

Synlogic, Inc.
301 Binney St., Suite 402
Cambridge, Massachusetts 02142

September 26, 2023

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: Cindy Polynice

Re: Synlogic, Inc.
Registration Statement on Form S-1
File No. 333-274421
Request for Acceleration

Dear Ms. Polynice:

Pursuant to Rule 461 of Regulation C promulgated under the Securities Act of 1933, as amended, Synlogic, Inc. (the "Registrant") hereby requests acceleration of the effective date of its Registration Statement on Form S-1 (File No. 333-274421), so that it may become effective at 5:00 p.m. (Washington, D.C. time) on September 28, 2023, or as soon thereafter as practicable.

Please call Daniel A. Bagliebter or Nishant M. Dharia of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Registrant, at (212) 692-6856 or (212) 692-8174 with any comments or questions regarding this matter.

Very truly yours,

Synlogic, Inc.

By: /s/ Aoife Brennan MB, BCh, BAO, MMSc
Name: Aoife Brennan MB, BCh, BAO, MMSc
Title: President and Chief Executive Officer

cc: *Synlogic, Inc.*
Brendan St. Amant

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
Daniel A. Bagliebter, Esq.
Nishant M. Dharia, Esq.