$5,981.64

- (1) Pursuant to Rule 416 of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of common stock, par value \$0.001 per share ("Common Stock") of Larimar Therapeutics, Inc. (the "Company") which become issuable by reason of any future stock dividend, stock split, recapitalization or other similar transaction or to cover such additional shares as may hereinafter be offered or issued to prevent dilution resulting from stock splits, stock dividends, recapitalizations or certain other capital adjustments, effected without the receipt of consideration by the Company, which results in an increase in the number of the outstanding shares of Common Stock.

- (2) Represents (a) 947,800 shares of Common Stock authorized for issuance under the Larimar Therapeutics, Inc. 2020 Equity Incentive Plan (the "2020 Plan") as of the date hereof, which number consists of (i) 1,700,000 shares of Common Stock initially available for grant under the 2020 Plan minus (ii) 752,200 shares of Common Stock reserved for issuance upon the exercise of previously granted stock options that remain outstanding under the 2020 Plan, plus (b) up to an additional 1,350,000 shares of Common Stock that may become issuable under the 2020 Plan pursuant to its terms.
- (3) For the purposes of computing the registration fee only. This estimate is made pursuant to Rule 457(h) and Rule 457(c) of the Securities Act. The Proposed Maximum Offering Price Per Share with respect to the 2020 Plan is based upon the average of the high and low prices of the Common Stock on September 29, 2020, as quoted on the Nasdaq Global Market.
- (4) Represents 752,200 shares of Common Stock reserved for issuance upon the exercise of previously granted stock options that remain outstanding under the 2020 Plan as of the date hereof.
- (5) For the purposes of computing the registration fee only, and based on the \$12.0021 weighted average exercise price of the outstanding stock options under the 2020 Plan as of the date hereof.
- (6) Represents 763,163 shares of Common Stock subject to outstanding equity awards under the Zafgen, Inc. 2014 Stock Option and Incentive Plan, as amended (the "2014 Plan"). To the extent equity awards outstanding under the 2014 Plan expire, terminate, are cancelled or forfeited for any reason or shares are withheld under the equity award for the payment of taxes or in satisfaction of the exercise price for an option award, those shares will be available for future issuance under the 2020 Plan.
- (7) Represents 12,788 shares of Common Stock subject to outstanding stock options under the Zafgen, Inc. 2006 Stock Option Plan (the "2006 Plan"). To the extent stock options outstanding under the 2006 Plan expire, terminate, are cancelled or forfeited for any reason, or shares are withheld under the stock option for the payment of taxes or in satisfaction of the exercise price for an option award, those shares will be available for future issuance under the 2020 Plan.

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

The information specified in Part I of Form S-8 is omitted from this filing in accordance with the provisions of Rule 428 under the Securities Act and the introductory note to Part I of the Form S-8 instructions. The documents containing the information specified in Part I will be delivered to participants in the 2020 Plan as required by Rule 428(b)(1) under the Securities Act.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed by the Company with the United States Securities and Exchange Commission (the “Commission”) pursuant to the Exchange Act, are incorporated by reference in, and shall be deemed to be a part of, this Registration Statement:

- (a) the Company’s Annual Report on [Form 10-K](#) for the year ended December 31, 2019, filed with the Commission on March 5, 2020;
- (b) the Company’s Quarterly Reports on Form 10-Q for the quarter ended [March 31, 2020](#), filed with the Commission on May 7, 2020 and for the quarter ended [June 30, 2020](#), filed with the Commission on August 14, 2020;
- (c) the information specifically incorporated by reference into the Company’s Annual Report on Form 10-K for the year ended December 31, 2019 from the Company’s Definitive Proxy Statement on [Form DEFM 14-A](#), filed on April 29, 2020;
- (d) the Company’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 13, 2020](#), [March 9, 2020](#), [April 24, 2020](#), [June 2, 2020](#), [August 6, 2020](#) and [September 29, 2020](#) and the Company’s Current Reports on Form 8-K/A filed with the Commission on [June 26, 2020](#), [August 14, 2020](#) and [September 29, 2020](#); and
- (e) the description of the Common Stock contained in the Company’s 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 reports and other documents filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (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) after the date hereof and prior to the filing of a post-effective amendment which indicates that all securities offered pursuant to this Registration Statement 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 hereof from the date of filing of such documents or reports.

