

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

Office of

Corporation Finance

Healthcare & Insurance

cc: Jaime L. Chase, Esq.