UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 17, 2017

SYNDAX PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (state or other jurisdiction of incorporation) 001-37708 (Commission File Number) 32-0162505 (I.R.S. Employer Identification No.)

Building D, Floor 3 35 Gatehouse Drive Waltham, Massachusetts (Address of principal executive offices)

02451 (Zip Code)

Registrant's telephone number, including area code: (781) 419-1400

	(Former name or former address, if changed since last report)		
Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following rovisions (see General Instruction A.2. below):			
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)		
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)		
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))		
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))		
ndicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§230.405 of his chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).			
Emerging growth company $\ oxtimes$			
	an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or exist financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.		

Item 1.01. Entry into a Material Definitive Agreement.

On October 17, 2017, Syndax Pharmaceuticals, Inc. (the "Company") entered into a Purchase Agreement with Biotechnology Value Fund, L.P. ("BVF") and certain entities affiliated with BVF (the "Purchase Agreement"). Pursuant to the Purchase Agreement, the Company issued directly to BVF in a registered direct offering (the "Offering") of 2,021,018 shares of the Company's common stock at a price per share of \$12.37 per share. The net proceeds from the Offering, after deducting estimated expenses, are expected to be approximately \$24.8 million. No underwriter or placement agent participated in the Offering.

The Offering was made pursuant to the Company's shelf registration statement previously filed with the Securities and Exchange Commission (the "SEC"), which the SEC declared effective on April 20, 2017 (File No. 333-217172), as supplemented by the prospectus supplement filed with the SEC on October 18, 2017.

The Company closed the Offering on October 20, 2017. Immediately following the closing of the Offering, the Company had a total of 24,389,929 shares of common stock issued and outstanding.

A copy of the opinion of Cooley LLP relating to the legality of the issuance and sale of the common stock in the Offering is filed herewith as Exhibit 5.1.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
5.1	Opinion of Cooley LLP
10.1	Purchase Agreement, dated October 17, 2017
23.1	Consent of Cooley LLP (included in Exhibit 5.1)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SYNDAX PHARMACEUTICALS, INC.

By: /s/ Briggs W. Morrison, M.D.

Briggs W. Morrison, M.D. Chief Executive Officer

Dated: October 20, 2017



Robert W. Phillips +1 415 693 2020 rphillips@cooley.com

October 20, 2017

Syndax Pharmaceuticals, Inc. 35 Gatehouse Drive, Building D, Floor 3 Waltham, MA 02451

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the offering by Syndax Pharmaceuticals, Inc., a Delaware corporation (the "Company"), of 2,021,018 shares (the "Shares") of the Company's common stock, par value \$0.0001 (the "Common Stock") pursuant to a Registration Statement on Form S-3 (Registration Statement No. 333- 217172) (the "Registration Statement"), filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Act"), the prospectus included within the Registration Statement (the "Base Prospectus"), and the prospectus supplement dated October 17, 2017, filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations of the Act (the "Prospectus Supplement"). The Base Prospectus and the Prospectus Supplement are collectively referred to as the "Prospectus." The Shares are to be sold by the Company as described in the Registration Statement and the Prospectus.

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Company's certificate of incorporation and bylaws, as currently in effect, and the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals and the conformity to originals of all documents submitted to us as copies thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought to independently verify such matters.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware. We express no opinion as to whether the laws of any particular jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable.

COOLEY LLP 101 CALIFORNIA STREET 5TH FLOOR SAN FRANCISCO, CA 94111-5800 T: (415) 693-2000 F: (415) 693-2222 COOLEY.COM



Syndax Pharmaceuticals, Inc. October 20, 2017 Page Two

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus and to the filing of this opinion as an exhibit to a Current Report on Form 8-K to be filed with the Commission for incorporation by reference into the Registration Statement. This opinion is expressed as of the date hereof, and we disclaim any responsibility to advise you of any changes in the facts stated or assumed herein or of any changes in applicable law.

