

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

October 23, 2017

Carlos Gutierrez-Ramos President and Chief Executive Officer Synlogic, Inc. 200 Sidney Street, Suite 320 Cambridge, MA 02139

Re: Synlogic, Inc.

Registration Statement on Form S-3

Filed October 13, 2017 File No. 333-220948

Dear Dr. Gutierrez-Ramos:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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.

Please contact Christine Westbrook at (202) 551-5019 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Matthew Gardella, Esq.