PUMA BIOTECHNOLOGY, INC. Form 424B3 February 21, 2013

Filed pursuant to Rule 424(b)(3)

File Number 333-178308

PROSPECTUS SUPPLEMENT NO. 8 (To Prospectus Dated April 16, 2012)

Puma Biotechnology, Inc. 16,000,000

Shares of Common Stock

This prospectus supplement no. 8 further supplements and updates the prospectus dated April 16, 2012, as supplemented by prospectus supplement no. 1 dated April 19, 2012, prospectus supplement no. 2 dated April 30, 2012, prospectus supplement no. 3 dated May 25, 2012, prospectus supplement no. 4 dated June 26, 2012, prospectus supplement no. 5 dated August 14, 2012, prospectus supplement no. 6 dated October 24, 2012 and prospectus supplement no. 7 dated November 14, 2012, relating to the offering of up to 16,000,000 shares of our common stock that were privately issued to selling stockholders in connection with a merger transaction and a private placement.

This prospectus supplement incorporates into our prospectus the information contained in our attached current report on Form 8-K, which was filed with the Securities and Exchange Commission on February 21, 2013.

You should read this prospectus supplement together with the prospectus, and all other supplements and amendments thereto. This prospectus supplement is qualified by reference to the prospectus and the other prospectus supplements except to the extent that the information in the prospectus supplement supersedes the information contained in the prospectus or the other prospectus supplements.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the prospectus, and all other supplements and amendments thereto.

Our common stock trades on the New York Stock Exchange (the NYSE) under the symbol PBYI. On February 20, 2013, the closing price of our common stock on the NYSE was \$24.26 per share.

You should carefully consider matters discussed in the section entitled Risk Factors in the quarterly report on Form 10-Q that was filed with the Securities and Exchange Commission on November 14, 2012.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is February 21, 2013.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 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): February 20, 2013

PUMA BIOTECHNOLOGY, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State or other jurisdiction of incorporation) 001-35703 (Commission File Number) 10880 Wilshire Boulevard, Suite 2150, 77-0683487 (IRS Employer Identification No.)

Los Angeles, California 90024

(Address of principal executive offices) (Zip Code)

(424) 248-6500

(Registrant s telephone number, including area code)

N/A

(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:

- 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 February 20, 2013, Puma Biotechnology, Inc. (the Company) issued a press release announcing that it had reached an agreement with the U.S. Food and Drug Administration under a Special Protocol Assessment for the planned Phase III clinical trial of the Company s lead drug candidate PB272 (neratinib) in patients with HER2-positive metastatic breast cancer who have failed two or more prior treatments (third-line disease). A copy of the press release is attached hereto as Exhibit 99.1 and incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

- (d) Exhibits.
- 99.1 Press Release dated February 20, 2013

SIGNATURE

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.

PUMA BIOTECHNOLOGY, INC.

Date: February 21, 2013 By: /s/ Alan H. Auerbach Alan H. Auerbach

Chief Executive Officer and President

EXHIBIT INDEX

Exhibit

No. Description

99.1 Press Release dated February 20, 2013

Exhibit 99.1

News Release

Puma Biotechnology Announces Agreement with FDA on Special Protocol

Assessment for Phase III Trial of PB272 (Neratinib) in HER2-Positive

Metastatic Breast Cancer Patients

Los Angeles, Calif., Feb. 20, 2013 Puma Biotechnology, Inc. (NYSE: PBYI), a development stage biopharmaceutical company, today announced that it has reached agreement with the U.S. Food and Drug Administration (FDA) under a Special Protocol Assessment (SPA) for the planned Phase III clinical trial of the Company s lead drug candidate PB272 (neratinib) in patients with HER2-positive metastatic breast cancer who have failed two or more prior treatments (third-line disease). The SPA is a written agreement between the Company, as the trial s sponsor, and the FDA regarding the design, endpoints and planned statistical analysis approach of the Phase III trial to be used in support of a New Drug Application (NDA) for PB272. The European Medicines Agency (EMA) has also provided follow-on scientific advice (SA) consistent with that of the FDA regarding the Company s Phase III trial design and endpoints to be used and the ability of such design to support the submission of a European Union (EU) Market Authorization Application (MAA).

Pursuant to the SPA and SA, the Phase III trial will be a randomized trial of PB272 plus Xeloda versus Tykerb plus Xeloda in patients with third-line HER2-positive metastatic breast cancer. The trial is expected to enroll approximately 600 patients who will be randomized (1:1) to receive either PB272 plus Xeloda or Tykerb plus Xeloda. The trial will be conducted at approximately 150 sites in North America, Europe and Asia-Pacific. The agreed upon co-primary endpoints of the trial are progression-free survival and overall survival. The Company plans to use the progression-free survival data from the trial as the basis for submission of an NDA/MAA for Accelerated/Conditional Approval for PB272 from the regulatory agencies. Puma anticipates that it will begin patient enrollment in this Phase III trial in March or April of this year.

Alan H. Auerbach, Chief Executive Officer and President of Puma Biotechnology, said, Obtaining FDA and EMA agreement on the overall Phase III trial design, and more specifically patient population and primary endpoints, represents an important milestone in the global development of PB272 and for Puma as a company. We look forward to initiating patient enrollment in the Phase III trial shortly.

About Puma Biotechnology

Puma Biotechnology, Inc. is a development stage biopharmaceutical company that acquires and develops innovative products for the treatment of various forms of cancer. The Company focuses on in-licensing drug candidates that are undergoing or have already completed initial clinical testing for the treatment of cancer and then seeks to further develop those drug candidates for commercial use. The Company is initially focused on the development of PB272 (neratinib), an oral potent irreversible tyrosine kinase inhibitor, for the treatment of patients with HER2-positive metastatic breast cancer and non-small cell lung cancer.

Further information about Puma Biotechnology can be found at www.pumabiotechnology.com.

Forward-Looking Statements:

This press release contains forward-looking statements that involve risks and uncertainties that could cause the Company s actual results to differ materially from the anticipated results and expectations expressed in these forward-looking statements. These statements are based on current expectations, forecasts and assumptions, and actual outcomes and results could differ materially from these statements due to a number of factors, which include, but are not limited to, the fact that the Company has no product revenue and no products approved for marketing; the Company s dependence on its lead drug candidate, which is still under development and may never receive regulatory approval; the challenges associated with conducting and enrolling clinical trials; the risk that the results of clinical trials may not support the Company s drug candidate claims, even if approved; the risk that physicians and patients may not accept or use the Company s products; the Company s reliance on third parties to conduct its clinical trials and to formulate and manufacture its drug candidates; the Company s dependence on licensed intellectual property; and the other risk factors disclosed from time to time in the Company s filings with the Securities and Exchange Commission, including the Company s Quarterly Report on Form 10-Q for the Quarter Ended September 30, 2012. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. The Company assumes no obligation to update these forward-looking statements, except as required by law.

Contacts:

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