

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

September 5, 2019

Briggs W. Morrison Chief Executive Officer Syndax Pharmaceuticals, Inc. Building D, Floor 3 35 Gatehouse Drive Waltham, MA 02451

> Re: Syndax Pharmaceuticals, Inc, Registration Statement on Form S-3 Filed August 30, 2019 File No. 333-233564

Dear Dr. Morrison:

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 Tonya K. Aldave at (202) 551-3601 with any questions.

Sincerely,

Division of Corporation Finance Office of Healthcare & Insurance

cc: Jaime L. Chase, Esq.