## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).
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## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

**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*     MATHIS LARRY							2. Issuer Name and Ticker or Trading Symbol ALEXION PHARMACEUTICALS INC [ ALXN ]								hip of Report pplicable) ector ficer (give title	10% Ow		ner
(Last) (First) (Middle) 352 KNOTTER DR C/O ALEXION PHARMACEUTICALS INC						3. Date of Earliest Transaction (Month/Day/Year) 02/17/2012									low)		below)	респу
(Street) CHESHIRE CT 06410					_ 4.1	4. If Amendment, Date of Original Filed (Month/Day/Year)									or Joint/Group Filing (Check Applicable m filed by One Reporting Person m filed by More than One Reporting son			
(City)	(S		(Zip)					-				_						
Table I - Non-Deriva  1. Title of Security (Instr. 3)  2. Transact Date (Month/Date)					action	ion 2A. Deemed Execution Da			3. Transa Code (	ction	4. Securities Acquired (A)			5. A Sec Ber Ow	5. Amount of Securities Beneficially Owned Following Reported		n: Direct or Indirect nstr. 4)	7. Nature of Indirect Beneficial Ownership
									Code	v	Amount	(A) or (D)	Price	Trai	orted isaction(s) tr. 3 and 4)			(Instr. 4)
Common Stock, par value \$.0001 per share 02/17/2						012		М		24,000	A	\$5.7	3	40,565		D		
Common Stock, par value \$.0001 per share 02/17/2					7/2012	2012					24,000	D	\$81.23	3(1)	16,565	,565		
Common Stock, par value \$.0001 per share 02/17/2						012			S		5,450	D	\$81.23	\$81.23 <sup>(1)</sup> 11			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)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)		4. Transa Code ( 8)				Expiration	6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		9. Numb derivativ y Securiti 6) Benefic Owned Followin Reporte Transac (Instr. 4)	ve es ially ng d tion(s)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
					Code	v	(A)	(D)	Date Exercisa	ble	Expiration Date	Title	Amount or Number of Shares					
Option to Purchase Common Stock	\$5.73	02/17/2012			M			24,000	06/15/20	004	03/15/2014	Common Stock, par value \$.0001 per share	24,000	\$0	0		D	

## **Explanation of Responses:**

02/21/2012 /s/ Larry Mathis

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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.

<sup>1.</sup> This transaction was executed in multiple trades through a broker-dealer at prices ranging from \$80.90 - \$81.78. 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.

<sup>\*</sup> If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

<sup>\*\*</sup> Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).