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): March 17, 2011

Protalix BioTherapeutics, Inc.

(Exact name of registrant as specified in its charter)

Florida (State or other jurisdiction of incorporation) 001-33357 (Commission File Number) 65-0643773 (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):

- 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 March 17, 2011, Protalix BioTherapeutics, Inc. (the "Company") issued a press release announcing that it intends, subject to market conditions, to offer and sell shares of its common stock in an underwritten public offering (the "Offering"). Citigroup Global Markets Inc. and Barclays Capital Inc. are acting as the joint book-running managers for the Offering. The Offering is subject to market conditions, and there can be no assurance as to whether or when the Offering may be completed, or as to the actual size or terms of the Offering. A copy of the press release is attached hereto as Exhibit 99.1.

The information contained in Item 7.01 of this report and in Exhibit 99.1 shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

99.1 Press release dated March 17, 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.

Date: March 17, 2011

PROTALIX BIOTHERAPEUTICS, INC.

By: /s/ David Aviezer

Name: David Aviezer, Ph.D.

Title: President and Chief Executive Officer

Protalix BioTherapeutics Announces Proposed Public Offering of Common Stock

CARMIEL, Israel, March 17, 2011 /PR Newswire/Protalix BioTherapeutics, Inc. (NYSE-AMEX:PLX, TASE:PLX) announced today that it intends, subject to market conditions, to offer and sell shares of its common stock in an underwritten public offering. Citi and Barclays Capital Inc. are acting as the joint book-running managers for the offering. The offering is subject to market conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering.

The Company expects to use the net proceeds from the sale of the shares for one or more of the following: to fund clinical trials for the Company's product candidates; to fund the Company's research and development activities; to enhance the Company's manufacturing capacity; and for working capital and general corporate purposes.

The offering is being made pursuant to an effective shelf registration statement. Before you invest, you should read the base prospectus in such shelf registration statement, the preliminary prospectus supplement, when available, and other documents the Company has filed with the Securities and Exchange Commission, or SEC, for more complete information about the Company and this offering. The offering may be made only by means of a prospectus supplement and the accompanying prospectus, copies of which may be obtained by sending a request to the offices of Citi at Brooklyn Army Terminal, 140 58th Street, 8th Floor, Brooklyn, NY 11220, telephone number (800) 831-9146 or to Barclays Capital Inc. at Barclays Capital Inc., c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, New York 11717; Barclaysprospectus@broadridge.com (phone: 888-603-5847). Alternatively, you may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov.

This press release shall not constitute an offer to sell, or the solicitation of an offer to buy, any of the securities, nor shall there be any sale of these securities, in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction.

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.

Forward Looking Statements

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. Such statements include, but are not limited to, statements regarding the Company's expectations with respect to the completion, timing and size of its proposed public offering and the use of the net proceeds therefrom. 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 the Company's 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 review process of the U.S. Food and Drug Administration, or the FDA, the European Medicines Agency, or the EMEA, other foreign regulatory bodies and other governmental regulatory bodies, including the risk that regulatory authorities may find that the data from our clinical trials and other studies is insufficient for regulatory approval; the risk that the FDA may find that the information we provide in a resubmission of the NDA for taliglucerase alfa in response to the Company's receipt of a complete response letter from the FDA in February 2011 is insufficient for regulatory approval; 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, including the NDA and the marketing authorization applications (MAAs) we filed with the FDA, the EMEA and other health regulatory authorities for taliglucerase alfa for the treatment of Gaucher disease; the successful preclinical development of the Company's product candidates; the completion of the Company's clinical trials; and other factors described in the Company's filings with the SEC. The statements in this release are valid only as of the date hereof and the Company disclaims any obligation to update this information.

Investor Contact

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