

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

January 5, 2018

Elizabeth H. Lacy General Counsel Assembly Biosciences, Inc. 11711 N. Meridian St., Suite 310 Carmel, Indiana 46032

Re: Assembly Biosciences, Inc.

Registration Statement on Form S-3

Filed December 29, 2017 File No. 333-222366

Dear Ms. Lacy:

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 Chris Edwards at (202) 551-6761 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Maggie L. Wong, Esq.