

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

Schedule 13G  
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1 (b), (c) AND (d) AND AMENDMENTS THERETO FILED  
PURSUANT TO 13d-2 (b)  
(Amendment No. 1)\*

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Zafgen, Inc.  
(Name of Issuer)

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Common Stock  
(Title of Class of Securities)

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98885E103  
(CUSIP Number)

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December 31, 2015  
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\*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).

(Continued on following pages)

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Exhibit Index on Page 10

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1	NAME OF REPORTING PERSONS Foresite Capital Fund II, L.P. ("FCF II")	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 1,488,410 shares, except that Foresite Capital Management II, LLC ("FCM II"), the general partner of FCF II, may be deemed to have sole power to vote these shares, and James Tananbaum ("Tananbaum"), the managing member of FCM II, may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER See response to row 5.
	7	SOLE DISPOSITIVE POWER 1,488,410 shares, except that FCM II, the general partner of FCF II, may be deemed to have sole power to dispose of these shares, and Tananbaum, the managing member of FCM II, may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	1,488,410
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	<input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	5.5%
12	TYPE OF REPORTING PERSON	PN

1	NAME OF REPORTING PERSONS Foresite Capital Management II, LLC ("FCM II")		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>		
3	SEC USE ONLY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 1,488,410 shares, all of which are directly owned by Foresite Capital Fund II, L.P. ("FCF II"). FCM II, the general partner of FCF II, may be deemed to have sole power to vote these shares, and James Tananbaum ("Tananbaum"), the managing member of FCM II, may be deemed to have sole power to vote these shares.
		6	SHARED VOTING POWER See response to row 5.
		7	SOLE DISPOSITIVE POWER 1,488,410 shares, all of which are directly owned by FCF II. FCM II, the general partner of FCF II, may be deemed to have sole power to dispose of these shares, and Tananbaum, the managing member of FCM II, may be deemed to have sole power to dispose of these shares.
		8	SHARED DISPOSITIVE POWER See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	1,488,410	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	<input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	5.5%	
12	TYPE OF REPORTING PERSON	OO	

1	NAME OF REPORTING PERSONS Foresite Capital Fund III, L.P. ("FCF III")	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 1,099,700 shares, except that Foresite Capital Management III, LLC ("FCM III"), the general partner of FCF III, may be deemed to have sole power to vote these shares, and James Tananbaum ("Tananbaum"), the managing member of FCM III, may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER See response to row 5.
	7	SOLE DISPOSITIVE POWER 1,099,700 shares, except that FCM III, the general partner of FCF III, may be deemed to have sole power to dispose of these shares, and Tananbaum, the managing member of FCM III, may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	1,099,700
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	<input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	4.0%
12	TYPE OF REPORTING PERSON	PN

1	NAME OF REPORTING PERSONS Foresite Capital Management III, LLC ("FCM III")	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 1,099,700 shares, all of which are directly owned by Foresite Capital Fund III, L.P. ("FCF III"). FCM III, the general partner of FCF III, may be deemed to have sole power to vote these shares, and James Tananbaum ("Tananbaum"), the managing member of FCM III, may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER See response to row 5.
	7	SOLE DISPOSITIVE POWER 1,099,700 shares, all of which are directly owned by FCF III. FCM III, the general partner of FCF III, may be deemed to have sole power to dispose of these shares, and Tananbaum, the managing member of FCM III, may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	1,099,700
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	<input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	4.0%
12	TYPE OF REPORTING PERSON	OO

1	NAME OF REPORTING PERSONS James Tananbaum ("Tananbaum")	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
	5	SOLE VOTING POWER 2,588,110 shares, of which 1,488,410 shares are directly owned by Foresite Capital Fund II, L.P. ("FCF II"), and 1,099,700 shares are directly owned by Foresite Capital Fund III, L.P. ("FCF III"). Tananbaum is the managing member of each of Foresite Capital Management II, LLC ("FCM II"), which is the general partner of FCF II, and Foresite Capital Management III, LLC ("FCM III"), which is the general partner of FCF III. Tananbaum may be deemed to have sole power to vote these shares.
	6	SHARED VOTING POWER See response to row 5.
	7	SOLE DISPOSITIVE POWER 2,588,110 shares, of which 1,488,410 shares are directly owned by FCF II, and 1,099,700 shares are directly owned by FCF III. Tananbaum is the managing member of each FCM II, which is the general partner of FCF II, and FCM III, which is the general partner of FCF III. Tananbaum may be deemed to have sole power to dispose of these shares.
	8	SHARED DISPOSITIVE POWER See response to row 7.
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	2,588,110
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	<input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9	9.5%
12	TYPE OF REPORTING PERSON	IN

