
UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No.1

to

FORM S-3

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 No.)

**One S.W. Columbia St., Suite 1105
Portland, OR 97258
(503) 227-0554**

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

**Alan P. Timmins
President and Chief Operating Officer
AVI BioPharma, Inc.**

**One S.W. Columbia, Suite 1105, Portland, OR 97258
(503) 227-0554**

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

Copies to:

Michael C. Phillips, Esq.
Davis Wright Tremaine LLP
23rd Floor
1300 S.W. Fifth Avenue
Portland, Oregon 97201
(503) 241-2300

Approximate date of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

CALCULATION OF REGISTRATION FEE

Title of Class of Securities to be Registered	Amount to be Registered (1),(2)	Proposed Maximum Aggregate Offering Price per share (3)	Proposed Maximum Aggregate Offering Price (3)	Amount of Registration Fee (3),(4)
Common Stock, par value \$.0001 per share	5,647,016	\$ 1.5325	\$ 18,254	\$ 1
(1) Pursuant to Rule 416 under the Securities Act, includes such indeterminate amounts and numbers of common stock as may be issued upon a stock split, stock dividend or similar transaction				
(2) 5,635,105 shares of common stock were covered by the Registration Statement on Form S-3 (File No. 333-150021) of AVI BioPharma, Inc., which was filed with the Securities and Exchange Commission on April 1, 2008. Under Amendment No. 1 to the Registration Statement, filed May 16, 2008, an additional 11,911 shares were registered, for a total of 5,647,016 shares.				
(3) Estimated solely for purposes of calculating the additional registration fee payable on account of the 11,911 additional shares to be registered under this Amendment No.1 pursuant to Rule 457(c) and Section 6(b) of the Securities Act of 1933 using the average of the high and low prices of the registrant's common stock as reported on The Nasdaq Global Market on May 15, 2008.				
(4) Represents the fee payable on the additional number of shares to be registered. Fee of \$407 was previously paid when the Registration Statement on Form S-3 (File No. 333-150021) of AVI BioPharma, Inc., was initially filed with the Securities and Exchange Commission on April 1, 2008.				

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

The information in this prospectus is not complete and may be changed. The selling shareholders named in this prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission becomes effective. This prospectus is not an offer to sell these securities and the selling shareholders named in this prospectus are not soliciting offers to buy these securities in any jurisdiction where the offer and sale is not permitted.

SUBJECT TO COMPLETION, DATED May 16, 2008

PROSPECTUS



AVI BIOPHARMA, INC.
5,647,016 Shares of Common Stock

This prospectus relates to the offer and sale from time to time by the selling shareholders identified in this prospectus, and their pledgees, assignees and successors-in-interest, of 5,647,016 shares of our common stock. We are filing the registration statement of which this prospectus is a part in order to fulfill contractual obligations with the selling shareholders.

The prices at which such selling shareholders may sell the shares in this offering will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive any of the proceeds from the sale of the shares. See "Plan of Distribution" beginning on page 6.

Our common stock is quoted on the Nasdaq Global Market under the symbol "AVII." The closing sales price of our common stock on the Nasdaq Global Market on May 15, 2008 was \$1.53 per share.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 3.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 16, 2008.

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You should rely only on the information contained in this prospectus, including information incorporated by reference in this prospectus, or any supplement to which we have referred you. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus or any supplement is accurate as of any date other than the date on the front of those documents or that any document incorporated by reference is accurate as of any date other than its filing date. You should not consider this prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Furthermore, you should not consider this prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

PROSPECTUS SUMMARY

This summary highlights important features of this offering and the information included or incorporated by reference in this prospectus. This summary does not contain all of the information that you should consider before investing in our common stock. You should read this prospectus and the information and documents incorporated by reference carefully. Such documents contain important information you should consider when making your investment decision. See “Incorporation of Certain Documents by Reference” on page .

Unless the context otherwise requires, all references to “we,” “our,” “our company, or “the Company” in this prospectus refer to AVI BioPharma, Inc., an Oregon corporation.

About AVI BioPharma, Inc.

