UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. __)*

AVENUE THERAPEUTICS, INC.

(Name of Issuer)

Common Stock, \$0.0001 Par Value (Title of Class of Securities)

> 05360L205 (CUSIP Number)

A.S. Kumar General Counsel, Cipla Limited c/o InvaGen Pharmaceuticals Inc. Site B, 7 Oser Ave. Hauppauge, New York 11788

Tel: +1 (631) 231-3233

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

November 12, 2018

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO					
13	38.55% (See Note 2)					
12			ASS REPRESENTED BY AMOUNT IN ROW (11)			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)		C			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,227,179 (See Item 5 below)					
		10	SHARED DISPOSITIVE POWER N/A			
REPORTING	PERSON	9	SOLE DISPOSITIVE POWER N/A			
NUMBER OF BENEFICI OWNED BY	ALLY	8	4,227,179 (See Note 1)			
		7	N/A SHARED VOTING POWER			
	New Yor	ĸ	SOLE VOTING POWER			
6	CITIZENSHIP OR PLACE OF ORGANIZATION					
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)					
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) Not Applicable (see Item 3 below)					
3						
	SEC USE ONLY					
2	CHECK	THE API	PROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)	(a) □ (b) ☑		
1	INVAGEN PHARMACEUTICALS INC.					
1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)					

(1) The Reporting Person does not own any shares of common stock ("Shares") of Avenue Therapeutics, Inc. (the "Issuer"). However, due to the Support Agreement (as defined below), the Reporting Person may be deemed to have shared voting power to vote, with respect to the matters covered by the Support Agreement, up to an aggregate of 4,227,179 Shares, and such Shares may be deemed beneficially owned pursuant to Rule 13d-3 under the Securities Exchange Act of 1934, as amended ("Rule 13d-3"). Such 4,227,179 Shares include (i) 3,590,096 issued and outstanding Shares held by Fortress Biotech, Inc. ("Fortress"), (ii) 175,001 issued and outstanding Shares held by Fortress Biotech, Inc. ("Fortress"), (ii) 175,001 issued and outstanding Shares held by Dr. Lucy Lu, the Chief Executive Officer of the Issuer ("Dr. Lu"), (iii) 158,332 unvested restricted Shares of the Issuer held by Dr. Lu, (iv) 53,750 vested restricted stock units of the Issuer held by Dr. Lu that are convertible into Shares, and (v) 250,000 shares of the Issuer's class A preferred stock ("Class A Preferred Stock") held by Fortress that are convertible into Shares. Pursuant to Rule 13d-4"), neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by the Reporting Person that it is a beneficial owner of such Shares, and the Reporting Person expressly disclaims any such beneficial ownership.

(2) Calculation of percentage is based on 10,966,148 Shares, comprised of (i) 10,196,088 issued and outstanding Shares, (ii) 466,310unvested restricted Shares of the Issuer, (iii) 53,750 vested restricted stock units of the Issuer held by Dr. Lu that are convertible into Shares, and (iv) 250,000 shares Class A Preferred Stock held by Fortress that are convertible into Shares, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 14, 2018 ("Form 10-Q").

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) CIPLA (EU) LIMITED			
2				(a) □ (b) ☑
3	SEC USE ONLY			
4		SOURCE OF FUNDS (SEE INSTRUCTIONS) Not Applicable (see Item 3 below)		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION United Kingdom			
		7	SOLE VOTING POWER N/A SHARED VOTING POWER	
NUMBER OF S BENEFICIA OWNED BY	ALLY EACH	8	4,227,179 (See Note 1) SOLE DISPOSITIVE POWER	
REPORTING I WITH	I PERSON	9	N/A	
		10	SHARED DISPOSITIVE POWER N/A	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,227,179 (See Item 5 below)			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 38.55% (See Note 2)			
14	ТҮРЕ О СО	F REPOI	RTING PERSON (SEE INSTRUCTIONS)	

(1) The Reporting Person does not own any Shares. However, due to the Support Agreement, the Reporting Person may be deemed to have shared voting power to vote, with respect to the matters covered by the Support Agreement, up to an aggregate of 4,227,179 Shares, and such Shares may be deemed beneficially owned pursuant to Rule 13d-3. Such 4,227,179 Shares include (i) 3,590,096 issued and outstanding Shares held by Fortress, (ii) 175,001 issued and outstanding Shares held by Dr. Lu, (iii) 158,332 unvested restricted Shares of the Issuer held by Dr. Lu, (iv) 53,750 vested restricted stock units of the Issuer held by Dr. Lu that are convertible into Shares, and (v) 250,000 shares of Class A Preferred Stock held by Fortress that are convertible into Shares. Pursuant to Rule 13d-4, neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by the Reporting Person that it is a beneficial owner of such Shares, and the Reporting Person expressly disclaims any such beneficial ownership.

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1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) CIPLA LIMITED			
2				(a) □ (b) ☑
3	SEC USE ONLY			
4		SOURCE OF FUNDS (SEE INSTRUCTIONS) Not Applicable (see Item 3 below)		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION India			
		7	SOLE VOTING POWER N/A SHARED VOTING POWER	
NUMBER OF S BENEFICIA OWNED BY REPORTING I WITH	ALLY EACH PERSON		4,227,179 (See Note 1) SOLE DISPOSITIVE POWER	
		10	N/A SHARED DISPOSITIVE POWER N/A	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,227,179 (See Item 5 below)			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 38.55% (See Note 2)			
14	TYPE O	F REPOF	RTING PERSON (SEE INSTRUCTIONS)	

(1) The Reporting Person does not own any Shares. However, due to the Support Agreement, the Reporting Person may be deemed to have shared voting power to vote, with respect to the matters covered by the Support Agreement, up to an aggregate of 4,227,179 Shares, and such Shares may be deemed beneficially owned pursuant to Rule 13d-3. Such 4,227,179 Shares include (i) 3,590,096 issued and outstanding Shares held by Fortress, (ii) 175,001 issued and outstanding Shares held by Dr. Lu, (iii) 158,332 unvested restricted Shares of the Issuer held by Dr. Lu, (iv) 53,750 vested restricted stock units of the Issuer held by Dr. Lu that are convertible into Shares, and (v) 250,000 shares of Class A Preferred Stock held by Fortress that are convertible into Shares. Pursuant to Rule 13d-4, neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by the Reporting Person that it is a beneficial owner of such Shares, and the Reporting Person expressly disclaims any such beneficial ownership.

(2) Calculation of percentage is based on 10,966,148 Shares, comprised of (i) 10,196,088 issued and outstanding Shares, (ii) 466,310 unvested restricted Shares of the Issuer, (iii) 53,750 vested restricted stock units of the Issuer held by Dr. Lu that are convertible into Shares, and (iv) 250,000 shares Class A Preferred Stock held by Fortress that are convertible into Shares, as reported by the Issuer in its Quarterly Report on Form 10-Q.

Item 1. Security and Issuer.

This statement relates to shares of common stock ("Shares") of Avenue Therapeutics, Inc., a Delaware corporation (the "Issuer"). The Issuer's principal executive offices are located at 2 Gansevoort Street, New York, New York 10014.

Item 2. Identity and Background.

- (a) This Schedule 13D is being jointly filed on behalf of: (i) InvaGen Pharmaceuticals Inc., a New York corporation ("InvaGen"); (ii) Cipla (EU) Limited, a company incorporated in the United Kingdom ("Cipla EU") and (iii) Cipla Limited, a company incorporated in India ("Cipla Limited") (each of InvaGen, Cipla EU and Cipla Limited, a "Reporting Person", and collectively, the "Reporting Persons").
- (b) InvaGen is a wholly-owned direct subsidiary of Cipla EU. Cipla EU is a wholly-owned direct subsidiary of Cipla Limited. A Joint Filing Agreement among the Reporting Persons is attached as <u>Exhibit A</u> to this Schedule 13D.
- (c) InvaGen's business address is 7 Oser Avenue, Hauppauge, New York 11788. Cipla EU's business address is Dixcart House, Addlestone Road, Bourne Business Park, Addlestone, Surrey, KT15 2LE, United Kingdom. Cipla Limited's business address is Cipla House, Peninsula Business Park, Ganpatrao Kadam Marg, Lower Parel, Mumbai 400013, Maharashtra, India.
- (d) The principal business of Cipla Limited is the manufacturing and distribution of pharmaceutical products. Cipla EU is a direct subsidiary of Cipla Limited, and InvaGen is an indirect subsidiary of Cipla Limited.
- (e) During the last five years, none of the Reporting Persons nor, to the knowledge of the Reporting Persons, any of the persons listed in<u>Annex A</u> has (i) been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction such that, as a result of such proceeding, such person was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activity subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) N/A.

Item 3. Source or Amount of Funds or Other Consideration.

The descriptions of the SPMA (as defined below) and the Support Agreement (as defined below) in Item 4 of this Schedule 13D are hereby incorporated by reference. The Stockholders (as defined below) entered into the Support Agreement in connection with the SPMA. The Shares covered by the Support Agreement have not been purchased by any Reporting Person and no payments were made by or on behalf of any Reporting Person in connection with the execution of the Support Agreement. InvaGen expects to pay the consideration payable in connection with the Stock Purchase Transaction out of its generally available funds or through the issuance of equity to Cipla EU. InvaGen expects to pay the consideration payable in connection with the Merger Transaction out of its generally available funds, through the issuance of equity to Cipla EU, or by borrowing from a financial institution (except for amounts payable under the Contingent Value Rights Agreement (as defined in the SPMA), if any, which are expected to be paid from generally available funds of the Issuer).

Item 4. Purpose of Transaction.

Stock Purchase and Merger Agreement

On November 12, 2018, the Issuer, InvaGen and Madison Pharmaceuticals Inc., a newly formed wholly-owned subsidiary of InvaGen, entered into a Stock Purchase and Merger Agreement (the "SPMA") pursuant to which InvaGen will purchase, for \$35 million, Shares representing 33.3% of the fully diluted capitalization of the Issuer (the "Stock Purchase Transaction") and subsequently acquire the remaining issued and outstanding capital stock of the Issuer for \$180 million, subject to certain reductions, in a reverse subsidiary merger transaction (the "Merger Transaction"). Pursuant to the terms and subject to the conditions set forth in the SPMA, InvaGen will, at second closing, hold 100% of the issued and outstanding equity interests of the Issuer. The aggregate consideration to be paid by InvaGen under the SPMA is \$215 million in cash, subject to certain potential reductions. In addition, the Issuer is subject to certain lock-up restrictions and agreed not to (subject to customary exceptions), during the period commencing at the signing of the SPMA until the Merger Transaction, issue, buy, sell, or otherwise subject to a security interest, pledge, hypothecation, mortgage or lien, any securities of the Issuer.

Under the SPMA, at the closing of the Stock Purchase Transaction, the Issuer and InvaGen will enter into an agreed upon form registration rights agreement with respect to the Shares purchased by InvaGen (the "Registration Rights Agreement"). In addition, at the closing of the Stock Purchase Transaction, the Issuer will cause the form of amended and restated bylaws of the Issuer agreed to among the parties to the SPMA, providing for, among other things, the nomination of three individuals selected by InvaGen to be directors of the Issuer, to be adopted as the amended and restated bylaws of the Issuer (the "Revised Bylaws").

Consummation of the Merger Transaction is conditioned, among other things, upon U.S. Food and Drug Administration approval of IV Tramadol, its labeling and scheduling and the absence of any Risk Evaluation and Mitigation Strategy restrictions in effect with respect to IV Tramadol, as well as the expiration of any waiting period applicable to the acquisition under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

The SPMA contains certain customary closing conditions, including the approval of the Issuer's stockholders of the Stock Purchase Transaction and the Merger Transaction.

Voting and Support Agreement

On November 12, 2018, concurrently with the entry into the SPMA, Fortress Biotech, Inc. ("Fortress"), and Dr. Lucy Lu, the Issuer's chief executive officer ("Dr. Lu", and together with Fortress, the "Stockholders"), entered into a Voting and Support Agreement (the "Support Agreement") with InvaGen and the Issuer.

Under the Support Agreement, the Stockholders agreed, among other things, to (i) be present at any meeting of the Issuer's stockholders, in person or represented by proxy, or otherwise cause all of their voting securities to be counted as present for purposes of calculating a quorum, and (ii) vote or cause to be voted (including by proxy or written consent, if applicable) all of their securities in favor of the Proposals (as defined in the SPMA), adjourning or postponing the stockholders meeting to a later date if there are not sufficient votes for the requisite stockholder approval, electing the Buyer Directors as members of the board of directors of the Issuer or any other matter necessary for the consummation of the Stock Purchase Transaction, Merger Transaction and any other transactions contemplated by the SPMA or the ancillary agreements. Further, pursuant to the Voting Agreement, the Stockholders will vote against any Takeover Proposal (as defined in the SPMA), any other action made in opposition to adoption of the SPMA or the ancillary agreements, any action reasonably expected to materially impede any of the transactions contemplated by the SPMA or the ancillary agreements, any action reasonably expected to materially impede any of the transaction or warranty or any other obligation or agreement of the Issuer contained in the SPMA, or of the Stockholders contained in the Voting Agreement, any sale, lease or transfer of any material asset of the Issuer, and ry other change in the Issuer's corporate structure or business. In addition, the Stockholders agreed not to transfer any Issuer securities held by the until the earlier of the Merger Transaction and the termination of the SPMA.

