Instruction 1(b).

FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

**OMB APPROVAL** OMB Number: Estimated average burden hours per response: 0.5

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

Name and Address of Reporting Person*     THOMAS FRANK E						2. Issuer Name and Ticker or Trading Symbol ZAFGEN, INC. [ ZFGN ]									k all applic	cable)	g Pers	son(s) to Iss 10% Ov		
(Last)	Last) (First) (Middle) C/O ZAFGEN, INC.					3. Date of Earliest Transaction (Month/Day/Year) 06/24/2014									Officer below)	(give title		Other (s below)	pecify	
ONE BROADWAY, 8TH FLOOR						4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable Line)					
(Street) CAMBRIDGE MA 02142					_										X Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City) (State) (Zip)																				
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																				
1. Title of Security (Instr. 3)  2. Transa Date (Month/D						Execution if any	A. Deemed xecution Date, any Month/Day/Year)		Transaction Disposed Code (Instr. 5)		ties Acquired (A) o			5. Amou Securitie Beneficia Owned F Reported	es For ally (D) Following (I) (		n: Direct r Indirect sstr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
									Code	v	Amount	(A) or (D)		ice	Transact (Instr. 3	tion(s)				
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																				
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution D if any (Month/Day/	ate,	4. Transaction Code (Instr 8)				6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title and Amoun of Securities Underlying Derivative Security (Instr. 3 and 4)			8. Price of Derivative Security (Instr. 5)	9. Numbe derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	e s Illy	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)	
					Code	v	(A)	(D)	Date Exercisa		Expiration Date	Title	Amor or Numl of Share	ber						
Stock Option (Right to Buy)	\$16	06/24/2014			A		13,327		(1)		06/24/2024	Common Stock	13,3	327	\$0.00	13,32	7	D		

## **Explanation of Responses:**

1. The option vests in equal monthly installments over a three-year period beginning on June 24, 2014. All unvested options will vest effective upon the consummation of a change in control.

## Remarks:

/s/ Frank E. Thomas

06/26/2014

\*\* 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.