

**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 Instruction 1(b).

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>BAKER BROS. ADVISORS LP</u>  (Last) (First) (Middle) <u>667 MADISON AVENUE, 21ST FLOOR</u>  (Street) <u>NEW YORK NY 10065</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>ALEXION PHARMACEUTICALS INC [ ALXN ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>05/10/2017</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock <sup>(1)</sup>								65,810	D	
Common Stock <sup>(2)</sup>								66,153	D	
Common Stock								94,410	I	See Footnote <sup>(3)</sup>
Common Stock <sup>(4)</sup>	05/10/2017		A		2,030	A	\$0	509,726	I	See Footnotes <sup>(5)(6)(7)(9)(10)(11)</sup>
Common Stock <sup>(4)</sup>	05/10/2017		A		2,030	A	\$0	6,106,592	I	See Footnotes <sup>(5)(6)(8)(9)(10)(11)</sup>

**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 Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		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 of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					

1. Name and Address of Reporting Person\*  
BAKER BROS. ADVISORS LP  
 (Last) (First) (Middle)  
667 MADISON AVENUE, 21ST FLOOR  
 (Street)  
NEW YORK NY 10065  
 (City) (State) (Zip)

1. Name and Address of Reporting Person\*  
BAKER FELIX  
 (Last) (First) (Middle)  
667 MADISON AVENUE, 21ST FLOOR  
 (Street)  
NEW YORK NY 10065  
 (City) (State) (Zip)

1. Name and Address of Reporting Person\*

## BAKER JULIAN

(Last) (First) (Middle)

667 MADISON AVENUE, 21ST FLOOR

(Street)

NEW YORK NY 10065

(City) (State) (Zip)

### 1. Name and Address of Reporting Person\*

Baker Bros. Advisors (GP) LLC

(Last) (First) (Middle)

667 MADISION AVENUE, 21ST FLOOR

(Street)

NEW YORK NY New York

(City) (State) (Zip)

### 1. Name and Address of Reporting Person\*

667, L.P.

(Last) (First) (Middle)

667 MADISION AVENUE, 21ST FLOOR

(Street)

NEW YORK NY 10065

(City) (State) (Zip)

### 1. Name and Address of Reporting Person\*

Baker Brothers Life Sciences LP

(Last) (First) (Middle)

667 MADISION AVENUE, 21ST FLOOR

(Street)

NEW YORK NY 10065

(City) (State) (Zip)

