

PROSPECTUS SUPPLEMENT NO. 14

SYNTHETIC BIOLOGICS, INC.

112,573 Shares of Common Stock

This prospectus supplement amends and supplements our prospectus, dated July 26, 2012 relating to the resale, from time to time, of up to 112,573 shares of common stock of Synthetic Biologics, Inc. upon the exercise of warrants issued in July 2011 at an exercise price of \$1.00 per share and warrants sold in our July 2010 offering at an exercise price of \$1.32 per share. We will receive proceeds if the warrants are exercised for cash; to the extent we receive such proceeds, they will be used for working capital purposes.

Our common stock became eligible for trading on the NYSE MKT October 16, 2008. Our common stock is eligible for quotation on the NYSE MKT under the symbol "SYN". The closing price of our stock on January 7, 2013 was \$1.74.

This prospectus supplement is being filed to include the information set forth in the Current Report on Form 8-K filed on January 8, 2013, which is set forth below. This prospectus supplement should be read in conjunction with the prospectus dated July 26, 2012, supplement no. 1 dated August 9, 2012, prospectus supplement no. 2 dated August 15, 2012, prospectus supplement no. 3 dated August 15, 2012, prospectus supplement no. 4 dated September 12, 2012, prospectus supplement no. 5 dated October 9, 2012, prospectus supplement no. 6 dated October 17, 2012, prospectus supplement no. 7 dated November 1, 2012, prospectus supplement no. 8 dated November 14, 2012; prospectus supplement no. 9 dated November 15, 2012; prospectus supplement no. 10 dated November 15, 2012; prospectus supplement no. 11 dated December 3, 2012; prospectus supplement no. 12 dated December 6, 2012, and prospectus supplement no. 13 dated December 21, 2012 which are to be delivered with this prospectus supplement.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 4 of the original prospectus for more information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus or the prospectus to which it relates is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement No. 14 is January 8, 2013.

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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 8, 2013

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

Nevada

(State or other jurisdiction of  
incorporation)

1-12584

(Commission File No.)

13-3808303

(IRS Employer Identification  
No.)

3985 Research Park Drive, Suite 200, Ann Arbor, Michigan 48108  
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (734) 332-7800

(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:

- .. 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))
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Item 7.01. Regulation FD Disclosure

Jeffrey Riley, Chief Executive Officer and President of Synthetic Biologics, Inc. (the "Company"), will be making a presentation on January 9, 2013 at the Sixth Annual OneMedForum San Francisco 2013, as well as making several investor presentations during the next few weeks. In connection with the presentations, Mr. Riley intends to discuss the slide presentation furnished as Exhibit 99.1 hereto, which is incorporated herein by reference.

The slide presentation attached as Exhibit 99.1 to this Report includes "safe harbor" language pursuant to the Private Securities Litigation Reform Act of 1995, as amended, indicating that certain statements contained in the slide presentation or in the press release are "forward-looking" rather than historical.

The information included in this Item 7.01 and in Exhibit 99.1 shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing. The Company undertakes no duty or obligation to update or revise information included in this Report or any of the Exhibits.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

The following exhibit is being filed as part of this Report.

Exhibit Number	Description
99.1	Presentation materials to be provided at Synthetic Biologics, Inc.'s investor presentations

## 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.

SYNTHETIC BIOLOGICS, INC.

Date: January 8, 2013

By: /s/ C. Evan Ballantyne

Name: C. Evan Ballantyne

Title: Chief Financial Officer

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## EXHIBIT INDEX

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