Sincerely,

Cooley LLP

By: /s/ Robert W. Phillips

Robert W. Phillips

COOLEY LLP 101 CALIFORNIA STREET 5TH FLOOR SAN FRANCISCO, CA 94111-5800 T: (415) 693-2000 F: (415) 693-2222 COOLEY.COM

PURCHASE AGREEMENT

THIS PURCHASE AGREEMENT (the "**Agreement**") is made as of the 17th day of October, 2017, by and among Syndax Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), and the investors set forth on the signature pages hereto (the "**Investors**").

THE PARTIES HEREBY AGREE AS FOLLOWS:

1. Purchase and Sale of Stock.

1.1 Sale and Issuance of Common Stock.

- (a) On or prior to the Closing (as defined below), the Company shall have authorized the sale and issuance to the Investors of an aggregate of 2,021,018 shares of the Company's common stock, \$0.0001 par value (the "Common Stock") at a purchase price of \$12.37 per share (the "Per Share Purchase Price").
- (b) Subject to the terms and conditions of this Agreement, each Investor, severally and not jointly, agrees to purchase at the Closing and the Company agrees to sell and issue to such Investor at the Closing the number of shares of the Company's Common Stock set forth on such Investor's signature page hereof at the Per Share Purchase Price (the "Stock").
- 1.2 Closing. The purchase and sale of the Stock shall take place at the offices of Cooley LLP located at 3175 Hanover Street, Palo Alto, California 94304 at 10:00 A.M. Pacific Time, on October 20, 2017, or at such other time and place as the Company and the Investors may mutually agree upon in writing (which time and place are designated as the "Closing"). At the Closing, the Company shall cause (a) its transfer agent to deliver to each Investor, via electronic book-entry, the Stock that such Investor is purchasing against payment of the purchase price therefor by wire transfer of immediately available funds to an account specified by the Company in writing to the Investors and (b) its outside legal counsel, Cooley LLP, to deliver to each Investor a legal opinion in a form to be agreed to between the Company and the Investors.

2. Representations and Warranties of the Company. The Company hereby represents and warrants to each Investor that:

2.1 The Company meets the requirements for use of Form S-3 under the Securities Act of 1933, as amended (the "Securities Act"), and has filed with the Securities and Exchange Commission (the "Commission") a registration statement on such Form (Registration File No. 333-217172), which became effective as of April 20, 2017, for the registration under the Securities Act of the Stock. Such registration statement meets the requirements set forth in Rule 415(a)(1)(x) under the Securities Act and complies with said Rule. The Company will file with the Commission pursuant to Rule 424(b) under the Securities Act, and the rules and regulations (the "Rules and Regulations") of the Commission promulgated thereunder, a supplement to the form of prospectus filed with the Commission on April 6, 2017. Such registration statement, including the exhibits thereto, as amended at the date of this Agreement, is hereinafter called the "Registration Statement"; such prospectus in the form filed with the Commission on April 6, 2017, is hereinafter called the "Base Prospectus"; and the supplemented form of prospectus, in

the form in which it will be filed with the Commission pursuant to Rule 424(b) (including the Base Prospectus as so supplemented) is hereinafter called the "Prospectus Supplement." Any reference herein to the Registration Statement, the Base Prospectus or the Prospectus Supplement shall be deemed to refer to and include the documents incorporated by reference therein (the "Incorporated Documents") pursuant to Item 12 of Form S-3 which were filed under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on or before the date of this Agreement, or the issue date of the Base Prospectus or the Prospectus Supplement, as the case may be; and any reference herein to the terms "amend," "amendment" or "supplement" with respect to the Registration Statement, the Base Prospectus or the Prospectus Supplement include the filing of any document under the Exchange Act after the date of this Agreement, or the issue date of the Base Prospectus or the Prospectus Supplement, as the case may be, deemed to be incorporated therein by reference. All references in this Agreement to financial statements and schedules and other information which is "contained," "included," "described," "set forth" or "stated" in the Registration Statement, the Base Prospectus or the Prospectus Supplement (and all other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information which is or is deemed to be incorporated by reference in the Registration Statement, the Base Prospectus or the Prospectus Supplement, as the case may be. No stop order suspending the effectiveness of the Registration Statement or the use of the Base Prospectus or the Prospectus Supplement has been instituted or, to the Company's knowledge, is threatened by the Commission.