The foregoing descriptions of the SPMA, the Support Agreement, the Registration Rights Agreement and the Revised Bylaws set forth in this Item 4 do not purport to be complete and are qualified in their entirety by reference to their full texts, which are incorporated by reference as Exhibit B, Exhibit C, Exhibit D, and Exhibit E hereto, respectively.

Stockholders Agreement

The description of the Stockholders Agreement entered into by the Issuer, InvaGen and the Stockholders on November 12, 2018, including InvaGen's right to nominate the Buyer Directors (as defined in the Stockholders Agreement), that is set forth under Item 1.01 of the Issuer's Current Report on Form 8-K filed with the Securities Exchange Commission on November 14, 2018 ("Form 8-K") and the full text of the Stockholders Agreement provided as Exhibit 10.2 to Form 8-K are hereby incorporated by reference.

Item 5. Interest in Securities of the Issuer.

- (a) The information contained in rows 7 through 13 on each of the cover pages of this Schedule 13D and the information contained in Items 1, 2 and 4 of this Schedule 13D are incorporated by reference. The Reporting Persons do not own any Shares of the Issuer. However, due to the Support Agreement, the Reporting Person may be deemed to have shared voting power to vote, with respect to the matters covered by the Support Agreement, up to an aggregate of 4,227,179 Shares, and such Shares may be deemed beneficially owned pursuant to Rule 13d-3 under the Securities Exchange Act of 1934, as amended. Such 4,227,179 Shares include (i) 3,590,096 issued and outstanding Shares held by Fortress, (ii) 175,001 issued and outstanding Shares held by Dr. Lu, (iii) 158,332 unvested restricted Shares of the Issuer held by Dr. Lu, (iv) 53,750 vested restricted stock units of the Issuer held by Dr. Lu that are convertible into Shares, and (v) 250,000 shares of the Issuer's class A preferred stock ("Class A Preferred Stock") held by Fortress that are convertible into Shares. Pursuant to Rule 13d-4 under the Securities Exchange Act of 1934, as amended, neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by any of the Reporting Persons that it is a beneficial owner of such Shares, and the Reporting Persons expressly disclaim any such beneficial ownership.
- (b) The Shares subject to the Support Agreement represent 38.55% of the outstanding Shares. The calculation of such percentage is based on 10,966,148 Shares, comprised of (i) 10,196,088 issued and outstanding Shares, (ii) 466,310 unvested restricted Shares of the Issuer, (iii) 53,750 vested restricted stock units of the Issuer held by Dr. Lu that are convertible into Shares, and (iv) 250,000 shares Class A Preferred Stock held by Fortress that are convertible into Shares, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 14, 2018.
- (c) Except as set forth in Item 4 and Item 6 of this Schedule 13D, none of the Reporting Persons nor, to the Reporting Persons' knowledge, any of the persons listed in <u>Annex A</u> hereto, has effected any transaction in the Shares during the past 60 days.
- (d) The Reporting Persons have no right to receive dividends from, or the proceeds from the sale of, any Shares subject to the Support Agreement. The Reporting Persons will have no pecuniary interest in any Shares of the Issuer unless and until the Stock Purchase Transaction contemplated by the SPMA is consummated.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

The descriptions of the SPMA and the Support Agreement in Item 4 of this Schedule 13D are hereby incorporated by reference.

The description of the Waiver Agreement entered into by InvaGen and Fortress on November 12, 2018 that is set forth under Item 1.01 of Form 8-K and the full text of the Waiver Agreement provided as Exhibit 10.6 to Form 8-K are hereby incorporated by reference.

The description of the restrictive covenant agreement entered into by InvaGen and Fortress on November 12, 2018 that is set forth under Item 1.01 of Form 8-K and the full text of the restrictive covenant agreement provided as Exhibit 10.7 to Form 8-K are hereby incorporated by reference.

The description of the Indemnification Agreement entered into by InvaGen and Fortress on November 12, 2018 that is set forth under Item 1.01 of Form 8-K and the full text of the Indemnification Agreement provided as Exhibit 10.8 to Form 8-K are hereby incorporated by reference.

The description of the restrictive covenant agreement entered into by InvaGen and Dr. Lu on November 12, 2018 that is set forth under Item 1.01 of Form 8-K and the full text of the restrictive covenant agreement provided as Exhibit 10.9 to Form 8-K are hereby incorporated by reference.

The description of the Contingent Value Rights Agreement that is set forth under Item 1.01 of Form 8-K is hereby incorporated by reference.

Item 7. Material to Be Filed as Exhibits.

Exhibit	Description
<u>Exhibit A</u>	Joint Filing Agreement by and among InvaGen Pharmaceuticals Inc., Cipla (EU) Limited and Cipla Limited dated as of November 23, 2018.
<u>Exhibit B</u>	Stock Purchase and Merger Agreement by and among Avenue Therapeutics, Inc., InvaGen Pharmaceuticals Inc. and Madison Pharmaceuticals Inc. dated as of November 12, 2018. Incorporated by reference to Exhibit 10.1 to Form 8-K.
<u>Exhibit C</u>	Voting and Support Agreement by and among Avenue Therapeutics, Inc., InvaGen Pharmaceuticals Inc. and certain Stockholders of Avenue Therapeutics, Inc. dated as of November 12, 2018. Incorporated by reference to Exhibit 10.5 to Form 8-K.
Exhibit D	Form of Registration Rights Agreement.
<u>Exhibit E</u>	Form of Revised Bylaws.

SIGNATURE

After reasonable inquiry and to the best of his or her knowledge and belief, the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: November 23, 2018

INVAGEN PHARMACEUTICALS INC.

By:	/s/ Deepak Agarwal
2.	/ Deepan ingan mai

- Name: Deepak Agarwal
- Title: Director
- CIPLA (EU) LIMITED
- By: /s/ Christos Kartalis
- Name: Christos Kartalis
- Title: Director
- CIPLA LIMITED
- By: /s/ A.S. Kumar
- Name: A.S. Kumar
- Title: Global General Counsel and Executive Vice President

Annex A Directors and Executive Officers of the Reporting Persons

InvaGen Pharmaceuticals Inc.

The name, business address, present principal occupation and citizenship of each director and executive officer of InvaGen Pharmaceuticals Inc. ("InvaGen") are set forth below. If no address is given, the business address of each person listed below is 7 Oser Avenue, Hauppauge, New York 11788.

Name	Present Principal Occupation and Business Address	Citizenship
Umang Vohra	Director	India
Samina Vaziralli	Director	India
Peter Lankau	Director	United States
Nikhil Lalwani	President and Chief Executive Officer of InvaGen	India
Deepak Agarwal	Chief Financial Officer of InvaGen	India
Mohit Mundra	Secretary and Treasurer of InvaGen	India

Cipla (EU) Limited

The name, business address, present principal occupation and citizenship of each director and executive officer of Cipla (EU) Limited ("Cipla EU") are set forth below. If no address is given, the business address of each person listed below is Dixcart House, Addlestone Road, Bourne Business Park, Addlestone, Surrey, KT15 2LE, United Kingdom.

Name		Present Principal Occupation and Business Address	Citizenship
Gillian Latham	Director		United Kingdom
Christos Kartalis	Director		Greece
Samina Vaziralli	Director		India
Cinla Limitad	Director		muru

Cipla Limited

The name, business address, present principal occupation and citizenship of each director and executive officer of Cipla Limited ("Cipla Limited") are set forth below. If no address is given, the business address of each person listed below is Cipla House, Peninsula Business Park, Ganapatrao Kadam Marg, Lower Parel West, Mumbai, Maharashtra 400013, India.

Present Principal Occupation and Business Address

Name	Business Address	Citizenship	
Y. K. Hamied	Non-Executive Chairman of Cipla Limited	India	
M.K. Hamied	Non-Executive Vice-Chairman of Cipla Limited	India	
Samina Vaziralli	Executive Vice-Chairperson of Cipla Limited	India	
Umang Vohra	Managing Director and Global Chief Executive Officer of Cipla Limited	India	
S. Radhakrishnan	Director of Cipla Limited	India	
Ashok Sinha	Director of Cipla Limited	India	
Dr. Peter Mugyenyi	Director of Cipla Limited	Uganda	
Adil Zainulbhai	Director of Cipla Limited	United States	
Punita Lal	Director of Cipla Limited	India	
Naina Lal Kidwai	Director of Cipla Limited	India	
Ireena Vittal	Director of Cipla Limited	India	
Peter Lankau	Director of Cipla Limited	United States	

JOINT FILING AGREEMENT

The persons below hereby agree that the Schedule 13D to which this agreement is attached as an exhibit, as well as all future amendments to such Schedule 13D, shall be filed jointly on behalf of each of them. This agreement is intended to satisfy the requirements of Rule 13d-1(k)(1)(iii) under the Securities Exchange Act of 1934.

Dated: November 23, 2018

InvaGen Pharmaceuticals Inc.

By: /s/ Deepak Agarwal Name: Deepak Agarwal

Title: Director

Cipla (EU) Limited

By: /s/ Christos Kartalis

Name: Christos Kartalis Title: Director

Cipla Limited

/s/ A.S. Kumar

Name: A.S. Kumar

Title: Global General Counsel and Executive Vice President

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT (as may be amended or modified from time to time, this "<u>Agreement</u>") is made and entered into as of [•] by and among Avenue Therapeutics, Inc., a Delaware corporation (the "<u>Company</u>"), and InvaGen Pharmaceuticals Inc., a New York corporation ("<u>Buyer</u>").

WHEREAS, the Company and Buyer entered into that certain Stock Purchase and Merger Agreement, dated as of November 12, 2018 (the "SPMA"); and

WHEREAS, in connection with the execution and delivery of the SPMA and the consummation of the transactions contemplated thereby, the Company has agreed to grant Buyer certain registration rights as set forth below.

NOW, THEREFORE, in consideration of the mutual promises and covenants herein contained, and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

Section 1. Definitions

Capitalized terms used but not defined in this Agreement shall have the respective meanings ascribed to them in the SPMA.

"Agent" means the principal placement agent on an agented placement of Registrable Securities.

"Automatic Shelf Registration Statement" shall have the meaning specified in Rule 405 under the Securities Act.

"Prospectus" means the prospectus or prospectuses included in any Registration Statement (including any "free writing prospectus" (as defined in Rule 405 of the Securities Act) and any prospectus subject to completion and a prospectus that includes any information previously omitted from a prospectus filed as part of an effective registration statement in reliance upon Rule 430A promulgated under the Securities Act), as amended or supplemented by any prospectus supplement with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference or deemed to be incorporated by reference in such prospectus or prospectuses.

"Registrable Securities" means the Common Shares and any Securities into which the Common Shares may be converted or exchanged pursuant to any merger, consolidation, sale of all or any part of its assets, corporate conversion or other extraordinary transaction of the Company, held by the Buyer (whether now held or hereafter acquired, and including any such Securities received by the Buyer upon the conversion or exchange of, or pursuant to such a transaction with respect to, other Securities held by the Buyer). As to any particular Registrable Securities, such Securities shall cease to be Registrable Securities on the earliest to occur of: (a) the date on which a Registration Statement with respect to the sale of such Registration Statement; (b) the date on which such Registrable Securities shall have become effective under the Securities shall have ceased to be outstanding; (c) any date on which Company counsel delivers a written opinion of counsel, which shall be in a form reasonably satisfactory to Buyer's counsel, to the effect that such Buyer's Registrable Securities are eligible for sale without registration pursuant to Rule 144 (or any successor provision) under the Securities Act and without volume limitations or other restrictions on transfer thereunder; or (d) the date on which such Registrable Securities have been sold to a third party and all transfer restrictions and restrictive legends with respect to such Registrable Securities are removed upon the consummation of such sale.

"Registration Statement" means any registration statement filed by the Company with the SEC in compliance with the Securities Act for a public offering and sale of the Common Shares or other securities of the Company, including the Prospectus, amendments and supplements to such Registration Statement, including pre- and posteffective amendments, all exhibits and all materials incorporated by reference or deemed to be incorporated by reference in such Registration Statement (other than a registration statement (i) on Form S-4 or Form S-8 or any successor form to Form S-4 or Form S-8 or in connection with any employee or director welfare, benefit or compensation plan, (ii) covering only Securities proposed to be issued in exchange for Securities or assets of another entity, (iii) in connection with an exchange offer or an offering of Securities exclusively to existing Security holders of the Company or its subsidiaries, (iv) relating to a transaction pursuant to Rule 145 of the Securities Act, (v) for an offering of debt that is convertible into equity Securities of the Company, or (vi) solely for a dividend reinvestment plan).

"Securities" means capital stock, limited partnership interests, limited liability company interests, beneficial interests, warrants, options, notes, bonds, debentures, and other securities, equity interests, ownership interests and similar obligations of every kind and nature of any Person.

"Shelf Registration Statement" means a Registration Statement on Form S-3 or another appropriate form for an offering to be made on a delayed or continuous basis pursuant to Rule 415 under the Securities Act.

