

Ann Arbor, MI 48104

(Mailing address and zip code)

(734) 332-7800

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))

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

Amendment to the 2010 Stock Incentive Plan

On May 15, 2015, the stockholders of Synthetic Biologics, Inc. (the “Company”) approved an amendment to the 2010 Stock Incentive Plan (the “Plan”) to increase the total number of shares of stock that the Company will have the authority to issue from 6,000,000 to 8,000,000. The Amended and Restated 2010 Stock Incentive Plan became effective upon such stockholder approval (see Item 5.07 below). A description of the Plan is set forth in the Company’s proxy statement, dated April 13, 2015, for its 2015 Annual Meeting of Stockholders (the “Proxy Statement”), in the section captioned “Proposal 4. APPROVAL OF AN AMENDMENT TO OUR 2010 STOCK INCENTIVE PLAN TO INCREASE THE NUMBER OF SHARES OF COMMON STOCK THAT WE HAVE AUTHORITY TO GRANT FROM 6,000,000 to 8,000,000” which is incorporated herein by reference. The description is qualified in its entirety by reference to a copy of the Amended and Restated Plan attached to the Proxy Statement as Annex B.

Item 5.03. Amendment to Articles of Incorporation or Bylaws; Change in Fiscal Year.

On May 15, 2015, the Company filed a Certificate of Amendment to its Articles of Incorporation (the “Certificate of Amendment”) with the Secretary of State of the State of Nevada which increased its authorized number of shares of common stock from 100,000,000 to 250,000,000.

The foregoing description of the Certificate of Amendment is qualified in its entirety by reference to the full text of the Certificate of Amendment which is filed as Exhibit 3.1 to this Current Report on Form 8-K and incorporated herein by reference.

Item 5.07. Submission of Matters to a Vote of Security Holders.

On May 15, 2015, the Company held its Annual Meeting of Stockholders (the “Annual Meeting”). At the Annual Meeting, the stockholders voted on the following four proposals and cast their votes as described below. These

matters are described in detail in the Company's proxy statement for the Annual Meeting, which was filed with the Securities and Exchange Commission on April 13, 2015.

Proposal 1 — Election of Directors

The following four individuals were elected as directors, to serve until the 2015 Annual Meeting of Stockholders and their successors are elected and qualified with the following votes:

Name of Director Votes For Withheld Broker Non-Votes

Jeffrey J. Kraws 20,731,460 6,033,605 31,996,669

Jeffrey Riley 26,661,658 103,407 31,996,669

Scott L. Tarriff 20,616,270 6,148,795 31,996,669

Jeffrey Wolf 20,744,833 6,020,232 31,996,669

Proposal 2 — Ratification of the appointment of BDO USA, LLP as the Company’s independent registered public accounting firm for the year ending December 31, 2015.

The stockholders ratified the appointment of BDO USA, LLP as the Company’s independent registered public accounting firm for the year ending December 31, 2015 based on the votes listed below:

Votes For Votes Against Abstentions Broker Non-Votes

58,120,732 288,414 352,588 0

Proposal 3 — Approval of the Amendment to the Company’s Articles of Incorporation to increase the total number of shares of authorized common stock, \$0.001 par value per share, from 100,000,000 shares to 250,000,000 shares.

The stockholders approved the proposed Amendment to the Company’s Articles of Incorporation based on the votes listed below:

Votes For Votes Against Abstentions Broker Non-Votes

45,439,224 12,706,857 615,653 0

Proposal 4 - Approval of an Amendment to the Company’s 2010 Stock Incentive Plan to increase the number of shares of common stock that it will have the authority to grant from 6,000,000 to 8,000,000.

The stockholders approved the Amendment to the Company’s 2010 Stock Incentive Plan based on the votes listed below:

Votes For Votes Against Abstentions Broker Non-Votes

19,400,718 7,112,844 251,503 31,996,669

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit 3.1 Certificate of Amendment to the Certificate of Incorporation*

Exhibit 10.1 Amended and Restated 2010 Stock Incentive Plan (incorporated by reference to Exhibit B to the Definitive Proxy Statement filed with the Securities and Exchange Commission on April 13, 2015.)

*Filed herewith

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: May 18, 2015

**SYNTHETIC
BIOLOGICS,
INC.**

By: /s/ Jeffrey Riley
Name: Jeffrey Riley
Title: Chief
Executive Officer