2.2 The Registration Statement contains all exhibits and schedules as required by the Securities Act. Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the Securities Act and the Exchange Act and the applicable Rules and Regulations and did not and, as amended or supplemented, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Base Prospectus and the Prospectus Supplement, each as of its respective date, complied in all material respects with the Securities Act and the Exchange Act and the applicable Rules and Regulations. Each of the Base Prospectus and the Prospectus Supplement, as amended or supplemented, did not and will not contain as of the date thereof any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. The Incorporated Documents, when they were filed with the Commission, conformed in all material respects to the requirements of the Exchange Act and the applicable Rules and Regulations and none of such Incorporated Documents, when they were filed with the Commission, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and any further documents so filed and incorporated by reference in the Base Prospectus or Prospectus Supplement, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act and the applicable Rules and Regulations, as applicable, and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumsta

omitted from the Prospectus Supplement or any amendment thereof or supplement thereto in reliance upon and in conformity with information furnished in writing to the Company by or on behalf of any Investor specifically for use in the Registration Statement or the Prospectus Supplement. No post-effective amendment to the Registration Statement reflecting any facts or events arising after the date thereof which represent, individually or in the aggregate, a fundamental change in the information set forth therein is required to be filed with the Commission. There are no documents required to be filed with the Commission in connection with the transaction contemplated hereby that have not been filed as required pursuant to the Securities Act or will not be filed within the requisite time period.

- **2.3** Neither the Company nor any of its directors and officers has distributed and none of them will distribute, prior to the Closing, any offering material in connection with the offering and sale of the Stock other than the Base Prospectus, the Prospectus Supplement, the Registration Statement, copies of the documents incorporated by reference therein and any other materials permitted by the Securities Act.
- **2.4** The Company has been duly organized and is validly existing as a corporation and is in good standing under the laws of the State of Delaware as of the date hereof, and is duly qualified to do business and as in good standing in each other jurisdiction in which its ownership or lease of property or the conduct of business requires such qualification, except where the failure to qualify, singularly or in the aggregate, would not have or reasonably be expected to result in a material adverse effect on the business, properties, operations, condition (financial or otherwise) or results of operations of the Company taken as a whole, or in its ability to perform its obligations under this Agreement (a "**Material Adverse Effect**"). All direct and indirect subsidiaries of the Company ("**Subsidiaries**") are duly organized and in good standing under the laws of the place of organization or incorporation, and each Subsidiary is in good standing in each jurisdiction in which its ownership or lease of property or the conduct of business requires such qualification, except where the failure to qualify would not have a Material Adverse Effect on the assets, business or operations of the Company taken as a whole.
- 2.5 The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by the Agreement and otherwise to carry out its obligations hereunder. The execution and delivery of the Agreement to which it is a party by the Company and the consummation by it of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of the Company and no further corporate consent or action is required to be obtained by the Company, its Board of Directors or its stockholders in connection therewith other than in connection with the listing applications with respect to the listing of the Shares. The Agreement has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof, will constitute the legally valid and binding obligation of the Company enforceable against the Company in accordance with its terms except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

