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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

Zafgen, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share
(Title of Class of Securities)

98885E103

(CUSIP Number)

**Dr. Carole Ben-Maimon
Chondrial Therapeutics, Inc.
150 Monument Road
Bala Cynwyd, PA 19004
844-511-9056**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

December 17, 2019

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1.	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Chondrial Therapeutics, Inc.	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	SOURCE OF FUNDS (see instructions)	
	OO	
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)	
	<input type="checkbox"/>	
6.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER
		0
	8.	SHARED VOTING POWER
		5,392,642 (1)
	9.	SOLE DISPOSITIVE POWER
		0
	10.	SHARED DISPOSITIVE POWER
		5,392,642 (1)
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	5,392,642 (1)	
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)	
	<input type="checkbox"/>	
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	14.4% (2)	
14.	TYPE OF REPORTING PERSON (see instructions)	
	CO	

- (1) Beneficial ownership of the Issuer's common stock referred to herein is being reported solely because Chondrial Therapeutics, Inc. may be deemed to have beneficial ownership of such shares as a result of the Voting Agreements (as defined below) described in Item 4 hereof. Includes 3,617,197 shares of common stock subject to the Voting Agreements, and 1,775,445 shares of common stock which may be acquired by the stockholders of the Issuer who are parties to the Voting Agreement (and therefore may become subject to the Voting Agreements) upon (a) the exercise of stock options that are currently exercisable or will become exercisable within 60 days of the date of the event reported on the cover page of this Statement, and (b) the vesting of restricted stock units (RSUs) within 60 days of the date of the event reported on the cover page of this Statement. Neither the filing of this Statement on Schedule 13D nor its contents shall be deemed to constitute an admission by Chondrial Therapeutics, Inc. that it is the beneficial owner of any of the common stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, or for any other purpose, and such beneficial ownership is expressly disclaimed.
- (2) Based on 37,374,118 shares of the Issuer's common stock issued and outstanding as of December 16, 2019, as reflected in the Merger Agreement (defined below).

This Statement on Schedule 13D relates to shares of the common stock, par value \$0.001 per share (the “Shares”), of Zafgen, Inc., a Delaware corporation (the “Company”), whose principal executive offices are located at 3 Center Plaza, Suite 610, Boston, Massachusetts.

Item 2. Identity and Background.

The person filing this statement is Chondrial Therapeutics, Inc., a Delaware corporation (the “Reporting Person”). The principal office of the Reporting Person is located at 150 Monument Rd., Bala Cynwyd, PA 19004.

The Reporting Person is a clinical-stage biotechnology company focused on the treatment of rare diseases.

The directors and executive officers of the Reporting Person are set forth below. Unless otherwise indicated, each individual’s business address is c/o Chondrial Therapeutics, Inc., 150 Monument Rd., Bala Cynwyd, PA 19004. Each director and officer is a citizen of the United States.

<u>Name</u>	<u>Principal Occupation</u>
Bryan Sendrowski 780 Third Avenue 37th floor New York, NY 10017	Principal, Deerfield Management Company, L.P.
Carole Ben-Maimon, MD	President and Chief Executive Officer of Chondrial Therapeutics, Inc.

Jonathan Leff 780 Third Avenue 37th floor New York, NY 10017	Partner, Deerfield Management Company, L.P.
R. Mark Payne, MD 705 Riley Hospital Drive Riley Research, Room 127 Indianapolis, IN 46202	Professor of Pediatrics, Indiana University School of Medicine
Tom Hamilton 777 Maritime Dr. Port Washington, WI 53074	President and Chief Executive Officer, Construction Forms, Inc.
William Slattery 780 Third Avenue 37th floor New York, NY 10017	Partner, Deerfield Management Company, L.P.
John Berman	Vice President Finance and Operations, Treasurer of Chondrial Therapeutics, Inc.
Jennifer Johansson	Vice President Regulatory Affairs and Counsel, Secretary of Chondrial Therapeutics, Inc.
David Bettoun	Vice President Discovery and Preclinical Development of Chondrial Therapeutics, Inc.
Noreen Scherer	Vice President Clinical Operations of Chondrial Therapeutics, Inc.

None of the Reporting Person, nor any director or executive officer of the Reporting Person, has, during the past 5 years, (a) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors), or (b) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting, or mandating activities subject to, United States federal or state securities laws or a finding of any violation with respect to such laws.

Item 3. Source or Amount of Funds or Other Consideration.

As described in response to Item 4, the Shares to which this Statement relates have not been purchased by the Reporting Person. As an inducement for the Reporting Person to enter into the Merger Agreement (as defined below) described in Item 4 and in consideration thereof, certain stockholders of the Company identified in Item 4 entered into voting agreements dated as of December 17, 2019, with respect to an aggregate of 5,392,642 Shares of common stock. The Reporting Person did not pay additional consideration to such stockholders in connection with the execution and delivery of the voting agreements.