"Transfer" means and includes the act of selling, giving, transferring, creating a trust (voting or otherwise), assigning or otherwise disposing of (other than pledging, hypothecating or otherwise transferring as security or any transfer upon any merger or consolidation) (and correlative words shall have correlative meanings); provided, however, that any transfer or other disposition upon foreclosure or other exercise of remedies of a secured creditor after an event of default under or with respect to a pledge, hypothecation or other transfer as security shall constitute a Transfer.

"Underwriters' Representative" means the managing underwriter, or in the case of a co-managed underwriting, the managing underwriter designated as the Underwriters' Representative by the co-managers.

"WKSI" shall mean a well-known seasoned issuer, as defined in Rule 405 under the Securities Act.

Section 2. Registration Rights

(a) <u>Shelf Registrations</u>. At any time and from time to time on or after the First Stage Closing, the Buyer may deliver to the Company a written notice (a "<u>Shelf Registration Notice</u>") requiring the Company to prepare and file with the SEC a Shelf Registration Statement with respect to resales of some or all Registrable Securities by the Buyer. As promptly as practicable after receiving the Shelf Registration Notice, but in no event more than 45 days following receipt of such notice, the Company shall file with the SEC a Shelf Registration Statement shall become automatically effective, the Company shall use commercially reasonable efforts to cause the Shelf Registration Statement to become or be declared effective by the SEC for all of the Registration Statement). To the extent the Company is a WKSI at the time that the Shelf Registration Statement which covers such Registration Statement (or a successor Registration Statement filed with respect to the Registrable Securities) continuously effective (including by filing a new Shelf Registration Statement if the initial Shelf Registration Statement expires) in order to permit the Prospectus forming a part thereof to be lawfully delivered and the Shelf Registration Statement useable for resale of the Registration Statement expires) in order to permit the Prospectus forming a part thereof to be lawfully delivered and the Shelf Registration Statement useable for resale of the Registration Statement expires).

(b) <u>Shelf Offerings</u>. In the event of the termination of the SPMA following the First Stage Closing, and at any time thereafter during the Shelf Effectiveness Period, the Buyer may deliver to the Company a written notice ("<u>Shelf Offering Notice</u>") requiring the Company to facilitate a "takedown" of Registrable Securities off of the Shelf Registration Statement ("<u>Shelf Offering</u>"). As promptly as reasonably practicable upon receipt of the Shelf Offering Notice, the Company shall use commercially reasonable efforts to facilitate such a "takedown" by amending or supplementing the Prospectus related to the Shelf Registration Statement as may be reasonably requested by the Buyer and taking other actions contemplated by <u>Section 3.1</u> that may be applicable to such Shelf Offering.

(c) <u>Non-Shelf Demand Registration</u>. At any time and from time to time, if the Company has not effected or is not diligently pursuing a Shelf Registration Statement pursuant to <u>Section 2(a)</u> or the Company is not eligible to file a Shelf Registration Statement or the Shelf Registration Statement filed pursuant to <u>Section 2(a)</u> shall cease to be effective, the Buyer may deliver to the Company a written notice (a "<u>Non-Shelf Demand Registration Notice</u>") informing the Company that the Buyer requires the Company to register for resale some or all of such Buyer's Registrable Securities (a "<u>Non-Shelf Demand Registration</u>"). Upon receipt of the Non-Shelf Demand Registration Notice, the Company will use commercially reasonable efforts to file with the SEC as promptly as practicable after receiving the Non-Shelf Demand Registration Statement"), and agrees to use commercially reasonable efforts to cause the Non-Shelf Demand Registration Statement to be declared effective by the SEC as soon as reasonably practicable following the filing thereof. The Company agrees to use reasonable efforts to keep any Non-Shelf Demand Registration Statement to be declared effective (including the preparation and filing of any amendments and supplements necessary for that purpose) for a period of not less than 120 days ("<u>Minimum Effective Period</u>").

(d) All offers and sales by the Buyer under a Non-Shelf Demand Registration Statement shall be completed within the period during which such Non-Shelf Demand Registration Statement remains effective and not the subject of any stop order, injunction or other order of the SEC. Upon notice that such Non-Shelf Demand Registration Statement is no longer effective, the Buyer will not offer or sell the Registrable Securities under the Non-Shelf Demand Registration Statement.

(e) Neither the Company nor any stockholder of the Company (other than the Buyer) may include securities in any offering requested under Section 2 of this Agreement.

(f) <u>Underwritten Offerings</u>. If any registration or offering pursuant to this <u>Section 2</u> involves an underwritten offering (whether on a "firm," "best efforts" or "all reasonable efforts" basis or otherwise), or an agented offering, the Buyer shall have the right to select the counsel representing the Buyer in such registration or offering, the underwritter or underwriters and manager or managers to administer such underwritten offering or the placement agent or agents for such agented offering.

Section 3. Additional Obligations of the Company and the Buyer

3.1 <u>Obligations of the Company</u>. When the Company is required to effect the registration of any Registrable Securities or facilitate or effect any offering pursuant to <u>Section 2</u> of this Agreement, the Company shall:

(a) use commercially reasonable efforts to (i) register or qualify the Registrable Securities within a reasonable time after the applicable Registration Statement is declared effective by the SEC under all applicable state securities or "blue sky" laws of such jurisdictions as the Buyer may reasonably request in writing, (ii) keep each such registration or qualification effective during the period such Registration Statement is required to be kept effective pursuant to this Agreement, (iii) cooperate with the Buyer and the underwriters or Agents, if any, and their respective counsel in connection with any filings required to be made with FINRA or other applicable regulatory authorities, and (iv) to do any and all other similar acts and things that may be reasonably necessary or advisable to enable the Buyer to consummate the disposition of the Registrable Securities in each such jurisdiction; *provided, however*, that the Company shall not be required to (A) qualify generally to do business in any jurisdiction where it would not otherwise be required to such at the other subject to any taxation in any jurisdiction where it would not otherwise be subject to such taxation or (C) take any action that would subject it to the general service of process in any jurisdiction where it is not then so subject;

(b) promptly notify the Buyer of the receipt, and provide copies to the Buyer, of any comments or other correspondence from staff of the SEC with respect to any Registration Statement, and promptly respond to such comments (subject to Section 3.1(n)) and provide copies of such responses to the Buyer;

(c) as promptly as practicable, prepare and file with the SEC, if necessary, such amendments and supplements to the Registration Statement and the Prospectus used in connection with such Registration Statement or any document incorporated therein by reference or file any other required document as may be necessary to cause or maintain the effectiveness of such Registration Statement for so long as such Registration Statement is required to be kept effective and to comply with the provisions of the Securities Act and the rules thereunder with respect to the disposition of all securities covered by such Registration Statement and the instructions applicable to the registration form used by the Company;

(d) in the event that any Registrable Securities included in a Registration Statement subject to, or required by, this Agreement remain unsold at the end of the period during which the Company is obligated to maintain the effectiveness of such Registration Statement, file a post-effective amendment to the Registration Statement for the purpose of removing such securities from registered status;

(e) furnish, without charge, to the Buyer such number of copies of the Registration Statement, each amendment and supplement thereto (in each case including all exhibits, but excluding any documents to be incorporated by reference therein that are publicly available on the SEC's Electronic Data Gathering, Analysis and Retrieval system ("EDGAR")), and the Prospectus included in such Registration Statement (including each preliminary Prospectus) in conformity with the requirements of the Securities Act as the Buyer or any underwriter or Agent may reasonably request for use in and in order to facilitate the public sale or other disposition of the Registrable Securities owned by the Buyer;

(f) if a disposition of Registrable Securities takes the form of an underwritten or agented offering, any "bought deal" or block trade, promptly enter into customary agreements (including, in the case of an underwritten offering, underwriting agreements in customary form, and including provisions with respect to indemnification and contribution in customary form and consistent with the provisions relating to indemnification and contribution contained herein) and promptly take all other customary actions at such times as customarily occur in similar registered offerings in order to facilitate the disposition of such Registrable Securities and in connection therewith, including:

(i) make such representations and warranties to the Buyer and the underwriters, if any, in form, substance and scope as are customarily made by issuers in similar underwritten offerings;

(ii) obtain opinions of counsel to the Company and updates thereof (which counsel and opinions (in form, scope and substance) shall be reasonably satisfactory to the Buyer and the Underwriter's Representative or Agent, if any) addressed to the Buyer and the underwriters, if any, covering the matters customarily covered in opinions requested in sales of securities or underwritten offerings and such other matters as may be reasonably requested by the Buyer and the lead managing underwriter, and the Company shall furnish to the Buyer a signed counterpart of any such legal opinion;

(iii) obtain "cold comfort" letters and updates thereof from the Company's independent certified public accountants addressed to the Buyer, if permissible, and the underwriters, if any, which letters shall be customary in form and shall cover matters of the type customarily covered in "cold comfort" letters to underwriters in connection with primary underwritten offerings, and the Company shall furnish to the Buyer a signed counterpart of any such comfort letter; and

(iv) use commercially reasonable efforts to obtain executed lock-up agreements from the officers and directors of the Company and from the holders of more than 5% of the Company's equity securities (who are, or whose associated persons are, bound by the Company's insider trading policy), if requested by the underwriters for such time periods as the underwriters may reasonably request.

(g) promptly notify the Buyer: (i) when the Registration Statement, any pre-effective amendment, the Prospectus or any prospectus supplement related thereto or post-effective amendment to the Registration Statement has been filed, and, with respect to the Registration Statement or any post-effective amendment, when the same has become effective, (ii) of the issuance by the SEC of any stop order suspending the effectiveness of the Registration Statement or the initiation or threat of any proceedings for that purpose, and (iii) of the receipt by the Company of any notification with respect to the suspension of the qualification of any Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction or the initiation of any proceeding for such purpose;

(h) use commercially reasonable efforts to prevent the issuance of any order suspending the effectiveness of a Registration Statement or suspending the qualification or exemption from qualification under state securities or "blue sky" laws, and, if any such order suspending the effectiveness of a Registration Statement or suspending the qualification or exemption from qualification under state securities or "blue sky" laws is issued, shall promptly use commercially reasonable efforts to obtain the withdrawal of such order at the earliest possible moment (and shall provide the Buyer with prompt notice thereof);

(i) after the filing of a Registration Statement and thereafter until the expiration of the period during which the Company is required to maintain the effectiveness of the applicable Registration Statement as set forth in the applicable Sections above, promptly notify the Buyer: (i) of the existence of any fact of which the Company is aware or the happening of any event which has resulted in (A) the Registration Statement, as then in effect, containing an untrue statement of a material fact or omitting to state a material fact required to be stated therein or necessary to make any statements therein not misleading, (B) the Prospectus included in such Registration Statement containing an untrue statement of a material fact or omitting to state a material fact necessary to make any statements therein, in the light of the circumstances under which they were made, not misleading or (C) the representations and warranties of or relating to the Company's reasonable determination that a post-effective amendment to the Registration Statement easing to be true and correct in any material respect and (ii) of the Company's reasonable determination that a post-effective amendment to the Registration Statement would be appropriate or required or that there exist circumstances not yet disclosed to the public which make further sales under such Registration Statement inadvisable pending such disclosure and post-effective amendment; and, if the notification relates to any event described in either of clauses (i) or (ii) of this <u>Section 3.1(i)</u>, at the request of the Buyer, the Company shall promptly prepare and file with the SEC a post-effective amendment or supplement or file any other required document so that (x) such Registration Statement shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein in the light of the circumstances under which they were made, not misleading (y) such Prospectus shall not include an untrue statement of a material fact or omit to s

(j) in the event that the Common Shares are listed on a national securities exchange, use commercially reasonable efforts to cause all such Registrable Securities to be listed, and to maintain the listing of such Registrable Securities, on the national securities exchange on which the Common Shares are then listed and cause to be satisfied all requirements and conditions of such securities exchange to the listing or quoting of such securities that are reasonably within the control of the Company including registering the applicable class of Registrable Securities under the Exchange Act, if appropriate, and using commercially reasonable efforts to cause such registration to become effective pursuant to the rules of the SEC in accordance with the terms hereof;

(k) if requested by the Buyer during the offering of Registrable Securities, incorporate in a prospectus supplement or post-effective amendment such information concerning the Buyer or the intended method of distribution as the Buyer reasonably requests to be included therein and is reasonably necessary to permit the sale of the Registrable Securities pursuant to the Registration Statement, including information with respect to the number of Registrable Securities being sold, the purchase price being paid therefor and any other material terms of the offering;

(1) make available to its stockholders, as soon as practicable but no later than 90 days following the end of the 12-month period beginning with the first month of the Company's first fiscal quarter commencing after the effective date of each Registration Statement filed pursuant to this Agreement an earnings statement satisfying the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder;

(m) make the Company's executive officers available for customary presentations to investors to discuss the affairs of the Company at times that may be mutually and reasonably agreed upon (including to the extent customary, senior management participation in due diligence calls with the underwriters (or Agent) and their counsel and, in the case of any marketed underwritten offering, participation in any road show as reasonably requested by the lead managing underwriters for such offering), and provide the Buyer, the underwriters and their respective counsel, accountants and other advisors (the "Inspectors") reasonable access to its books and records as shall be reasonably requested in order to conduct a reasonable due diligence investigation within the meaning of the Securities Act with respect to any applicable Registration Statement; *provided*, that such Inspectors agree to keep such information confidential (subject to customary exceptions) unless the disclosure of such information is necessary to avoid or correct a misstatement or omission in such Registration Statement;

(n) in connection with the preparation and filing of any Registration Statement, Prospectus, any amendments or supplements thereto, and any other written communications with the SEC with respect thereto, (i) give the Buyer, the underwriters or Agent (if applicable) and their respective counsels the opportunity to review and provide comments on such Registration Statement, each Prospectus included therein or filed with the SEC, each amendment thereof or supplement thereto, and any other written communications with the SEC with respect thereto, (ii) fairly and in good faith consider such comments in any such documents prior to the filing thereof as the counsel to the Buyer or underwriters may reasonably request, and (iii) make available such of the Company's representatives as shall be reasonably requested by the Buyer or any underwriter for discussion of such documents;

(o) provide and cause to be maintained a transfer agent and registrar for all Registrable Securities covered by such Registration Statement from and after a date not later than the effective date of such Registration Statement;

 (p) cooperate with the Buyer to facilitate the timely delivery, preparation and delivery of certificates (or evidence of direct registration), with requisite CUSIP numbers, representing Registrable Securities to be sold;

(q) to the extent the Company is a WKSI during the period in which this Agreement is in effect, use commercially reasonable efforts to take such actions as under its control to remain a WKSI and not become an ineligible issuer during the period when any Registration Statement remains in effect; and

(r) take such other actions as are reasonably required in order to expedite or facilitate the disposition of Registrable Securities included in each such registration.

