



DIVISION OF  
CORPORATION FINANCE

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

September 14, 2023

Aoife Brennan  
President, Chief Executive Officer and Director  
SYNLOGIC, INC.  
301 Binney Street, Suite 402  
Cambridge, MA 02142

**Re: SYNLOGIC, INC.**  
**Registration Statement on Form S-1**  
**Filed September 8, 2023**  
**File No. 333-274421**

Dear Aoife Brennan:

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 Cindy Polynice at 202-551-8707 with any questions.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences

cc: Nishant M. Dharia, Esq.