

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): September 17, 2008

Protalix BioTherapeutics, Inc.

(Exact name of registrant as specified in its charter)

Florida
(State or other
jurisdiction of
incorporation)

000-27836
(Commission
File Number)

65-0643773
(IRS Employer
Identification No.)

2 Snunit Street
Science Park
POB 455
Carmiel, Israel 20100

(Address of principal executive offices) (Zip Code)

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

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

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 7.01. Regulation FD Disclosure

On September 17, 2008, Protalix BioTherapeutics, Inc. (the "Company") issued a press release announcing that Dr. David Aviezer, the Company's President and Chief Executive Officer, will present at the UBS Global Life Sciences Conference on Wednesday, September 24, 2008 at 1:30 PM, ET. The conference is being held at the Grand Hyatt Hotel in New York City. A copy of the press release is furnished as Exhibit 99.1.

An audio webcast of the corporate presentation will be available on the Company's website at www.protalix.com under the events calendar section.

The information in Item 7.01 of this report (including Exhibit 99.1) is being furnished pursuant to Item 7.01 of Form 8-K and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed to be incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act.

Item 8.01. Other Events

On September 22, 2008, the Company issued a press release announcing that it has enrolled more than 75% of the patients required for the Company's on-going phase III clinical trial of its lead product candidate, prGCD, a proprietary plant cell expressed recombinant form of human Glucocerebrosidase (GCD) for the treatment of Gaucher disease, and that the Company anticipates completion of enrollment in the clinical trial during the second half of 2008. A copy of the press release is attached hereto as Exhibit 99.2.

Item 9.01. Financial Statements and Exhibits**(d) Exhibits**

99.1 Press release dated September 17, 2008.

99.2 Press release dated September 22, 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: September 22, 2008

By: /s/ David Aviezer

Name: David Aviezer, Ph.D.

Title: President and Chief Executive Officer

Protalix BioTherapeutics to Present at the UBS Global Life Sciences Conference

CARMIEL, Israel, September 17, 2008 (Business Wire) — Protalix BioTherapeutics, Inc. (Amex: PLX), announced today that Dr. David Aviezer, President and CEO, will present at the UBS Global Life Sciences Conference on Wednesday, September 24, 2008 at 1:30 PM ET. The conference is being held at the Grand Hyatt Hotel in New York City.

An audio webcast of the corporate presentation will be available on Protalix's website at www.protalix.com under the events calendar section.

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.

Contact:

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**Protalix BioTherapeutics Provides Enrollment Update for
the Phase III Clinical Trial of prGCD**

CARMIEL, Israel, September 22, 2008 — Protalix BioTherapeutics, Inc. (Amex: PLX), today announced that the Company anticipates completion, during the second half of 2008, of enrollment in its on-going pivotal phase III clinical trial of prGCD, a proprietary plant cell expressed recombinant form of human Glucocerebrosidase (GCD) for the treatment of Gaucher disease. Currently, clinical trial sites that are participating in the trial are recruiting patients in Europe, the United States, Israel and other countries.

“We are pleased to announce that, to date, we have enrolled more than 75% of the patients required for our phase III clinical trial for prGCD,” said Dr. David Aviezer, President and Chief Executive Officer of the Company. “Given the recent and current rates of patient screening and recruitment, we anticipate that we will soon be able to complete enrollment for this study. We expect to submit a New Drug Application (NDA) with the United States Food and Drug Administration (FDA) in the second half of 2009. In addition, we are very encouraged by the fact that Gaucher disease patients that have completed our phase III clinical trial have chosen to continue to be treated with prGCD as part of our on going follow-on extension study.”

The pivotal phase III clinical trial of prGCD is a multi-center, randomized, double-blind, parallel group, dose-ranging trial to assess the safety and efficacy of prGCD in 30 naive patients suffering from Gaucher disease. In the trial, patients are selected randomly for one of two dosing arms and receive IV infusions every two weeks for nine months. The primary endpoint of the study is the percent change in spleen volume from baseline, as measured by MRI.

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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, 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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