

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): February 9, 2021

SYNTHETIC BIOLOGICS, INC.  
(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of  
incorporation)

001-12584

(Commission File No.)

13-3808303

(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/A

(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 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).

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. “

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Item 1.01. Entry into a Material Definitive Agreement.

On February 9, 2021, Synthetic Biologics, Inc. (the “Company”) entered into an amended and restated the sales agreement with B. Riley Securities, Inc. (“B. Riley”) and A.G.P./Alliance Global Partners (“AGP”) in order to include AGP as an additional sales agent for the Company’s “at the market offering” program (the “Sales Agreement”). The Sales Agreement amended and restated the At Market Issuance Sales Agreement, dated August 5, 2016, with B. Riley Securities, Inc. (formerly known as B. Riley FBR, Inc.), as amended by amendment no. 1, dated May 7, 2018, to the At Market Issuance Sales Agreement.

The description of the Sales Agreement above does not purport to be complete and is qualified in its entirety by reference to the full text of the Sales Agreement, a copy of which is filed as Exhibit 1.1. to this Current Report on Form 8-K and is incorporated herein by reference.

Item 3.02 – Unregistered Sale of Equity Securities.

On February 9, 2021, the Company, issued 1,851,149 shares of its common stock upon the conversion effected on such date by the holder of 23,533 shares of its Series A Convertible Preferred Stock. As of the date hereof, there are 4,764 shares of Series A Convertible Preferred Stock outstanding.

The Company issued the shares of its common stock upon conversion of the Series A Convertible Preferred Stock in reliance on the exemption from registration provided for under Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”). The Company relied on this exemption from registration insofar as the security exchanged by the Company upon conversion was with an existing security holder and no commission or other remuneration was paid or given directly or indirectly for soliciting such exchange.

Item 8.01. Other Events.

On February 10, 2021, the Company will file 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 and AGP, each acting as sales agent or principal. Any such sales would be deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act pursuant to the Sales Agreement. As of February 9, 2021, the Company has sold an aggregate of 36,496,555 shares of common stock (on a post 2018 split basis) having an aggregate offering price of \$33,602,155 under the Sales Agreement pursuant to the Registration Statement. As of February 9, 2021, the Company had 72,685,015 shares of common stock outstanding, after taking into account shares of common stock issued pursuant to warrant exercises, shares of common stock issued upon conversion of preferred stock and sales in the Company’s “at the market offering.”

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.

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.

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
<a href="#"><u>1.1</u></a>	<a href="#"><u>Amended and Restated At Market Issuance Sales Agreement by and among Synthetic Biologics, Inc., B. Riley Securities, Inc. and A.G.P./Alliance Global Partners, dated February 9, 2021</u></a>
<a href="#"><u>5.1</u></a>	<a href="#"><u>Opinion of Parsons Behle &amp; Latimer</u></a>
<a href="#"><u>23.1</u></a>	<a href="#"><u>Consent of Parsons Behle &amp; Latimer (included in Exhibit 5.1 hereof)</u></a>

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: February 10, 2021

SYNTHETIC BIOLOGICS, INC.

By: /s/ Steven A. Shallcross

Name: Steven A. Shallcross

Title: Chief Executive Officer and Chief Financial Officer