### Explanation of Responses:

- 65,810 shares of Common Stock of Alexion Pharmaceuticals, Inc. (the "Issuer") directly held by Felix J. Baker.
- 66,153 shares of Common Stock of the Issuer directly held by Julian C. Baker.
- Felix J. Baker and Julian C. Baker may be deemed to have an indirect pecuniary interest in 94,410 shares of Common Stock of the Issuer directly held by FBB Associates. Felix J. Baker and Julian C. Baker are the sole partners of FBB Associates. Felix J. Baker and Julian C. Baker each disclaims beneficial ownership of the securities held directly by FBB Associates except to the extent of their pecuniary interest therein, and this report shall not be deemed an admission that Felix J. Baker or Julian C. Baker is a beneficial owner of such securities for purposes of Section 16 or any other purpose.
- Reflects 2,030 Restricted Stock Units ("Restricted Stock Units") payable solely in common shares which vest on May 10, 2018.
- Restricted Stock Units payable solely in common shares granted to Felix J. Baker on May 10, 2017 in his capacity as a director of the Issuer pursuant to the Amended and Restated 2004 Incentive Plan ("Stock Incentive Plan"). Felix J. Baker serves on the Issuer's Board of Directors (the "Board") as a representative of the Funds (as defined below). Pursuant to the policies of Baker Bros. Advisors LP (the "Adviser"), Felix J. Baker does not have any right to any of the Issuer's securities issued as part of his service on the Board, and the Funds (as defined below) are entitled to receive all the pecuniary interest in the securities issued. 667, L.P. ("667") and Baker Brothers Life Sciences, L.P. ("Life Sciences", and together with 667, the "Funds") each own an indirect proportionate pecuniary interest in the Restricted Stock Units.
- Solely as a result of Julian C. Baker's and Felix J. Baker's ownership interest in the general partners of the general partners of the Funds, Felix J. Baker and Julian C. Baker may be deemed to have an indirect pecuniary interest in the Restricted Stock Units.
- As a result of their ownership interest in Baker Biotech Capital (GP), LLC, Felix J. Baker and Julian C. Baker may be deemed to have an indirect pecuniary interest in 509,726 shares of Common Stock of the Issuer beneficially owned by 667, a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital (GP), LLC, due to Baker Biotech Capital, L.P.'s right to receive an allocation of a portion of the profits from 667. Includes beneficial ownership of 3,561 shares issued pursuant to the Stock Incentive Plan in lieu of director retainer fees, of which the fund may be deemed to own a portion.
- As a result of their ownership interest in Baker Brothers Life Sciences Capital (GP), LLC, Felix J. Baker and Julian C. Baker may be deemed to have an indirect pecuniary interest 6,106,592 shares of Common Stock of the Issuer beneficially owned by Life Sciences, a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital, L.P., a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital (GP), LLC, due to Baker Brothers Life Sciences Capital, L.P.'s right to receive an allocation of a portion of the profits from Life Sciences. Includes beneficial ownership of 3,561 shares issued pursuant to the Stock Incentive Plan in lieu of director retainer fees, of which the fund may be deemed to own a portion.
- Includes 12,763, 33,608 and 20,226 shares of Common Stock of the Issuer held directly, respectively by Julian C. Baker, Felix J. Baker and Stephen R. Biggar received from their service on the Board of Directors of Synageva Biopharma Corp. ("Synageva Board"), a company acquired by the Issuer pursuant to a merger agreement dated May 5, 2015 and its predecessor ("Predecessor Board"). Julian C. Baker, a principal of the Adviser, served on the Predecessor Board as a representative of the Funds. Felix J. Baker, a principal of the Adviser, and Stephen R. Biggar, an employee of the Adviser served on the Synageva Board. Felix J. Baker serves on the Board. Pursuant to the policies of the Adviser, Julian C. Baker, Felix J. Baker and Stephen R. Biggar do not have any right to any of Synageva's or the Issuer's securities issued as part of their service on the Board, the Synageva Board or the Predecessor Board and the Funds are entitled to receive all the pecuniary interest in the securities issued. The Funds each own an indirect proportionate pecuniary interest in the stock options or common shares received for service on the Board, the Synageva Board or the Predecessor Board. Solely as a result of Felix J. Baker's and Julian C. Baker's ownership interest in the general partners of the general partners of the Funds, Felix J. Baker and Julian C. Baker may be deemed to have an indirect pecuniary interest in the stock options and common shares received from their service on the Board, the Synageva Board or the Predecessor Board (i.e. no direct pecuniary interest).
- The Adviser serves as the Investment Adviser to the Funds. In connection with the services provided by the Adviser, the Adviser receives an asset-based management fee that does not confer any pecuniary interest in the securities held by the Funds. Baker Bros. Advisors (GP) LLC (the "Adviser GP") is the Adviser's sole general partner. Julian C. Baker and Felix J. Baker are principals of the Adviser GP. The Adviser has complete and unlimited discretion and authority with respect to the investment and voting power of the securities held by the Funds. The general partners of the Funds relinquished to the Adviser all discretion and authority with respect to the investment and voting power of the securities held by the Funds. Julian C. Baker, Felix J. Baker, the Adviser GP and the Adviser disclaim beneficial ownership of the securities held directly by the Funds except to the extent of their pecuniary interest therein, and this report shall not be deemed an admission that any of Julian C. Baker, Felix J. Baker, the Adviser GP or the Adviser is a beneficial owner of such securities for purposes of Section 16 or any other purpose.
- The disclosure of the grant of Restricted Stock Units reported on this form is a single grant of 2,030 shares. The 2,030 shares are reported for each of the Funds as each has an indirect pecuniary interest.

**Remarks:**

Felix J. Baker is a director of Alexion Pharmaceuticals, Inc. (the "Issuer"). By virtue of his representation on the Board of Directors of the Issuer, for purposes of Section 16 of the Securities Exchange Act of 1934, as amended, the reporting persons other than Felix J. Baker are deemed directors by deputization of the Issuer. The same reporting persons had previously filed with Felix J. Baker as the lead reporting person; commencing with this filing, Baker Bros. Advisors LP will be listed as the lead reporting person to improve clarity. The change in lead reporting person does not reflect any change in pecuniary interest amongst the reporting persons.

<u>Baker Bros. Advisors LP,</u>	
<u>Name: Scott L. Lessing, Title:</u>	<u>05/12/2017</u>
<u>President /s/ Scott L. Lessing</u>	
<u>/s/ Felix J. Baker</u>	<u>05/12/2017</u>
<u>/s/ Julian C. Baker</u>	<u>05/12/2017</u>
<u>Baker Bros. Advisors (GP),</u>	
<u>LLC, Name: Scott L Lessing,</u>	<u>05/12/2017</u>
<u>Title: President /s/ Scott L</u>	
<u>Lessing</u>	
<u>Baker Bros. Advisors LP,</u>	
<u>Mgmt. Co. and Inv. Adviser to</u>	
<u>667, L.P., pursuant to authority</u>	
<u>granted by Baker Biotech</u>	
<u>Capital, L.P., GP to Baker</u>	<u>05/12/2017</u>
<u>Brothers 667, L.P. Name: Scott</u>	
<u>L. Lessing Title: President /s/</u>	
<u>Scott L. Lessing Title:</u>	
<u>President /s/</u>	
<u>Baker Bros. Advisors LP,</u>	
<u>Mgmt. Co. and Inv. Adviser to</u>	
<u>BAKER BROTHERS LIFE</u>	
<u>SCIENCES, L.P., pursuant to</u>	
<u>authority granted by Baker</u>	<u>05/12/2017</u>
<u>Brothers Life Sciences Capital,</u>	
<u>L.P., GP to Baker Brothers Life</u>	
<u>Sciences, L.P. Name: Scott L.</u>	
<u>Lessing Title: President /s/</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.**