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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of The Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): July 15, 2016

Zafgen, Inc.
(Exact name of registrant as specified in its charter)

DELAWARE	001-36510	20-3857570
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

175 Portland Street, 4th Floor Boston, MA	02114
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (617) 622-4003

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(b) Departure of Certain Officers

As part of the restructuring plan approved by the Board of Directors (the "Board") of Zafgen, Inc. (the "Company") as described in Item 8.01 below, Patrick Loustau is leaving the company and therefore Thomas E. Hughes, Ph.D. has been appointed as the President of the Company effective as of July 19, 2016. Mr. Loustau's employment with the Company will terminate upon a date agreed to with the Company.

On July 15, 2016, the Board accepted the resignation of Alicia Secor from her position as the Chief Commercial Officer of the Company and the termination of her employment with the Company effective as of July 31, 2016.

(c) Appointment of Certain Officers

As described in Item 5.02(a) above, the Board has appointed Thomas E. Hughes, Ph.D., the Chief Executive Officer of the Company and a member of its Board, to also serve as the President of the Company, effective as of July 19, 2016, until his successor is duly elected and qualified, or until his earlier death, resignation or removal.

Dr. Hughes, age 57, has served as the Chief Executive Officer of the Company and a member of its Board since October 2008. From October 2008 until June 2014 Dr. Hughes also served as President. From 1987 to 2008, he held several positions at Novartis AG (and formerly Sandoz Pharmaceuticals) including vice president and global head of the cardiovascular and metabolic diseases therapeutic area at the Novartis Institutes for BioMedical Research in Cambridge, MA. In these roles he oversaw many drug discovery and development projects targeting obesity, diabetes and heart disease. Dr. Hughes is the author of over 40 peer-reviewed publications and is an inventor on numerous issued and pending patents related to the treatment of diabetes, cardiovascular disease and obesity. Dr. Hughes holds a Ph.D. in nutritional biochemistry from Tufts University, an M.S. in Zoology from Virginia Polytechnic Institute & State University and a B.A. in biology from Franklin and Marshall College. Dr. Hughes' qualifications to serve as the President and Chief Executive Officer of the Company and a member of its Board include his extensive knowledge of the obesity and metabolic disease industry combined with his leadership, executive, managerial and pharmaceutical company experience, and his more than 25 years of industry experience in the development and commercialization of pharmaceutical products.

(e) Compensatory Arrangements of Certain Departing Officers

Upon the termination of Mr. Loustau's employment as described in Item 5.02(b) above, the Company will enter into a separation agreement and release of the Company and its affiliates with Mr. Loustau pursuant to the terms of the severance and change in control agreement by and between the Company and Mr. Loustau dated as of June 30, 2016. According to such separation agreement and release, Mr. Loustau shall receive 9 months of base salary continuation and 9 months of COBRA continuation medical benefits subsidized by the Company following his departure and all options and other stock-based awards held by him shall immediately accelerate and become fully exercisable or non-forfeitable as of the date of his termination, provided that he does not revoke such separation agreement and release.

Item 8.01 Other Events.

On July 19, 2016, the Company issued a press release announcing the Company's restructuring plan, and the departure of Mr. Loustau and Ms. Secor as discussed in Item 5.02(b) above. A copy of the press release is filed herewith as Exhibit 99.1 to this Report on Form 8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press release issued by Zafgen, Inc. on July 19, 2016.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: July 19, 2016

ZAFGEN, INC.

By: /s/ Thomas E. Hughes
Thomas E. Hughes. Ph.D.
Chief Executive Officer and President

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press release issued by Zafgen, Inc. on July 19, 2016.

Exhibit 99.1

Zafgen Refocuses Resources on Development of Differentiated Second-Generation MetAP2 Inhibitor ZGN-1061

-ZGN-1061 in Phase I Development for Severe and Complicated Obesity Indications-

- Suspending Development of Beloranib; Implementing Strategic Restructuring to Align Operations with Clinical Development Priorities-

-Strong Cash Position Sufficient to Fund Operations through Phase 2a Clinical Trials for ZGN-1061-

-Company to Host Conference Call at 5:00 PM Eastern Time-

Boston, July 19, 2016—Zafgen Inc. (NASDAQ:ZFGN), a biopharmaceutical company dedicated to significantly improving the health and well-being of patients affected by obesity and complex metabolic disorders, announced today that, following a comprehensive review of its assets and clinical programs, as well as feedback from regulatory authorities, the Company is refocusing its resources on development of a differentiated second-generation MetAP2 inhibitor, ZGN-1061, in severe and complicated obesity.

