

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**FORM S-8
REGISTRATION STATEMENT**
*Under
The Securities Act of 1933*

AVI BIOPHARMA, INC.

(Exact name of Registrant as specified in its charter)

Oregon
(State or other jurisdiction of
incorporation or organization)

93-0797222
(I.R.S. Employer
Identification Number)

3450 Monte Villa Parkway, Suite 101
Bothell, WA 98021
(425) 354-5038

(Address including zip code, and telephone number, including area code, of principal executive offices)

AVI BIOPHARMA, INC.
2002 EQUITY INCENTIVE PLAN
(Full title of the plan)

Christopher Garabedian
President and Chief Executive Officer
AVI BioPharma, Inc.
3450 Monte Villa Parkway, Suite 101
Bothell, WA 98021
(425) 354-5038

(Name, address, and telephone number, including area code, of agent for service)

Copy to:

Michael Nordtvedt
Wilson Sonsini Goodrich & Rosati
Professional Corporation
701 Fifth Avenue, Suite 5100
Seattle, Washington 98104
(206) 883-2500

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

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Maximum Amount to be Registered (1)(2)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock \$0.0001 par value				
— Outstanding under the 2002 Equity Incentive Plan	10,253,728	\$2.12(3)	\$21,737,904	\$2,523.78
— To be issued under the 2002 Equity Incentive Plan	2,069,384	\$1.90(4)	\$3,931,830	\$456.49
Total	12,323,112		\$25,669,734	\$2,980.27

(1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock that become issuable under the 2002 Equity Incentive Plan (the "Plan") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding shares of common stock.

(2) For the sole purpose of calculating the registration fee, the number of shares issuable pursuant to the Plan has been broken down into two subtotals.

- (3) Offering prices of shares underlying options that are outstanding as of the date of this Registration Statement are computed in accordance with Rule 457(h) under the Securities Act based on the weighted-average exercise price (rounded to the nearest cent) of the shares underlying such outstanding options. Offering prices are estimated solely for the purpose of calculating the registration fee.
- (4) Offering prices of awards that have not yet been granted as of the date of this Registration Statement are computed in accordance with Rules 457(c) and 457(h) under the Securities Act solely for the purpose of calculating the registration fee based upon the price of \$1.90 per share, the average of the high and low prices of the common stock of the Registrant as reported on The NASDAQ Global Market on March 11, 2011.

AVI BIOPHARMA, INC.

REGISTRATION OF ADDITIONAL SECURITIES

PURSUANT TO GENERAL INSTRUCTION E

This Registration Statement registers the offer and sale of additional shares of our common stock to be issued pursuant to our 2002 Equity Incentive Plan, or Plan. Accordingly, unless noted herein, the contents of our previous Registration Statement on Form S-8 filed with the Securities and Exchange Commission ("SEC") on December 13, 2002 (File No. 333-101826), including periodic reports that we filed after that Registration Statement on Form S-8 to maintain current information about us, are incorporated by reference into this Registration Statement pursuant to General Instruction E of Form S-8.

Item 3. Incorporation of Documents by Reference

The following documents previously filed with the SEC are hereby incorporated by reference:

(a) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 filed with the SEC on March 15, 2011.

(b) All other reports filed with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") since the end of the fiscal year covered by our Annual Report referred to in (a) above.

(c) The description of our common stock contained in our registration statement on Form 8-A12G, filed May 29, 1997, pursuant to Section 12(g) of the Exchange Act.

All documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities registered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents.

We are not incorporating any information from any filed documents furnished under either Item 2.02 or Item 7.01 of any Current Report on Form 8-K. Unless expressly incorporated into this Registration Statement, a Current Report furnished on Form 8-K subsequent to the date hereof shall not be incorporated by reference into this Registration Statement, except as to specific sections of such statements as set forth therein.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 6. Indemnification of Directors and Officers

Under the Oregon Business Corporation Act (the “Oregon Act”) and our Third Restated Articles of Incorporation, as amended (the “Articles”), we have broad powers to indemnify directors and officers against liabilities that they may incur in such capacities.