We are a biopharmaceutical company developing therapeutic products principally based on third-generation NEUGENE® antisense technology. Our principal products in development target life-threatening diseases, including cardiovascular, infectious, and genetic diseases. Currently approved drugs or other therapies for these diseases often prove to be ineffective or produce undesirable side effects. Our pre-clinical and clinical studies indicate that our technology may lead to development of drugs that we believe offer more effective treatment options with fewer side effects than currently approved products. A patent estate including 186 patents (foreign and domestic) issued or licensed to us and 192 pending patent applications (domestic and foreign) protects our technologies. Our lead product candidate, Resten-NG®, which is targeted at cardiovascular disease, addresses a market we believe may exceed \$3 billion worldwide.

Our executive offices are located at One S.W. Columbia, Suite 1105, Portland, OR 97258. Our telephone number is (503) 227-0554, fax number is (503) 227-0751, and our website address is www.avibio.com. The information on our website is not incorporated by reference into this prospectus.

This prospectus includes our trademarks and registered trademarks, including NeuGene®, Avicine®, Resten-NG®, Resten-CP™, and Oncomyc-NG™. Each other trademark, trade name or service mark appearing in this annual report belongs to its holder.

The Offering

Common stock offered by selling shareholders	5,647,016 shares
Use of proceeds	We will not receive any proceeds from the sale of shares in this offering. See “Selling Shareholders.”
Nasdaq National Market symbol	AVII

RISK FACTORS

Investment in our securities involves a high degree of risk. You should carefully consider the risks described in the section entitled “Risk Factors” in any prospectus as well as in the section entitled “Risk Factors” contained in our most recent annual report on Form 10-K, which has been filed with the SEC and are incorporated herein by reference in their entirety, as well as other information in this prospectus and any other documents or reports incorporated by

reference herein before purchasing any of our securities. Each of the risks described in these sections and documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a loss of your investment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference herein and therein contain forward-looking statements regarding our plans, expectations, estimates and beliefs. Our actual results could differ materially from those discussed in, or implied by, these forward-looking statements. Forward-looking statements are identified by words such as “believe,” “anticipate,” “expect,” “intend,” “plan,” “will,” “may,” and other similar expressions. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. We have based these forward-looking statements largely on our expectations. Forward-looking statements in this report include, but are not necessarily limited to, those relating to:

- our intention to introduce new products;
- receipt of any required FDA or other regulatory approval for our products;
- our expectations about the markets for our products;
- acceptance of our products, when introduced, in the marketplace;
- our future capital needs;
- results of our research and development efforts, and
- success of our patent applications.

Forward-looking statements are subject to risks and uncertainties, certain of which are beyond our control. Actual results could differ materially from those anticipated as a result of the factors described in the “Risk Factors” and detailed herein and in our other Securities and Exchange Commission filings, including among others:

- the effect of regulation by the FDA and other governmental agencies;
- delays in obtaining, or our inability to obtain, approval by the FDA or other regulatory authorities for our products;
- research and development efforts, including delays in developing, or the failure to develop, our products;
- the development of competing or more effective products by other parties;
- the results of pre-clinical and clinical testing;
- uncertainty of market acceptance of our products;
- problems that we may face in manufacturing, marketing, and distributing our products;
- our inability to raise additional capital when needed;
- delays in the issuance of, or the failure to obtain, patents for certain of our products and technologies; and
- problems with important suppliers and business partners.

Because of these risks and uncertainties, the forward-looking events and circumstances discussed in this prospectus or incorporated by reference might not occur. Factors that cause actual results or conditions to differ from those anticipated by these and other forward-looking statements

include those more fully described in the “Risk Factors” section and elsewhere in this prospectus. Except for our ongoing obligations to disclose material information as required by the federal securities laws, we undertake no obligation to release publicly any revisions to any forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. All of the above factors are difficult to predict, contain uncertainties that may materially affect our actual results and may be beyond our control. New factors emerge from time to time, and it is not possible for our management to predict all of such factors or to assess the effect of each factor on our business.

USE OF PROCEEDS

The proceeds from the sale of the selling shareholders’ shares of common stock will belong to the selling shareholders. We will not receive any proceeds from the sale by the selling shareholders of these shares of common stock. See “Selling Shareholders.”

DESCRIPTION OF TRANSACTION

On March 12, 2008, we entered into an Agreement and Plan of Merger (“the Merger Agreement”) with Ercole Biotech, Inc., a privately held Delaware corporation (“Ercole”). Under the terms of the Merger Agreement, a wholly-owned subsidiary of AVI merged with and into Ercole, with Ercole surviving the merger as a wholly-owned subsidiary of the Company (the “Merger”). Under the terms of the Merger Agreement, AVI issued 5,647,016 shares of AVI Common Stock to shareholders of Ercole other than AVI in exchange for all of the issued and outstanding shares of Ercole’s common stock and preferred stock held by such holders, and, subject to receipt of information required by applicable law from each such holder, we agreed to register those 5,647,016 shares of AVI Common Stock for resale by the Ercole shareholders. AVI also held shares of Ercole preferred stock, but received no portion of the merger consideration for the shares it held.

