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): January 4, 2011 (January 4, 2011)

Protalix BioTherapeutics, Inc.

(Exact name of registrant as specified in its charter)

Florida	**001-33357**	**65-0643773**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

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

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

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

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

o 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 January 4, 2011, Protalix BioTherapeutics, Inc. (the "Company") issued a press release announcing that it has been invited to deliver an oral presentation on PRX-105, the Company's plant cell expressed pegylated recombinant human acetylcholinesterase in development for use in several therapeutic and prophylactic indications, as well as in a biodefense program and an organophosphate-based pesticide treatment program, at the Biomedical Advanced Research and Development Authority (BARDA) Industry Day. BARDA resides within the Office of the Assistant Secretary for Preparedness and Response in the U.S. Department of Health and Human Services (HHS). The BARDA Industry Day is being held in conjunction with the HHS 5th Annual Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) Stakeholders Workshop being held on January 10 through 12, 2011, in Washington, D.C.

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 9.01. Financial Statements and Exhibits

(d) Exhibits

99.1 Press release dated January 4, 2011.

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: January 4, 2011

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

Protalix BioTherapeutics Announces Presentation of PRX-105 Data at the BARDA Industry Day

CARMIEL, Israel, January 4, 2011 (PR NEWSWIRE) — Protalix BioTherapeutics, Inc. (NYSE-AMEX:PLX, TASE:PLX), announced today that it has been invited to deliver an oral presentation on PRX-105, the Company's plant cell expressed pegylated recombinant human acetylcholinesterase in development for use in several therapeutic and prophylactic indications, as well as in a biodefense program and an organophosphate-based pesticide treatment program, at the Biomedical Advanced Research and Development Authority (BARDA) Industry Day. BARDA resides within the Office of the Assistant Secretary for Preparedness and Response in the U.S. Department of Health and Human Services (HHS). The BARDA Industry Day is being held in conjunction with the HHS 5th Annual Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) Stakeholders Workshop being held on January 10 through 12, 2011, in Washington, D.C.

The Company's presentation, entitled "PRX-105: A Novel Biological Countermeasure for Nerve Agents," includes preclinical and Phase I data and will be presented on January 12, 2011. In pre-clinical studies, PRX-105 successfully protected animals exposed to organophosphate nerve gas agent analogs in both the prophylactic and post-exposure settings. The Phase I clinical trial of PRX-105 established the pharmacokinetics of the protein and demonstrated that single dose, intravenous administration of PRX-105 is safe and well tolerated.

About the Public Health Emergency Medical Countermeasures Enterprise (PHEMCE)

PHEMCE is a coordinated interagency effort that is responsible for defining and prioritizing requirements for public health emergency medical countermeasures; focusing research, development, and procurement activities on the identified requirements; and establishing deployment and use strategies for medical countermeasures in the strategic national stockpile. The Stakeholders Workshop includes plenary talks from the U.S. federal government, the American Medical Association, and state and local speakers, as well as seven breakout sessions on various topics related to the PHEMCE mission. The BARDA Industry Day will include a poster session, exhibitor hall and over 40 oral presentations highlighting cutting edge medical countermeasure research.

About PRX-105

We are developing PRX-105, our proprietary plant cell-based acetylcholinesterase (AChE) and its molecular variants, for use in several therapeutic and prophylactic indications, as well as in a biodefense program and an organophosphate-based pesticide treatment program. We have received from the Yissum Research and Development Company and the Boyce Thompson Institute, Inc. an exclusive, worldwide right and license to certain technology, including patents and certain patent applications relating to AChE for the therapeutic and prophylactic indications as well as an exclusive license not limited to such indications with respect to certain of those patents and patent applications.

About Protalix

Protalix is a biopharmaceutical company focused on the development and commercialization of recombinant therapeutic proteins expressed through its proprietary plant cell based expression system. Protalix's ProCellEx™ presents a proprietary method for the expression of recombinant proteins that Protalix believes will allow for the cost-effective, industrial-scale production of recombinant therapeutic

proteins in an environment free of mammalian components and viruses. Protalix is also advancing additional recombinant biopharmaceutical drug development programs, including its PRX-105 development program. Taliglucerase alfa is an enzyme replacement therapy in development under a Special Protocol Assessment with the FDA for Gaucher disease. Protalix's new drug application (NDA) for taliglucerase alfa has been accepted by the U.S. Food and Drug Administration (FDA) and granted a Prescription Drug User Fee Act (PDUFA) action date of February 25, 2011.

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 material differences include, among others, risks relating to: the successful preclinical development of our product candidates; the completion of our clinical trials; the review process of the FDA, the EMEA, other foreign regulatory bodies and other governmental regulatory bodies; delays in the FDA's, the EMEA's or other health regulatory authorities' approval of any applications we file or refusals to approve such filings; uncertainties related to the ability to attract and retain partners for our technologies and products under development; and other factors described in our filings with the Securities and Exchange Commission. Companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced or late-stage clinical trials, even after obtaining promising earlier trial results or in preliminary findings for such clinical trials. Further, even if favorable testing data is generated from clinical trials of drug products, the FDA, EMEA or any other foreign regulatory authority may not accept or approve an NDA filed by a pharmaceutical or biotechnology company for such drug product. Failure to obtain approval from the FDA, EMEA or any other foreign regulatory authority of any of our drug candidates in a timely manner, if at all, will severely undermine our business and results of operations by reducing our potential marketable products and our ability to generate corresponding product revenues. The statements in this release are valid only as of the date hereof and we disclaim any obligation to update this information.

Investor Contact

Marcy Nanus
The Trout Group, LLC
Telephone: 646-378-2927
Email: mnanus@troutgroup.com