FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

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hours per response: 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Last) (First) (Middle) 07/20/2016 780 THIRD AVENUE, 37TH FLOOR	`						Relationship of Reporting Person(s) to Issuer (Check all applicable) Director X 10% Owner				
(Street) NEW YORK NY 10017	Original File	ed (Month/D		3. Date of Earliest Transaction (Month/Day/Year) 07/20/2016 Officer (give title below) Possible Member of 10% Group							
(Street) NEW YORK NY 10017	Original File	ed (Month/D							•		
	4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person Y Form filed by More than One Reporting Person					son					
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned											
1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Year) (Month/Day/Year) 2. Transaction Execution Date, if any (Month/Day/Year) (Month/Day/Year) 8)	ction Disp	ecurities Ac posed Of (D)			5. Amount Securities Beneficial Owned Following	ly	6. Owners Form: Dir (D) or Indirect (ect Ind Bei	lature of irect neficial nership		
Code	V Amo	ount (A	r Pr	rice	Reported Transaction (Instr. 3 au	on(s)	(Instr. 4)	(ins	str. 4)		
Common Stock 07/20/2016 s	19	3,630	D \$3	3.3118 ⁽¹⁾	247,4	13	I	De Pa	rough erfield rtners, O. ⁽²⁾⁽³⁾		
Common Stock 07/20/2016 s	24	6,439	D \$.	3.3118 ⁽¹⁾	314,8	89	I	De Int Ma	rough erfield ernational aster nd, O(2)(3)		
Common Stock 07/20/2016 s	90	1,430	D \$.	3.3118 ⁽¹⁾	1,151,	802	I	De Sp Sit Fu	rough erfield ecial uations nd, o.(2)(3)		
Table II - Derivative Securities Acquire (e.g., puts, calls, warrants, op	, .	,			y Owned						
Derivative Security (Instr. 3) Date (Month/Day/Year) Price of Derivative Security Derivative Security Date (Month/Day/Year) If any (Month/Day	. Date Exerc xpiration D Month/Day/\(^1\) ate xercisable	ate	3 and 4	nt of ties lying tive ty (Instr.	of Derivative Security (Instr. 5)	9. Numb derivativ Securiti Benefici Owned Followin Reporte Transac (Instr. 4	ve Oes Formula (I) ng (I) tion(s)	wnership orm: irect (D) · Indirect · (Instr.	11. Nature of Indirect Beneficial Ownership (Instr. 4)		

4. 0	(F: -:)	A
(Last) 780 THIRD AVI	(First) ENUE, 37TH FLO	(Middle)
, so Timed AVI	2.,02,37111120	
(Street) NEW YORK	NIV	10017
MEW TORK	NI	10017
(City)	(State)	(Zip)
1. Name and Addre	ss of Reporting Pers	on [*]
(Last)	(First)	(Middle)
780 THIRD AVI	ENUE	
37TH FLOOR		
(Street)		
NEW YORK	NY	10017
(City)	(State)	(Zip)
1. Name and Addre	ss of Reporting Pers	on [*]
DEERFIELD	PARTNERS	<u> 8, L.P.</u>
(Last)	(First)	(Middle)
780 THIRD AVI	, ,	(
37TH FLOOR		
(Street)		
NEW YORK	NY	10017
(City)	(State)	(Zip)
1. Name and Addre	ss of Reporting Pers	on [*]
DEERFIELD	MANAGEM	ENT CO
(Last)	(First)	(Middle)
	ENUE, 37TH FLO	
(Street) NEW YORK	NY	10017
	· ·	
,		
(City)	(State)	(Zip)
1. Name and Addre	ss of Reporting Pers	
1. Name and Addre	ss of Reporting Pers	on*
1. Name and Addre	ss of Reporting Pers	on* ster Fund, L.P. (Middle)
1. Name and Addre Deerfield Int (Last) 780 THIRD AVI	ss of Reporting Persernational Ma	on* ster Fund, L.P. (Middle)
1. Name and Addre Deerfield Int (Last) 780 THIRD AVI	ss of Reporting Persernational Ma	on* ster Fund, L.P. (Middle)
1. Name and Addre Deerfield Int (Last) 780 THIRD AVI (Street)	ss of Reporting Persemational Ma (First) ENUE, 37TH FLO	on ster Fund, L.P. (Middle) OR