The Company additionally incorporates by reference to the Company’s Definitive Proxy Statement on Form DEFM 14-A, filed on April 29, 2020, the description of the business of Chondrial Therapeutics, Inc. contained under the heading “Chondrial’s Business.”

For purposes of this Registration Statement, any document or any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded to the extent that a subsequently filed document or a statement contained therein, or in any other subsequently filed document which also is or is deemed to be incorporated by reference, modifies or supersedes such document or such statement in such document. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

The Company is governed by the Delaware General Corporation Law, or DGCL. Section 145 of the DGCL provides that a corporation may indemnify any person, including an officer or director, who was or is, or is threatened to be made, a party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was or is an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, the corporation's best interest and, for criminal proceedings, had no reasonable cause to believe that such person's conduct was unlawful. A Delaware corporation may indemnify any person, including an officer or director, who was or is, or is threatened to be made, a party to any threatened, pending or contemplated action or suit by or in the right of such corporation, under the same conditions, except that such indemnification is limited to expenses (including attorneys' fees) actually and reasonably incurred by such person, and except that no indemnification is permitted without judicial approval if such person is adjudged to be liable to such corporation. Where an officer or director of a corporation is successful, on the merits or otherwise, in the defense of any action, suit or proceeding referred to above, or any claim, issue or matter therein, the corporation must indemnify that person against the expenses (including attorneys' fees) which such officer or director actually and reasonably incurred in connection therewith.

The Company's Ninth Amended and Restated Certificate of Incorporation, as amended, or the Charter, provides for the indemnification of directors to the fullest extent permissible under Delaware law. Accordingly, the Company's directors will not be personally liable for monetary damages for breach of their fiduciary duty as directors, except for liabilities:

- for any breach of the director's duty of loyalty to the Company or its stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- for unlawful payments of dividends or unlawful stock repurchases or redemptions, as provided under Section 174 of the DGCL; or
- for any transaction from which the director derived an improper personal benefit.

The Company's amended and restated bylaws, or the Bylaws, provide for the indemnification of officers and directors acting on the Company's behalf if such persons act in good faith and in a manner reasonably believed to be in and not opposed to the Company's best interest, and, with respect to any criminal action or proceeding, such indemnified party had no reason to believe his or her conduct was unlawful.

The Company has entered into indemnification agreements with each of the Company's directors and certain of its executive officers. These agreements provide that the Company will indemnify each of its directors and certain of its executive officers to the fullest extent permitted by law. The Company intends to enter into indemnification agreements with any new directors and executive officers in the future.

The Company also maintains a general liability insurance policy which covers certain liabilities of directors and officers of the Company arising out of claims based on acts or omissions in their capacities as directors or officers.

The Company believes that the limitation of liability provision in the Charter and the indemnification agreements facilitate its ability to continue to attract and retain qualified individuals to serve as directors and officers. The limitation of liability and indemnification provisions in the Charter and Bylaws may discourage

stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit the Company and its stockholders. A stockholder's investment may be harmed to the extent the Company pays the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

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

Exhibit Number	Description of Exhibit
4.1	<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>
4.2	<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>
4.3	<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>
4.4	<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>
4.5	<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>
4.6	<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>
5.1*	<u>Opinion of Troutman Pepper Hamilton Sanders LLP as to the legality of the securities being registered</u>
23.1*	<u>Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm for Larimar Therapeutics, Inc.</u>
23.2*	<u>Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm for Larimar Therapeutics, Inc.</u>
23.3*	<u>Consent of Troutman Pepper Hamilton Sanders LLP (contained in Exhibit 5.1)</u>
24.1*	<u>Powers of Attorney (included on the signature page of the Registration Statement)</u>

* Filed herewith

Item 9. Undertakings.

(a) The undersigned Company 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 Commission 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;

(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) shall not apply if the information required to be included on a post-effective amendment by those paragraphs is contained in periodic reports filed by or furnished to the Commission by the Company 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 Company hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Company'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 herein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the Commission 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 Company of expenses incurred or paid by a director, officer or controlling person of the Company 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 Company 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 Bala Cynwyd, Commonwealth of Pennsylvania, on this 2nd day of October, 2020.

