

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1
to

FORM S-1
REGISTRATION STATEMENT
Under
The Securities Act of 1933

Applied Therapeutics, Inc.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

81-3405262
(I.R.S. Employer
Identification No.)

545 5th Avenue, Suite 1400
New York, NY 10017
(212) 220 - 9226
(Address, including zip code, and telephone number, including
area code, of Registrant's principal executive offices)

Shoshana Shendelman, Ph.D.
President and Chief Executive Officer
545 5th Avenue, Suite 1400
New York, NY 10017
(212) 220 - 9226
(Name, address, including zip code, and telephone number, including
area code, of agent for service)

Copies to:

Andrea L. Nicolas
Michael J. Schwartz
Skadden, Arps, Slate, Meagher & Flom LLP
4 Times Square
New York, NY 10036
(212) 735-3000

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
Emerging growth company

If 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 revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee(3)
Common stock, \$0.0001 par value per share	1,380,344	\$27,870,853.02	\$3,617.90

(1) Pursuant to Rule 416(a), this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or similar transaction.

(2) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, as amended (the "Securities Act"), using the average of the high and low prices of the Registrant's common stock as reported on The Nasdaq Global Market on December 12, 2019, which was approximately \$20.1927 per share.

(3) The Registrant previously paid this amount in connection with a prior filing of the registration statement.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a) may determine.

EXPLANATORY NOTE

Applied Therapeutics, Inc., the registrant whose name appears on the cover of this registration statement, is filing this Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-235504), or the Registration Statement, to file Exhibit 5.1 and restate the list of exhibits set forth in Item 16 of Part II of the Registration Statement. Accordingly, this Amendment consists only of the facing page, this explanatory note, Part II of the Registration Statement, the signature page to the Registration Statement and the filed exhibit. The prospectus is unchanged and has been omitted.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses payable by the registrant in connection with the sale of our common stock being registered. All amounts are estimates except for the Securities and Exchange Commission, or SEC, registration fee, the Financial Industry Regulatory Authority, or FINRA, filing fee and The Nasdaq Global Select Market, or Nasdaq, listing fee.

<u>Item</u>	<u>Amount</u>
SEC registration fee	\$ 3,618
FINRA filing fee	0
Nasdaq listing fee	0
Printing expenses	75,000
Legal fees and expenses	50,000
Accounting fees and expenses	30,000
Transfer agent fees and expenses	0
Miscellaneous expenses	10,000
Total	<u>\$ 168,618</u>

Item 14. Indemnification of Directors and Officers.

As permitted by Section 102 of the Delaware General Corporation Law, we have adopted provisions in our amended and restated certificate of incorporation and bylaws that limit or eliminate the personal liability of our directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. Our amended and restated certificate of incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws provide that:

- we may indemnify our directors, officers and employees to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions;
- we may advance expenses to our directors, officers and employees in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and
- the rights provided in our bylaws are not exclusive.

Our amended and restated certificate of incorporation and our amended and restated bylaws provide for the indemnification provisions described above and elsewhere herein. We have entered or will enter into, and intend to continue to enter into, separate indemnification agreements with our directors and officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements generally require us, among other things, to indemnify our officers and directors against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also generally require us to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of our officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act.

The Registrant has purchased and currently intends to maintain insurance on behalf of each and every person who is or was a director or officer of the Registrant against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information as to all securities we have sold since January 20, 2016 (date of inception) up to the date of the prospectus that is a part of this registration statement:

