UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 14A (RULE 14a-101) INFORMATION REQUIRED IN PROXY STATEMENT

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant x

Filed by a Party other than the Registrant

Check the appropriate box:

- " Preliminary Proxy Statement
- " Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- " Definitive Proxy Statement
- " Definitive Additional Materials
- x Soliciting Material under §240.14a-12

SYNTHETIC BIOLOGICS, INC.

(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- x No fee required.
- " Fee paid previously with preliminary materials.
- Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a6(i)(1) and 0-11.

Explanatory Note

On August 11, 2022, Synthetic Biologics, Inc. (the "Company") held its 2022 Second Quarter Investor Conference Call during which a reference was made to the Company's 2022 Annual Meeting of Stockholders to be held on September 30, 2022. A copy of the transcript of the relevant part of the conference call is included in this Schedule 14A. This Schedule 14A supplements the Preliminary Proxy Statement filed by the Company with the U.S. Securities and Exchange Commission on August 3, 2022.

Synthetic Biologics, Inc. 2022 Second Quarter Investor Conference Call

Publication date: August 11, 2022

Relevant Section of Transcript as follows:

Financial Updates

Before turning to our financial results, I would remind you that the Company's common stock began trading on a split-adjusted basis on July 25, 2022. The reverse stock split was effected to ensure that we could continue to meet the per share price requirements of the NYSE American stock exchange. We believe maintaining our listing on NYSE American is important to the Company's performance, corporate visibility and will provide greater flexibility with respect to future capital market access.

On July 29th, with MSD Credit Opportunity Master Fund, we closed a \$3 million private placement of 275,000 shares of Series C convertible preferred stock and 100,000 shares of Series D convertible preferred stock. Each share of Series C and Series D preferred stock has a purchase price of \$8.00. Each share of Series C and Series D preferred stock is convertible into shares of the Company's common stock at an initial conversion price of \$1.22 per share. The proceeds from the stock offering will further support the advancement of our clinical development programs. The purpose of this financing was twofold: first, the structure of the transaction will aid us administratively during our upcoming shareholder meeting to ensure that we have the necessary quorum for the meeting, and the votes needed to help pass key initiatives that we believe are critical to our long-term success and viability; and second, we have added a significant and highly respected institutional investor who is very supportive of the management team, our technologies and our strategy.