FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| OMB APPROVAL |
|--------------|
| |

5. Relationship of Reporting Person(s) to Issuer

OMB Number: 3235-0287 Estimated average burden 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)

1. Name and Address of Reporting Person

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

2. Issuer Name and Ticker or Trading Symbol

| Wagner Heidi L | | | | | | ALEXION PHARMACEUTICALS INC [ALXN] | | | | | | Directo Officer | • | 10% C | Owner (specify | |
|--|---|--|----------------------------------|-------------------------------|---|--|------|---|--|---------------|---|---|---|---|--|--|
| (Last) (First) (Middle) C/O ALEXION PHARMACEUTICALS, INC 100 COLLEGE STREET | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 02/27/2017 | | | | | | | below) SVP, C | Global Go | vernment Affa | airs | |
| (Street) NEW HAVEN CT 06510 (City) (State) (Zip) | | | | | 4. IT A | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | |) K Form f Form f | vidual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person | | | |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | |
| Date | | | | 2. Transa Date (Month/D | | 2A. Deemed Execution Date, if any (Month/Day/Year) | | | 4. Securities Disposed O | | | Benefici | ies cially Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | Code | v | Amount | (A) or (D) | Price | Transac (Instr. 3 | tion(s) | | (Instr. 4) | |
| Common Stock, par value \$.0001 per share 02/2 | | | | | 2017 | | S | | 358(1) | D | \$131.2 | 2) 29 | ,646 | D | | |
| Common Stock, par value \$.0001 per share 02/2 | | | | | 2017 | | S | | 480(1) | D | \$131.7 | 2) 29 | ,166 | D | | |
| Common Stock, par value \$.0001 per share 03/0 | | | | | 2017 | | S | | 156(1) | D | \$132.5 | 3) 29 | ,010 | D | | |
| Common Stock, par value \$.0001 per share 02/2 | | | | 02/28/ | 2017 | | A | | 4,400(4) | A | \$0 | 33 | ,410 | D | | |
| 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) | rivative Conversion Date Execution curity or Exercise (Month/Day/Year) if any | | Date, Transaction Code (Instr | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number derivative Securities Beneficial Owned Following Reported Transactio | Ownershi Form: Direct (D) or Indirec (I) (Instr. 4 | Beneficial Ownership t (Instr. 4) | | |

Explanation of Responses:

\$131.25

1. This sale was made to cover withholding taxes immediately following the vesting of previously granted Restricted Stock Units.

Code

Α

(A)

8,700⁽⁵⁾

2. This transaction was executed in multiple trades through a broker-dealer at prices ranging from \$131.00 - \$131.99. The price reported in this column reflects the weighted average sales price. Upon request, the reporting person will provide to the SEC staff full information regarding the number of shares sold at each price.

Date

(D)

Exercisable

02/28/2018

Expiration Date

02/28/2027

Title

Stock.

par value

\$.0001

per share

- 3. This transaction was executed in multiple trades through a broker-dealer at prices ranging from \$132.00 \$132.99. The price reported in this column reflects the weighted average sales price. Upon request, the reporting person will provide to the SEC staff full information regarding the number of shares sold at each price.
- 4. Award of Restricted Stock Units under the 2004 Incentive Plan. 25% vests on each anniversary of the grant date.
- 5. Stock option award under 2004 Incentive Plan. 25% vest on the first anniversary of the grant date, 1/16 every three months thereafter until fully vested over 4 years.

Remarks:

Option to

Purchase

Common

Stock

/s/ Michael V. Greco, Attorneyin-fact for Heidi Wagner

Amount

or Number

8,700

\$0

03/01/2017

** Signature of Reporting Person

Date

(Instr. 4)

8,700

D

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).

02/28/2017

** 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.