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 17, 2014

SYNTHETIC BIOLOGICS, INC. (Exact name of registrant as specified in its charter)

Nevada 1-12584 13-3808303

(State or other jurisdiction of incorporation) (Commission File No.) (IRS Employer Identification No.)

155 Gibbs Street, Suite 412, Rockville, Maryland, 20850 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (734) 332-7800

(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 1.01 Entry into a Material Definitive Agreement

On April 17, 2014, the Board of Directors of Synthetic Biologics, Inc. (the "Company") approved an amendment to the Company's employment agreements with its Chief Executive Officer ("CEO"), Jeffrey Riley, and its Chief Financial Officer ("CFO"), C. Evan Ballantyne, which increased their base salaries to \$385,000 and \$335,000, respectively.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

The Compensation Committee of the Company conducted an evaluation of the compensation of the Company's CEO and CFO. In order to aid its decision-making, the Compensation Committee considered the compensation practices and the competitive market for executives at companies with which the Company competes for personnel and a study of the Company's peer group compensation. The competitive market information and peer group study results indicated that the overall compensation of the Company's CEO and CFO was below market. Based substantially on the Compensation Committee's review of competitive market information, the Board of Directors of the Company increased the CEO's base salary to \$385,000, granted him an option exercisable for 500,000 shares of the Company's common stock vesting pro rata on a monthly basis over 36 months and approved a 2013 year-end cash bonus pursuant to the terms of his employment agreement. The Board of Directors of the Company's common stock vesting pro rata on a monthly basis over 36 months and approved a 2013 year-end cash bonus pursuant to the terms of his employment agreement.

Item 9.01 Financial Statements and Exhibits.

10.1 Amendment to Employment Agreement between the Company and Jeffrey Riley 10.2 Amendment to Employment Agreement between the Company and C. Evan Ballantyne

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.

SYNTHETIC BIOLOGICS, INC.

Date: April 21, 2014 By: <u>/s/ C. Evan Ballantyne</u>

Name: C. Evan Ballantyne
Title: Chief Financial Officer