Name and Address of Reporting Person* Deerfield Special Situations Fund, L.P.						
(Last) 780 3RD AVEN 37TH FLOOR	(First) UE	(Middle)				
(Street) NEW YORK	NY	10017				
(City)	(State)	(Zip)				

Explanation of Responses:

- 1. The price reported in Column 4 is a weighted average price. The shares were sold in multiple transactions at prices ranging from \$3.18 to \$3.60, inclusive. The transactions reported herein include transactions that occurred following (and on the same date as) the trade that resulted in the Reporting Persons ceasing to be subject to Section 16 of the Securities Exchange Act of 1934. The reporting persons undertake to provide to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote (1) of this Form 4.
- 2. This Form 4 is being filed by the undersigned as well as the entities listed on the Joint Filer Information Statement attached as an exhibit hereto (the "Reporting Persons"). Deerfield Mgmt, L.P. is the general partner of Deerfield Special Situations Fund, L.P., Deerfield Partners, L.P. and Deerfield International Master Fund, L.P. (collectively, the "Funds"). Deerfield Management Company, L.P. is the investment manager of the Funds. James E. Flynn is the sole member of the general partner of each of Deerfield Mgmt, L.P. and Deerfield Management Company, L.P.
- 3. In accordance with Instruction 4 (b)(iv) to Form 4, the entire amount of the Issuer's securities held by the Funds is reported herein. For purposes of Section 16 of the Securities Exchange Act of 1934, as amended, each Reporting Person disclaims beneficial ownership of any such securities, except to the extent of his/its indirect pecuniary interest therein, if any, and this report shall not be deemed an admission that such Reporting Person is the beneficial owner of such securities for purposes of Section 16 or otherwise.

Remarks:

Jonathan Isler, Attorney-in-Fact: Power of Attorney, which is hereby incorporated by reference to Exhibit 24 to a Form 3 with regard to Editas Medicine, Inc. filed with the Securities and Exchange Commission on February 2, 2016 by Deerfield Mgmt III, L.P., Deerfield Management Company, L.P., Deerfield Healthcare Innovations Fund, L.P., Deerfield Mgmt HIF, L.P., Deerfield Private Design Fund III, L.P. and James E. Flynn.

<u>/s/ Jonathan Isler</u> <u>08/01/2016</u>

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

Joint Filer Information

Names: Deerfield Mgmt, L.P., Deerfield Management Company, L.P.,

Deerfield Special Situations Fund, L.P.,

Deerfield Partners, L.P., Deerfield International Master Fund, L.P.

Address: 780 Third Avenue, 37th Floor

New York, NY 10017

Designated Filer: James E. Flynn

Issuer and Ticker Symbol: Zafgen, Inc. [ZFGN]

Date of Earliest Transaction

Required to be Reported: July 20, 2016

The undersigned, Deerfield Mgmt, L.P., Deerfield Management Company, L.P., Deerfield Special Situations Fund, L.P., Deerfield Partners, L.P. and Deerfield International Master Fund, L.P., are jointly filing the attached Statement of Changes in Beneficial Ownership on Form 4 with James E. Flynn with respect to the beneficial ownership of securities of Zafgen, Inc.

Signatures:

DEERFIELD MGMT, L.P. DEERFIELD PARTNERS, L.P.

By: J.E. Flynn Capital, LLC, General Partner

By: Deerfield Mgmt, L.P., General Partner

By: /s/ Jonathan Isler

By: J.E. Flynn Capital, LLC, General Partner

Jonathan Isler, Attorney-In-Fact

By: /s/ Jonathan Isler

Jonathan Isler, Attomey-In-Fact

DEERFIELD MANAGEMENT COMPANY, L.P. DEERFIELD INTERNATIONAL MASTER FUND, L.P.

By: Deerfield Mgmt, L.P., General Partner

By: <u>/s/ Jonathan Isler</u>
Jonathan Isler, Attorney-In-Fact

By: J.E. Flynn Capital, LLC, General Partner

By: <u>/s/ Jonathan Isler</u> Jonathan Isler, Attorney-In-Fact

DEERFIELD SPECIAL SITUATIONS FUND, L.P.

By: Flynn Management LLC, General Partner

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital, LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact