

**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES**

| OMB APPROVAL                                 |           |
|--|-----------|
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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*<br><u>Wagner Heidi L</u><br><br>(Last) (First) (Middle)<br><u>C/O ALEXION PHARMACEUTICALS, INC</u><br><u>352 KNOTTER DRIVE</u><br><br>(Street)<br><u>CHESHIRE CT 06410</u><br><br>(City) (State) (Zip) | 2. Date of Event Requiring Statement (Month/Day/Year)<br><u>10/01/2015</u> | 3. Issuer Name and Ticker or Trading Symbol<br><u>ALEXION PHARMACEUTICALS INC [ ALXN ]</u>   |  |
|   |  | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br>Director 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><u>SVP, Global Government Affairs</u> | 5. If Amendment, Date of Original Filed (Month/Day/Year)<br><br>6. Individual or Joint/Group Filing (Check Applicable Line)<br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br><input type="checkbox"/> 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) |
|--|---|--|---|
| <u>Common Stock, par value \$.0001 per share</u> | <u>25,916</u>   | <u>D</u>   |   |

**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   |   |  |  |   |
| <u>Option to Purchase Common Stock</u>     | <u>05/02/2011</u>  | <u>02/02/2021</u> | <u>Common Stock, par value \$.0001 per share</u>                            | <u>9,500</u>   | <u>42.655</u>  | <u>D</u>  |
| <u>Option to Purchase Common Stock</u>     | <u>05/03/2012</u>  | <u>02/03/2022</u> | <u>Common Stock, par value \$.0001 per share</u>                            | <u>14,000</u>  | <u>78.88</u>   | <u>D</u>  |
| <u>Option to Purchase Common Stock</u>     | <u>02/12/2013</u>  | <u>11/12/2022</u> | <u>Common Stock, par value \$.0001 per share</u>                            | <u>3,000</u>   | <u>91.98</u>   | <u>D</u>  |
| <u>Option to Purchase Common Stock</u>     | <u>05/06/2013</u>  | <u>02/06/2023</u> | <u>Common Stock, par value \$.0001 per share</u>                            | <u>18,807</u>  | <u>93.83</u>   | <u>D</u>  |
| <u>Option to Purchase Common Stock</u>     | <u>02/28/2015</u>  | <u>02/28/2024</u> | <u>Common Stock, par value \$.0001 per share</u>                            | <u>20,000</u>  | <u>176.8</u>   | <u>D</u>  |
| <u>Option to Purchase Common Stock</u>     | <u>02/27/2016</u>  | <u>02/27/2025</u> | <u>Common Stock, par value \$.0001 per share</u>                            | <u>15,000</u>  | <u>180.37</u>  | <u>D</u>  |
| <u>Option to Purchase Common Stock</u>     | <u>10/01/2016</u>  | <u>10/01/2025</u> | <u>Common Stock, par value \$.0001 per share</u>                            | <u>5,000</u>   | <u>157.82</u>  | <u>D</u>  |

Explanation of Responses:

Remarks:

/s/ Michael V. Greco, Attorney-in-fact for Heidi L. Wagner 10/08/2015

\*\* 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.

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