- (1) We granted options to purchase an aggregate of 2,679,820 shares of common stock, with exercise prices ranging from \$0.04 to \$4.70 per share, to certain of our employees, directors and consultants pursuant to our 2016 Equity Incentive Plan, as amended, or the 2016 Plan. Of these options, options to purchase 55,081 shares have been exercised for cash consideration in the aggregate amount of \$46,287.92, and options to purchase 2,624,738 shares of common stock remain outstanding.
- (2) In January 2016, we issued an aggregate of 4,972,373 shares of common stock to our President, Chief Executive Officer and our co-founder for a cash contribution of \$1.00.
- (3) In February 2017, we issued 486,077 shares of common stock to the Trustees of Columbia University in the City of New York, or Columbia University, as partial consideration of Columbia University's execution and delivery to us of that certain license agreement, representing a fair value of \$0.5 million.
- (4) Between January and March 2017, we issued and sold an aggregate of 3,093,898 shares of our Series A convertible preferred stock to 36 accredited investors and certain members of our board of directors at a price per share of \$2.26 for an aggregate purchase price of \$7.0 million.
- (5) In March 2017, we issued warrants exercisable for up to an aggregate of 309,389 shares of our common stock, at an exercise price of \$2.49 per share to affiliates of Brookline Capital Markets, a division of CIM Securities, LLC, pursuant to that certain placement agency agreement, dated October 7, 2016, as amended and restated on November 23, 2016.
- (6) In February 2018, we issued an aggregate of \$6.0 million of our convertible notes to 22 accredited investors and certain members of our board of directors.
- (7) In November 2018, we issued warrants exercisable for up to an aggregate of 76,847 shares of our common stock, at an exercise price of \$6.59 per share to affiliates of Brookline Capital Markets, a division of CIM Securities, LLC, pursuant to that certain placement agency agreement, dated January 18, 2018.

- (8) Between November and February 2019, we issued and sold an aggregate of 4,444,773 shares of our Series B convertible preferred stock to 28 accredited investors and certain members of our board of directors. We issued 1,097,721 shares of our Series B convertible preferred stock upon cancellation of indebtedness, for an aggregate purchase price at the time of conversion, including interest, of \$6.6 million and we sold 3,347,052 shares of our Series B convertible preferred stock at a price per share of \$7.49 for an aggregate purchase price of approximately \$25.1 million.
- (9) In April 2019, we issued warrants exercisable for up to an aggregate of 96,128 shares of our common stock, at an exercise price of \$8.24 per share, to affiliates of Brookline Capital Markets, a division of CIM Securities, LLC, pursuant to that certain placement agency agreement, dated August 28, 2018.
- (10) In November, 2019, we issued and sold an aggregate of 1,380,344 shares of our common stock to 12 accredited investors at a per share price of \$14.50, for an aggregate purchase price of approximately \$20 million.

The offers, sales and issuances of the securities described in paragraph (1) were deemed to be exempt from registration under the Securities Act in reliance on Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of such securities were employees, directors or bona fide consultants of the Registrant and received the securities under the 2016 Plan. Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about the Registrant.

The offers, sales and issuances of the securities described in paragraphs (2) through (9) above were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act and Rule 506 promulgated under Regulation D as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act and had adequate access, through employment, business or other relationships, to information about the Registrant. No underwriters were involved in these transactions.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The exhibits listed below are filed as part of this registration statement.

Exhibit Number	Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
3.1+	Amended and Restated Certificate of Incorporation of the Registrant, as amended.	10-Q	001-38898	3.1	August 12, 2019
3.2+	Amended and Restated Bylaws of the Registrant.	10-Q	001-38898	3.2	August 12, 2019
4.1+	Registration Rights Agreement, dated November 7, 2019, by and among the Company and the Purchasers.	8-K	001-38898	10.2	November 12, 2019
4.2+	Form of Common Stock Certificate of the Registrant.	10-Q	001-38898	4.2	August 12, 2019
4.3+	Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain of its stockholders, dated November 5, 2018.	S-1/A	333-230838	4.2	April 29, 2019
4.4+	Form of Warrant, issued to affiliates of Brookline Capital Markets, a division of CIM Securities, LLC, on March 13, 2017.	S-1/A	333-230838	4.3	April 29, 2019
4.5+	Form of Warrant, issued to affiliates of Brookline Capital Markets, a division of CIM Securities, LLC, on November 5, 2018.	S-1/A	333-230838	4.4	April 29, 2019
4.6+	Form of Warrant, issued to affiliates of Brookline Capital Markets, a division of CIM Securities, LLC, on April 9, 2019.	S-1/A	333-230838	4.5	April 29, 2019
5.1	Opinion of Skadden, Arps, Slate, Meagher & Flom LLP.	—	—	—	—
10.1*+	Form of Indemnity Agreement by and between the Company and its directors and executive officers.	S-1/A	333-230838	10.1	April 29, 2019
10.2*+	2019 Equity Incentive Plan.	S-1/A	333-230838	10.2	April 29, 2019
10.3*+	Forms of Option Grant Notice and Option Agreement under 2019 Equity Incentive Plan.	S-1/A	333-230838	10.3	April 29, 2019
10.4*+	Form of Restricted Stock Unit Grant Notice and Unit Award Agreement under 2019 Equity Incentive Plan.	S-1/A	333-230838	10.4	April 29, 2019
10.5*+	2016 Equity Incentive Plan, as amended.	S-1/A	333-230838	10.5	April 29, 2019
10.6*+	Forms of Stock Option Agreement under the 2016 Equity Incentive Plan, as amended.	S-1/A	333-230838	10.6	April 29, 2019
10.7*+	2019 Employee Stock Purchase Plan.	S-1/A	333-230838	10.7	April 29, 2019
10.8†+	Exclusive License Agreement by and between the Registrant and The Trustees of Columbia University in the City of New York, dated October 26, 2016.	S-1/A	333-230838	10.11	April 29, 2019
10.9*+	Employment Agreement, by and between the Company Riccardo Perfetti, dated August 28, 2019.	10-Q	001-38898	10.1	November 13, 2019
10.10*+	Employment Agreement by and between the Company and Mark Vignola, dated August 29, 2019.	10-Q	001-38898	10.2	November 13, 2019

