FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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* FROST PHILLIP MD ET AL | | | | | suer Name and T otalix BioTh | | | | Relationship of Reporting Person(s) to Issuer (Check all applicable) Director X 10% Owner | | | | | |
|---|---------|---------|---|---|---|---|---------------|---|--|-------|----------------------------|--|--|---|
| (Last) | (First) | (Midd | le) | 3. Date of Earliest Transaction (Month/Day/Year) 08/24/2009 | | | | | | | Officer (give ti below) | tle Ot | her (specify low) | |
| 4400 BISCAYNE BLVD (Street) MIAMI FL 33137-3227 | | | 4. If A | Amendment, Date | e of Origii | nal Fi | led (Month/Da | 6. Individual or Joint/Group Filing (Check Applicab Line) Form filed by One Reporting Person X Form filed by More than One Reporting | | | | | | |
| (City) | (State) | (Zip) | | | | | | | | | | Person | | |
| | | Table I | - Non-Deriva | ative | Securities A | cquired | l, Di | sposed of | , or Be | enefi | cia | lly Owned | | 4 |
| 1. Title of Security (Instr. 3) | | | 2. Transaction Date (Month/Day/Ye | ear) E | zA. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, and 5) | | | | 5. Amount of Securities Beneficially Owned Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership |
| | | | | | | Code | v | Amount | (A) or (D) | Price | | Reported Transaction(s) (Instr. 3 and 4) | (| (Instr. 4) |
| Common Stock | | | 08/25/200 | 19 | | S | | 1,100 | D | \$6. | 37 | 7,983,948 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | | | 08/25/200 | 19 | | S | | 3,400 | D | \$6 | .4 | 7,980,548 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | | | 08/26/200 | 19 | | S | | 2,132 | D | \$6. | 02 | 7,978,416 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | | | 08/26/200 | 19 | | S | | 10,759 | D | \$6. | 03 | 7,967,657 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | | | 08/26/200 | 19 | | S | | 2,665 | D | \$6. | 04 | 7,964,992 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | | | 08/26/200 |)9 | | S | | 9,006 | D | \$6. | 05 | 7,955,986 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | | | 08/26/200 |)9 | | S | | 4,231 | D | \$6. | 06 | 7,951,755 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | | | 08/26/200 |)9 | | S | | 1,789 | D | \$6. | 07 | 7,949,966 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | | | 08/26/200 |)9 | | S | | 2,304 | D | \$6. | 08 | 7,947,662 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| | | | | | | | | | | | | | | |

| 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. Transac Code (Ir 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned | 6. Ownership Form: Direct (D) or Indirect (I) | 7. Nature of Indirect Beneficial Ownership |
| | | | Code | v | Amount | (A) or (D) | Price | Following Reported Transaction(s) (Instr. 3 and 4) | (Instr. 4) | (Instr. 4) |
| Common Stock | 08/26/2009 | | S | | 1,331 | D | \$6.09 | 7,946,331 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 735 | D | \$6.1 | 7,945,596 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 1,381 | D | \$6.11 | 7,944,215 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 134 | D | \$6.12 | 7,944,081 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 3,010 | D | \$6.13 | 7,941,071 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 1,962 | D | \$6.14 | 7,939,109 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 3,480 | D | \$6.15 | 7,935,629 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 134 | D | \$6.16 | 7,935,495 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 1,405 | D | \$6.17 | 7,934,090 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 873 | D | \$6.18 | 7,933,217 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 1,467 | D | \$6.2 | 7,931,750 | I | Frost Gamma Investments Trust ⁽¹⁾ |
| Common Stock | 08/26/2009 | | S | | 1,202 | D | \$6.22 | 7,930,548 | I | Frost Gamma Investments Trust ⁽¹⁾ |

| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | |
|--|---|--|---|----------|---------------------------------------|-----|--|---|--------------------|--|--|---|--|--|--|
| Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | | 3A. Deemed Execution Date, if any (Month/Day/Year) | Code (In | ransaction of Code (Instr. Derivative | | 6. Date Exerc Expiration D (Month/Day/ | 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 | Amount or Number of Shares | | | | |

| | | 1 | | | | | | | | |
|--------------------|------------------------|--------------|--|--|--|--|--|--|--|--|
| | dress of Reporting Per | | | | | | | | | |
| (Last) | ast) (First) (Middle) | | | | | | | | | |
| 4400 BISCAYNE BLVD | | | | | | | | | | |
| (Street) | | | | | | | | | | |
| MIAMI | FL | 33137-3227 | | | | | | | | |
| (City) | (State) | (Zip) | | | | | | | | |
| | dress of Reporting Per | | | | | | | | | |
| (Last) | (First) | (Middle) | | | | | | | | |
| 4400 BISCAY | YNE BOULEVARD | , 15TH FLOOR | | | | | | | | |
| (Street) | | | | | | | | | | |
| MIAMI | FL | 33137 | | | | | | | | |
| (City) | (State) | (Zip) | | | | | | | | |

Explanation of Responses:

1. These securities are held by Frost Gamma Investments Trust, of which the Reporting Person is the trustee. Frost Gamma Limited Partnership is the sole and exclusive beneficiary of Frost Gamma Investments Trust. The Reporting Person is one of two limited partners of Frost Gamma Limited Partnership. The general partner of Frost Gamma Limited Partnership is Frost Gamma, Inc., and the sole shareholder of Frost Gamma, Inc. is Frost-Nevada Corporation, of which the Reporting Person is the sole shareholder.

/s/ Phillip Frost, M.D. 08/26/2009
/s/ Phillip Frost, M.D., as
Trustee 08/26/2009

** 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.

Exhibit 99

Form 4 - Joint Filer Information

Name: Frost Gamma Investments Trust

Address: 4400 Biscayne Boulevard

15th Floor

Miami, Florida 33137

Designated Filer: Phillip Frost, M.D.

Issuer & Ticker Symbol: Protalix BioTherapeutics, Inc. ("PLX")

Date of Event Requiring

Statement:

August 24, 2009

Signature: /s/ Phillip Frost, M.D., Trustee Phillip Frost, M.D., Trustee