- **2.6** The Stock has been duly authorized for issuance and sale pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement, will be validly issued, fully paid and non-assessable, and free and clear of all liens imposed by the Company.
- 2.7 The Company and its Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement), or other similar anti-takeover provision pursuant to the Amended and Restated Certificate of Incorporation, the Amended and Restated Bylaws or the laws of its state of incorporation that is or could become applicable to the Investors as a result of the Investors and the Company fulfilling their obligations or exercising their rights pursuant to the Agreement and the transactions contemplated hereby, including without limitation, as a result of the Company's issuance of the Common Stock and the Investors' ownership of the Common Stock. All such anti-takeover provisions in effect as of the date hereof are summarized generally in the Base Prospectus under the caption, "Description of Capital Stock Anti-Takeover Provisions."
- **2.8** All issued and outstanding securities of the Company issued prior to the transactions contemplated by this Agreement have been duly authorized and validly issued and are fully paid and non-assessable; the holders thereof have no rights of rescission with respect thereto, and are not subject to personal liability by reason of being such holders; and none of such securities were issued in violation of the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company.
- **2.9** The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock pursuant to the Exchange Act nor has the Company received any notification that the Commission is currently contemplating terminating such registration. The Company is currently in compliance with all applicable NASDAQ listing and maintenance requirements and, except as disclosed in its filings with the Commission, the Company has not, in the 12 months preceding the date hereof, received notice from NASDAQ to the effect that the Company is not in compliance with such listing or maintenance requirements.
- 3. Representations and Warranties of the Investor. Each Investor hereby represents and warrants to the Company that:
- **3.1** The Investor has full right, power and authority to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement. This Agreement constitutes a valid and binding obligation of the Investor enforceable against the Investor in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

3.2 The Investor agrees that until 11:59 p.m. Eastern time on November 11, 2017, neither the Investor nor any of its affiliates shall offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of in any manner, either directly or indirectly, any Stock purchased under this Agreement or any securities of the Company currently owned by the Investor, other than transfers of securities between and among the Investor and any one or more of its affiliates.

4. Miscellaneous.

- **4.1 Integration**. After this transaction, the Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities such that the rules of The Nasdaq Stock Market would require stockholder approval of this transaction prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction.
- **4.2 Successors and Assigns.** Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.
- **4.3 Governing Law.** This Agreement shall be governed by and construed under the laws of the State of New York as applied to agreements among New York residents entered into and to be performed entirely within New York.
- **4.4 Execution**. This Agreement may be executed in two (2) or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature on this Agreement or any instrument pursuant to Section 4.8 hereof is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a legally valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original thereof.
- **4.5 Titles and Subtitles.** The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.
- **4.6 Notices.** Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given upon personal delivery to the party to be notified or upon deposit with the United States Post Office, by registered or certified mail, postage prepaid and addressed to the party to be notified at the address indicated for such party on the signature page hereof, or at such other address as such party may designate by ten (10) days' advance written notice to the other parties.

- **4.7 Finder's Fee.** Each party represents that it neither is nor will be obligated for any finders' fee or commission in connection with this transaction. Each Investor agrees to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finders' fee (and the costs and expenses of defending against such liability or asserted liability) for which such Investor or any of its officers, partners, employees, or representatives is responsible. The Company agrees to indemnify and hold harmless each Investor from any liability for any commission or compensation in the nature of a finders' fee (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.
- **4.8 Amendments and Waivers.** Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and each Investor.
- **4.9 Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.
- **4.10 Entire Agreement.** This Agreement and the other documents referred to herein constitute the entire agreement among the parties and no party shall be liable or bound to any other party in any manner by any warranties, representations, or covenants except as specifically set forth herein or therein.
- 4.11 Indemnification. Subject to the provisions of this Section 4.11, the Company will indemnify and hold each Investor and its directors, officers, shareholders, members, partners, employees and agents (and any other persons with a functionally equivalent role of a person holding such titles notwithstanding a lack of such title or any other title), each person who controls such Investor (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners or employees (and any other persons with a functionally equivalent role of a person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a "Investor Party") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Investor Party may suffer or incur as a result of or relating to (a) any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or (b) any action instituted against an Investor, or any of them or their respective affiliates, by any stockholder of the Company who is not an affiliate of such Investor or any governmental or regulatory agency, with respect to any of the transactions contemplated by this Agreement (unless such action is based upon a material breach of such Investor's representations, warranties or covenants in this Agreement or any material violations by the Investor of state or federal securities laws or any conduct by such Investor which constitutes fraud, gross negligence, willful misconduct or malfeasance). If any action shall be brought against any Investor Party in respect of which indemnity may be sought pursuant to this Agreement, such Investor Party shall promptly notify the Company in writing, and the Company shall have the right to a

