PROSPECTUS

\$125,000,000

AVI BioPharma, Inc.

Common Stock
Preferred Stock
Debt Securities
Warrants to Purchase Common Stock,
Preferred Stock or Debt Securities

We may offer and sell from time to time in one or more offerings debt securities, shares of common stock, shares of preferred stock and warrants to purchase common stock, preferred stock or debt securities, up to a total public offering price of \$125,000,000.

Our address is 4575 Research Way, Suite 200, Corvallis, Oregon 97333. Our telephone number is (541)753-3635.

Our common stock is quoted on the Nasdaq National Market under the symbol "AVII." The closing sales price of our common stock on the Nasdaq National Market on August 12, 2009 was \$2.08 per share.

Each time we sell debt securities, shares of common stock, shares of preferred stock, or warrants to purchase common stock, preferred stock or debt securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with the additional information described under the heading "Information Incorporated by Reference" before you make your investment decision.

We will sell the securities to or through underwriters or dealers, through agents, or directly to investors, or a combination of these methods. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution."

Investing in our securities stock involves a high degree of risk. See "Risk Factors" beginning on page 2 of this prospectus, as well as in supplements to this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is August 13, 2009.

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You should rely only on the information contained in this document or to which we have referred you. We have not authorized anyone to provide you with information that is different. This document may only be used where it is legal to sell these securities. The information in this document may only be accurate on the date of this document.

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This summary highlights information about AVI BioPharma, Inc. Because this is a summary, it may not contain all the information you should consider before investing in our securities. You should carefully read this entire prospectus, including the information set forth under "Risk Factors," and the documents incorporated by reference in this prospectus.

AVI BioPharma, Inc.

AVI BioPharma is a biopharmaceutical company specializing in the discovery and development of novel, RNA-based drugs targeting a range of diseases. References in this prospectus to "AVI", the "Company", we", "us" and "our" are to AVI BioPharma, Inc., an Oregon corporation.

As one of the emerging leaders in the fast growing field of RNA therapeutics, AVI has developed and optimized derivatives of its proprietary antisense chemistry (phosphorodiamidate morpholino oligomers or PMOs) that can be designed to target disease mechanisms through distinct mechanisms of action. Unlike other RNA therapeutic approaches, AVI's antisense technology has been used to directly target both messenger RNA (mRNA) and precursor messenger RNA (pre-mRNA) allowing for both down- and up-regulation of targeted genes or proteins. We believe that these broad capabilities give the Company a unique RNA-based technology platform and strong intellectual property position, both of which are the result of advances across several areas of science, including over 20 years of research and development work in chemistry and the Human Genome Project. Our patent estate includes 213 patents (foreign and domestic) issued to or licensed by us and 185 pending patent applications (domestic and foreign).

AVI is leveraging its discovery and development capabilities to build a pipeline of RNA-based therapeutic candidates to develop in collaboration with larger pharmaceutical and biotechnology partners. Current applications of AVI's RNA technology platform include genetic diseases (Duchenne muscular dystrophy), infectious diseases (Ebola and Marburg viruses), cardiovascular disease (restenosis) and other early discovery targets. Several of our antiviral programs, including H1N1 influenza, Ebola, Marburg, Junín and Dengue, have been or are currently funded by the U.S. government, and other governmental and non-governmental funding has supported our other programs.

We are an Oregon corporation headquartered at 4575 SW Research Way, Suite 200, Corvallis, Oregon 97333. Our telephone number is (541) 753-3635. Our website address is www.avibio.com. Information contained on our website is not a part of, and is not incorporated into, this prospectus.

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

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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 supplement as well as in the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, both of which have been filed with the SEC and are incorporated herein by reference in their entirety, as well as other information in this prospectus, any accompanying prospectus supplement, 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 supplement and the accompanying prospectus and the information incorporated by reference herein and therein contain forward-looking statements regarding our plans, expectations, estimates and beliefs. Such statements are "forward-looking statements" for purposes of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. 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. These forward-looking statements are based on current expectations and are not guarantees of future performance. We caution you not to place undue reliance on these statements, which speak only as of the date on which the statement was made. Forward-looking statements in this prospectus supplement and the accompanying prospectus 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 expectations about availability of government funding for certain projects,
- · 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 "Risk Factors" in the accompanying prospectus and detailed in our other SEC 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,
- · uncertainty of government funding for certain projects,
- the development of competing or more effective products by other parties,
- the results of pre-clinical and clinical testing and our ability to conduct these tests,

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- · 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 and any subsequent prospectus supplement or incorporated by reference might not transpire. 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.

ABOUT THIS PROSPECTUS

This prospectus is part of a "shelf" registration statement that we have filed with the Securities and Exchange Commission, which we refer to as the "SEC". By using a shelf registration statement, we may issue and sell to the public any part or all of the securities described in the registration statement, at any time and from time to time, in one or more public offerings, up to an aggregate amount of \$125,000,000. The exhibits to our registration statement contain the text of certain contracts and other important documents we have summarized in this prospectus, in any prospectus supplement or in the documents incorporated by reference in this prospectus. Since these summaries may not contain all the information that you may find important in deciding whether to purchase the securities we offer, you should review the full text of these documents. The registration statement, the exhibits and the documents incorporated by reference can be obtained from the SEC as indicated under the heading "Where You Can Find More Information."

