SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K/A

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 1, 2012

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

Nevada 1-12584 13-3808303

(State or other jurisdiction of incorporation)

(Commission File No.) (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))

Item 4.02 Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review

(b) On May 3, 2012, Synthetic Biologics, Inc. ("the Company") filed a Current Report on Form 8-K disclosing that it had been informed by Berman & Company, P.A. ("Berman & Company"), its independent registered accounting firm, that during a regular Public Company Accounting Oversight Board ("PCAOB") inspection of Berman & Company, the PCAOB issued a comment that the audit opinion included in the Company's Annual Report on Form 10-K for the year ended December 31, 2011 (the "Original Audit Opinion") was issued by a partner at Berman & Company who was not authorized under the PCAOB rules to issue the opinion or act as the Company's named engagement partner with respect to the Form 10-K audit (or prior 2011 Form 10-Q interim reviews) after the original engagement partner rotated off of the account under the Securities and Exchange Commission's ("SEC") independence rules as it pertains to partner rotation (S-X Rule 2-01 -- Qualifications of Accountants).

On May 11, 2012, the Company filed an amendment to its Annual Report on Form 10-K with an audit opinion that was reissued by a licensed CPA at Berman & Company (the "Reissued Audit Opinion") who: (i) was the manager of the Company's December 31, 2011 audit, (ii) was recently made a partner of the firm, (iii) had performed most of the audit work on the December 31, 2011 audit after the original audit partner rotated off of the account, (iv) is serving as the Company's engagement partner on a going forward basis, (v) has taken full responsibility for the audit as the lead engagement partner on the audit, and (vi) performed a detailed review of all audit procedures related to the original audit for sufficiency. The review performed by the new audit partner did not result in any changes to the Company's financial statements or notes to the financial statements for the year ended December 31, 2011, other than the addition of the May 1, 2012 and May 10, 2012 disclosures in the subsequent event footnote to the financial statements. Also, the review did not result in any changes to the Company's other filings with the SEC. As such, the Company believes, as of the date of this Report, that its financial statements and notes to financial statements for the year ended December 31, 2011, as filed, and the accompanying Revised Audit Opinion can be relied upon.

On May 29, 2012, upon the request of the SEC staff, the Original Audit Opinion was withdrawn by Berman & Company because it was issued by a partner at Berman & Company who was not authorized under the PCAOB rules to issue the opinion or act as the Company's named engagement partner. As such, the Original Audit Opinion should not be relied upon.

The withdrawal of the Original Audit Opinion by Berman & Company is limited wholly to the Original Audit Opinion and does not in any matter effect, constitute or suggest any withdrawal of the Reissued Audit Opinion of Berman & Company filed on May 11, 2012, which as stated in the second paragraph, the Company believes can continue to be relied upon.

The Company has sought guidance from the SEC staff regarding this matter and intends to file a waiver request with the SEC's Corporation Finance Division to allow it to continue to be eligible to use Form S-3. Until such time as such guidance is received, the Company will not issue any shares under any of its outstanding registration statements on Form S-3.

The Chairman of the Company's Audit Committee as well as the Company's Chief Financial Officer have discussed with Berman & Company the subject matter giving rise to this Report on Form 8-K/A.

Item 9.01 Financial Statements and Exhibits.

(a) - (c)

N/A

(d) Exhibits.

7.1 Letter from Berman & Company to the Securities and Exchange Commission.

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: May 30, 2012 By: <u>/s/ C. Evan Ballantyne</u>

Name: C. Evan Ballantyne Title: Chief Financial Officer