defense thereof with counsel of its own choosing reasonably acceptable to the Investor Party. Any Investor Party shall have the right to engage separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Investor Party except to the extent that (i) the engagement thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of such separate counsel, a material conflict on any material issue between the position of the Company and the position of such Investor Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Investor Party under this Agreement (i) for any settlement by a Investor Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed or (ii) to the extent, but only to the extent, that a loss, claim, damage or liability is attributable to any Investor Party's breach of any of the representations, warranties, covenants or agreements made by such Investor Party in this Agreement. To the extent that an Investor Party wishes to seek indemnification under this Section 4.11, such Investor Party must provide the Company with written notice asserting a claim under this Section 4.11, with such notice to be provided within one year from the Closing. If an Investor Party fails to provide such written notice within this one year period, the Investor Party shall no longer be entitled to indemnification by the Company hereunder.

- **4.12 Expenses.** Each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement; provided, however, that the Company shall pay the Investors' reasonable legal fees and expenses incurred in connection with the transactions contemplated by this Agreement (including any post-Closing expenses) up to an aggregate amount of \$25,000. The Company shall pay all transfer agent fees, stamp taxes and other taxes and duties levied in connection with the delivery of the Common Stock to the Investors.
- **4.13 Construction**. The parties agree that each of them and/or their respective counsel has reviewed and had an opportunity to revise the Agreement and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Agreement or any amendments hereto.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Purchase Agreement as of the day and year first above written.

SYNDAX PHARMACEUTICALS, INC.

By: /s/ Luke J. Albrecht

Name: Luke J. Albrecht

Title: General Counsel and Corporate Secretary

Address: 35 Gatehouse Drive, Building D, Floor 3

Waltham, Massachusetts

[Company Signature Page to Purchase Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Purchase Agreement as of the day and year first above written. Name of Investor: Biotechnology Value Fund, L.P. Signature of Authorized Signatory of Investor: /s/ Mark Lampert Name of Authorized Signatory: Mark Lampert Title of Authorized Signatory: President of BVF, Inc., itself GP of BVF Partners L.P., itself GP of Biotechnology Value Fund, L.P. Email Address of Authorized Signatory: [1 Address for Notice of Investor: One Sansome Street, 30th Floor, San Francisco, CA 94104 Telephone: (415) 525-8890 With a copy to (which shall not constitute notice): Gibson, Dunn & Crutcher, LLP 555 Mission Street, Suite 3000 San Francisco, CA 94105 Attn: Ryan A. Murr Address for Delivery of Stock for Investor (if not same as address for notice): The Depository Trust Company 570 Washington Blvd — 5th floor Jersey City, NJ 07310

Number of Shares of Common Stock to Be Purchased: 947,350

Attention: BNY Mellon/Branch Deposit Department for the account of [

Total Purchase Price: \$11,718,719.50

IN WITNESS WHEREOF, the parties hereto have executed this Purchase Agreement as of the day and year first above written. Name of Investor: Biotechnology Value Fund II, L.P. Signature of Authorized Signatory of Investor: /s/ Mark Lampert Name of Authorized Signatory: Mark Lampert Title of Authorized Signatory: President of BVF, Inc., itself GP of BVF Partners L.P., itself GP of Biotechnology Value Fund II, L.P. Email Address of Authorized Signatory: [Address for Notice of Investor: One Sansome Street, 30th Floor, San Francisco, CA 94104 Telephone: (415) 525-8890 With a copy to (which shall not constitute notice): Gibson, Dunn & Crutcher, LLP 555 Mission Street, Suite 3000 San Francisco, CA 94105 Attn: Ryan A. Murr Address for Delivery of Stock for Investor (if not same as address for notice):

