

January 22, 2015

VIA EDGAR

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attn: Jeffrey P. Riedler, Assistant Director

Re: Syndax Pharmaceuticals, Inc.

Application for Withdrawal of Registration Statement on Form S-1 (File No. 333-194845)

Dear Mr. Riedler:

Pursuant to Rule 477 promulgated under the Securities Act of 1933, as amended (the "Securities Act"), Syndax Pharmaceuticals, Inc. (the "Company") hereby requests that the Securities and Exchange Commission (the "Commission") consent to the withdrawal, effective as of the date hereof or at the earliest possible practicable date hereafter, of its Registration Statement on Form S-1 (File No. 333-194845), together with all amendments and exhibits thereto (collectively, the "Registration Statement"). The Registration Statement was originally filed with the Commission on March 27, 2014.

The Registration Statement was filed in connection with the proposed public offering by the Company of its common stock, which the Company has determined not to pursue at this time. The Registration Statement was never declared effective and no securities have been or will be issued pursuant thereto. Therefore, withdrawal of the Registration Statement is consistent with the public interest and the protection of investors, as contemplated by paragraph (a) of Rule 477.

The Company acknowledges that no refund will be made for fees paid to the Commission in connection with the filing of the Registration Statement; however, the Company requests, in accordance with Rule 457(p) under the Securities Act, that all fees paid to the Commission in connection with the filing of the Registration Statement be credited to the Company's account to be offset against the filing fee for any future registration statement or registration statements the Company may file with the Commission.

The Company hereby requests an order granting the withdrawal of the Registration Statement to be issued by the Commission as soon as possible. Please provide a copy of the order granting withdrawal of the Registration Statement to the undersigned at Syndax Pharmaceuticals, Inc., 400 Totten Pond Road, Suite 110, Waltham, Massachusetts 02451 or by email at jpallies@syndax.com, with a copy to the Company's counsel, Hogan Lovells US LLP, Attention: Laura A. Berezin, 4085 Campbell Avenue, Suite 100, Menlo Park, California 94025 or by email at jpallies@syndax.com, with a copy to the Company's counsel, Hogan Lovells US LLP, Attention: Laura A. Berezin, 4085 Campbell Avenue, Suite 100, Menlo Park, California 94025 or by email at jpallies@syndax.com, with a copy to the Company's counsel, Hogan Lovells US LLP, Attention: Laura A. Berezin, 4085 Campbell Avenue, Suite 100, Menlo Park, California 94025 or by email at jpallies@syndax.com, with a copy to the Company's counsel, Hogan Lovells US LLP, Attention: Laura A. Berezin, 4085 Campbell Avenue, Suite 100, Menlo Park, California 94025 or by email at jpallies@syndax.com, with a copy to the Company's counsel, Hogan Lovells US LLP, Attention: Laura A. Berezin, 4085 Campbell Avenue, Suite 100, Menlo Park, California 94025 or by email at jpallies@syndax.com, with a copy to the Company's counsel, Hogan Lovells US LLP, Attention: Laura A. Berezin, 4085 Campbell Avenue, Suite 100, Menlo Park, California 94025 or by email at jpallies@syndax.com, with a copy to the Company or the Company of the

If you have any questions or comments or require further information regarding this application of withdrawal of the Registration Statement, please do not hesitate to call or email Laura A. Berezin at (650) 463-4194 or Jaime L. Chase at (202) 637-5457.

Sincerely,

Syndax Pharmaceuticals, Inc.

/s/ John S. Pallies

By: John S. Pallies
Title: Chief Financial Officer