# 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): January 19, 2021

## SYNTHETIC BIOLOGICS, INC.

(Exact name of registrant as specified in its charter)

Nevada001-1258413-3808303(State or other jurisdiction of incorporation)(Commission File No.)(IRS Employer Identification No.)

## 9605 Medical Center Drive, Suite 270 Rockville, Maryland 20850

(Address of principal executive offices and zip code)

### (301) 417-4364

Registrant's telephone number, including area code

#### N/Δ

(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 (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))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.001 per share	SYN	NYSE American

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §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 8.01. Other Events.

On January 19, 2021, Synthetic Biologics, Inc. (the "Company") filed a prospectus supplement to its Registration Statement on Form S-3 (333-224728), which was declared effective on May 15, 2018 (the "Registration Statement"), to update and amend certain information contained in the prospectus, dated May 15, 2018, relating to the offer and sale of shares of the Company's common stock from time to time through or directly to B. Riley Securities, Inc. (formerly known as B. Riley FBR, Inc.), acting as sales agent or principal. Any such sales would be deemed to be "at the market offerings" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, pursuant to an At Market Issuance Sales Agreement, dated August 5, 2016, with B. Riley, as amended by amendment no. 1, dated May 7, 2018 (the "Sales Agreement"). As of January 15, 2021, the Company has sold an aggregate of 26,009,427 shares of common stock (on a post 2018 split basis) having an aggregate of \$24,780,844 under the Sales Agreement pursuant to the Registration Statement. As of January 15, 2021, the Company had 53,669,733 shares of common stock outstanding, after taking into account 10,276,660 shares of common stock issued pursuant to warrant exercises and 996,522 shares of common stock issued upon conversion of preferred stock and sales in "at the market offerings".

This Current Report on Form 8-K shall not constitute an offer to sell or the solicitation of an offer to buy any security nor shall there be any sale of these securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.

The opinion of the Company's counsel regarding the validity of the shares of common stock that will be issued pursuant to the Sales Agreement and the prospectus supplement is filed herewith as Exhibit 5.1 and is incorporated by refence herein.

#### Item 9.01. Financial Statements and Exhibits.

d) Exhibits.

The following exhibits are filed with this Current Report on Form 8-K.

Exhibit Number	Description
<u>5.1</u>	Opinion of Parsons Behle & Latimer
23.1	Consent of Parsons Behle & Latimer (included in Exhibit 5.1 hereof)

# **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: January 19, 2021 SYNTHETIC BIOLOGICS, INC.

By: /s/ Steven A. Shallcross

Name: Steven A. Shallcross

Title: Chief Executive Officer and Chief Financial Officer