Section 4. Indemnification; Contribution

4.1 <u>Indemnification by the Company.</u> The Company agrees to indemnify and hold harmless the Buyer and each Person, if any, who controls the Buyer within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, and any of their partners, members, officers, directors, employees, agents, advisors or representatives, as follows:

(a) against any and all loss, liability, claim, damage, action, cost, judgment and expense whatsoever (including reasonable fees, expenses and disbursements of attorneys and other professionals), as incurred, arising out of or based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto) pursuant to which the Registrable Securities were registered under the Securities Act, including all documents incorporated therein by reference, or in any Prospectus (or any amendment or supplement thereto), including all documents incorporated therein by reference, (ii) the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, or (iii) any other violation or alleged violation by the Company (or any of its Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law, relating to a Registration Statement, Prospectus or amendment or supplement thereto filed in accordance with this Agreement.

(b) against any and all loss, liability, claim, damage, action, cost, judgment and expense whatsoever (including reasonable fees, expenses and disbursements of attorneys and other professionals), as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; and

(c) against any and all cost or expense whatsoever, as incurred (including reasonable fees, expenses and disbursements of attorneys and other professionals), reasonably incurred in investigating, preparing, defending against or participating in (as a witness or otherwise) any litigation, or investigation or proceeding by any third party or governmental agency or body, commenced or threatened, in each case whether or not a party, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under <u>Sections 4.1(a)</u> or <u>4.1(b)</u> above;

provided, however, that the indemnity provided pursuant to this Section 4.1 does not apply to the Buyer with respect to any loss, liability, claim, damage, action, cost, judgment or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in good faith reliance upon and in conformity with written information furnished to the Company by the Buyer expressly for use in the Registration Statement (or any amendment thereto) or a Prospectus (or any amendment or supplement thereto), to the extent incorporated therein.

4.2 <u>Indemnification by Buyer</u>. The Buyer agrees to indemnify and hold harmless the Company, and each of its directors and officers (including each director and officer of the Company who signed a Registration Statement), and each Person, if any, who controls the Company within the meaning of <u>Section 15</u> of the Securities Act or <u>Section 20</u> of the Exchange Act, solely with respect to information provided by the Buyer referred to in the proviso to this <u>Section 4.2</u>, as follows:

(a) against any and all loss, liability, claim, damage, action, cost, judgment and expense whatsoever, as incurred, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto) pursuant to which the Registrable Securities of the Buyer were registered under the Securities Act, including all documents incorporated therein by reference, or in any Prospectus (or any amendment or supplement thereto), including all documents incorporated therein by reference, or a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(b) against any and all loss, liability, claim, damage, judgment and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, if such settlement is effected with the written consent of the Buyer; and

(c) against any and all expense whatsoever, as incurred (including reasonable fees and disbursements of counsel), reasonably incurred in investigating, preparing, defending against or participating in (as a witness or otherwise) any litigation, or investigation or proceeding by any governmental agency or body, commenced or threatened, in each case whether or not a party, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under Sections 4.2(a) or 4.2(b) above;

provided, however; that the indemnity provided pursuant to this <u>Section 4.2</u> shall only apply with respect to any loss, liability, claim, damage, action, cost judgment or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in good faith reliance upon and in conformity with written information furnished to the Company by the Buyer expressly for use in the Registration Statement (or any amendment thereto) or the Prospectus (or any amendment or supplement thereto), to the extent incorporated therein. Notwithstanding the provisions of this <u>Section 4.2</u>, the Buyer and any permitted assignee shall not be required to indemnify the Company, its officers, directors or control persons with respect to any amount in excess of the amount of the total net proceeds to the Buyer or such permitted assignee, as the case may be, from sales of the Registrable Securities of the Buyer under the Registration Statement or Prospectus, as applicable, that is the subject of the indemnification claim.

4.3 Conduct of Indemnification Proceedings. An indemnified party hereunder shall give reasonably prompt notice to the indemnifying party of any action or proceeding commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify the indemnifying party (i) shall not relieve it from any liability which it may have under the indemnity agreement provided in Section 4.1 or 4.2 above, unless and only to the extent it did not otherwise learn of such action and the lack of notice by the indemnified party results in the forfeiture by the indemnifying party of substantial rights and defenses, and (ii) shall not, in any event, relieve the indemnifying party from any obligations to any indemnified party other than the indemnification obligation provided under Section 4.1 or 4.2 above and the contribution obligation provided in Section 4.4 below. If the indemnifying party so elects within a reasonable time after receipt of such notice, the indemnifying party may assume the defense of such action or proceeding at such indemnifying party's own expense with counsel chosen by the indemnifying party and approved by the indemnified party, which approval shall not be unreasonably withheld; provided, however, that the indemnifying party will not settle, compromise or consent to the entry of any judgment with respect to any such action or proceeding without the written consent of the indemnified party unless such settlement, compromise or consent secures the unconditional release of the indemnified party and does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party; and provided, further, that, if the indemnified party reasonably determines that a conflict of interest exists where it is advisable for the indemnified party to be represented by separate counsel or that, upon advice of counsel, there may be legal defenses available to it which are different from or in addition to those available to the indemnifying party (or in the situation where the indemnifying party fails to take reasonable steps necessary to defend diligently the action or proceeding within 20 Business Days after receiving notice from the indemnified party that the indemnified party believes the indemnifying party has failed to do so), then the indemnifying party shall not be entitled to assume such defense and the indemnified party shall be entitled to separate counsel at the indemnifying party's expense, it being understood, however, that the indemnifying party shall not, in connection with any one such action, claim or proceeding or separate but substantially similar or related actions, claims or proceedings in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one additional firm of attorneys (together with appropriate local counsel) at any time for all such indemnified parties. If the indemnifying party is not entitled to assume the defense of such action or proceeding as a result of the second proviso to the preceding sentence, the indemnifying party's counsel shall be entitled to conduct the indemnifying party's defense and counsel for the indemnified party shall be entitled to conduct the defense of the indemnified party, it being understood that both such counsel will cooperate with each other to conduct the defense of such action or proceeding as efficiently as possible. If the indemnifying party is not so entitled to assume the defense of such action or does not assume such defense, the indemnifying party will not be liable for any settlement effected without the written consent of the indemnifying party, not to be unreasonably withheld, delayed or conditioned. If an indemnifying party is entitled to assume, and assumes, the defense of such action or proceeding in accordance with this paragraph, the indemnifying party shall not be liable for any fees and expenses of counsel for the indemnified party incurred thereafter in connection with such action or proceeding.

4.4 <u>Contribution</u>. In order to provide for just and equitable contribution in circumstances in which the indemnity agreement provided for in <u>Sections 4.1</u> and <u>4.2</u> above is for any reason held to be unenforceable by a court of competent jurisdiction to any indemnified party although applicable in accordance with its terms, the Company and the Buyer shall contribute to the aggregate losses, liabilities, claims, damages, actions, costs, judgments and expenses of the nature contemplated by such indemnity agreement incurred by the Company and the Buyer, in such proportion as is appropriate to reflect the relative fault of the Company on the one hand and the Buyer on the other hand, in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages, actions, costs, judgments actions, costs, judgments or expenses. The relative fault of the indemnifying party and indemnified party shall be determined by reference to, among other things, whether the action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, relates to information supplied by the indemnifying party or the indemnified party (and, with respect to Buyer, only written information expressly provided for use in the Registration Statement (or any amendment thereto) or the Prospectus (or any amendment thereto), to the extent incorporated therein), and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action.

The parties hereto agree that it would not be just or equitable if contribution pursuant to this <u>Section 4.4</u> were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraph. Notwithstanding the provisions of this <u>Section 4.4</u>, the Buyer shall not be required to contribute any amount in excess of the amount that it would have been obligated to pay by way of indemnification if the indemnification provided for under <u>Section 4.2</u> had been available under the circumstances.

Notwithstanding the foregoing, no Person guilty of fraudulent misrepresentation (within the meaning of <u>Section 11(f)</u> of the Securities Act) shall be entitled to contribution from any indemnifying party who was not guilty of such fraudulent misrepresentation. For purposes of this <u>Section 4.4</u>, each Person, if any, who controls the Buyer within the meaning of <u>Section 15</u> of the Securities Act or <u>Section 20</u> of the Exchange Act, and any of their partners, members, officers, directors, employees, agents or representatives, shall have the same rights to contribution as the Buyer, and each director of the Company, each officer of the Company who signed a Registration Statement and each Person, if any, who controls the Company within the meaning of <u>Section 15</u> of the Securities Act or <u>Section 20</u> of the Exchange Act shall have the same rights to contribution as the Company within the meaning of <u>Section 15</u> of the Securities Act or <u>Section 20</u> of the Exchange Act shall have the same rights to contribution as the Company.

In addition, no Person shall be obligated to contribute hereunder for any amounts in payment for any settlement of any action or claim, effected without such Person's written consent, which shall not be unreasonably withheld.

4.5 <u>Survival</u>. The indemnification and contribution provisions in this <u>Section 4</u> shall be a continuing right and shall survive the registration and sale of any securities by any Person entitled to indemnification or contribution, as applicable hereunder, and the expiration or termination of this Agreement.

Section 5. Registration Expenses

The Company shall pay all expenses incident to the performance by the Company of its registration obligations under<u>Sections 2</u> and <u>3</u> above, including (i) all expenses incurred in connection with the preparation, printing and distribution of any Registration Statement and Prospectus and all amendments and supplements thereto, (ii) SEC and state securities registration, listing and filing fees, (iii) all fees and expenses of complying with securities or "blue sky" laws (including reasonable fees and disbursements of counsel for the Buyer in connection with "blue sky" qualifications of the securities and determination of their eligibility for investment under the laws of such jurisdictions), (iv) all FINRA fees and fees of any applicable stock exchange, (v) fees and disbursements of counsel for the Company and fees and expenses for the independent certified public accountants retained by the Company (including the expenses or costs associated with the delivery of any opinions or comfort letters), (vi) all internal expenses of the Company (including all salaries and expenses of its officers and employees performing legal or accounting duties); (vii) the fees and disbursements of counsel representing the Buyer registering Registrable Securities pursuant to the Registration Statement; and (viii) the fees and disbursements of counsel representing the Buyer registering Registrable Securities pursuant to the Registration Statement; and or participating in the offering, as applicable. The Buyer shall be responsible for the payment of any brokerage and sales commissions, fees and disbursements of the Buyer pursuant to this Agreement. The Company shall have no obligation to pay any other costs or expenses incurred by the Buyer; including underwriting discounts or selling commissions shall be borne by the Buyer. In addition, in an underwritten offering, all selling stockholders and the Company shall bear the expenses of the underwriters, *pro rata*, in proportion to the respective amount of shares each sells in such offe

Section 6. Rule 144 Compliance

The Company shall use commercially reasonable efforts to file as and when applicable, on a timely basis, all reports required to be filed by it under the Exchange Act. The Company shall use commercially reasonable efforts to make and keep current public information available as specified in paragraph (c) of Rule 144 (or any successor rule) promulgated under the Securities Act. The Company shall use commercially reasonable efforts to take such further action as may be reasonably required from time to time to enable the Buyer to Transfer Registrable Securities without registration under the Securities Act within the limitation of the exemptions provided by Rule 144 or any other exemption from registration. Upon the request of the Buyer, the Company will deliver to the Buyer a written statement as to whether it has complied with such requirements and, if not, the specifics thereof, as well as any such other information as may be reasonably requested to allow the Buyer to sell its Registrable Securities pursuant to Rule 144. In connection with any Transfer of Registrable Securities by the Buyer pursuant to Rule 144 promulgated under the Securities Act, the Company shall cooperate with the Buyer to facilitate the timely preparation and delivery of certificates representing the Registrable Securities to be sold and not bearing any Securities Act legend, and enable certificates for such Registrable Securities to be for such number of shares and registered in such names as the Buyer may reasonably request at least five Business Days prior to any sale of Registrable Securities hereunder or, if practicable, and at the request of the Buyer, have such Registrable Securities delivered electronically via DWAC through the Depository Trust Company.

