

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D/A

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO
13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO 13d-2(a)

(Amendment No. 2)*

Protalix BioTherapeutics, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

74365A-10-1

(CUSIP Number)

Steven D. Rubin
4400 Biscayne Boulevard, Suite 1500
Miami, Florida 33137
Telephone: (305) 575-6015

(Name, address and telephone number of person
authorized to receive notices and communications)

August 17, 2009

(Date of event which requires filing of this statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), Rule 13d-1(f) or Rule 13d-1(g), check the following box. ☐

NOTE: Schedules filed in paper format shall include a signed original and five copies of the Schedule, including all exhibits. See Rule 13d-7(b) for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSONS Phillip Frost, M.D.		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS N/A		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America		
	7	SOLE VOTING POWER	0
	8	SHARED VOTING POWER	7,600,167 (1)
	9	SOLE DISPOSITIVE POWER	0
	10	SHARED DISPOSITIVE POWER	7,600,167 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 7,600,167 (1)		
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 9.9% (2)		
14	TYPE OF REPORTING PERSON IN		

- (1) Consists of 7,600,167 Shares (as defined herein) held of record by Frost Gamma Investments Trust, of which Phillip Frost, M.D. is the trustee. Frost Gamma Limited Partnership is the sole and exclusive beneficiary of Frost Gamma Investments Trust. Dr. Frost 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. Dr. Frost is also the sole shareholder of Frost-Nevada Corporation.
- (2) The percentage of beneficial ownership is based upon 76,614,924 Shares outstanding as of September 15, 2009, as reported in the Issuer's Definitive Proxy Statement filed with the SEC on September 18, 2009.

1	NAME OF REPORTING PERSONS Frost Gamma Investments Trust		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>		
3	SEC USE ONLY		
4	SOURCE OF FUNDS OO		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION State of Florida		
	7	SOLE VOTING POWER	0
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	8	SHARED VOTING POWER	7,600,167 (1)
	9	SOLE DISPOSITIVE POWER	0
	10	SHARED DISPOSITIVE POWER	7,600,167 (1)
	11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 7,600,167 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 9.9% (2)		
14	TYPE OF REPORTING PERSON OO		

- (1) Consists of 7,600,167 Shares held of record by Frost Gamma Investments Trust, of which Phillip Frost, M.D. is the trustee. Frost Gamma Limited Partnership is the sole and exclusive beneficiary of Frost Gamma Investments Trust. Dr. Frost 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. Dr. Frost is also the sole shareholder of Frost-Nevada Corporation.
- (2) The percentage of beneficial ownership is based upon 76,614,924 Shares outstanding as of September 15, 2009, as reported in the Issuer's Definitive Proxy Statement filed with the SEC on September 18, 2009.

AMENDMENT NO. 2 TO SCHEDULE 13D

This Amendment No. 2 to Schedule 13D (this “Second Amendment”) amends and supplements certain Items of the Schedule 13D filed by Phillip Frost, M.D. (“Dr. Frost”), and Frost Gamma Investments Trust (the “Gamma Trust”, collectively with Dr. Frost, the “Reporting Persons”), with the SEC on December 9, 2005, and amended on January 16, 2007 (collectively, the “Original Schedule 13D”) with respect to the Common Stock, \$0.001 par value (the “Shares”), of Protalix BioTherapeutics, Inc., a Florida corporation (the “Issuer”), by furnishing the information set forth below. Except as set forth below, all previous Items are unchanged. Capitalized terms used but not defined herein shall have the meanings ascribed thereto in the Original 13D.

ITEM 1. SECURITY AND ISSUER.

Item 1 is hereby amended to delete the principal executive offices of the Issuer and replace it with the following:

The principal executive offices of the Issuer are located at 2 Snunit Street, Science Park, POB 455, Carmiel, Israel 20100.

ITEM 2. IDENTITY AND BACKGROUND.

