



DIVISION OF
CORPORATION FINANCE

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

November 2, 2015

Via E-mail

Briggs W. Morrison, M.D.
Chief Executive Officer
Syndax Pharmaceuticals, Inc.
400 Totten Pond Road, Suite 110
Waltham, Massachusetts 02451

**Re: Syndax Pharmaceuticals, Inc.
Amendment No. 1 to
Draft Registration Statement on Form S-1
Correspondence Submitted October 19, 2015
CIK No. 0001395937**

Dear Dr. Morrison:

We have reviewed your correspondence and have the following comment. Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in a response.

After reviewing the information you provide in response to this comment and your amended draft registration statement or filed registration statement, we may have additional comments.

Notes to Condensed Consolidated Financial Statements

8. Convertible Preferred Stock, page F-48

1. Please refer to prior comment 2. We acknowledge the information provided in your response but continue to have difficulty in understanding the basis for your measurement of the convertible preferred stock at full redemption value. Please provide the following information:
 - Clarify whether Board approval for liquidation clause (i) requires a unanimous vote. If so, explain your basis for determining that holders of the preferred stock control this liquidation event; and
 - Explain your basis for determining that the holders of the preferred stock control the events described in liquidation clauses (ii) and (iii), which appear to be dependent upon an unrelated third party.

Briggs W. Morrison, M.D.
Syndax Pharmaceuticals, Inc.
November 2, 2015
Page 2

You may contact Frank Wyman at (202) 551-3648 or Joel Parker at (202) 551-3651 if you have questions regarding comments on the financial statements and related matters. Please contact Scot Foley at (202) 551-3383, Bryan Pitko at (202) 551-3203, or me at (202) 551-3675 with any other questions.

Sincerely,

/s/ Bryan J. Pitko for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Laura A. Berezin
Jaime L. Chase
Hogan Lovells US LLP
4085 Campbell Avenue, Suite 100
Menlo Park, California 94025