Section 7. Miscellaneous

7.1 Additional Agreements: Certain Transactions.

(a) In the event that any Common Shares or other Securities are issued in respect of, or in exchange for, or in substitution of the Registrable Securities by reason of any reorganization, recapitalization, merger, consolidation, spin-off, partial or complete liquidation, share dividend, split-up, sale of assets, distribution to stockholders or combination of the shares or any other similar change in the Company's capital structure, the Company agrees that appropriate adjustments shall be made to this Agreement to ensure that the Buyer has, immediately after consummation of such transaction, substantially the same rights from the Company or another issuer of Securities, as applicable, as it has immediately prior to the consummation of such issuance in respect of the Registrable Securities under this Agreement.

(b) The Company shall not enter into any agreement with respect to the Company's Securities that is inconsistent with the rights granted to the Buyer under this Agreement, and no such agreement is currently in effect.

7.2 <u>Entire Agreement.</u> This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter of this Agreement and supersedes any and all prior agreements, negotiations, correspondence, undertakings, understandings and communications of the parties hereto with respect to the subject matter of this Agreement.

7.3 <u>Transaction Costs</u>. Except as otherwise provided herein, the parties to this Agreement will pay their own costs and expenses (including legal, accounting and other fees) relating to this Agreement.

7.4 <u>Modifications</u>. Any amendment or modification to this Agreement, including this undertaking itself, shall only be valid if effected by an instrument or instruments in writing and shall be effective against each of the parties hereto that has signed such instrument or instruments. The parties agree that they jointly negotiated and prepared this Agreement and that this Agreement will not be construed against any party on the grounds that such party prepared or drafted the same.

7.5 <u>Notices.</u> Notices will be deemed to have been received (a) upon receipt of a registered letter, (b) three Business Days following proper deposit with an internationally recognized express overnight delivery service, or (c) in the case of transmission by email, as of the date so transmitted (or if so transmitted after normal business hours at the place of the recipient, on the Business Day following such transmission):

If to the Company:

Avenue Therapeutics, Inc. 2 Gansevoort Street, 9th Floor New York, NY 10014 Attn: Dr. Lucy Lu, M.D. Email: <u>llu@avenuetx.com</u>

With a copy (which shall not constitute notice) to:

Alston & Bird LLP 90 Park Avenue, 12th Floor New York, NY 10016 Attn: Mark McElreath Email: mark.mcelreath@alston.com

If to Buyer:

InvaGen Pharmaceuticals Inc. Site B, 7 Oser Ave. Hauppauge, NY 11788c/o A.S. Kumar, Esq. Global General Counsel Cipla Ltd. Cipla House, Peninsula Business Park, Ganapatrao Kadam Marg, Lower Parel West, Mumbai, Maharashtra 400013, India Email: <u>as.kumar@cipla.com</u> and <u>cosecretary@cipla.com</u>

With a copy (which shall not constitute notice) to:

InvaGen Pharmaceuticals Inc. Site B, 7 Oser Ave. Hauppauge, NY 11788 c/o Nishant Saxena Global Chief Strategy Officer Cipla Ltd. Cipla House, Peninsula Business Park, Ganapatrao Kadam Marg, Lower Parel West, Mumbai, Maharashtra 400013, India Email: <u>nishant.saxena@cipla.com</u>

With a copy (which shall not constitute notice) to:

Hughes Hubbard & Reed LLP One Battery Park Plaza New York, NY 10004-1482 Attn: Kenneth A. Lefkowitz Email: <u>ken.lefkowitz@hugheshubbard.com</u>

or to such other address as may be hereafter communicated in writing by the parties in a notice given in accordance with this <u>Section 7.5</u>, which address shall then apply to the respective notice provisions of the SPMA and all other Ancillary Agreements.

7.6 <u>Public Announcements</u>. Except as required by Legal Requirements or by the requirements of any stock exchange on which the securities of a party hereto or any of its Affiliates are listed, no party to this Agreement will make, or cause to be made, any press release or public announcement in respect of this Agreement or the transactions contemplated hereby or otherwise communicate with any news media with respect to the foregoing without prior notification to the other parties, and the parties to this Agreement will consult with each other and cooperate as to the form, timing and contents of any such press release, public announcement or disclosure.

7.7 Severability. Each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable Legal Requirements, but if any provision of this Agreement is found to be unenforceable or invalid under applicable Legal Requirements, such provision will be ineffective only to the extent of such unenforceability or invalidity, and the parties will negotiate in good faith to modify this Agreement so that the unenforceable or invalid provision is replaced by such valid and enforceable provision which the parties consider, in good faith, to match as closely as possible the invalid or unenforceable provision and to achieve the same or a similar economic effect and to give effect to the parties' original intent. The remaining provisions of this Agreement will continue to be binding and in full force and effect.

7.8 Assignment. No party hereto may assign, in whole or in part, or delegate all or any part of its rights, interests or obligations under this Agreement without the prior written consent of the other party. Any assignment or delegation made without such consent will be void. Notwithstanding the foregoing, Buyer shall be entitled to (a) assign its rights under this Agreement to any one of its Affiliates, and (b) assign any or all of its rights and obligations under this Agreement (in whole or in part) as collateral security in a financing transaction.

7.9 <u>Governing Law</u>. This Agreement and any claims or causes of action pursuant to it will be governed by and construed in accordance with the laws of the State of Delaware, without regard for its principles of conflict of laws.

7.10 Specific Performance. Each party acknowledges and agrees that the other party would be irreparably damaged if the provisions of this Agreement are not performed in accordance with their terms and that any breach of this Agreement and the non-consummation of the transactions contemplated hereby by either party could not be adequately compensated in all cases by monetary damages alone. Accordingly, in addition to any remedy to which such other party may be entitled under <u>Section 7.11</u>, provisional measures and injunctive relief necessary to protect the possibility of each party to seek specific performance from the other from the tribunal referred to in <u>Section 7.11</u> can be sought from any court of competent jurisdiction. Each of the parties hereto (i) agrees that it shall not oppose the granting of any such relief and (ii) hereby irrevocably waives any requirement for the security or posting of any bond in connection with any such relief (it is understood that clause (i) of this sentence is not intended to, and shall not, preclude any party hereto from litigating on the merits the substantive claim to which such remedy relates).

7.11 Submission to Jurisdiction. Each of the parties hereto irrevocably agrees that any Proceeding with respect to this Agreement and the rights and obligations arising hereunder, or for recognition and enforcement of any judgment in respect of this Agreement and the rights and obligations arising hereunder brought by any other party hereto or its successors or assigns shall be brought and determined exclusively in the Court of Chancery of the State of Delaware, or in the event (but only in the event) that such court does not have subject matter jurisdiction over such action or proceeding, in the federal courts sitting in the State of Delaware. Each of the parties hereto agrees that mailing of process or other papers in connection with any such action or proceeding in the manner provided in Section 7.5 or in such other manner as may be permitted by applicable Legal Requirements, will be valid and sufficient service thereof. Each of the parties hereto hereby irrevocably submits with regard to any such action or proceeding for itself and in respect of its property, generally and unconditionally, to the personal jurisdiction of the aforesaid courts. Each of the parties hereto hereby irrevocably waives, and agrees not to assert, by way of motion, as a defense, counterclaim, or otherwise, in any action or proceeding with respect to this Agreement and the rights and obligations arising hereunder; (a) any claim that it is not personally subject to the jurisdiction of the above named courts for any reason other than the failure to serve process in accordance with this <u>Section 7.11</u>; (b) any claim that it or its property is exempt or immune from jurisdiction of judgment, execution of judgment or otherwise); and (c) to the fullest extent permitted by the applicable Legal Requirements, any claim that (i) the suit, action or proceeding in such court is progenty. (ii) the venue of such astron or proceeding in such courts.

7.12 Waiver of Jury Trial. EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. EACH PARTY TO THIS AGREEMENT CERTIFIES AND ACKNOWLEDGES THAT: (A) NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT SEEK TO ENFORCE THE FOREGOING WAIVER IN THE EVENT OF A LEGAL ACTION; (B) SUCH PARTY HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER; (C) SUCH PARTY MAKES THIS WAIVER VOLUNTARILY; AND (D) SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS <u>SECTION 7.12</u>.

7.13 Waiver. Any term or condition of this Agreement may be waived at any time by the party that is entitled to the benefit thereof, but no such waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the party waiving such term or condition, and no waiver by any party of any default, misrepresentation, or breach of warranty or covenant hereunder, shall be deemed to extend to any prior or subsequent default, misrepresentation, or breach of warranty in exercising any rights arising by virtue of any such prior or subsequent occurrence. No failure or delay of any party in exercising any right or remedy hereunder shall operate as a waiver thereof, and no waiver by any party of any term or condition of this Agreement, in any one or more instances, shall be deemed to be or construed as a waiver of the same or any other term or condition of this Agreement on any future occasion.

7.14 <u>Counterparts; Facsimile Signature</u>. This Agreement may be executed in one (1) or more counterparts, by original or facsimile (or other such electronically transmitted) signature, each of which will be deemed an original, but all of which will constitute one and the same instrument. Any party executing this Agreement by facsimile (or other such electronically transmitted) signature shall, upon request from another party hereto, promptly deliver to the requesting party an original counterpart of such signature.

7.15 <u>Rights Cumulative</u>. All rights and remedies of each of the parties under this Agreement will be cumulative, and the exercise of one or more rights or remedies will not preclude the exercise of any other right or remedy available under this Agreement or applicable Legal Requirements.

7.16 Interpretation. (a) The words "hereof", "herein", and "hereunder" and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole and not to any particular provision of this Agreement; (b) the words "date hereof," when used in this Agreement, shall refer to the date set forth in the Preamble; (c) the terms defined in the singular have a comparable meaning when used in the plural, and vice versa; (d) the terms defined in the present tense have a comparable meaning when used in the past tense, and vice versa; (e) any references herein to a specific Section or Article shall refer, respectively, to Sections or Articles of this Agreement; (f) wherever the word "includes", "includes", or "including" is used in this Agreement, it shall be deemed to be followed by the words "without limitation"; (g) references herein to any gender includes each other gender; (h) the word "or" shall not be exclusive; (i) the headings herein are for convenience of reference only, do not constitute part of this Agreement and shall not be deemed to use affect any of the parties hereto have participated jointly in the negotiation and drafting of this Agreement and, in the event that an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as jointly drafted by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provision of this Agreement.

7.17 Survival. This Section 7 shall survive any termination of this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be duly executed on its behalf as of the date first herein above set forth.

By:
Name:
Title
BUYER:
INVAGEN PHARMACEUTICALS INC.
By:
Name:
Title:

[Signature Page to Registration Rights Agreement]

AMENDED AND RESTATED BYLAWS OF AVENUE THERAPEUTICS, INC.

I. CORPORATE OFFICES

1.1 <u>Registered Office</u>

The registered office of the corporation shall be in the City of Dover County of Kent, State of Delaware. The name of the registered agent of the corporation at such location is Incorporating Services, Ltd.

1.2 Other Offices

The board of directors may at any time establish other offices at any place or places where the corporation is qualified to do business.

II. MEETINGS OF STOCKHOLDERS

2.1 Place of Meetings

Meetings of stockholders shall be held at any place, within or outside the State of Delaware, designated by the board of directors. The board of directors may, in its sole discretion, determine that a meeting shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211 of the General Corporation Law of Delaware.

If authorized by the board of directors in its sole discretion, and subject to such guidelines and procedures as the board of directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication, participate in a meeting of stockholders, be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder, (ii) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder, (ii) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder, (ii) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder, (ii) the corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the corporation.

2.2 <u>Annual Meeting</u>

The annual meeting of stockholders shall be held each year on a date and at a time designated by the board of directors. In the absence of such designation, the annual meeting of stockholders shall be held on the third Monday in April in each year at 1:00 p.m. However, if such day falls on a legal holiday, then the meeting shall be held at the same time and place on the next succeeding full business day. At the meeting, directors shall be elected and any other proper business may be transacted.

2.3 Special Meeting

Special meetings of the stockholders may be called, at any time for any purpose or purposes, by the board of directors or by such person or persons as may be authorized by the certificate of incorporation or these bylaws, or by such person or persons duly designated by the board of directors whose powers and authority, as expressly provided in a resolution of the board of directors, include the power to call such meetings, but such special meetings may not be called by any other person or persons.

2.4 Notice of Stockholders' Meetings

(a) Except to the extent otherwise required by law, all notices of meetings with stockholders shall be in writing and shall be sent or otherwise given in accordance with Section 2.5 of these bylaws not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting. The notice shall specify the place, if any, date, and hour of the meeting, the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.

