

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

OMB APPROVAL	
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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).

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* <u>Aviezer David</u>  (Last) (First) (Middle) <u>C/O PROTALIX BIOTHERAPEUTICS, INC.</u> <u>2 SNUNIT STREET, SCIENCE PARK, POB 455</u>  (Street) <u>CARMIEL L3 20100</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Protalix BioTherapeutics, Inc. [ PLX ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <b>President &amp; CEO</b>
	3. Date of Earliest Transaction (Month/Day/Year) <u>02/25/2010</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			

**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						Title
Stock Options (Right to Buy)	\$6.9	02/25/2010		A		250,000		(1)	02/25/2020	Common Stock	250,000	\$0	250,000 <sup>(2)</sup>	D	

**Explanation of Responses:**

- The options vest quarterly, in 12 equal tranches over a three-year period, commencing upon the U.S. Food and Drug Administration's marketing approval of taliglucerase alfa, if at all, and are subject to accelerated vesting upon a change in control as described in the Protalix BioTherapeutics, Inc., 2006 Stock Incentive Plan.
- Does not include options to purchase 326,267 shares of common stock at an exercise price equal to \$0.12 per share that expire on December 8, 2013, options to purchase 977,296 shares of common stock at an exercise price equal to \$0.972 per share that expire on September 10, 2016, options to purchase 600,000 shares of common stock at an exercise price equal to \$5.00 per share that expire on February 7, 2018, and options to purchase 100,000 shares of common stock at an exercise price equal to \$2.65 per share that expire on February 25, 2019.

/s/ Yossi Maimon, POA 02/26/2010

\*\* 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.

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