

SYNLOGIC, INC.
301 Binney Street, Suite 402
Cambridge, Massachusetts 02142

September 11, 2019

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549
Attention: Ms. Tonya K. Aldave
Mr. Justin Dobbie

Re: Synlogic, Inc.
Registration Statement on Form S-3
Filed August 8, 2019, as amended on August 30, 2019
File No. 333-233139 (the “Registration Statement”)
Acceleration Request

Ladies and Gentlemen:

In accordance with Rule 461 of Regulation C promulgated under the Securities Act of 1933, as amended, Synlogic, Inc. (the “Registrant”) hereby respectfully requests that the Securities and Exchange Commission accelerate the effective date of the above-referenced Registration Statement to Friday, September 13, 2019, at 4:00 p.m., Eastern Time, or as soon as thereafter practicable.

The cooperation of the staff in meeting the timetable described above is very much appreciated.

Please contact Matthew J. Gardella of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Registrant, at (617) 348-1735 with any questions regarding this request.

Very truly yours,

SYNLOGIC, INC.

/s/ Todd Shegog

Todd Shegog

Chief Financial Officer and Treasurer

cc: Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
 Matthew J. Gardella, Esq.
 Daniel A. Bagliebter, Esq.