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): October 9, 2018

SYNTHETIC BIOLOGICS, INC.

(Exact name of registrant as specified in its charter)

Nevada (State or other jurisdiction of incorporation) 001-12584 (Commission File No.) 13-3808303 (I.R.S. Employer Identification No.)

9605 Medical Center Drive, Suite 270 Rockville, Maryland 20850 (Address of principal executive offices)

(301) 417-4364 Registrant's telephone number, including area code:

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))

Indicate by check mark whether the registrant is an emerging growth company as defined in in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company "

If an emerging growth company, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. "

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

Item 5.02(b) Departure of a Named Executive Officer.

On October 9, 2018, Synthetic Biologics, Inc. (the "Company"), received a letter from Joseph A. Sliman, M.D., MPH., its Chief Medical Officer purporting to provide notice of a right to terminate his Employment Agreement, dated January 17, 2017, with the Company for "good reason", alleging a material reduction in his duties, authorities, and responsibilities as an executive of the Company. The Employment Agreement with Mr. Sliman was by its terms due to expire in December 2018. The Company is reviewing with legal counsel its rights and remedies and it disputes certain aspects regarding Mr. Sliman's attempt to terminate his Employment Agreement. In the interim, while this dispute with Mr. Sliman regarding his employment is outstanding, Michael Kaleko, M.D., Ph.D., Senior Vice President, Research & Development has agreed to assume Dr. Sliman's responsibilities.

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.

Date: October 10, 2018

SYNTHETIC BIOLOGICS, INC.

By: /s/ Steven Shallcross

Name: Steven Shallcross

Title: Interim Chief Executive Officer and Chief Financial

Officer