

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
OMB Number:	3235-0104
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

1. Name and Address of Reporting Person* <u>Barrett Peter</u> (Last) (First) (Middle) <u>C/O ATLAS VENTURE FUND VII, L.P.</u> <u>25 FIRST STREET, SUITE 303</u> (Street) <u>CAMBRIDGE MA 02141</u> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>06/18/2014</u>	3. Issuer Name and Ticker or Trading Symbol <u>ZAFGEN, INC. [ZFGN]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series A Preferred Stock	(1)	(1)	Common Stock	759,236	(1)	I	See Footnote ⁽⁵⁾
Series B Preferred Stock	(2)	(2)	Common Stock	2,810,709	(2)	I	See Footnote ⁽⁵⁾
Series C Preferred Stock	(3)	(3)	Common Stock	1,315,859	(3)	I	See Footnote ⁽⁵⁾
Series D Preferred Stock	(4)	(4)	Common Stock	746,926	(4)	I	See Footnote ⁽⁵⁾

Explanation of Responses:

- The Series A Preferred Stock is convertible into Common Stock on a 6.28-for-1 basis into the number of shares of Common Stock as shown in column 3 at any time at the holder's election, and automatically upon the closing of the Issuer's initial public offering, and has no expiration date.
- The Series B Preferred Stock is convertible into Common Stock on a 6.28-for-1 basis into the number of shares of Common Stock as shown in column 3 at any time at the holder's election, and automatically upon the closing of the Issuer's initial public offering, and has no expiration date.
- The Series C Preferred Stock is convertible into Common Stock on a 6.28-for-1 basis into the number of shares of Common Stock as shown in column 3 at any time at the holder's election, and automatically upon the closing of the Issuer's initial public offering, and has no expiration date.
- The Series D Preferred Stock is convertible into Common Stock on a 6.28-for-1 basis into the number of shares of Common Stock as shown in column 3 at any time at the holder's election, and automatically upon the closing of the Issuer's initial public offering, and has no expiration date.
- The securities are directly held by Atlas Venture Fund VII, L.P. ("AV VII LP"). The general partner of AV VII LP is Atlas Venture Associates VII, L.P. ("AVA VII LP"). The general partner of AVA VII LP is Atlas Venture Associates VII, Inc. The Reporting Person disclaims beneficial ownership of all shares except to the extent of his pecuniary interest, if any, therein.

Remarks:

/s/ Peter Barrett 06/18/2014

** 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 5 (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.