

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 5.07 Submission of Matters to a Vote of Security Holders.

On June 10, 2014, Synthetic Biologics, Inc. (the “Company”) held its Annual Meeting of Stockholders (the “Annual Meeting”). At the Annual Meeting, the stockholders voted on the following two 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 May 12, 2014.

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
(a) Jeffrey J. Kraws	21,119,882	215,572	19,140,651
(b) Jeffrey Riley	21,121,597	213,857	19,140,651
(c) Scott L. Tarriff	21,108,420	227,034	19,140,651
(d) Jeffrey Wolf	21,111,387	224,067	19,140,651

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, 2014.

The stockholders ratified and approved the appointment of BDO USA, LLP as the Company’s independent registered public accounting firm for the year ending December 31, 2014 based on the votes listed below:

Votes For	Votes Against	Abstentions	Broker Non-Votes
40,281,570	182,265	12,270	0

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: June 13, 2014

SYNTHETIC BIOLOGICS, INC.

By: /s/ C. Evan Ballantyne

Name: C. Evan Ballantyne

Title: Chief Financial Officer