The Depository Trust Company

570 Washington Blvd — 5th floor

Jersey City, NJ 07310

Attention: BNY Mellon/Branch Deposit Department for the account of [

Number of Shares of Common Stock to Be Purchased: 629,906

Total Purchase Price: \$7,791,937.22

IN WITNESS WHEREOF, the parties hereto have executed this Purchase Agreement as of the day and year first above written. Name of Investor: Biotechnology Value Trading Fund OS, L.P. Signature of Authorized Signatory of Investor: /s/ Mark Lampert Name of Authorized Signatory: Mark Lampert Title of Authorized Signatory: President of BVF, Inc., itself GP of BVF Partners L.P., itself Sole Member of BVF Partners OS, Ltd., itself GP of Biotechnology Value Trading Fund OS, L.P.] Email Address of Authorized Signatory: [Address for Notice of Investor: One Sansome Street, 30th Floor San Francisco, CA 94104 Telephone: (415) 525-8890 With a copy to (which shall not constitute notice): Gibson, Dunn & Crutcher, LLP 555 Mission Street, Suite 3000 San Francisco, CA 94105 Attn: Ryan A. Murr Address for Delivery of Stock for Investor (if not same as address for notice): The Depository Trust Company

570 Washington Blvd — 5th floor

Jersey City, NJ 07310

Attention: BNY Mellon/Branch Deposit Department for the account of [

Number of Shares of Common Stock to Be Purchased: 169,388

Total Purchase Price: \$2,095,329.56

IN WITNESS WHEREOF, the parties hereto have executed this Purchase Agreement as of the day and year first above written. Name of Investor: Investment 10, L.L.C. Signature of Authorized Signatory of Investor: /s/ Mark Lampert Name of Authorized Signatory: Mark Lampert Title of Authorized Signatory: President of BVF, Inc., itself GP of BVF Partners L.P., itself the investment advisor of Investment 10, LLC. Email Address of Authorized Signatory: [1 Address for Notice of Investor: One Sansome Street, 30th Floor, San Francisco, CA 94104 Telephone: (415) 525-8890 With a copy to (which shall not constitute notice): Gibson, Dunn & Crutcher, LLP 555 Mission Street, Suite 3000 San Francisco, CA 94105 Attn: Ryan A. Murr Address for Delivery of Stock for Investor (if not same as address for notice): The Depository Trust Company 570 Washington Blvd — 51st floor

Number of Shares of Common Stock to Be Purchased: 101,858

Attention: BNY Mellon/Branch Deposit Department for the account of [

Total Purchase Price: \$1,259,983.46

Jersey City, NJ 07310

IN WITNESS WHEREOF, the parties hereto have executed this Purchase Agreement as of the day and year first above written. Name of Investor: MSI BVF SPV, L.L.C. Signature of Authorized Signatory of Investor: /s/ Mark Lampert Name of Authorized Signatory: Mark Lampert Title of Authorized Signatory: President of BVF, Inc., itself GP of BVF Partners L.P., itself attorney-in-fact for MSI BVF SPV, L.L.C. Email Address of Authorized Signatory: [1 Address for Notice of Investor: One Sansome Street, 30th Floor, San Francisco, CA 94104 Telephone: (415) 525-8890 With a copy to (which shall not constitute notice): Gibson, Dunn & Crutcher, LLP 555 Mission Street, Suite 3000 San Francisco, CA 94105 Attn: Ryan A. Murr Address for Delivery of Stock for Investor (if not same as address for notice): BNP Paribas Prime Brokerage

787 Seventh Avenue, 8th Floor

New York, NY 10019

Telephone: (212) 471-6836

Attention: Jose Nevarez

Number of Shares of Common Stock to Be Purchased: 172,516

Total Purchase Price: \$2,134,022.92