ARCA biopharma, Inc. Form 8-K April 13, 2015 **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): April 13, 2015 (April 10, 2015) ARCA biopharma, Inc. (Exact Name of Registrant as Specified in Charter) Delaware 000-22873 36-3855489 (State or Other Jurisdiction (Commission File Number) (I.R.S. Employer of Incorporation) 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))

Section 8 — Other Events

Item 8.01. Other Events.

On April 13, 2015, ARCA biopharma, Inc. ("ARCA") announced that the U.S. Food and Drug Administration (FDA) has designated as a Fast Track development program the investigation of GencaroTM for the prevention of atrial fibrillation/atrial flutter in a genetically modified heart failure population (heart failure patients with reduced left ventricular ejection fraction, HFREF). The press release is furnished as Exhibit 99.1 hereto, the contents of which are incorporated herein by reference.

Section 9 — Financial Statements and Exhibits

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit

Number Description

Press Release titled "ARCA biopharma Receives FDA Fast Track Designation For Gencar^M Atrial Fibrillation Development in a Genetically Targeted Heart Failure Population" dated April 13, 2015.

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: April 13, 2015

ARCA biopharma, Inc. (Registrant)

By:/s/ Brian L. Selby Name: Brian L. Selby

Title: VP, Finance and Chief Accounting Officer

INDEX TO EXHIBITS

Exhibit

Number Description

99.1 Press Release titled "ARCA biopharma Receives FDA Fast Track Designation For Gencarom Atrial

Fibrillation Development in a Genetically Targeted Heart Failure Population" dated April 13, 2015.