SELLING SHAREHOLDERS

This prospectus relates to the resale from time to time of up to a total of 5,647,016 shares of our common stock by the selling shareholders. The shares were issued in a private placement exempt from registration requirements under the Securities Act of 1933, as amended (the “Securities Act”). Under the Merger Agreement, we agreed to file a registration statement, of which this prospectus is a part, with the SEC to register the resale of these shares and to keep the registration statement effective until September 20, 2009.

The following table, based upon information currently known by us, sets forth as of May 16, 2008: (i) the number of shares held of record or beneficially by each selling shareholder as of such date and (ii) the number of shares that may be offered under this prospectus. Beneficial ownership is determined in accordance with the rules of the SEC, and includes voting or investment power with respect to shares, and includes shares of common stock plus any securities held by the holder exercisable for or convertible into shares of common stock within sixty (60) days after May 16, 2008, in accordance with Rule 13d-3(d)(1) under the Securities Exchange Act of 1934, as amended. None of the selling shareholders are a broker-dealer or an affiliate of a broker-dealer.

Name of Selling Shareholder	Common Stock Beneficially owned prior to the offering	Common stock owned upon completion of the offering (2)	Percentage of common stock owned upon completion of this offering
Altman, Sidney	4,270	0	*
ARBA Partners, LP (3)	20,118	0	*
Bebenek, Tadeusz	500,279	0	*
Blass, Josef and Ewa, JTROS	85,631	0	*
Bocckino, Stephen B.	74,446	0	*
Brostoff, Steven W.	29,778	0	*

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Buckley, Brian	15,484	0	*
Dominski, Zbigniew	6,321	0	*
Duncan, Clayton I.	997,138	229,846	*
Gorlach, Jorn and Jenifer, JTROS	104,224	0	*
Graziewicz, Maria	74,446	0	*
H&M Holdings, LLC (4)	62,019	33,432	*
Juliano, Rudolph L.	5,878	0	*
Kenan - Flagler Business School Foundation (5)	11,911	0	*
Kole, Ryszard	94,919	0	*
Kole, Ryszard and Jolanta, JTROS	1,865,623	0	*
Kopczynski, Casey	14,889	0	*
Kouri, Richard E.	205,471	0	*
Love, W. Bennett	745,960	147,412	*
Maroglou, Athanasios	107,202	0	*
Mitchell, Beverly S.	5,189	0	*
North Carolina Biotechnology Center (6)	120,167	0	*
Patterson, Winston Campbell	5,878	0	*
Redick, Ann	59,557	0	*
Reichow, Richard W.	422,767	118,158	*
Roberts, Jennifer Dillman	1,191	0	*
Sazani, Peter	233,265	0	*
Summerton, James E.	96,658	0	*
University of North Carolina at Chapel Hill Foundation, The (7)	154,353	0	*
Venuti, Robert P.	25,948	0	*
Ward, David P.	12,973	0	*
Woody, Jr. W. Ruffin	11,911	0	*

(1) Of the total shares of common stock listed as owned by the selling shareholders, a total of 621,158 shares are held in an escrow account to secure certain indemnification and other obligations of the former shareholders of Ercole in connection with the Merger. It is expected that these shares (less any shares that may be distributed from the escrow account to us in satisfaction of indemnification claims) will be released from escrow and distributed to the selling shareholders on or about March 20, 2009. The number of shares indicated as owned by each selling shareholder includes those shares which such selling shareholder is entitled to receive upon distribution of these shares from the escrow account.

(2) We do not know when or in what amounts a selling shareholder may offer shares for sale. The selling shareholders may not sell any or all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this offering, we cannot estimate the number of the shares that will be held by the selling shareholders after completion of the offering. However, for purposes of this table, we have assumed the sale by the selling shareholders of all of the shares of common stock available for resale under this prospectus. Percent calculations are based on 70,429,110 shares of our common stock issued and outstanding as of March 20, 2008.

