UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **April 8, 2008**

Protalix BioTherapeutics, Inc.

(Exact name of registrant as specified in its charter)

Florida
(State or other jurisdiction of incorporation)

000-27836	**65-0643773**
(Commission File Number)	(IRS Employer Identification No.)

2 Snunit Street
Science Park
POB 455
Carmiel, Israel 20100
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **+972-4-988-9488**

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01. Other Events

On April 8, 2008, the Company issued a press release announcing that it has been awarded a grant of up to approximately $4 million by the Office of the Chief Scientist of Israel's Ministry of Industry and Trade. The Office of the Chief Scientist has awarded this grant to the Company for the advancement of the Company's clinical and preclinical drug development programs.

A copy of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

99.1 Press release dated April 8, 2008

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

PROTALIX BIOTHERAPEUTICS, INC.

Date: April 9, 2008

By: /s/ David Aviezer
Name: David Aviezer, Ph.D.
Title: President and
Chief Executive Officer

Exhibit 99.1

Protalix BioTherapeutics Receives Research Grant from the Office of the Chief Scientist of Israel's Ministry of Industry and Trade

CARMIEL, Israel, April 8, 2008 (Business Wire) — Protalix BioTherapeutics, Inc. (Amex: PLX), today announced it has been awarded a grant of up to approximately $4 million by the Office of the Chief Scientist (OCS) of Israel's Ministry of Industry and Trade. The OCS has awarded this grant to the Company for the advancement of its clinical and preclinical drug development programs.

The Company intends to apply approximately $3.1 million of the proceeds from the grant to costs being incurred in connection with the clinical development of prGCD, the Company's plant cell expressed recombinant Glucocerebrosidase enzyme, an enzyme naturally found in human cells that is mutated or deficient in patients with Gaucher disease. prGCD is currently the subject of a phase III clinical trial in which it is being tested as an enzyme replacement therapy for Gaucher disease. The Company also intends to apply $900,000 from the proceeds of the grant to advance two of the other drug candidates in its drug pipeline. The Company intends to apply funds to the preclinical development of a plant cell-based acetylcholinesterase (AChE) and its molecular variants for the use in several therapeutic indications, including a biodefense program and an organophosphate-based pesticide treatment program, and to the preclinical development PRX-102, a therapeutic enzyme for the treatment of Fabry disease. The grant is available through the end of 2008 and funds are to be made available to the Company over the course of the year based on actual expenditures made by the Company in connection with designated programs.

"This grant from the Office of the Chief Scientist is an important, non-dilutive cash resource for Protalix," said Dr. David Aviezer, President and Chief Executive Officer of the Company. "We are pleased to have the support of the Chief Scientist as our enrollment of Gaucher patients in the phase III clinical trial of prGCD progresses."

About the Application to the Office of the Chief Scientist

Grants from the OCS are judged on various criteria including innovation and uniqueness of the technology or product, potential market forecasts, and capabilities of the company in areas including financial strength, R&D capabilities, and management experience.

The Chief Scientist is largely focused on promoting the growth of commercial research and development in Israel. Its implementation of a 1984 government policy, codified in the Law for the Encouragement of Industrial Research and Development, includes various assistance programs that provide qualifying companies in high-tech industries with incentives to avidly undertake R&D activities. By sharing the risks inherent in high-tech research and development projects, the Israeli government hopes to facilitate expansion of its growing technological infrastructure, a main component of the country's economy.

About Protalix BioTherapeutics

Protalix is a biopharmaceutical company. Its goal is to become a fully integrated biopharmaceutical company focused on the development and commercialization of proprietary recombinant therapeutic proteins to be expressed through its proprietary plant cell based expression system. Protalix's ProCellEx(TM) presents a proprietary method for the expression of recombinant proteins that Protalix believes is safe and scalable and will allow for the cost-effective, industrial-scale production of recombinant therapeutic proteins. Protalix is enrolling and treating patients in its pivotal phase III clinical trial in Israel, the United States and other locations for its lead product candidate, prGCD, for its enzyme replacement therapy for Gaucher disease, a lysosomal storage disorder in humans, and has reached an agreement with the United States Food and Drug Administration on the final design of the pivotal phase III clinical trial through the FDA's Special Protocol Assessment (SPA) process. Protalix is also advancing additional recombinant biopharmaceutical drug development programs.

Safe Harbor Statement:

To the extent that statements in this press release are not strictly historical, all such statements are forward-looking, and are made pursuant to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to known and unknown risks and uncertainties that may cause actual future experience and results to differ materially from the statements made. These statements are based on our current beliefs and expectations as to such future outcomes. Drug discovery and development involve a high degree of risk. Factors that might cause such a material difference include, among others, the risk that we may fail to satisfy certain conditions relating to grants we have received from the Office of the Chief Scientist of Israel's Ministry of Industry and Trade which may lead to our being required to refund grants previously received together with interest and penalties, the risk that the Office of the Chief Scientist may not deliver to us all of the funds awarded to us, uncertainties related to the ability to attract and retain partners for our technologies and products under development, the identification of lead compounds, the successful preclinical development of our products, the completion of clinical trials, the review process of the FDA, foreign regulatory bodies and other governmental regulation, and other factors described in our filings with the Securities and Exchange Commission. The statements are valid only as of the date hereof and we disclaim any obligation to update this information.

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