

August 14, 2015

## VIA EDGAR

United States Securities and Exchange Commission 100 F Street, NE Washington, D.C. 20549 Attention: Jeffrey P. Riedler Assistant Director

Re: Synthetic Biologics, Inc.

Registration Statement on Form S-3

Filed August 10, 2015 File No. 333-206267

To whom it may concern:

Synthetic Biologics, Inc. (the "Company") hereby requests acceleration of the effective date of the above-referenced Registration Statement so that it may become effective by 5:00 p.m. Eastern Daylight Time on August 18, 2015 or as soon thereafter as reasonably practicable.

In making this request, the Company acknowledges that: (i) should the Securities and Exchange Commission (the "Commission") or the staff, acting pursuant to delegated authority, declare the filing effective, it will not foreclose the Commission from taking any action with respect to the filing; (ii) the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and (iii) the Company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

SYNTHETIC BIOLOGICS, INC.

By: /s/ Steven A. Shallcross

Steven A. Shallcross, Chief Financial Officer