(3) C.D.M. Properties LLC is the general partner of this selling shareholder. Clara Markowicz, Martin Jaffe and Victor Markowicz are the managers of C.D.M. Properties LLC and exercise the voting and dispositive powers with regard to the registered shares.

(4) Fred Hutchison, Allen Baum, John Fogg and William Wofford are the current managers of this selling

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shareholder and exercise the voting and dispositive powers with regard to the registered shares.

(5) W. Steven Jones, John C. O'Hara, Jr., William Hugh McLean, David W. Stevens, James W. Dean, David A. Hoffman, Gregory W. Brown, Susan Cates, Robert C. Eubanks, Jr., J. Alston Gardner, Paul J. Rizzo, William L. Rogers, and Thomas J. Ward are current members of the Board of Directors of this selling shareholder, and exercise the voting and dispositive powers with regard to the registered shares.

(6) E. Norris Tolson is President and CEO of this selling shareholder and exercises the voting and dispositive powers with regard to the registered shares.

(7) Richard L. Mann is Treasurer of this selling shareholder and exercises the voting and dispositive powers with regard to the registered shares.

* Less than one percent.

PLAN OF DISTRIBUTION

The selling shareholders and their successors, which includes their pledgees, donees, partnership distributees and other transferees receiving the offered shares in non-sale transfers, may sell any or all of the offered shares of common stock on the Nasdaq Global Market or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling shareholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers,
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction,
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account,
- an exchange distribution in accordance with the rules of the applicable exchange,
- privately- negotiated transactions,
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part,
- broker-dealers may agree with the selling shareholder to sell a specified number of such shares at a stipulated price per share, through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise,
- a combination of any such methods of sale, or
- any other method permitted pursuant to applicable law.

The selling shareholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling shareholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling shareholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with NASDAQ Marketplace Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with NASDAQ Marketplace Rule IM-2440.

In connection with the sale of the common stock or interests therein, the selling shareholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling shareholders may also sell shares of the common stock short and deliver these securities to close out its short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling shareholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such

broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling shareholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling shareholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because the selling shareholders may, individually, be deemed to be an “underwriter” within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling shareholders.

We have agreed to keep this prospectus effective until September 20, 2009. The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling shareholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of the common stock by the selling shareholders or any other person. We will make copies of this prospectus available to the selling shareholders and have informed it of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

The validity of the shares of common stock being offered hereby has been passed upon for AVI BioPharma, Inc. by Davis Wright Tremaine LLP of Portland, Oregon.

EXPERTS

The financial statements of AVI BioPharma, Inc. as of December 31, 2007 and 2006, and for each of the years in the three-year period ended December 31, 2007, and management’s assessment of the effectiveness of internal control over financial reporting as of December 31, 2007 have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2006 financial statements refers to a change in the accounting for share-based payments.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the units we are offering

under this prospectus. This prospectus does not contain all of the information set forth in the registration statement, as amended, and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement, as amended, and the exhibits and schedules filed as a part of the registration statement. You may read and copy the registration statement, as amended, as well as our reports, proxy statements and other information, at the SEC's Public Reference Room at Room 100 F Street N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC maintains an Internet site at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Most of our SEC filings are also accessed through our website at www.avibio.com.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" in this prospectus the information in other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this prospectus or a prospectus supplement. We incorporate by reference in this prospectus the documents listed below and any future filings that we may make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the termination of the offering under this prospectus:

- Annual Report on Form 10-K for the year ended December 31, 2007;
- Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2008;
- Definitive Proxy Statement on Schedule 14A filed on April 15, 2008;
- Current Reports on Form 8-K filed on April 16, 2008, March 28, 2008, March 25, 2008, March 13, 2008, March 3, 2008; February 13, 2008; and February 7, 2008; and
- The description of our common stock contained in our registration statement on Form 8-A filed on May 29, 1997.

Notwithstanding the foregoing, we are not incorporating any document or information deemed to have been furnished and not filed in accordance with SEC rules. You may obtain a copy of any or all of the documents referred to above which may have been or may be incorporated by reference into this prospectus (excluding certain exhibits to the documents) at no cost to you by writing or telephoning us at the following address:

AVI BioPharma, Inc.
Investor Relations
One S.W. Columbia
Suite 1105
Portland, OR 97258
Attn: Michael C. Hubbard
(503) 227-0554

The mailing address of our principal executive offices is AVI BioPharma, Inc., One S.W. Columbia Suite 1105 Portland, OR 97258, and our telephone number at that location is (503) 227-0554.