(b) Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the corporation shall also be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any such consent shall be deemed revoked if (i) the corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent, and (ii) such inability becomes known to the secretary or an assistant secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice; provided, however, that the inadvertent failure to recognize such revocation shall not invalidate any meeting or other action.

(c) Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the corporation shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any stockholder who fails to object in writing to the corporation, within sixty (60) days of having been given written notice by the corporation of its intention to send the single notice permitted under this subsection 2.4(c), shall be deemed to have consented to receiving such single written notice.

(d) Sections 2.4(b) and (c) shall not apply to any notice given to stockholders under Sections 164 (notice of sale of shares of stockholder who failed to pay an installment or call on stock not fully paid), 296 (notice of disputed claims relating to insolvent corporations), 311 (notice of meeting of stockholders to revoke dissolution of corporation), 312 (notice of meeting of stockholders of corporation whose certificate of incorporation has been renewed or revived) and 324 (notice when stock has been attached as required for sale upon execution process) of the General Corporation Law of Delaware.

2.5 Manner of Giving Notice; Affidavit of Notice

(a) Written notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at his, her or its address as it appears on the records of the corporation. An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

(b) Notice given pursuant to this Section 2.5(b) shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of such posting and the giving of such separate notice; and (iv) if by any other form of electronic transmission, when directed to the stockholder. An affidavit of the secretary, an assistant secretary or the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

2.6 Quorum

The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum is not present or represented at any meeting of the stockholders, then the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed.

2.7 Adjourned Meeting; Notice

When a meeting is adjourned to another time or place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time and place thereof, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, are announced at the meeting at which the adjournment is taken. At the adjourned meeting the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

2.8 <u>Voting</u>

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries, pledgors and joint owners of stock and to voting trusts and other voting agreements).

Except as otherwise provided in the certificate of incorporation, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder.

2.9 <u>Waiver of Notice</u>

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these bylaws, a written waiver thereof, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver or any waiver by electronic transmission of notice unless so required by the certificate of incorporation or these bylaws.

2.10 Stockholder Action by Written Consent Without a Meeting

Unless otherwise provided in the certificate of incorporation, any action required by the General Corporation Law of Delaware to be taken at any annual or special meeting of stockholders of a corporation, or any action that may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice, and without a vote if a consent in writing, setting forth the action so taken, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. A telegram, cablegram or other electronic transmission consenting to an action to be taken and transmitted by a stockholder, proxyholder or other person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this Section 2.10, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the corporation can determine (a) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder, proxyholder or other authorized person or persons, and (b) the date on which such stockholder, proxyholder or other authorized person or persons transmitted such telegram, cablegram or electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or other electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall have been delivered to the corporation by delivery to its registered office in this State, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by telegram, cablegram or other electronic transmission may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded, to the extent and in the manner provided by resolution of the board of directors of the corporation. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

Prompt notice of the taking of the corporate action without a meeting by written consent shall be given to those stockholders who have not consented in writing. If the action that is consented to is such as would have required the filing of a certificate under any section of the General Corporation Law of Delaware if such action had been voted on by stockholders at a meeting thereof, then the certificate filed under such section shall state, in lieu of any statement required by such section concerning any vote of stockholders, that written notice and written consent have been given as provided in Section 228 of the General Corporation Law of Delaware.

2.11 Record Date for Stockholder Notice; Voting; Giving Consents

In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the board of directors may fix, in advance, a record date that shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action.

If the board of directors does not so fix a record date:

(a) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held;

(b) the record date for determining stockholders entitled to express consent to corporate action in writing without a meeting, when no prior action by the board of directors is necessary, shall be the day on which the first written consent is expressed; and

(c) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting.

2.12 Proxies

Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for him by a written proxy, signed by the stockholder and filed with the secretary of the corporation, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. A proxy shall be deemed signed if the stockholder's name is placed on the proxy (whether by manual signature, typewriting, telegraphic transmission or otherwise) by the stockholder or the stockholder's attorney-in-fact. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the General Corporation Law of Delaware.

2.13 List of Stockholders Entitled to Vote

The officer who has charge of the stock ledger of a corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. The corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least ten (10) days prior to the meeting: (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

2.14 Stockholder Proposals

Effective upon the corporation's initial public offering of stock under the Securities Act of 1933, as amended, any stockholder wishing to bring any other business before a meeting of stockholders, including, but not limited to, the nomination of persons for election as directors, must provide notice to the corporation not more than ninety (90) and not less than fifty (50) days before the meeting in writing by registered mail, return receipt requested, of the business to be presented by the stockholders at the stockholders' meeting. Any such notice shall set forth the following as to each matter the stockholder proposes to bring before the meeting: (a) a brief description of the business desired to be brought before the meeting and the reasons for conducting such business at the meeting and, if such business includes a proposal to amend the bylaws of the corporation, the language of the proposed amendment; (b) the name and address, as they appear on the corporation's books, of the stockholder proposing such business; (c) the class and number of shares of the corporation that are beneficially owned by such stockholder; (d) a representation that the stockholder is a holder of record of stock of the corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business; and (e) any material interest of the stockholder in such business. Notwithstanding the foregoing provisions of this Section 2.14, a stockholder shall also comply with all applicable requirements of all applicable laws, rules and regulations, including, but not limited to, the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder, with respect to the matters set forth in this Section 2.14. In the absence of such notice to the corporation meeting the above requirements, a stockholder shall not be entitled to present any business at any meeting of stockholders.

III. DIRECTORS

3.1 <u>Powers</u>

Subject to the provisions of the General Corporation Law of Delaware and any limitations in the certificate of incorporation or these bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the board of directors.

3.2 <u>Number of Directors</u>

The number of directors constituting the board of directors shall be not more than seven (7) but not less than one (1), and may be fixed or changed, within this minimum and maximum, by the stockholders or the board of directors. Notwithstanding the foregoing, as long as InvaGen Pharmaceuticals Inc. ("InvaGen") has the right to nominate the InvaGen Directors (as defined in Section 3.3 herein), the size of the board of directors may only be increased or decreased upon consent of an authorized officer of InvaGen (as confirmed in accordance with Section 12.4 of the SPMA).

No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

3.3 Election, Qualification and Term of Office of Directors

Except as provided in this Section 3.3 and in Section 3.4 of these bylaws, directors shall be elected at each annual meeting of stockholders to hold office until the next annual meeting. Directors need not be stockholders unless so required by the certificate of incorporation or these bylaws, wherein other qualifications for directors may be prescribed. Each director, including a director elected to fill a vacancy, shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal. Each director shall be a natural person.

Elections of directors need not be by written ballot.

At any time that InvaGen beneficially owns at least 75% of the First Stage Shares (as defined in the SPMA), InvaGen shall have the right to nominate three members to the board of directors (each, an "<u>InvaGen Director</u>"), initially upon the closing of the Stock Purchase Transaction pursuant to that certain Stock Purchase and Merger Agreement by and among InvaGen, Madison Pharmaceuticals Inc. and the corporation dated November 12, 2018 (the "<u>SPMA</u>"), and thereafter at every annual meeting of the stockholders of the corporation in which directors are generally elected, including at every adjournment or postponement thereof, and on any action by written consent of the stockholders of the corporation relating to the election of directors generally. At least one of the InvaGen Directors shall be "Independent" as determined by the board of directors pursuant to Rule 5605 of The Nasdaq Stock Market ("<u>Nasdaq</u>") and the rules and regulations of the U.S. Securities and Exchange Commission ("<u>SEC</u>").

(a) The following procedures shall be followed with respect to the nomination of InvaGen Directors for election at annual meetings of stockholders of the corporation pursuant to this Section 3.3:

(i) For purposes of determining whether InvaGen has a right to nominate an InvaGen Director pursuant to this Section 3.3 and for purposes of Article IX herein, the beneficial ownership of the common stock of the corporation shall be measured as of the record date for such annual meeting or written consent. If any change in the outstanding shares of capital stock of the corporation shall occur, including by reason of any issuance (including upon exercise of warrants), reclassification, recapitalization, stock split (including a reverse stock split), or combination, exchange, readjustment of shares, consolidation, split, buy-back, repurchase, redemption, acquisition or similar transaction, or any stock dividend or distribution paid in stock, the calculation of beneficial ownership under this Section 3.3 and under Article IX herein shall be equitably adjusted to proportionately reflect such change.

(ii) Each year, the corporation will notify InvaGen when it intends to hold its next corporation's annual meeting of stockholders at least 120 days prior to such meeting. With respect to InvaGen's nominees, at least 90 days prior to the corporation's annual meeting of stockholders, InvaGen shall provide the corporation with the InvaGen's nominees for the InvaGen Directors, along with any other information reasonably requested by the independent directors of the corporation pursuant to Rule 5605 of Nasdaq and the rules and regulations of the SEC (the "Independent Directors") to evaluate the suitability of such candidates for directorship.

(iii) Within 10 days of receiving InvaGen's nominees for the InvaGen Directors in accordance with Section 3.3(a)(ii), the Independent Directors shall make a good faith and reasonable determination as to the suitability of InvaGen's nominees for InvaGen Directors and shall notify InvaGen of its determination (and the determination of the board of directors as to whether at least one of the InvaGen nominees is "Independent" pursuant to Rule 5605 of Nasdaq and the rules and regulations of the SEC). If the Independent Directors do not notify InvaGen of their determination within the 10 day period specified above, then InvaGen's nominees shall be deemed to be approved for purposes of Section 3.3(a)(iv) below. If InvaGen and the Independent Directors (s) shall not agree on the nominee(s) within 30 days after the Independent Directors raise an objection to an InvaGen Director nomination, the InvaGen Director(s) shall not be nominated by the corporation at such annual meeting. The Independent Directors may not disqualify a nominee except for the following: (i) commission of acts of misrepresentation, fraud, or dishonesty, (ii) commission of or pleading *nolo contendere* or guilty to, a crime involving fraud, any regulatory violation, dishonesty or any felony, (iii) the entry of an order of the SEC or other regulatory or self-regulatory body against the nominee; or (iv) if nominee is considered to be a "Bad Actor" as defined in Rule 506 under the Securities Act of 1933, as amended.

(iv) If the Independent Directors or any authorized committee thereof approves of InvaGen's nominees for InvaGen Directors, the board of directors shall (1) nominate such nominees to be elected as directors and recommend that the stockholders vote to elect such nominees at the next annual meeting of stockholders at which directors will be generally elected and (2) in the case of InvaGen Directors designated pursuant to Section 3.3(a)(v) or Section 3.3(a)(v), appoint the InvaGen Directors as members of the board of directors promptly to serve until the corporation's next annual meeting of stockholders at which directors will be generally elected.

(v) If any InvaGen nominee(s) is not appointed, nominated or elected by the stockholders, then as soon as practicable after the annual meeting, as applicable, InvaGen shall designate nominee(s) for such InvaGen Director(s) (subject to the limitations on the Independent Directors' ability to raise an objection as specified in clause (iii) of this Section 3.3(a)), which nominee(s) shall be appointed as director(s) by the board of directors promptly after such designation.

(vi) In the event an InvaGen Director resigns from the board of directors (or is otherwise incapable of serving on the board of directors), the remaining InvaGen Directors shall have the power to fill such vacancy. So long as the InvaGen Director replacement satisfies the criteria in Sections 3.3(a) (ii)-(iii), the board of directors shall vote in favor of such InvaGen Director replacement.

(b) InvaGen Directors shall be as close as proportionally practicable, but at least one InvaGen Director shall be, represented on all committees of the board of directors and shall be appointed to such committees in accordance with Nasdaq and SEC rules. The chair of the corporation's audit committee shall be selected by InvaGen out of the InvaGen Directors, provided that such person qualifies as an "audit committee financial expert" as such term is defined in Item 407(d)(5)(ii) of Regulation S-K under the Securities Exchange Act, of 1934, as amended.

3.4 <u>Resignation and Vacancies</u>

Any director may resign at any time upon notice given in writing or electronic transmission to the corporation. When one or more directors so resigns and the resignation is effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have the power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in this Section 3.4 in the filling of other vacancies.

Unless otherwise provided in the certificate of incorporation or these bylaws:

(a) vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director; and

(b) whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the General Corporation Law of Delaware.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten percent (10%) of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the General Corporation Law of Delaware as far as applicable.

3.5 <u>Place of Meetings; Meetings by Telephone</u>

The board of directors of the corporation may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the board of directors, or any committee designated by the board of directors, may participate in a meeting of the board of directors, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.6 First Meetings

The first meeting of each newly elected board of directors shall be held at such time and place as shall be fixed by the vote of the stockholders at the annual meeting and no notice of such meeting shall be necessary to the newly elected directors in order legally to constitute the meeting, provided a quorum shall be present. In the event of the failure of the stockholders to fix the time or place of such first meeting of the newly elected board of directors, or in the event such meeting is not held at the time and place as shall be specified in a notice given as hereinafter provided for special meetings of the board of directors, or as shall be specified in a written waiver signed by all of the directors.

