

ARCA biopharma, Inc.
Form 424B4
November 21, 2013

Prospects Supplement No. 11

Filed pursuant to Rule 424 (b)(4)

(to Prospectus dated May 30, 2013)

Registration No. 333-187508

125,000 Shares of Series A Convertible Preferred Stock

12,500,000 Shares of Common Stock Underlying the Preferred Stock

Warrants to Purchase up to 6,250,000 Shares of Common Stock and

6,250,000 Shares of Common Stock Underlying the Warrants

ARCA biopharma, Inc.

This prospectus supplement supplements the prospectus dated May 30, 2013 (the "Prospectus"), as supplemented by that certain Prospectus Supplement No. 1 dated July 17, 2013 ("Supplement No. 1"), by that certain Prospectus Supplement No. 2 dated July 19, 2013 ("Supplement No. 2"), by that certain Prospectus Supplement No. 3 dated July 24, 2013 ("Supplement No. 3"), by that certain Prospectus Supplement No. 4 dated July 30, 2013 ("Supplement No. 4"), by that certain Prospectus Supplement No. 5 dated August 6, 2013 ("Supplement No. 5"), by that certain Prospectus Supplement No. 6 dated September 4, 2013 ("Supplement No. 6"), by that certain Prospectus Supplement No. 7 dated September 23, 2013 ("Supplement No. 7"), by that certain Prospectus Supplement No. 8 dated October 29, 2013 ("Supplement No. 8"), by that certain Prospectus Supplement No. 9 dated November 6, 2013 ("Supplement No. 9"), and by that certain Prospectus Supplement No. 10 dated November 13, 2013 ("Supplement No. 10"), and together with Supplement No. 1, Supplement No. 2, Supplement No. 3, Supplement No. 4, Supplement No. 5, Supplement No. 6, Supplement No. 7, Supplement No. 8, and Supplement No. 9, the "Supplements"), which form a part of our Registration Statement on Form S-1 (Registration No. 333-187508). This prospectus supplement is being filed to update and supplement the information in the Prospectus and the Supplements with the information contained in our current report on Form 8-K, filed with the Securities and Exchange Commission (the "Commission") on November 21, 2013 (the "Current Report"). Accordingly, we have attached the Current Report to this prospectus supplement.

The Prospectus, the Supplements and this prospectus supplement relate to the offer and sale of up to 125,000 shares of Series A Convertible Preferred Stock ("Preferred Stock") which are convertible into 12,500,000 shares of Common Stock, warrants to purchase up to 6,250,000 shares of our Common Stock and 6,250,000 shares of Common Stock underlying the warrants.

This prospectus supplement should be read in conjunction with the Prospectus and the Supplements. This prospectus supplement updates and supplements the information in the Prospectus and the Supplements. If there is any inconsistency between the information in the Prospectus, the Supplements and this prospectus supplement, you should rely on the information in this prospectus supplement.

Our common stock is traded on the Nasdaq Global Market under the trading symbol "ABIO". On November 21, 2013, the last reported sale price of our common stock was \$1.41 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page 5 of the Prospectus and beginning on page 23 of our quarterly report on Form 10-Q for the quarterly period ended September 30, 2013 before

you decide whether to invest in shares of our common stock.

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

The date of this prospectus supplement is November 21, 2013

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): November 21, 2013 (November 19, 2013)

ARCA biopharma, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

000-22873
(Commission File Number)

36-3855489
(I.R.S. Employer
Identification No.)

11080 CirclePoint Road, Suite 140, Westminster, CO 80020

(Address of Principal Executive Offices) (Zip Code)

(720) 940-2200

(Registrant's telephone number, including area code)

Not Applicable

(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)
- .. 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 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On November 21, 2013, ARCA announced that Dr. John Zabriskie resigned from the Board of Directors of ARCA biopharma, Inc. (ARCA) on November 19, 2013. Dr. Zabriskie's resignation was not the result of any disagreements with the Company relating to its operations, policies or practices.

On November 21, 2013, the ARCA Board of Directors appointed Dr. Raymond Woosley to the Audit Committee of the Board.

A copy of the press release announcing Dr. Zabriskie's resignation is attached hereto as Exhibit 99.1.

Section 9 Financial Statements and Exhibits

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Press Release titled ARCA biopharma Announces Resignation from Board of Directors dated November 21, 2013.

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.

Dated: November 21, 2013

ARCA biopharma, Inc.

(Registrant)

By: /s/ Christopher D. Ozeroff

Name: Christopher D. Ozeroff

Title: SVP and General Counsel

Section 9 Financial Statements and Exhibits

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Press Release titled ARCA biopharma Announces Resignation from Board of Directors dated November 21, 2013.

ARCA BIOPHARMA ANNOUNCES RESIGNATION FROM BOARD OF DIRECTORS

Westminster, CO, November 21, 2013 ARCA biopharma, Inc. (Nasdaq: ABIO), today announced that John L. Zabriskie, PhD, has resigned from the Company's Board of Directors.

Dr. Zabriskie resigned effective November 19, 2013. There has been no disagreement between the Company and Dr. Zabriskie. Dr. Zabriskie has served as a member of ARCA's board of directors since March 2005.

I want to express our deep gratitude and appreciation for John's contributions to ARCA and the Board, commented Michael Bristow, MD, PhD, President and CEO of ARCA. John has been a tremendous asset, sharing his extensive experience and wisdom from a highly successful career in our industry. We will miss his sage advice and steady hand in guiding the Company.

Dr. Zabriskie is Co-Founder and Director of Puretech Ventures, LLC, and the past Chairman of the Board, Chief Executive Officer and President of NEN Life Science Products, Inc., a supplier of kits for labeling and detection of DNA. Prior to joining NEN Life Science Products in July 1997, Dr. Zabriskie was President and Chief Executive Officer of Pharmacia and Upjohn Inc. Prior to joining Upjohn in 1994, Dr. Zabriskie was Executive Vice President for Merck & Co., Inc. Dr. Zabriskie received his undergraduate degree in chemistry from Dartmouth College and his Ph.D. in organic chemistry from the University of Rochester.

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