

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

**FORM S-3  
REGISTRATION STATEMENT**  
*UNDER  
THE SECURITIES ACT OF 1933*

**PUMA BIOTECHNOLOGY, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**2834**  
(Primary Standard Industrial  
Classification Code Number)

**77-0683487**  
(I.R.S. Employer  
Identification Number)

**10880 Wilshire Boulevard, Suite 2150  
Los Angeles, CA 90024  
(424) 248-6500**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Alan H. Auerbach  
President and Chief Executive Officer  
Puma Biotechnology, Inc.  
10880 Wilshire Boulevard, Suite 2150  
Los Angeles, CA 90024  
(424) 248-6500**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

*Copies to:*

**B. Shayne Kennedy, Esq.  
Latham & Watkins LLP  
650 Town Center Drive, 20th Floor  
Costa Mesa, CA 92626  
(714) 540-1235**

**William C. Hicks, Esq.  
Megan Gates, Esq.  
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.  
One Financial Center  
Boston, MA 02111  
(617) 542-6000**

**Approximate date of commencement of proposed sale to the public:** As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  File No. 333-193641

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one):

Large accelerated filer  Accelerated filer   
Non-accelerated filer  (Do not check if a smaller reporting company) Smaller reporting company

**CALCULATION OF REGISTRATION FEE**

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price (1)	Amount of Registration Fee (2)
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Common Stock, par value \$0.0001 per share	\$23,000,000	\$2,963
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- (1) Fee calculated pursuant to Rule 457(o) and Section 6(b) of the Securities Act of 1933, as amended.
- (2) The Registrant previously registered an aggregate of \$115,000,000 of Common Stock on a Registration Statement on Form S-3 (File No. 333-193641), as amended, which was declared effective on February 10, 2014, and for which a filing fee of \$14,812.00 was previously paid.

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**This Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) promulgated under the Securities Act.**

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## **EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE**

This registration statement is being filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 462(b) under the Securities Act of 1933, as amended. This Registration Statement relates to the public offering of common stock of the Registrant contemplated by the Registration Statement on Form S-3, as amended (File No. 333-193641), originally filed with the Commission by the Registrant on January 29, 2014, as amended (the "Prior Registration Statement"), and is being filed for the sole purpose of registering additional securities of the same class as were included in the Prior Registration Statement. The contents of the Prior Registration Statement and all exhibits thereto are hereby incorporated by reference.

The required opinion and consents are listed on an Exhibit Index attached hereto and filed herewith.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Los Angeles, State of California, on the 10th day of February, 2014.

### PUMA BIOTECHNOLOGY, INC.

By: /s/ Alan H. Auerbach  
Alan H. Auerbach  
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

SIGNATURE	TITLE	DATE
<u>/s/ Alan H. Auerbach</u> Alan H. Auerbach	Chairman of the Board of Directors, President and Chief Executive Officer (Principal Executive Officer)	February 10, 2014
<u>/s/ Charles R. Eyler</u> Charles R. Eyler	Senior Vice President, Finance and Administration and Treasurer (Principal Financial and Accounting Officer)	February 10, 2014
<u>*</u> Thomas R. Malley	Director	February 10, 2014
<u>*</u> Jay M. Moyes	Director	February 10, 2014
<u>*</u> Troy E. Wilson	Director	February 10, 2014

\*By: /s/ Alan H. Auerbach  
Alan H. Auerbach  
*Attorney-in-fact*

## EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
5.1	Opinion of Latham & Watkins LLP
23.1	Consent of Latham & Watkins LLP (included in Exhibit 5.1)
23.2	Consent of PKF Certified Public Accountants, A Professional Corporation, independent registered public accounting firm
24.1+	Power of Attorney

+ Previously filed on the signature page to the Registrant's Registration Statement on Form S-3, as amended (File No. 333-193641), originally filed with the Securities and Exchange Commission on January 29, 2014 and incorporated by reference herein.

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 www.lw.com

**LATHAM & WATKINS** LLP

FIRM / AFFILIATE OFFICES

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London	Singapore
Los Angeles	Tokyo
Madrid	Washington, D.C.

File No. 048623-0008

February 10, 2014

Puma Biotechnology, Inc.  
 10880 Wilshire Boulevard, Suite 2150  
 Los Angeles, CA 90024

Re: Registration Statement filed pursuant to Rule 462(b), promulgated under the Securities Act of 1933, as amended

Ladies and Gentlemen:

We have acted as special counsel to Puma Biotechnology, Inc., a Delaware corporation (the "Company"), in connection with the registration of up to \$23,000,000 of shares of the Company's common stock, \$0.0001 par value per share (the "Additional Shares"), pursuant to a registration statement on Form S-3 under the Securities Act of 1933, as amended (the "Act"), filed with the Securities and Exchange Commission (the "Commission") on February 10, 2014 pursuant to Rule 462(b) promulgated under the Act (the "Subsequent Registration Statement"). The Subsequent Registration Statement relates to a registration statement on Form S-3 under the Act filed with the Commission on January 29, 2014 (File No. 333-193641), as amended (the "Initial Registration Statement," and together with the Subsequent Registration Statement, the "Registration Statement"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related prospectus (the "Prospectus"), other than as expressly stated herein with respect to the issue of the Additional Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters

**LATHAM & WATKINS** LLP

without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Additional Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers, and the Additional Shares have been issued by the Company against payment therefor in total numbers that do not exceed the total number of shares available under the Company's certificate of incorporation and in the circumstances contemplated by the form of underwriting agreement most recently filed as an exhibit to the Initial Registration Statement, the issue and sale of the Additional Shares will have been duly authorized by all necessary corporate action of the Company, and the Additional Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement and to the reference to our firm in the Prospectus under the heading "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

Puma Biotechnology, Inc.  
Los Angeles, California

We consent to the incorporation by reference in this Registration Statement on Form S-3 filed pursuant to Rule 462(b) of the Securities Act of 1933, as amended, of the reference to our firm under the caption "Experts" and of our report dated April 1, 2013 relating to the consolidated financial statements of Puma Biotechnology, Inc. and subsidiary as of December 31, 2012 and 2011 and for each of the two-years then ended, for the period from September 15, 2010 (date of inception) through December 31, 2010, and the period from inception (September 15, 2010) to December 31, 2012.

San Diego, California  
February 10, 2014

/s/ PKF  
PKF  
Certified Public Accountants  
A Professional Corporation