

Ann Arbor, MI 48104

(Mailing Address and 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 7.01. Regulation FD Disclosure

On December 10, 2015, Synthetic Biologics, Inc. (the “Company”) hosted its Microbiome Clinical Program Seminar in New York City. The Company’s SYN-004 and SYN-010 data and information slides are furnished as Exhibit 99.1 hereto, which is incorporated herein by reference.

The Company’s slides attached as Exhibit 99.1 to this Report includes “safe harbor” language pursuant to the Private Securities Litigation Reform Act of 1995, as amended, indicating that certain statements contained in the slides are “forward-looking” rather than historical.

The information included in this Item 7.01 and in Exhibit 99.1 shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that Section or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing. The Company undertakes no duty or obligation to update or revise information included in this Report or any of the Exhibits.

Item 8.01 – Other Events.

The Company presented data and information regarding the SYN-004 and SYN-010 programs that are contained in the slides furnished as Exhibit 99.1 hereto, which is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d)Exhibits

The following exhibit is being filed as part of this Report.

Exhibit

Number Description

99.1 Synthetic Biologics, Inc. SYN-004 and SYN-010 slides presented at the Company's Microbiome Clinical Program Seminar

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: December 11, 2015 SYNTHETIC BIOLOGICS,
INC.
(Registrant)

By: /s/ Steven A. Shallcross
Name: Steven A. Shallcross
Title: Chief Financial
Officer