"As the leader of the MetAP2 inhibitor field, we have spent many years validating the tremendous potential of this pathway for the treatment of complicated obesity with beloranib, which in multiple clinical trials demonstrated robust reductions in body weight, improvements in glycemic control, and other benefits related to cardiovascular disease risk," said Thomas Hughes, Ph.D., President and Chief Executive Officer of Zafgen. "However, given the heightened complexity and future cost of beloranib development, balanced against the emerging product profile of ZGN-1061, we believe that the long-term opportunity for ZGN-1061 is more robust than for beloranib. Given our deep knowledge of this new and exciting drug class, and our strong cash position, we believe we are well-positioned to advance ZGN-1061 as a potential new treatment for prevalent obesity-related indications."

The beloranib Investigational New Drug (IND) application was placed on full clinical hold in December 2015 by the U.S. Food and Drug Administration (FDA). To address the clinical hold, Zafgen recently held a Type A meeting with the FDA to discuss the clinical and preclinical data for beloranib as well as a proposed risk mitigation strategy for beloranib in Prader-Willi syndrome (PWS). Following its discussions with the FDA and review of other considerations, Zafgen has determined that the obstacles, costs and development timelines to obtain marketing approval for beloranib are too great to justify additional investment in the program, particularly given the promising emerging profile of ZGN-1061. The Company is therefore suspending further development of beloranib in order to focus its resources on ZGN-1061.

ZGN-1061, like beloranib, is a fumagillin-class MetAP2 inhibitor that was discovered by Zafgen's researchers as part of a multi-year campaign to identify novel compounds that avoided limiting preclinical safety concerns observed with beloranib, including teratogenicity and effects on testicular function. The compound has similar efficacy, potency, and range of activity in animal models of obesity as beloranib, but displays highly differentiated properties and a reduced potential to impact thrombosis, supporting the value of the compound as a more highly optimized MetAP2 inhibitor.

Zafgen is currently screening patients to initiate a Phase 1 clinical trial evaluating ZGN-1061 for safety, tolerability, and weight loss efficacy over four weeks of treatment, and currently expects Phase 1 clinical data by the end of the first quarter of 2017. Based on the clinical data demonstrating beloranib's significant effect on body weight and glycemic control in patients with severe obesity complicated by type 2 diabetes, Zafgen plans to focus later-stage development of ZGN-1061 in severe and complicated obesity.

As part of the strategic restructuring, the Company plans to reorganize its operations to align with its new priorities focused on ZGN-1061 development. Zafgen's workforce is being reduced by approximately 34%, to a total of 31 employees, by December 2016. Zafgen expects the restructuring to result in approximately $4.8 million in reduced annualized workforce expenses once the plan is fully implemented. The Company also expects to incur a non-recurring charge of approximately $2.4 million in the third quarter of 2016 related to the restructuring.

In addition, both Patrick Loustau, President, and Alicia Secor, Chief Commercial Officer, will be leaving the Company to pursue other opportunities.

"We would like to thank Patrick, Alicia, and all of our employees for their hard work and dedication over the past several months as we explored every reasonable path to remove the full clinical hold on the beloranib IND and advance beloranib development," continued Dr. Hughes. "We would also like to express our deepest gratitude to the investigators, patients and families who participated in our beloranib trials. While we are disappointed that we could not see beloranib through to approval, we are excited about the potential of ZGN-1061, and look forward to advancing this high-value candidate in the clinic."

Zafgen ended June 30, 2016 with approximately $150.5 million in cash and cash equivalents and now expects to end 2016 with greater than $125 million. The Company believes that its current cash balance is sufficient to fund operations through the end of 2018, at which time it expects to have completed a Phase 2a clinical trial for ZGN-1061.

