FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287
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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).

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

1. Name and Address of Reporting Person* MATHIS LARRY					2. Issuer Name and Ticker or Trading Symbol ALEXION PHARMACEUTICALS INC [ALXN]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner			vner
					3. Date of Earliest Transaction (Month/Day/Year) 05/11/2011							Officer below)	(give title	Other (s below)	specify
(Street) CHESHIRE CT 06410 (City) (State) (Zip)			4.	4. If Amendment, Date of Original Filed (Month/Day/Year)							Individual or Joint/Group Filing (Check Applicable le) X Form filed by One Reporting Person Form filed by More than One Reporting Person				
Table I - Non-Deriva 1. Title of Security (Instr. 3) 2. Transac Date (Month/Date)				ansactio	ction 2A. Deemed Execution Date,			3. Transactio Code (Inst	4. Securit	f, or Ber ies Acquire Of (D) (Inst	d (A) or	5. Amount of 6. Securities For Beneficially (D		n: Direct or Indirect nstr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
	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)		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)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		(Instr. 4)		
Option to Purchase Common Stock	\$98.86	05/11/2011		A		2,786 ⁽¹⁾		08/11/2011	05/11/2021	Common Stock, par value \$.0001 per share	2,786	\$0	2,786	D	

Explanation of Responses:

1. These options will vest in four quarterly installments during the one year period commencing on May 11, 2011 and ending on May 11, 2012.

/s/ Larry Mathis

05/13/2011

** 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.