This prospectus only provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that contains specific information about the terms of those securities. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with the additional information described below under the heading "Where You Can Find More Information," and "Information Incorporated by Reference."

We may sell the securities to or through underwriters or dealers, through agents, or directly to investors, or a combination of these methods. We and our agents reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. See "Plan of Distribution" below. A prospectus supplement, which we will provide to you each time we offer securities, will provide the names of any underwriters, dealers, or agents involved in the sale of the securities, and any applicable fee, commission, or discount arrangements with them.

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any jurisdiction where the offer is not permitted. You should not assume that the information in this prospectus or a prospectus supplement is accurate as of any date other than the date on the front of the document.

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RATIO OF EARNINGS TO FIXED CHARGES

We present below the ratio of our earnings to our fixed charges. Earnings consist of net loss plus fixed charges. Fixed charges consist of interest expense, including amortization of debt issuance costs, and that portion of rental expense we believe to be representative of interest.

		Ratio of Earnings to Fixed Charges Year ended December 31,											
	Three i	Three months ended Year ended December 31,											
	Mar	ch 31, 2009		2008		2007		2006		2005		2004	
Ratio of Earnings to Fixed Charges													
Coverage deficiency	\$	(927)	\$	(23,953)	\$	(27,168)	\$	(28,688)	\$	(18,206)	\$	(21,937)	

Except as described in any prospectus supplement, we currently intend to use the net proceeds from the sale of our securities for research and development and general corporate purposes. We may also use a portion of the net proceeds to commercialize our products, or to acquire or invest in businesses, products and technologies that are complementary to our own or provide us with a strategic advantage. We may also issue the securities offered under this prospectus in connection with product license and supply agreements, research collaboration agreements and to our commercial vendors and suppliers in exchange for products and services. Until we use the net proceeds of this offering for the above purposes, we intend to invest the funds in short-term, investment grade, interest-bearing securities. We cannot predict whether the proceeds invested will yield a favorable return.

SECURITIES WE MAY OFFER

We may offer from time to time in one or more offerings debt securities, shares of common stock, shares of preferred stock and warrants to purchase common stock, preferred stock or debt securities, or any combination of the foregoing, either individually or as units consisting of one or more securities. We may offer up to \$125,000,000 of securities under this prospectus. If securities are offered as units, we will describe the terms of the units in a prospectus supplement.

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DESCRIPTION OF COMMON STOCK AND PREFERRED STOCK

We describe below the common stock and preferred stock we may offer under this prospectus. The terms we summarize below will apply generally to any future common stock or preferred stock that we may offer. We will describe the particular terms of these securities in more detail in a prospectus supplement.

Common Stock

We are authorized to issue 200,000,000 shares of common stock, of which 85,725,709 shares were issued and outstanding as of the date hereof. Each shareholder of record is entitled to one vote for each outstanding share of our common stock owned by that shareholder on every matter properly submitted to the shareholders for their vote. Subject to the satisfaction of the dividend rights of holders of any shares of preferred stock issued hereafter, holders of common stock are entitled to any dividend declared by the board of directors out of funds legally available for this purpose. Subject to the payment of liquidation preferences to holders of any shares of preferred stock issued hereafter, holders of our common stock are entitled to receive, on a pro rata basis, all of our remaining assets available for distribution to the shareholders in the event of our liquidation, dissolution, or winding up. Holders of our common stock do not have any preemptive right to subscribe or purchase additional shares of any class of our capital stock. The preferences, limitations, relative rights and other terms of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Our articles of incorporation allow us to issue, without shareholder approval, preferred stock having rights senior to those of our common stock. Our board is authorized, without further shareholder approval, to issue up to 20,000,000 shares of preferred stock, of which no shares are currently issued and outstanding, in one or more series and to fix and designate the preferences, limitations, relative rights and other terms of the preferred stock, including:

- dividend rights;
- · conversion rights;
- · voting rights;
- · terms of redemption; and
- · liquidation preferences.

Our board of directors may fix the number of shares constituting any series of preferred stock and the designations of the series. We will fix the preferences, limitations, relative rights and other terms of the preferred stock of each series by the filing of articles of amendment relating to each series. We will specify the terms of the preferred stock in a prospectus supplement, including:

- the maximum number of shares in the series and the distinctive designation;
- · the terms on which dividends will be paid, if any;
- the terms on which the shares may be redeemed, if at all;
- · the liquidation preference, if any;
- · the terms of any retirement or sinking fund for the purchase or redemption of the shares of the series;
- the terms and conditions, if any, on which the shares of the series will be convertible into, or exchangeable for, shares of any other class or classes of capital stock;
- the voting rights, if any, on the shares of the series; and
- · any or all other preferences and relative, participating, operational or other special rights or qualifications, limitations or restrictions of the shares.