Item 4. Purpose of Transaction.

Merger Agreement:

On December 17, 2019, the Company entered into an Agreement and Plan of Merger (the “Merger Agreement”) by and among the Company, the Reporting Person, Chondrial Therapeutics Holdings, LLC, the sole stockholder of the Reporting Person, and Zordich Merger Sub, Inc., a wholly owned subsidiary of the Company (“Merger Sub”), pursuant to which the Reporting Person will be merged with and into Merger Sub (the “Merger”) at the effective time of the Merger, with Reporting Person continuing after the Merger as the surviving company and a wholly-owned subsidiary of the Company. The Merger is subject to customary conditions to closing including, without limitation, that the Merger Agreement shall have been approved and adopted and the Merger shall have been duly approved by the requisite vote of the stockholders of the Company.

Voting Agreements:

In connection with the execution of the Merger Agreement, the Company and Reporting Person entered into stockholder support agreements dated as of December 17, 2019 (the "Voting Agreements") with the current directors and certain officers (each in their capacities as stockholders of the Company), as well as the largest stockholder of the Company, with respect to an aggregate 5,392,642 Shares of common stock, inclusive of 3,617,197 shares of common stock beneficially owned by such stockholders, as well as 1,775,445 shares of common stock which may be acquired by such stockholders (and therefore may become subject to the Voting Agreements) upon (a) the exercise of stock options that are currently exercisable or will become exercisable within 60 days of the date of the event reported on the cover page of this Statement, and (b) the vesting of restricted stock units (RSUs) within 60 days of the date of the event reported on the cover page of this Statement. The Voting Agreements are each in substantially similar form and provide, among other things, that each of the stockholders has agreed to vote or cause to be voted all of the Shares of the Company's common stock beneficially owned by such stockholder (or thereafter acquired by such stockholder prior to the expiration or termination of the Voting Agreement) in favor of the stockholder proposals submitted at the meeting of the Company's stockholders to be held in connection with the Merger. The Voting Agreements also provide that the stockholders who are parties thereto shall not transfer any of such stockholders' Shares except under certain limited circumstances.

The foregoing descriptions of the Merger Agreement and Voting Agreements are qualified in their entirety by references to the form of the Merger Agreement and Voting Agreement (which is attached as Exhibit A to the Merger Agreement) attached as Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on December 18, 2019, and which are incorporated herein by reference.

Item 5. Interest in Securities of the Issuer.

The following information with respect to the ownership of the Shares by the Reporting Person is provided as of the date of this Statement on Schedule 13D:

- (a)
 - (i) Shares beneficially owned by Reporting Person: See Row 11 of the cover page.
 - (ii) Percent of class: See Row 13 of the cover page.
- (b) Number of Shares as to which Reporting Person has:
 - (i) Sole power to vote or to direct the vote: See Row 7 of the cover page.
 - (ii) Shared power to vote or to direct the vote: See Row 8 of the cover page.
 - (iii) Sole power to dispose or to direct the disposition of: See Row 9 of the cover page.
 - (iv) Shared power to dispose or to direct the disposition of: See Row 10 of the cover page.

To the Reporting Person's knowledge, none of the directors and officers of the Reporting Person identified in Item 2 directly or indirectly beneficially own Shares of the Company.

- (c) Describe recent transactions.

Except for the Merger Agreement and the Voting Agreements, and the transactions contemplated therein, the Reporting Person has not effected any transaction relating to the Company's Shares during the past 60 days, and, to the Reporting Person's knowledge, no other person named in Item 2 has effected any other transactions relating to the Company's Shares during the past 60 days.

- (d) Right to receive dividends.

No person is known to the Reporting Person to have the right to receive or the power to direct the receipt of dividends from, or proceeds from the sale of, any Shares beneficially owned by the Reporting Person on the date of this statement.

- (e) Date the reporting person ceased to be the beneficial owner of more than 5% of the class of securities (if applicable).

Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

The information set forth, or incorporated by reference, in Items 3 through 5 above is hereby incorporated by this reference in this Item 6. To the Reporting Person's knowledge, except as otherwise described herein, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

Item 7. Material to Be Filed as Exhibits.

- 1 Agreement and Plan of Merger, dated as of December 17, 2019, by and among Zafgen, Inc., Chondrial Therapeutics, Inc., Chondrial Therapeutics Holdings, LLC and Zordich Merger Sub, Inc. (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by Zafgen, Inc. on December 18, 2019).

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

CHONDRIAL THERAPEUTICS, INC.

By: /s/ Carole S. Ben-Maimon, MD

Name: Carole S. Ben-Maimon, MD

Title: President and Chief Executive Officer

December 27, 2019