

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

April 4, 2020

Jeffrey Hatfield Chief Executive Officer Zafgen, Inc. 3 Center Plaza, Suite 610 Boston, MA 02108

Re: Zafgen, Inc.

Preliminary Proxy Statement on Schedule 14A

Filed March 6, 2020 File No. 001-36510

Dear Mr. Hatfield:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Preliminary proxy statement on Schedule 14A filed March 6, 2020

Summary, page 1

- 1. Please place your disclosure of Chondrial's business in appropriate context by providing disclosure of the following:
 - Chondrial may need to develop novel clinical endpoints in later stage clinical trials for CTI-1601, as referenced on page 32;
 - In GLP toxicology studies of CTI-1601, occasional transient rigidity immediately after dosing in certain non-human primates was observed, as referenced on page 163; and
 - Chondrial is dependent upon in-licensed intellectual property for the development of CTI-1601, as discussed on pages 60 to 61 and pages 165 to 166.

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The Merger

Background of the Merger, page 74

2. We note your disclosure that Chondrial submitted a preliminary non-binding written proposal. Please expand your disclosure to explain how the exchange ratio was determined. Address in your disclosure how the Board arrived at the determination to approve the term to increase the Chondrial valuation by \$111,656 per day beginning on March 31, 2020 through the closing of the merger.

Chondrial's Business

Overview, page 157

3. We note your disclosure that Chondrial's additional pipeline products are in the nonclinical stage of development. Please expand your disclosure to include material terms of development programs that are material to Chondrial's business. Alternatively, please remove this disclosure.

Chondrial's Strategy, page 157

- 4. Please revise your disclosure to remove any implication that Chondrial will be successful in obtaining regulatory approval for CTI-1601 in an accelerated manner. As illustrative examples only, we note the following disclosures:
 - Chondrial is working with the FDA and collaborating with key opinion leaders to develop an efficient clinical development plan for the regulatory approval of CTI-1601.
 - Chondrial partners with experts in every aspect of development to ensure the most expeditious development program.
 - This expertise, along with the platform technology provides Chondrial with the ability to optimize the development and commercialization of the drug and biologic candidates under development and maximize the near and longer-term value of the Chondrian platform.

In-License Agreements, page 165

5. Please expand your disclosure to include all material terms of the License Agreements with Wake Forest University Health Sciences and Indiana University, including aggregate potential milestone payments, royalty term, term of the agreement and termination provisions.

<u>Intellectual Property</u>, page 165

6. Please revise this section to clearly distinguish among owned patents, licensed patents and provisional patent applications, discuss the significance of a provisional patent application versus an issued patent and identify applicable foreign jurisdictions.

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We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Michael Fay at 202-551-3812 or Vanessa Robertson at 202-551-3649 if you have questions regarding comments on the financial statements and related matters. Please contact Courtney Lindsay at 202-551-7237 or Christine Westbrook at 202-551-5019 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Andrew Goodman, Esq.