Exhibit Number	Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
10.11*+	Separation Agreement, by and between the Company and Les Funtleyder, dated May 28, 2019.	10-Q	001-38898	10.7	August 12, 2019
23.1+	Consent of Independent Registered Public Accounting Firm.	—	—	—	—
23.2	Consent of Skadden, Arps, Slate, Meagher & Flom LLP (included in Exhibit 5.1).	—	—	—	—
24.1+	Power of Attorney (included on signature page).	—	—	—	—
101.INS	XBRL Instance Document	—	—	—	—
101.SCH	XBRL Taxonomy Extension Schema	—	—	—	—
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	—	—	—	—
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	—	—	—	—
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	—	—	—	—
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	—	—	—	—

* Indicates a management contract or compensatory plan.

† Portions of this exhibit (indicated by asterisks) have been omitted.

+ Previously filed.

(b) Financial Statement Schedules.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings.

The undersigned hereby undertakes:

1. to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement to:
 - a. include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
 - b. reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424 (b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

- c. to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration;
2. that for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;
3. to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of this offering; and
4. that for purposes of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons, the registrant has been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling otherwise precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in New York, New York, on December 19, 2019.

APPLIED THERAPEUTICS, INC.

By: _____ /s/ SHOSHANA SHENDELMAN

Shoshana Shendelman
President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Shoshana Shendelman and Mark J. Vignola, and each of them severally, as his or her true and lawful attorney-in-fact and agent, each acting alone with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign this Registration Statement on Form S-1 to be filed in connection with the offering of securities of Applied Therapeutics, Inc., and any and all amendments (including post-effective amendments) to this registration statement, and any subsequent registration statement filed pursuant to Rule 462 under the Securities Act of 1933, as amended, and to file the same with exhibits thereto, and the other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as they might or could do in person, hereby ratifying and confirming all that said attorney-in-fact or his substitutes, each acting alone, may lawfully do or cause to be done by virtue thereof.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated. Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and as of the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
_____ /s/ SHOSHANA SHENDELMAN Shoshana Shendelman, Ph.D.	President and Chief Executive Officer (Principal Executive Officer)	December 19, 2019
* _____ Mark J. Vignola, Ph.D.	Chief Financial Officer (Principal Financial and Accounting Officer)	December 19, 2019
* _____ Les Funtleyder	Director	December 19, 2019
* _____ Teena Lerner, Ph.D.	Director	December 19, 2019

<u>Name</u>	<u>Title</u>	<u>Date</u>
* _____ Stacy Kanter	Director	December 19, 2019
* _____ Joel S. Marcus	Director	December 19, 2019
* _____ Jay S. Skyler, M.D., MACP	Director	December 19, 2019
*By _____ /s/ SHOSHANA SHENDELMAN Shoshana Shendelman <i>As Attorney-in-Fact</i>		

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[POWER OF ATTORNEY](#)

December 20, 2019

Applied Therapeutics, Inc.
545 5th Avenue, Suite 1400
New York, NY 10173

Re: Applied Therapeutics, Inc.
Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as special counsel to Applied Therapeutics, Inc., a Delaware corporation (the "Company"), in connection with the registration for resale under the Securities Act of 1933 (the "Securities Act"), of an aggregate of 1,380,344 shares of the Company's common stock, par value \$0.0001 per share, that are issued and outstanding (the "Shares"), on behalf of the stockholders set forth in Exhibit A hereto (the "Selling Stockholders"), pursuant to the Registration Statement (as defined below). We have been advised that the Shares were issued pursuant to a Securities Purchase Agreement (the "Securities Purchase Agreement"), dated as of November 7, 2019 by and among the Company and the Selling Stockholders.

