UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): June 5, 2018

SYNLOGIC, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

> 301 Binney St., Suite 402 Cambridge, MA (Address of principal executive offices)

001-37566 (Commission File Number) 26-1824804 (IRS Employer Identification No.)

02142 (Zip Code)

(617) 401-9975 Registrant's telephone number, including area code

Not applicable

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

Emerging Growth Company ⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers

On May 10, 2018, Synlogic, Inc. (the "Company") announced that Aoife M. Brennan, the Company's Chief Medical Officer, would also serve as Interim President and Chief Executive Officer while the Company commenced a search for a successor to its prior Chief Executive Officer, Jose Carlos Gutiérrez-Ramos.

On June 5, 2018, the Board of Directors of the Company (the "Board") approved compensation to Dr. Brennan in her role as Interim President and Chief Executive Officer. Pursuant to the terms of the amendment to Dr. Brennan's offer letter with the Company (the "Amendment"), Dr. Brennan will receive (i) an annual base salary of \$475,000 commencing as of May 10, 2018 and to be paid on a pro rata monthly basis for the period which Dr. Brennan serves as Interim President and Chief Executive Officer (the "Interim CEO Salary"), (ii) a target bonus of 40% of the Interim CEO Salary for the period which Dr. Brennan serves as Interim President and Chief Executive Officer and (iii) a one-time grant of an option to purchase an aggregate of 54,000 shares of the Company's common stock at an exercise price of \$9.55 (the fair market value on the date of the grant) which option will vest in equal monthly installments for 48 months beginning one month after the grant date and continuing for so long as Dr. Brennan continues to serve as Interim President and Chief Executive Officer.

The foregoing summary of the Amendment does not purport to be complete and is subject to, and qualified in its entirety by, the full text of the Amendment, which will be filed as an exhibit to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SYNLOGIC, INC.

By: /s/ Todd Shegog

Name:Todd ShegogTitle:Chief Financial Officer

Date: June 6, 2018