5,647,016 Shares

AVI BioPharma, Inc.

Common Stock



PROSPECTUS

May 16, 2008

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other expenses of issuance and distribution.

The following is a statement of the estimated expenses (other than underwriting compensation) to be incurred by the Registrant in connection with registration of 5,647,016 shares of its common stock for resale hereunder.

SEC registration fee	\$ 408
Printing and engraving fees*	1,000
Legal expenses*	30,000
Accounting fees and expenses*	15,000
Transfer Agent fees and expenses*	2,875
Miscellaneous*	500
Total	\$ 49,783

(*) The amounts marked with a * above are estimates.

Item 15. Indemnification of directors and officers.

Our Amended and Restated Articles of Incorporation provide for indemnification by us or our directors and former directors, and for advancement of reasonable expenses incurred by each such person upon an undertaking by such person to repay such amount if it is ultimately determined that he or she is not entitled to indemnification. Our Bylaws also provide that we shall have the power to indemnify our directors and officers pursuant to applicable law. Such indemnification does not cover matters involving (i) the breach of a director's duty of loyalty, (ii) actions or omissions not in good faith, intentional misconduct or knowing violations of law, (iii) the unlawful payment of dividends, stock purchases or redemptions or (iv) any transaction from which a director derives an improper personal benefit. We have entered into indemnification agreements with each of our directors. These agreements, among other things, indemnify our directors and officers for certain expenses (including attorneys' fees), judgments, fines and settlement amounts incurred by any such director or officer in any action or proceeding, including any action by or in our right, arising out of such person's services as one of our directors or officers, to any of our subsidiaries or to any other company or enterprise to which the director or officer provides services at our request. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers.

Item 16. Exhibits

Incorporated by Reference to Filings Indicated

Exhibit No	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
2.1	Agreement and Plan of Merger dated March 12, 2008 by and among AVI BioPharma, Inc., EB Acquisition Corp., and Ercole Biotech, Inc. and Stockholder Representative	8-K	1-14895	2.1	March 13, 2008	
3.1	Third Restated Articles of Incorporation of AntiVirals Inc.	SB-2	333-20513	3.1	May 29, 2007	
3.2	First Restated Bylaws of AVI BioPharma, Inc.	8-K	1-14895	3.5	February 7, 2008	
3.3	First Amendment to Third Restated Articles of Incorporation	8-K	0-22613	3.3	September 30, 1998	
3.4	Amendment to Article 2 of the Company's Third Restated Articles of Incorporation	DEF 14A	1-14895	N/A	April 11, 2002	
5.1	Opinion of Davis Wright Tremaine LLP					X
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm.					X
23.2	Consent of Davis Wright Tremaine LLP (contained in Exhibit 5.1).					X
24.1	Power of Attorney	S-3	333-150021	24.1	April 1, 2008	

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Item 17. 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 of 1933; (ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% 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 the Registration Statement or any material change to such information in the Registration Statement; *provided, however*, that paragraphs (i), (ii) and (iii) do not apply if the Registration Statement is on Form S-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the Registration Statement;

(2) that, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;

(4) that, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(A) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the Registration Statement as of the date the filed prospectus was deemed part of and included in the Registration Statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the Registration Statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the Registration Statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however,* that no statement made in a Registration

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Statement or prospectus that is part of the Registration Statement or made in a document incorporated or deemed incorporated by reference into the Registration Statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the Registration Statement or prospectus that was part of the Registration Statement or made in any such document immediately prior to such effective date; and

(5) that, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(A) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(B) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(C) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(D) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act that is incorporated by reference in 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 of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under Item 15 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Portland, Oregon on May 16, 2008.

AVI BIOPHARMA, INC.

By: _____ /s/ LESLIE HUDSON, PH.D.

Leslie Hudson, Ph.D.
Chief Executive Officer and

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.