3.7 <u>Regular Meetings</u>

Regular meetings of the board of directors may be held without notice at such time and at such place as shall from time to time be determined by the board of directors.

3.8 Special Meetings; Notice

Special meetings of the board of directors for any purpose or purposes may be called at any time by the chairman of the board of directors, the president, any vice president, the secretary or any director.

Notice of the time and place of special meetings shall be delivered either personally or by mail, telex, facsimile, telephone or electronic transmission to each director, addressed to each director at such director's address and/or phone number and/or electronic transmission address as it is shown on the records of the corporation. If the notice is mailed, it shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. If the notice is delivered personally or by telex, facsimile, telephone or electronic transmission, it shall be delivered by telephone or transmitted at least forty-eight (48) hours before the time of the holding of the meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the corporation. Notice may be delivered by any person entitled to call a special meeting or by an agent of such person.

3.9 Quorum

At all meetings of the board of directors, a majority of the authorized number of directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the board of directors, except as otherwise specifically provided by statute or by the certificate of incorporation. If a quorum is not present at any meeting of the board of directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

3.10 <u>Waiver Of Notice</u>

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these bylaws, a written waiver thereof, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the directors, or meeting of a committee of directors, need be specified in any written waiver of notice unless so required by the certificate of incorporation or these bylaws.

3.11 Adjourned Meeting; Notice

If a quorum is not present at any meeting of the board of directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

3.12 Board Action by Written Consent Without a Meeting

Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the board of directors, or of any committee thereof, may be taken without a meeting if all members of the board of directors or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board of directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form.

3.13 Fees and Compensation of Directors

Unless otherwise restricted by the certificate of incorporation or these bylaws, the board of directors shall have the authority to fix the compensation of directors.

The InvaGen Directors and any member of the board of directors designated by or affiliated with Fortress Biotech, Inc. shall not be compensated for his or her service on the board of directors, except to the extent such person is "Independent" as determined by the board of directors pursuant to Rule 5605 of Nasdaq and the rules and regulations of the SEC.

3.14 Approval of Loans to Officers

Subject to compliance with applicable law, including without limitation any federal or state securities laws, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiary, including any officer or employee who is a director of the corporation or its subsidiary, whenever, in the judgment of the directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the board of directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing contained in this Section 3.14 shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

3.15 <u>Removal of Directors</u>

Unless otherwise restricted by statute, by the certificate of incorporation or by these bylaws, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors; provided, that, whenever the holders of any class or classes of stock, or series thereof, are entitled to elect one or more directors by the provisions of the certificate of incorporation, removal of any directors elected by such class or classes of stock, or series thereof, shall be by the holders of a majority of the shares of such class or classes of stock, or series of stock, then entitled to vote at an election of directors.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

3.16 Chairman of the Board of Directors

The corporation may also have, at the discretion of the board of directors, a chairman of the board of directors. The chairman of the board of directors shall, if such a person is elected, preside at the meetings of the board of directors and exercise and perform such other powers and duties as may from time to time be assigned to him or her by the board of directors, or as may be prescribed by these bylaws.

IV. COMMITTEES

4.1 <u>Committees of Directors</u>

The board of directors may, by resolution passed by a majority of the whole board of directors, designate one or more committees, with each committee to consist of one or more of the directors of the corporation. The board of directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the board of directors or in the bylaws of the corporation, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority to (i) approve or adopt, or recommend to the stockholders, any action or matter expressly required by the General Corporation Law of Delaware to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any bylaws of the corporation.

4.2 <u>Committee Minutes</u>

Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

4.3 <u>Meetings and Action of Committees</u>

Meetings and actions of committees shall be governed by, and be held and taken in accordance with, the provisions of Article III of these bylaws, Section 3.5 (place of meetings and meetings by telephone), Section 3.7 (regular meetings), Section 3.8 (special meetings and notice), Section 3.9 (quorum), Section 3.10 (waiver of notice), Section 3.11 (adjourned meeting and notice), and Section 3.12 (board action by written consent without a meeting), with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the board of directors and its members; provided, however, that the time of regular meetings of committees may also be called by resolution of the board of directors and that notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

V. OFFICERS

5.1 Officers

The officers of the corporation shall be a chief executive officer, a president, one or more vice presidents, a secretary and a treasurer. The corporation may also have, at the discretion of the board of directors, a chairman of the board, one or more assistant vice presidents, assistant secretaries, assistant treasurers and any such other officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws. Any number of offices may be held by the same person.

5.2 Election of Officers

The officers of the corporation, except such officers as may be appointed in accordance with the provisions of Sections 5.3 of these bylaws, shall be chosen by the board of directors, subject to the rights, if any, of an officer under any contract of employment.

5.3 <u>Subordinate Officers</u>

The board of directors may appoint, or empower the president to appoint, such other officers and agents as the business of the corporation may require, each of whom shall hold office for such period, have such authority and perform such duties as are provided in these bylaws or as the board of directors may from time to time determine.

5.4 <u>Removal and Resignation of Officers</u>

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the board of directors at any regular or special meeting of the board of directors or by any officer upon whom such power of removal may be conferred by the board of directors.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

5.5 <u>Vacancies in Offices</u>

Any vacancy occurring in any office of the corporation shall be filled by the board of directors.

5.6 Chairman of the Board

The chairman of the board, if such an officer be elected, shall, if present, preside at meetings of the board of directors and exercise and perform such other powers and duties as may from time to time be assigned to him by the board of directors or as may be prescribed by these bylaws. If there is no chief executive officer, then the chairman of the board shall also be the chief executive officer of the corporation and shall have the powers and duties prescribed in Section 5.7 of these bylaws. The chairman of the board shall be chosen by the board of directors.

5.7 <u>Chief Executive Officer</u>

Subject to such supervisory powers, if any, as may be given by the board of directors to the chairman of the board, the chief executive officer of the corporation shall, subject to the control of the board of directors, have general supervision, direction and control of the business and the officers of the corporation. The chief executive officer shall preside at all meetings of the stockholders and, in the absence or nonexistence of a chairman of the board, at all meetings of the board of directors at which he or she is present. The chief executive officer shall have the general powers and duties of management usually vested in the office of chief executive officer of a corporation and shall have such other powers and duties as may be prescribed by the board of directors or these bylaws.

5.8 President

Subject to such supervisory powers, if any, as may be given by the board of directors to the chairman of the board or the chief executive officer, if there be such officers, the president shall, subject to the control of the board of directors, have general supervision, direction and control of the business and the officers of the corporation. In the absence or nonexistence of the chief executive officer, he or she shall preside at all meetings of the stockholders and, in the absence or nonexistence of a chairman of the board of directors at which he or she is present. He or she shall have the general powers and duties of management usually vested in the office of president of a corporation and shall have such other powers and duties as may be prescribed by the board of directors or these bylaws. The board of directors may provide in their discretion that the offices of president and chief executive officer may be held by the same person.

5.9 Vice Presidents

In the absence or disability of the chief executive officer and president, the vice presidents, if any, in order of their rank as fixed by the board of directors or, if not ranked, a vice president designated by the board of directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to time may be prescribed for them by the board of directors, these bylaws, the president or the chairman of the board.

5.10 Secretary

The secretary or an agent of the corporation shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the board of directors may direct, a book of minutes of all meetings and actions of directors, committees of directors and stockholders. The minutes shall show the time and place of each meeting, whether regular or special (and, if special, how authorized and the notice given), the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings and the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the board of directors, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates evidencing such shares, and the number and date of cancellation of every certificate surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the board of directors required to be given by law or by these bylaws. The secretary shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the board of directors or by these bylaws.

5.11 <u>Treasurer</u>

The treasurer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital, retained earnings and shares. The books of account shall at all reasonable times be open to inspection by any director.

The treasurer shall deposit all money and other valuables in the name and to the credit of the corporation with such depositaries as may be designated by the board of directors. The treasurer shall disburse the funds of the corporation as may be ordered by the board of directors, shall render to the president and directors, whenever they request it, an account of all of his or her transactions as treasurer and of the financial condition of the corporation, and shall have such other powers and perform such other duties as may be prescribed by the board of directors or these bylaws.

5.12 Assistant Secretary

The assistant secretary, or, if there is more than one, the assistant secretaries in the order determined by the stockholders or board of directors (or if there be no such determination, then in the order of their election) shall, in the absence of the secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the board of directors or the stockholders may from time to time prescribe.

5.13 <u>Representation of Shares of Other Corporations</u>

The chairman of the board, the chief executive officer, the president, any vice president, the treasurer, the secretary or assistant secretary of this corporation, or any other person authorized by the board of directors or the chief executive officer, president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

5.14 Authority and Duties of Officers

In addition to the foregoing authority and duties, all officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the board of directors or the stockholders.

VI. INDEMNITY

6.1 Indemnification of Directors and Officers

The corporation shall, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware, indemnify each of its directors and Officers against expenses (including attorneys' fees), judgments, fines, settlements, and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 6.1, a director or Officer of the corporation includes any person (a) who is or was a director or Officer of the corporation, (b) who is or was serving at the request of the corporation as a director, Officer manager, member, partner, trustee, or other agent of another corporation of the corporation or of another enterprise at the request of such predecessor corporation. Such indemnification shall be a contract right and shall include the right to receive payment of any expenses incurred by the indemnifice in connection with any proceeding in advance of its final disposition, consistent with the provisions of applicable law as then in effect. The right of indemnification provided in this Section 6.1 shall not be exclusive of any otherwise be entitled, and the provisions of this Section 6.1 shall incure to the benefit of the heirs and legal representatives of any person entitled to indemnity under this Section 6.1 and shall be applicable to proceedings commenced or continuing after the adoption of this Section 6.1, whether arising from acts or omissions occurring before or after such adoption. In furtherance, but not in limitation of the foregoing provisions, the following procedures, presumptions and remedies shall apply with respect to advancement of expenses and the right to indemnification under this Section 6.1.

(a) <u>Advancement of Expenses</u>. All reasonable expenses incurred by or on behalf of the indemnitee in connection with any proceeding shall be advanced to the indemnitee by the corporation within twenty (20) days after the receipt by the corporation of a statement or statements from the indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such proceeding, unless, prior to the expiration of such twenty-day period, the board of directors shall unanimously (except for the vote, if applicable, of the indemnitee) determine that the indemnitee has no reasonable likelihood of being entitled to indemnification pursuant to this Section 6.1. Such statement or statements shall reasonably evidence the expenses incurred by the indemnitee and, if required by law at the time of such advance, shall include or be accompanied by an undertaking by or on behalf of the indemnitee to repay the amounts advanced if it should ultimately be determined that the indemnitee is not entitled to be indemnified against such expenses pursuant to this Section 6.1.

(b) <u>Procedure for Determination of Entitlement to Indemnification</u>.

(i) To obtain indemnification under this Section 6.1, an indemnitee shall submit to the secretary of the corporation a written request, including such documentation and information as is reasonably available to the indemnitee and reasonably necessary to determine whether and to what extent the indemnitee is entitled to indemnification (the "Supporting Documentation"). The determination of the indemnitee's entitlement to indemnification shall be made not later than sixty (60) days after receipt by the corporation of the written request for indemnification together with the Supporting Documentation. The secretary of the corporation shall, promptly upon receipt of such a request for indemnification, advise the board of directors in writing that the indemnitee has requested indemnification, whereupon the corporation shall provide such indemnification, including without limitation advancement of expenses, so long as the indemnitee is legally entitled thereto in accordance with applicable law.

(ii) The indemnitee's entitlement to indemnification under this Section 6.1 shall be determined in one of the following ways: (A) by a majority vote of the Disinterested Directors (as hereinafter defined), even though less than a quorum of the board of directors; (B) by a committee of such Disinterested Directors, even though less than a quorum of the board of directors; (C) by a written opinion of Independent Counsel (as hereinafter defined) if (x) a Change of Control (as hereinafter defined) shall have occurred and the indemnitee so requests or (y) a quorum of the board of directors consisting of Disinterested Directors is not obtainable or, even if obtainable, a majority of such Disinterested Directors so directs; (D) by the stockholders of the corporation (but only if a majority of the Disinterested Directors, if they constitute a quorum of the board of directors, presents the issue of entitlement to indemnification to the stockholders for their determination); or (E) as provided in paragraph (c) below.

(iii) In the event the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to paragraph (b)(ii) above, a majority of the Disinterested Directors shall select the Independent Counsel, but only an Independent Counsel to which the indemnitee does not reasonably object; provided , however, that if a Change of Control shall have occurred, the indemnitee shall select such Independent Counsel, but only an Independent Counsel to which the board of directors does not reasonably object.

(iv) The only basis upon which a finding that indemnification may not be made is that such indemnification is prohibited by law.