Conference Call and Webcast

Zafgen will host an investor conference call today, July 19, 2016 at 5:00 p.m., Eastern Time, to discuss its strategic focus on ZGN-1061 and corporate restructuring. Investors and other interested parties may participate by dialing 844-824-7428 in the United States or 973-500-2177 outside the United States and referencing conference ID number 52579673. The call will also be webcast live on the Company's website at http://ir.zafgen.com/events.cfm. You can access the replay for seven days following the call by dialing 855-859-2056 in the United States or 404-537-3406 outside the United States and referencing conference ID number 52579673.

About ZGN-1061

ZGN-1061 is a fumagillin-class, injectable small molecule second generation MetAP2 inhibitor that was discovered by Zafgen's researchers and has been shown to have an improved profile relative to previous inhibitors in the class. Like other MetAP2 inhibitors that have shown promise in the treatment of metabolic diseases including severe and complicated obesity, ZGN-1061 modulates the activity of key cellular processes that control the body's ability to make and store fat, and utilize fat and glucose as an energy source. ZGN-1061 is also anticipated to help

reduce hunger and restore balance to fat metabolism, enabling calories to once again be used as a productive energy source, leading to weight loss and improved metabolic control. ZGN-1061 has an emerging safety profile and dosage form that are believed to be appropriate for the treatment of prevalent forms of severe and complicated obesity, and is currently in Phase 1 clinical development. Zafgen holds exclusive worldwide rights for the development and commercialization of ZGN-1061.

About Zafgen

Zafgen (Nasdaq:ZFGN) is a biopharmaceutical company dedicated to significantly improving the health and well-being of patients affected by obesity and complex metabolic disorders. Zafgen is focused on developing novel therapeutics that treat the underlying biological mechanisms of severe and complicated obesity through the MetAP2 pathway. Zafgen has pioneered the study of MetAP2 inhibitors in both common and rare forms of obesity. Zafgen's lead product candidate is ZGN-1061, which is a novel, first-in-class, twice-weekly subcutaneous injection which is being developed for the treatment of severe and complicated obesity. Zafgen is also developing ZGN-839, a liver-targeted MetAP2 inhibitor, for the treatment of nonalcoholic steatohepatitis, or NASH, and abdominal obesity. Zafgen aspires to improve the lives of patients through targeted treatments and has assembled a team accomplished in bringing therapies to patients affected by metabolic diseases.

Safe Harbor Statement

Various statements in this release concerning Zafgen's future expectations, plans and prospects, including without limitation, Zafgen's expectations regarding the use of ZGN-1061 and other MetAP2 inhibitors as treatments for forms of severe and complicated obesity, Zafgen's expectations with respect to the timing and success of its non-clinical studies and clinical trials of ZGN-1061 and its other product candidates, and Zafgen's expected cash and cash equivalents balance as of December 31, 2016, may constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995 and other federal securities laws. Forward-looking statements can be identified by terminology such as "anticipate," "believe," "could," "could increase the likelihood," "estimate," "expect," "intend," "is planned," "may," "should," "will," "will enable," "would be expected," "look forward," "may provide," "would" or similar terms, variations of such terms or the negative of those terms. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including, without limitation, Zafgen's ability to successfully demonstrate the efficacy and safety of ZGN-1061 and its other product candidates, the pre-clinical and clinical results for ZGN-1061 and its other product candidates, which may not support further development and marketing approval, actions of regulatory agencies, which may affect the initiation, timing and progress of pre-clinical studies and clinical trials, Zafgen's ability to obtain, maintain and protect its intellectual property, Zafgen's ability to enforce its patents against infringers and defend its patent portfolio against challenges from third parties, competition from others developing products for similar uses, Zafgen's ability to manage operating expenses, Zafgen's ability to obtain additional funding to support its business activities and establish and maintain strategic business alliances and new business initiatives, Zafgen's dependence on third parties for development, manufacture, marketing, sales and distribution of products, the outcome of litigation, and unexpected expenditures, as well as those risks more fully discussed in the section entitled "Risk Factors" in Zafgen's most recent

Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission, as well as discussions of potential risks, uncertainties, and other important factors in Zafgen's subsequent filings with the Securities and Exchange Commission. In addition, any forward-looking statements represent Zafgen's views only as of today and should not be relied upon as representing its views as of any subsequent date. Zafgen explicitly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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