SIGNATURE	TITLE	DATE
<u>/s/ LESLIE HUDSON, PH.D.</u> Leslie Hudson, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	May 16, 2008
<u>/s/ ALAN P. TIMMINS</u> Alan P. Timmins	President and Chief Operating Officer	May 16, 2008
<u>/s/ MARK M. WEBBER</u> Mark M. Webber	Chief Financial Officer and Chief Information Officer (Principal Financial and Accounting Officer)	May 16, 2008
<u>*</u> Michael D. Casey	Chairman of the Board	May 16, 2008
<u>*</u> John W. Fara, Ph.D.	Director	May 16, 2008
<u>*</u> K. Michael Forrest	Director	May 16, 2008
<u>*</u> William A. Goolsbee	Director	May 16, 2008
<u>*</u> John C. Hodgman	Director	May 16, 2008
<u>*</u> Gil Price, M.D.	Director	May 16, 2008
<u>*By: /s/ ALAN P. TIMMINS</u> ALAN P. TIMMINS Attorney-in-fact		

INDEX TO EXHIBITS

Incorporated by Reference to Filings Indicated

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
2.1	Agreement and Plan of Merger dated March 12, 2008 by and among AVI BioPharma, Inc., EB Acquisition Corp., and Ercole Biotech, Inc. and Stockholder Representative	8-K	1-14895	2.1	March 13, 2008	
3.1	Third Restated Articles of Incorporation of AntiVirals Inc.	SB-2	333-20513	3.1	May 29, 2007	
3.2	First Restated Bylaws of AVI BioPharma, Inc.	8-K	1-14895	3.5	February 7, 2008	
3.3	First Amendment to Third Restated Articles of Incorporation	8-K	0-22613	3.3	September 30, 1998	
3.4	Amendment to Article 2 of the Company's Third Restated Articles of Incorporation	DEF 14A	1-14895	N/A	April 11, 2002	
5.1	Opinion of Davis Wright Tremaine LLP					X
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm.					X
23.2	Consent of Davis Wright Tremaine LLP (contained in Exhibit 5.1).					X
24.1	Power of Attorney	S-3	333-150011	24.1	April 1, 2008	



Davis Wright Tremaine LLP

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May 16, 2008

AVI BioPharma, Inc.
One SW Columbia
Suite 1105
Portland, OR 97258

Ladies and Gentlemen:

We have acted as counsel to AVI BioPharma, Inc. (the "Company"), in connection with the preparation and filing by the Company of a registration statement on Form S-3 with the Securities and Exchange Commission (the "Commission") relating to the registration under the Securities Act of 1933, as amended (the "Securities Act"), to qualify for sale the 5,647,016 shares of the Company's common stock, par value \$0.0001 per share (the "Shares") identified in the Registration Statement.

In that connection, we have reviewed originals or copies identified to our satisfaction of the following documents:

- (a) The Registration Statement filed by the Company under the Securities Act with the Commission on April 1, 2008, and each amendment thereto (the registration statement, as so amended, being hereinafter referred to as the "Registration Statement").
- (b) The Certificate of Incorporation and Bylaws of the Company, as amended.
- (c) Originals or copies of such other corporate records of the Company, certificates of public officials and of officers of the Company and agreements and other documents as we have deemed necessary as a basis for the opinions expressed below.

In our review we have assumed:

- (a) The genuineness of all signatures.
- (b) The authenticity of the originals of the documents submitted to us.
- (c) The conformity to authentic originals of any documents submitted to us as copies.

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- (d) As to matters of fact, the truthfulness of the representations made in certificates of public officials and officers of the Company.

We have not independently established the validity of the foregoing assumptions.

Our opinion set forth below is limited to the Oregon Business Corporation Act as in effect as of the date of this letter, and we do not express any opinion herein concerning any other law.

Based on the foregoing and upon such other investigation as we have deemed necessary and subject to the qualifications set forth herein, we are of the opinion that the Shares have been legally issued and are fully paid and nonassessable.

This opinion letter speaks only as of the date hereof. We expressly disclaim any responsibility to advise you of any development or circumstance of any kind, including any change of law or fact that may occur after the date of this opinion letter that might affect the opinion expressed herein.

We understand that this opinion is to be used in connection with the Registration Statement. We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and the use of our name in the Prospectus under the caption "Legal Matters." In giving this consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Davis Wright Tremaine LLP
Davis Wright Tremaine LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors
AVI Biopharma, Inc.:

We consent to the use of our reports with respect to the financial statements and the effectiveness of internal control over financial reporting incorporated by reference herein and to the reference to our firm under the heading "Experts" in the prospectus.

As discussed in Note 2 to the financial statements, effective January 1, 2006, AVI BioPharma, Inc. adopted the provisions of Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment*.

KPMG LLP

Portland, OR
May 16, 2008