Item 2 is hereby amended to delete Dr. Frost’s principal occupation and replace it with the following:

Dr. Frost’s present principal occupation is Chairman and Chief Executive Officer of OPKO Health, Inc., a specialty healthcare company incorporated in Delaware whose address is 4400 Biscayne Boulevard, Suite 1180, Miami, Florida 33137.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

Item 5 is hereby amended in its entirety to read as follows:

(a) and (b) The Reporting Persons may be deemed to beneficially own Shares as follows:

Name	Number of Common Shares	Sole or Shared Voting	Sole or Shared Dispositive	% of Total Outstanding
Phillip Frost, M.D.	7,600,167 ⁽¹⁾	Shared ⁽²⁾	Shared ⁽²⁾	9.92% ⁽³⁾
Frost Gamma Investments Trust	7,600,167	Shared ⁽²⁾	Shared ⁽²⁾	9.92% ⁽³⁾

(1) All of these 7,600,167 Shares are held of record by the Gamma Trust.

(2) Dr. Frost is the sole trustee of the Gamma Trust and may be deemed to share beneficial ownership of the securities held by the Gamma Trust with the Gamma Trust. Frost Gamma Limited Partnership is the sole and exclusive beneficiary of the Gamma Trust. Dr. Frost 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. Dr. Frost is also the sole shareholder of Frost-Nevada Corporation.

(3) The percentage of beneficial ownership is based upon 76,614,924 Shares outstanding as of September 15, 2009, as reported in the Issuer’s Definitive Proxy Statement filed with the SEC on September 18, 2009.

(c) During the past sixty days, the Gamma Trust sold an aggregate of 2,181,106 Shares in open market transactions as listed in the table below:

Date	Number of Shares Sold	Weighted Average Price Per Share	Range of Prices ⁽¹⁾
July 24, 2009	20,000	\$6.24	\$6.20 - \$6.29
July 31, 2009	57,606	\$7.02	\$7.00 - \$7.08
August 03, 2009	88,894	\$7.08	\$7.00 - \$7.24
August 04, 2009	71,934	\$7.10	\$7.00 - \$7.20
August 05, 2009	35,950	\$6.88	\$6.80 - \$7.02
August 06, 2009	4,340	\$6.80	\$6.80 - \$6.80
August 07, 2009	15,000	\$6.46	\$6.39 - \$6.50
August 10, 2009	120,000	\$6.17	\$6.04 - \$6.43
August 11, 2009	26,695	\$6.01	\$5.90 - \$6.23
August 12, 2009	150,000	\$6.16	\$6.06 - \$6.29
August 13, 2009	150,000	\$6.00	\$5.90 - \$6.21
August 17, 2009	231,952	\$6.39	\$6.20 - \$6.66
August 18, 2009	76,989	\$6.09	\$6.00 - \$6.40
August 19, 2009	100,000	\$6.12	\$6.10 - \$6.15
August 20, 2009	100,000	\$6.09	\$6.05 - \$6.15
August 21, 2009	15,000	\$6.09	\$6.08 - \$6.10
August 24, 2009	148,365	\$6.06	\$6.00 - \$6.20
August 25, 2009	388,000	\$6.07	\$6.00 - \$6.40
August 26, 2009	50,000	\$6.08	\$6.02 - \$6.22
August 27, 2009	40,000	\$6.01	\$6.00 - \$6.07
August 28, 2009	27,307	\$6.00	\$6.00 - \$6.02
September 01, 2009	60,000	\$6.81	\$6.64 - \$7.16
September 03, 2009	15,000	\$7.21	\$7.18 - \$7.25
September 09, 2009	50,000	\$7.55	\$7.52 - \$7.62
September 10, 2009	128,074	\$7.43	\$7.35 - \$7.55
September 16, 2009	10,000	\$7.38	\$7.37 - \$7.40

(1) The Reporting Persons undertake to provide upon request by the Staff of the Division of Corporation Finance of the SEC full information regarding the number of shares sold at each separate price.

(d) No person (other than the Reporting Persons) is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Shares.

(e) Not applicable.

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: September 25, 2009

/s/ Phillip Frost, M.D.
Phillip Frost, M.D.

Dated: September 25, 2009

FROST GAMMA INVESTMENTS TRUST

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