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K of the General Rules and Regulations under the Securities Act.

In rendering the opinions stated herein, we have examined and relied upon the following:

- (a) the registration statement on Form S-1 (File No. 333-235504) of the Company relating to the Shares filed on December 13, 2019 with the Securities and Exchange Commission (the "Commission") under the Securities Act, and Pre-Effective Amendment No. 1 thereto, including the information deemed to be a part of the registration statement pursuant to Rule 430A of the Rules and Regulations (such registration statement being hereinafter referred to as the "Registration Statement");
- (b) the prospectus, dated December 20, 2019 (the "Prospectus"), which forms a part of and is included in the Registration Statement;
- (c) an executed copy of the Securities Purchase Agreement;
- (d) the Registration Rights Agreement, dated November 7, 2019, by and among the Company and the Selling Stockholders;
- (e) a copy of the Company's Amended and Restated Certificate of Incorporation, filed as Exhibit 3.1 to the Registration Statement (the "Amended and Restated Certificate of Incorporation");
- (f) the Amended and Restated Bylaws of the Company, filed as Exhibit 3.2 to the Registration Statement (the "Amended and Restated Bylaws"); and
- (g) a copy of certain resolutions of the Board of Directors of the Company, adopted on November 5, 2019 and certain resolutions of the Pricing Committee thereof, adopted on November 7, 2019.

We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and the Selling Stockholders and such agreements, certificates and receipts of public officials, certificates of officers or other representatives of the Company and the Selling Stockholders and others, and such other documents as we have deemed necessary or appropriate as a basis for the opinions stated below.

In our examination, we have assumed the genuineness of all signatures, including endorsements, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as facsimile, electronic, certified or photocopied copies, and the authenticity of the originals of such copies. With

respect to our opinion set forth below, we have assumed that (i) the Company received the consideration for the Shares set forth in the Securities Purchase Agreement and the applicable board resolutions, (ii) the issuance of the Shares has been registered in the Company's share registry and (iii) the issuance of the Shares does not violate or conflict with any agreement or instrument binding on the Company (except that we do not make this assumption with respect to the Amended and Certificate of Incorporation, the Amended and Restated Bylaws or those agreements or instruments expressed to be governed by the laws of the State of New York which are listed in Part II of the Registration Statement). As to any facts relevant to the opinions stated herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and the Selling Stockholders and others and of public officials, including the factual representations and warranties set forth in the Securities Purchase Agreement.

We do not express any opinion with respect to the laws of any jurisdiction other than the General Corporation Law of the State of Delaware (the "DGCL").

Based upon the foregoing and subject to the qualifications and assumptions stated herein, we are of the opinion that the Shares have been duly authorized by all requisite corporate action on the part of the Company under the DGCL and have been validly issued and are fully paid and nonassessable.

We hereby consent to the reference to our firm under the heading "Legal Matters" in the prospectus forming part of the Registration Statement. We also hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and Regulations.

Very truly yours,

/s/ Skadden, Arps, Slate, Meagher & Flom LLP

Exhibit A
Selling Stockholders

<u>Selling Stockholder</u>	<u>Shares Registered</u>
OrbiMed Genesis Master Fund, LP	137,932
OrbiMed Partners Master Fund Limited	344,827
The Biotech Growth Trust PLC	344,827
Franklin Strategic Series—Franklin Biotechnology Discovery Fund	172,413
Franklin Templeton Investment Funds—Franklin Biotechnology Discovery Fund	172,413
Gregg Smith	6,897
Hessler Finance LTD	70,000
Timothy Hogue	13,793
Laurence Lytton	55,173
The Ryan and Brittany Pearson Living Trust	17,241
Reinfrank Living Trust	10,345
Richard A. Smith	34,483

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[Exhibit A Selling Stockholders](#)