



DIVISION OF
CORPORATION FINANCE

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

August 15, 2018

Steven A. Shallcross
Interim Chief Executive Officer and Chief Financial Officer
Synthetic Biologics, Inc.
9605 Medical Center Drive, Suite 270
Rockville, Maryland 20850

Re: Synthetic Biologics, Inc.
Registration Statement on Form S-3
Filed August 1, 2018
File No. 333-226500

Dear Mr. Shallcross:

We have limited our review of your registration statement to those issues we have addressed in our comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

Registration Statement on Form S-3 filed August 1, 2018

General

1. Please tell us how you are eligible to conduct your offering on Form S-3. We note that the aggregate market value of your voting and non-voting common equity held by non-affiliates appears to be less than \$75 million during the 60 days prior to filing the registration statement, so that you would not meet the requirement of General Instruction I.B.1 to use Form S-3. If you are relying on General Instruction I.B.4 to use Form S-3, please tell us how you have met the informational requirements to warrant holders required by General Instruction I.B.4(b) and (c). If you are relying on General Instruction I.B.6 to use Form S-3, please include the information on your prospectus cover page that is required by Instruction 7 to General Instruction I.B.6 of Form S-3.

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We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Irene Paik at 202-551-6553 or Christine Westbrook at 202-551-5019 with any questions.

Sincerely,

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Patrick J. Egan - Gracin & Marlow LLP