Section 60.391 of the Oregon Act authorizes the indemnification of an individual made a party to a proceeding because the individual is or was an officer or director against certain liability incurred in the proceeding if:

- (a) the conduct of the individual was in good faith;
- (b) the individual reasonably believed that his or her conduct was in the best interests of the corporation or at least not opposed to its best interests;
- (c) in the case of any criminal proceeding, the individual had no reasonable cause to believe his or her conduct was unlawful;
- (d) in the case of any proceeding by or in the right of the corporation, the individual was not adjudged liable to the corporation; and
- (e) in connection with any proceeding (other than a proceeding by or in the right of the corporation) charging improper personal benefit to the individual, the individual was not adjudged liable on the basis that he or she improperly received personal benefit.

Section 60.401 of the Oregon Act also authorizes a court to order indemnification, whether or not the above standards of conduct have been met, if the court determines that the officer or director is fairly and reasonably entitled to indemnification in view of all the relevant circumstances. In addition, the Oregon Act provides that the indemnification described above is not exclusive of any other rights to which officers or directors may be entitled under the corporation’s articles of incorporation or bylaws, or under any agreement, action of its board of directors, vote of shareholders or otherwise.

Section 60.047(2)(d) of the Oregon Act also authorizes a corporation to include in its articles of incorporation a provision eliminating or limiting the personal liability of a director to the corporation or its shareholders for monetary damages for conduct as a director, except that such a provision cannot affect the liability of a director (i) for any breach of the director’s duty of loyalty to the corporation or its shareholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for any unlawful corporate distribution as defined in the Oregon Act or (iv) for any transaction from which the director derived an improper personal benefit.

Our Articles provide that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Oregon law. No amendment to the Articles that limits our obligation to indemnify any person shall have any effect for any act or omission that occurs prior to the later of the effective date of such amendment and the date notice of such amendment is given to the person.

We have entered into and expect to continue to enter into agreements to indemnify our executive officers. Also, contingent upon the receipt of shareholder approval of our form of indemnification agreement, we expect to enter into such agreement with our directors. With certain exceptions, these agreements require

us to indemnify each indemnitee to the fullest extent permitted by applicable law, against all expenses, judgments, fines and amounts paid in settlement incurred by the indemnitee in connection with any proceeding, whether of a civil, criminal, administrative or investigative nature, in which the indemnitee may be or may have been involved as a party, witness or otherwise, by reason of the fact that the indemnitee was one of our directors or officers, or by reason of any action or inaction on indemnitee's part while acting as one of our directors or officers, or by reason of the fact that indemnitee was serving, at our request, in certain capacities for other entities.

We believe that the provisions in the Articles and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

Item 8. Exhibits

Exhibit Number	Description
4.1(1)	Third Restated and Amended Articles of Incorporation of Antivirals, Inc.
4.2(2)	First Amendment to Third Restated and Amended Articles of Incorporation of Antivirals, Inc.
4.3(3)	Articles of Amendment to Article 2 of the Third Restated and Amended Articles of Incorporation of AVI BioPharma, Inc., as amended.
4.4(4)	Amended and Restated Bylaws of AVI BioPharma, Inc.
4.5(5)	Form of Specimen Certificate for Common Stock.
4.6(6)	AVI BioPharma, Inc. 2002 Equity Incentive Plan
5.1	Opinion of White & Lee LLP.
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
23.2	Consent of White & Lee LLP (see Exhibit 5.1).
24.1	Power of Attorney (included on signature page).
(1)	Incorporated by reference to Exhibit 3.1 to Registrant's Registration Statement on Form SB-2, as amended, filed on January 28, 1997.
(2)	Incorporated by reference to Exhibit 3.3 to Registrant's Current Report on Form 8-K, filed on September 30, 1998.
(3)	Incorporated by reference to Appendix B to Registrant's Definitive Proxy Statement on Schedule 14A, filed on April 11, 2002.
(4)	Incorporated by reference to Exhibit 3.4 to Registrant's Annual Report on Form 10-K, filed on March 15, 2011.
(5)	Incorporated by reference to Exhibit 4.1 to Registrant's Annual Report on Form 10-K, filed on March 15, 2011.
(6)	Incorporated by reference to Appendix A to Registrant's Definitive Proxy Statement on Schedule 14A, filed on April 11, 2002.