(c) <u>Presumptions and Effect of Certain Proceedings</u>. Except as otherwise expressly provided in this Section 6.1, if a Change of Control shall have occurred, the indemnitee shall be presumed to be entitled to indemnification under this Section 6.1 upon submission of a request for Indemnification together with the Supporting Documentation in accordance with paragraph (b)(i), and thereafter the corporation shall have the burden of proof to overcome that presumption in reaching a contrary determination. In any event, if the person or persons empowered under paragraph (b)(ii) above to determine entitlement to indemnification shall not have been appointed or shall not have made a determination within sixty (60) days after receipt by the corporation of the request therefor together with the Supporting Documentation, the indemnitee shall be deemed to be entitled to indemnification and the indemnitee shall be entitled to such indemnification unless (A) the indemnitee misrepresented or failed to disclose a material fact in making the request for indemnification or in the Supporting Documentation or (B) such indemnification is prohibited by law. The termination of any proceeding described in this Section 6.1, or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, adversely affect the right of the indemnitee to indemnification or, with respect to any criminal proceeding, that the indemnitee had reasonable cause to believe that the indemnitee's conduct was unlawful.

(d) <u>Remedies of Indemnitee</u>.

(i) In the event that a determination is made pursuant to paragraph (b)(ii) that the indemnitee is not entitled to indemnification under this Section 6.1: (A) the indemnitee shall be entitled to seek an adjudication of his or her entitlement to such indemnification either, at the indemnitee's sole option, in (x) an appropriate court of the State of Delaware or any other court of competent jurisdiction, or (y) an arbitration to be conducted by a single arbitrator pursuant to the rules of the American Arbitration Association; (B) any such judicial proceeding or arbitration shall be *de novo* and the indemnitee is not entitled to indemnification under this Section 6.1.

(ii) If a determination shall have been made or is deemed to have been made, pursuant to paragraph (b)(ii) or (iii), that the indemnitee is entitled to indemnification, the corporation shall be obligated to pay the amounts constituting such indemnification within five (5) days after such determination has been made or is deemed to have been made and shall be conclusively bound by such determination unless (A) the indemnitee misrepresented or failed to disclose a material fact in making the request for indemnification or in the Supporting Documentation, or (B) such indemnification is prohibited by law. In the event that: (X) advancement of expenses is not timely made pursuant to paragraph (a); or (Y) payment of indemnification is not made within five (5) days after a determination of entitlement to indemnification has been made or deemed to have been made pursuant to paragraph (b)(ii) or (iii), the indemnitee shall be entitled to seek judicial enforcement of the corporation's obligation to pay to the indemnite such advancement of expenses or indemnification. Notwithstanding the foregoing, the corporation may bring an action, in an appropriate court in the State of Delaware or any other court of competent jurisdiction, contesting the right of the indemnitee to receive indemnification hereunder due to have the burden of proving the occurrence of such Disqualifying Event.

(iii) The corporation shall be precluded from asserting in any judicial proceedings or arbitration commenced pursuant to this paragraph (d) that the procedures and presumptions of this Section 6.1 are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the corporation is bound by all the provisions of this Section 6.1.

(iv) In the event that the indemnitee, pursuant to this paragraph (d), seeks a judicial adjudication of or an award in arbitration to enforce his or her rights under, or to recover damages for breach of, this Section 6.1, the indemnitee shall be entitled to recover from the corporation, and shall be indemnified by the corporation against, any expenses actually and reasonably incurred by the indemnitee if the indemnitee prevails in such judicial adjudication or arbitration. If it shall be determined in such judicial adjudication or arbitration that the indemnitee is entitled to receive part but not all of the indemnification or advancement of expenses sought, the expenses incurred by the indemnitee in connection with such judicial adjudication shall be prorated accordingly.

(e) <u>Definitions</u>. For purposes of this Section 6.1:

(i) "Change in Control" means a change in control of the corporation of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Securities Exchange Act of 1934, as amended (the "Act"), whether or not the corporation is then subject to such reporting requirement; provided that, without limitation, such a change in control shall be deemed to have occurred if (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Act) is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the corporation representing twenty-five percent (25%) or more of the combined voting power of the corporation's then outstanding securities without the prior approval of at least a majority of the members of the board of directors in office immediately prior to such acquisition; (ii) the corporation is a party to a merger, consolidation, sale of assets or other reorganization, or a proxy contest, as a consequence of which members of the board of directors in office thereafter; or (iii) during any period of two (2) consecutive years, individuals who at the beginning of such period constitute less than a majority of the board of directors thereafter; or (iii) during any period or nomination for election by the corporation's stockholders was approved by a vote of at least a majority of the board of directors thereafter; at the beginning of such period) cease for any reason to constitute at least a majority of the board of directors.

(ii) "Disinterested Director" means a director of the corporation who is not a party to the proceeding in respect of which indemnification is sought by the indemnitee; and

(iii) "Independent Counsel" means a law firm or a member of a law firm that neither presently is, nor in the past five (5) years has been, retained to represent: (A) the corporation or the indemnitee in any matter material to either such party or (B) any other party to the proceeding giving rise to a claim for indemnification under this Section 6.1. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing under such persons, relevant jurisdiction of practice, would have a conflict of interest in representing either the corporation or the indemnitee's rights under this Section 6.1.

(f) <u>Invalidity: Severability: Interpretation</u>. If any provision or provisions of this Section 6.1 shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Section 6.1 (including, without limitation, all portions of any paragraph of this Section 6.1 containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (ii) to the fullest extent possible, the provisions of this Section 6.1 (including, without limitation, all portions of any paragraph of this Section 6.1 containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid; illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable. Reference herein to laws, regulations or agencies shall be deemed to include all amendments thereof, substitutions therefor and successors thereto.

6.2 Indemnification of Others

The corporation shall have the power, to the extent and in the manner permitted by the General Corporation Law of Delaware, to indemnify each of its officers, employees and agents (other than directors) against expenses (including attorneys' fees), judgments, fines, settlements, and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 6.2, an officer, employee or agent of the corporation (other than a director) includes any person (a) who is or was an employee or agent of the corporation, (b) who is or was serving at the request of the corporation as a director, officer, manager, member, partner, trustee, employee or other agent of another corporation, limited liability company, partnership, joint venture, trust or other enterprise, or (c) who was an employee or agent of a corporation that was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

6.3 Insurance

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, manager, member, partner, trustee, employee or other agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, limited liability company, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him against such liability under the provisions of the General Corporation Law of Delaware.

VII. RECORDS AND REPORTS

7.1 <u>Maintenance and Inspection of Records</u>

The corporation shall, either at its principal executive office or at such place or places as designated by the board of directors, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these bylaws as amended to date, accounting books and other records.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal place of business.

Any records maintained by a corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be kept on, or by means of, or be in the form of, any information storage device or method, provided that the records so kept can be converted into clearly legible paper form within a reasonable time. Any corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to any provision of the certificate of incorporation, these bylaws or the General Corporation Law of Delaware. When records are kept in such manner, a clearly legible paper from or by means of the information storage device or method shall be admissible in evidence, and accepted for all other purposes, to the same extent as an original paper record of the same information would have been, provided the paper form accurately portrays the record.

7.2 <u>Inspection by Directors</u>

Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders and its other books and records for a purpose reasonably related to his or her position as a director. The Court of Chancery is hereby vested with the exclusive jurisdiction to determine whether a director is entitled to the inspection sought. The court may summarily order the corporation to permit the director to inspect any and all books and records, the stock ledger and the stock list and to make copies or extracts therefrom. The burden of proof shall be upon the corporation to establish that the inspection such director seeks is for an improper purpose. The court may, in its discretion, prescribe any limitations or conditions with reference to the inspection, or award such other and further relief as the court may deem just and proper.

7.3 Annual Statement to Stockholders

The board of directors shall present at each annual meeting, and at any special meeting of the stockholders when called for by vote of the stockholders, a full and clear statement of the business and condition of the corporation.

VIII. GENERAL MATTERS

8.1 Checks

From time to time, the board of directors shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

8.2 Execution of Corporate Contracts and Instruments

The board of directors, except as otherwise provided in these bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

8.3 Stock Certificates; Partly Paid Shares

The shares of the corporation shall be represented by certificates, provided that the board of directors of the corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Notwithstanding the adoption of such a resolution by the board of directors, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the corporation by the chairman or vice-chairman of the board of directors, or the president or vice president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of such corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue. The corporation shall not have power to issue a certificate in bearer form.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, and upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

8.4 Special Designation on Certificates

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided , however, that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

8.5 Lost Certificates

Except as provided in this Section 8.5, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or his or her legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

8.6 <u>Construction; Definitions</u>

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the Delaware General Corporation Law shall govern the construction of these bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term "person" includes both a corporation and a natural person.

8.7 <u>Dividends</u>

The directors of the corporation, subject to any rights or restrictions contained in the certificate of incorporation, may declare and pay dividends upon the shares of its capital stock pursuant to the General Corporation Law of Delaware. Dividends may be paid in cash, in property or in shares of the corporation's capital stock.

The directors of the corporation may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation and meeting contingencies.

8.8 <u>Fiscal Year</u>

The fiscal year of the corporation shall be fixed by resolution of the board of directors and may be changed by the board of directors.

8.9 <u>Seal</u>

The corporation may adopt a corporate seal which may be altered as desired, and may use the same by causing it, or a facsimile thereof, to be impressed or affixed or in any other manner reproduced.

8.10 Transfer of Stock

Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction in its books.

8.11 Stock Transfer Agreements and Restrictions

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the General Corporation Law of Delaware.

8.12 <u>Electronic Transmission</u>

For purposes of these bylaws, "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

IX. AMENDMENTS

The original or other bylaws of the corporation may be adopted, amended or repealed by the stockholders entitled to vote<u>provided</u>, <u>however</u>, that the corporation may, in its certificate of incorporation, confer the power to adopt, amend or repeal bylaws upon the directors; <u>provided</u>, <u>further</u>, that these bylaws shall not be amended or repealed without the prior consent of an authorized officer of InvaGen (as confirmed in accordance with Section 12.4 of the SPMA), (a) if the SPMA has not been terminated, until the Second Stage Closing (as defined therein), and (b) if the SPMA has been terminated, at any time that InvaGen beneficially owns at least 75% of the First Stage Shares. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws.

X. DISSOLUTION

If it should be deemed advisable in the judgment of the board of directors of the corporation that the corporation should be dissolved, the board, after the adoption of a resolution to that effect by a majority of the whole board at any meeting called for that purpose, shall cause notice to be mailed to each stockholder entitled to vote thereon of the adoption of the resolution and of a meeting of stockholders to take action upon the resolution.

At the meeting a vote shall be taken for and against the proposed dissolution. If a majority of the outstanding stock of the corporation entitled to vote thereon votes for the proposed dissolution, then a certificate stating, among other things, that the dissolution has been authorized in accordance with the provisions of Section 275 of the General Corporation Law of Delaware and setting forth the names and residences of the directors and officers shall be executed, acknowledged, and filed and shall become effective in accordance with Section 103 of the General Corporation Law of Delaware, the corporation shall be dissolved.

Whenever all the stockholders entitled to vote on a dissolution consent in writing, either in person or by duly authorized attorney, to a dissolution, no meeting of directors or stockholders shall be encessary. The consent shall be filed and shall become effective in accordance with Section 103 of the General Corporation Law of Delaware. Upon such consent's becoming effective in accordance with Section 103 of the General Corporation Law of Delaware, the corporation power of attorney or a photocopy thereof shall be attached to and filed with the consent. The consent filed with the secretary or Some other officer of the corporation stating that the consent has been signed by or on behalf of all the stockholders entitled to vote on a dissolution; in addition, there shall be attached to the consent a certification by the secretary or some other officer of the corporation stating that the consent officer of the corporation setting forth the names and residences of the directors and officers of the corporation.

XI. CUSTODIAN

11.1 Appointment of a Custodian in Certain Cases

The Court of Chancery, upon application of any stockholder, may appoint one or more persons to be custodians and, if the corporation is insolvent, to be receivers, of and for the corporation when:

(a) at any meeting held for the election of directors the stockholders are so divided that they have failed to elect successors to directors whose terms have expired or would have expired upon qualification of their successors;

(b) the business of the corporation is suffering or is threatened with irreparable injury because the directors are so divided respecting the management of the affairs of the corporation that the required vote for action by the board of directors cannot be obtained and the stockholders are unable to terminate this division; or

(c) the corporation has abandoned its business and has failed within a reasonable time to take steps to dissolve, liquidate or distribute its assets.

11.2 Duties of Custodian

The custodian shall have all the powers and title of a receiver appointed under Section 291 of the General Corporation Law of Delaware, but the authority of the custodian shall be to continue the business of the corporation and not to liquidate its affairs and distribute its assets, except when the Court of Chancery otherwise orders and except in cases arising under Sections 226(a)(3) or 352(a)(2) of the General Corporation Law of Delaware.

CERTIFICATE OF ADOPTION OF AMENDED AND RESTATED BYLAWS OF AVENUE THERAPEUTICS, INC.

The undersigned hereby certifies that [s]he is a duly elected, qualified and acting officer of AVENUE THERAPEUTICS, INC., and that the foregoing amended and restated bylaws, comprising [] pages, were adopted as the bylaws of the corporation effective [DATE], by the board of directors of the corporation pursuant to action of the board of directors by unanimous written consent, and were recorded in the minutes thereof.

IN WITNESS WHEREOF, the undersigned has hereunto set [his/her] hand and affixed the corporate seal this ____ day of [MONTH], [YEAR].

/s/ [NAME], Secretary