ITEM 1(A). NAME OF ISSUER

Zafgen, Inc. (the "Issuer")

ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

175 Portland Street, 4<sup>th</sup> Floor  
Boston, Massachusetts 02114

ITEM 2(A). NAME OF PERSONS FILING

This Schedule is filed by Foresite Capital Fund II, L.P., a Delaware limited partnership, Foresite Capital Management II, LLC, a Delaware limited liability company, Foresite Capital Fund III, L.P., a Delaware limited partnership, Foresite Capital Management III, LLC, a Delaware limited liability company and James Tananbaum. The foregoing entities and individuals are collectively referred to as the "Reporting Persons."

ITEM 2(B). ADDRESS OF PRINCIPAL OFFICE

The address for each of the Reporting Persons is:

c/o Foresite Capital Management  
101 California Street, Suite 4100  
San Francisco, CA 94111

ITEM 2(C). CITIZENSHIP

See Row 4 of cover page for each Reporting Person.

ITEM 2(D). TITLE OF CLASS OF SECURITIES

Common Stock

ITEM 2(D). CUSIP NUMBER

98885E103

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B) OR (C), CHECK WHETHER THE PERSON FILING IS A:

Not applicable.

ITEM 4. OWNERSHIP

The following information with respect to the ownership of the common stock of the Issuer by the persons filing this Statement is provided as of December 31, 2015:

(a) Amount beneficially owned:

See Row 9 of cover page for each Reporting Person.

(b) Percent of Class:

See Row 11 of cover page for each Reporting Person.

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- (c) Number of shares as to which such person has:
- (i) Sole power to vote or to direct the vote:  
See Row 5 of cover page for each Reporting Person.
  - (ii) Shared power to vote or to direct the vote:  
See Row 6 of cover page for each Reporting Person.
  - (iii) Sole power to dispose or to direct the disposition of:  
See Row 7 of cover page for each Reporting Person.
  - (iv) Shared power to dispose or to direct the disposition of:  
See Row 8 of cover page for each Reporting Person.

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

Not applicable.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

Under certain circumstances set forth in the limited partnership agreements of FCF II and FCF III and the limited liability company agreements of FCM II and FCM III the partners or members, as the case may be, of each of such entities may be deemed to have the right to receive dividends from, or the proceeds from the sale of, shares of the Issuer directly or indirectly owned by each such entity of which they are a partner or member.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

Not applicable.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

Not applicable

ITEM 9. NOTICE OF DISSOLUTION OF GROUP.

Not applicable

ITEM 10. CERTIFICATION.

By signing below, I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under § 240.14a-11.

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SIGNATURES

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.

Date: February 12, 2016

FORESITE CAPITAL FUND II, L.P.

By: FORESITE CAPITAL MANAGEMENT II, LLC  
Its: General Partner

By: /s/ James Tananbaum  
Name: James Tananbaum  
Title: Managing Member

FORESITE CAPITAL MANAGEMENT II, LLC

By: /s/ James Tananbaum  
Name: James Tananbaum  
Title: Managing Member

FORESITE CAPITAL FUND III, L.P.

By: FORESITE CAPITAL MANAGEMENT III, LLC  
Its: General Partner

By: /s/ James Tananbaum  
Name: James Tananbaum  
Title: Managing Member

FORESITE CAPITAL MANAGEMENT III, LLC

By: /s/ James Tananbaum  
Name: James Tananbaum  
Title: Managing Member

JAMES TANANBAUM

By: /s/ James Tananbaum  
Name: James Tananbaum

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EXHIBIT INDEX

Exhibit	Found on Sequentially Numbered Page
Exhibit A: Agreement of Joint Filing	11

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EXHIBIT A

Agreement of Joint Filing

The Reporting Persons hereby agree that a single Schedule 13G (or any amendment thereto) relating to the common stock of the Issuer shall be filed on behalf of each of the Reporting Persons. Note that a copy of the applicable Agreement of Joint Filing is already on file with the appropriate agencies.

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