Item 9. Undertakings

- a. The undersigned Registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

- (ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

Provided, however, that clauses (1)(i) and (1)(ii) shall not apply if the information required to be included in a post-effective amendment by those clauses is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference into this registration statement;

- (2) That, for purposes of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; and
 - (3) To remove from registration by means of a post-effective amendment to any of the securities being registered which remain unsold at the termination of the offering.
- b. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference into this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
 - c. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, or controlling persons of the Registrant pursuant to the indemnification provisions summarized in Item 6 or otherwise, the Registrant has been advised that, in the opinion of the Commission, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, AVI BioPharma, Inc., a corporation organized and existing under the laws of the State of Oregon, certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bothell, State of Washington, on this 15th day of March, 2011.

AVI BIOPHARMA, INC.

By: /s/ Christopher Garabedian
Christopher Garabedian
President and Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Christopher Garabedian, J. David Boyle II and Effie Toshav, and each of them, as his or her attorney-in-fact, with full power of substitution in each, for him or her in any and all capacities to sign any and all amendments to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ CHRISTOPHER GARABEDIAN</u> Christopher Garabedian	President, Chief Executive Officer and Director (Principal Executive Officer)	March 15, 2011
<u>/s/ J. DAVID BOYLE II</u> J. David Boyle II	Senior Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 15, 2011
<u>/s/ WILLIAM GOOLSBEE</u> William Goolsbee	Chairman and Director	March 15, 2011
<u>/s/ M. KATHLEEN BEHRENS</u> M. Kathleen Behrens	Director	March 15, 2011
<u>/s/ ANTHONY CHASE</u> Anthony Chase	Director	March 15, 2011
<u>/s/ JOHN HODGMAN</u> John Hodgman	Director	March 15, 2011
<u>/s/ GIL PRICE</u> Gil Price	Director	March 15, 2011
<u>/s/ HANS WIGZELL</u> Hans Wigzell	Director	March 15, 2011

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OPINION OF WHITE & LEE LLP

March 14, 2011

AVI BioPharma, Inc.
3450 Monte Villa Parkway, Suite 101
Bothell, WA 98021

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-8 (the "*Registration Statement*") to be filed by AVI BioPharma, Inc., an Oregon corporation (the "*Company*"), with the Securities and Exchange Commission on or about the date hereof, in connection with the registration under the Securities Act of 1933, as amended, of an aggregate of 12,323,112 shares (the "*Shares*") of your common stock, par value \$0.0001 per share, reserved for issuance under the AVI BioPharma, Inc. 2002 Equity Incentive Plan (the "*Plan*"). In connection with the filing of the Registration Statement, we have acted as the Company's special legal counsel and have reviewed the actions proposed to be taken by you in connection with the issuance and sale of the Shares to be issued under the Plan.

In rendering this opinion, we have made such legal and factual examinations and inquiries as we have deemed advisable or necessary for the purpose of rendering this opinion. As to matters of fact material to the opinions expressed herein, we have relied upon the representations as to factual matters contained in and made by the Company pursuant to a certificate of an officer of the Company. In addition, we have examined originals or copies of documents, corporate records and other writings which we consider relevant for the purposes of this opinion. In such examination, we have assumed the genuineness of all signatures on original documents, the conformity to original documents of all copies submitted to us and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof.

We express no opinion as to matters governed by any laws other than the applicable laws of the State of Oregon and the federal law of the United States of America.

It is our opinion that, when issued and sold in the manner referred to in the Plan and pursuant to the agreement which accompanies the Plan, the Shares will be legally and validly issued, fully paid and nonassessable. We express no other opinions other than the opinion set forth in the foregoing sentence.

We consent to the use of this opinion as an exhibit to the Registration Statement, and further consent to the use of our name wherever appearing in the Registration Statement and any amendments thereto. In giving such consent, we do not consider that we are "experts" within the meaning of such term as used in the Securities Act, or the rules and regulations of the Securities and Exchange Commission issued thereunder, with respect to any part of the Registration Statement, including this opinion as an exhibit or otherwise.

Very truly yours,

WHITE & LEE LLP

/s/ WHITE & LEE LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors
AVI BioPharma, Inc.

We consent to the use of our reports dated March 14, 2011, with respect to the balance sheets of AVI BioPharma, Inc. (a developmental stage company) as of December 31, 2010 and 2009, and the related statements of operations, shareholders' equity (deficit) and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2010 and the information included in the cumulative from inception presentations for the period January 1, 2002 to December 31, 2010 (not separately presented), and the effectiveness of internal control over financial reporting as of December 31, 2010, incorporated herein by reference.

/s/ KPMG LLP

Seattle, Washington
March 14, 2011