LARIMAR THERAPEUTICS, INC.

By: /s/ Carole Ben-Maimon

Carole Ben-Maimon

President, Chief Executive Officer and Director

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Carole Ben-Maimon and Michael Celano, and each of them, 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 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, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Carole Ben-Maimon</u> Carole Ben-Maimon	President, Chief Executive Officer and Director (Principal Executive Officer)	October 2, 2020
<u>/s/ Michael Celano</u> Michael Celano	Chief Financial Officer (Principal Financial and Accounting Officer)	October 2, 2020
<u>/s/ Joseph Truitt</u> Joseph Truitt	Chairman, Board of Directors	October 2, 2020
<u>/s/ Peter Barrett</u> Peter Barrett	Director	October 2, 2020
<u>/s/ Thomas O. Daniel</u> Thomas O. Daniel	Director	October 2, 2020
<u>/s/ Thomas Edward Hamilton</u> Thomas Edward Hamilton	Director	October 2, 2020
<u>/s/ Jonathan Leff</u> Jonathan Leff	Director	October 2, 2020
<u>/s/ Frank E. Thomas</u> Frank E. Thomas	Director	October 2, 2020

Troutman Pepper Hamilton Sanders LLP
3000 Two Logan Square, Eighteenth and Arch Streets
Philadelphia, PA 19103-2799



troutman.com

October 2, 2020

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

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

Reference is made to the registration statement on Form S-8 (the "**Registration Statement**") of Larimar Therapeutics, Inc., a Delaware corporation (the "**Company**"), filed on the date hereof with the Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933, as amended (the "**Securities Act**"). The Registration Statement covers an aggregate of 3,825,951 shares of the Company's Common Stock, par value \$0.001 per share (the "**Shares**"), which may be issued pursuant to the Company's 2020 Equity Incentive Plan (the "**2020 Plan**"). This opinion letter is furnished to you at your request to enable you to fulfill the requirements of Item 601(b)(5) of Regulation S-K, 17 C.F.R. § 229.601(b)(5), in connection with the Registration Statement, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related prospectus, other than as expressly stated herein with respect to the issuance of the Shares.

For purposes of this opinion letter, we have examined copies of such agreements, instruments and documents as we have deemed an appropriate basis on which to render the opinions hereinafter expressed. In our examination of the aforesaid documents, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the accuracy and completeness of all documents submitted to us, the authenticity of all original documents, and the conformity to authentic original documents of all documents submitted to us as copies (including telecopies). As to all matters of fact, we have relied on the representations and statements of fact made in the documents so reviewed, and we have not independently established the facts so relied on. This opinion letter is given, and all statements herein are made, in the context of the foregoing.

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.

This opinion letter is based as to matters of law solely on the Delaware General Corporation Law, as amended. We express no opinion herein as to any other statutes, rules or regulations.

Larimar Therapeutics, Inc.
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Based upon, subject to and limited by the foregoing, we are of the opinion as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the recipients, and have been issued by the Company for legal consideration in excess of par value in the circumstances contemplated by the 2020 Plan, assuming in each case that the individual issuances, grants or awards under the 2020 Plan are duly authorized by all necessary corporate action and duly issued, granted or awarded and exercised in accordance with the requirements of law and the 2020 Plan (and the agreements duly adopted thereunder and in accordance therewith), the issue and sale 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.

This opinion letter has been prepared for use in connection with the Registration Statement. We assume no obligation to advise you of any changes in the foregoing subsequent to the effective date of the Registration Statement.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Troutman Pepper Hamilton Sanders LLP
Troutman Pepper Hamilton Sanders 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 6, 2020 relating to the financial statements of Chondrial Therapeutics, Inc., which appears in Larimar Therapeutics, Inc.'s Current Report on Form 8-K/A filed on June 26, 2020.

/s/ PricewaterhouseCoopers LLP
Philadelphia, Pennsylvania
October 2, 2020

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 5, 2020, relating to the financial statements of Zafgen, Inc., which appears in Zafgen, Inc's Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
October 2, 2020