We will describe the specific terms of a particular series of preferred stock in the prospectus supplement relating to that series. We urge you to read the applicable articles of amendment and the description in the prospectus supplement. The prospectus supplement will contain a description of the U.S. federal income tax consequences relating to the preferred stock.

Our issuance of preferred stock may have the effect of delaying or preventing a change in control. Our issuance of preferred stock could decrease the amount of earnings and assets available for distribution to the holders of our common stock or could adversely affect the rights and powers, including voting rights, of the holders of our common stock. The issuance of preferred stock could have the effect of decreasing the market price of our common stock.

Transfer Agent

The transfer agent for our common stock is BNY Mellon Shareowner Services, Pittsburgh, Pennsylvania.

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DESCRIPTION OF DEBT SECURITIES

We may offer any combination of senior debt securities or subordinated debt securities. Debt securities are secured or unsecured obligations to repay advanced funds. We may issue the senior debt securities and the subordinated debt securities under separate indentures between us, as issuer, and the trustee or trustees identified in the prospectus supplement. We filed the form for each type of indenture as an exhibit to the registration statement of which this prospectus is a part.

We will describe the particular terms of any debt securities we may offer in a prospectus supplement. The following summaries of the debt securities and the indentures are not complete. We urge you to read the indentures and the description of the debt securities included in the prospectus supplement.

General

We may issue debt securities in separate series. We may specify a maximum aggregate principal amount for the debt securities of any series. The debt securities will have terms that are consistent with the indentures. Unless the prospectus supplement indicates otherwise, senior debt securities will be unsecured and unsubordinated obligations and will rank equal with all our other unsecured and unsubordinated debt. We will make payment on our subordinated debt securities only if we have made all payments due under our senior indebtedness, including any outstanding senior debt securities.

The indentures might not limit the amount of other debt that we may incur and might not contain financial or similar restrictive covenants. The indentures might not contain any provision to protect holders of debt securities against a sudden or dramatic decline in our ability to pay our debt.

We will describe the debt securities and the price or prices at which we will offer the debt securities in a prospectus supplement. We will describe:

- · the title and form of the debt securities;
- · any limit on the aggregate principal amount of the debt securities or the series of which they are a part;
- the person to whom any interest on a debt security of the series will be paid;
- the date or dates on which we must repay the principal;
- the rate or rates at which the debt securities will bear interest, if any, the date or dates from which interest will accrue, and the dates on which we must pay interest;
- · if applicable, the duration and terms of the right to extend interest payment periods;
- \cdot the place or places where we must pay the principal and any premium or interest on the debt securities;
- the terms and conditions on which we may redeem any debt security, if at all;
- · any obligation to redeem or purchase any debt securities, and the terms and conditions on which we must do so;
- the denominations in which we may issue the debt securities;
- · the manner in which we will determine the amount of principal of or any premium or interest on the debt securities;
- the currency in which we will pay the principal of and any premium or interest on the debt securities;
- · the principal amount of the debt securities that we will pay upon declaration of acceleration of their maturity;
- the amount that will be deemed to be the principal amount for any purpose, including the principal amount that will be due and payable upon any maturity or that will be deemed to be outstanding as of any date;
- \cdot $\;$ if applicable, that the debt securities are defeasible and the terms of such defeasance;
- · if applicable, the terms of any right to convert debt securities into, or exchange debt securities for, shares of common stock or other securities or property;
- · the subordination provisions that will apply to any subordinated debt securities;
- · any addition to or change in the events of default applicable to the debt securities and any change in the right of the trustee or the holders to declare the principal amount of any of the debt securities due and payable; and
- · any addition to or change in the covenants in the indentures.

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We may sell the debt securities at a substantial discount below their stated principal amount. We will describe U.S. federal income tax considerations, if any, applicable to debt securities sold at an original issue discount in the prospectus supplement. An "original issue discount security" is any debt security sold for less than its face value, and which provides that the holder cannot receive the full face value if maturity is accelerated. We will describe the particular provisions relating to acceleration of the maturity upon the occurrence of an event of default in the prospectus supplement. In addition, we will describe U.S. federal income tax or other considerations applicable to any debt securities that are denominated in a currency or unit other than U.S. dollars in the prospectus supplement.

Conversion and Exchange Rights

If applicable, we will describe the terms on which the debt holder may convert debt securities into or exchange them for common stock or other securities or property in the prospectus supplement. The conversion or exchange may be mandatory or may be at the debt holder's option. We will describe how to calculate the number of shares of common stock or other securities or property that the debt holder will receive upon conversion or exchange.

Subordination of Subordinated Debt Securities

We will pay the indebtedness underlying the subordinated debt securities if we have made all payments due under our senior indebtedness, including any outstanding senior debt securities. If we distribute our assets to creditors upon any dissolution, winding-up, liquidation or reorganization or in bankruptcy, insolvency, receivership or similar proceedings, we must first pay all amounts due or to become due on all senior indebtedness before we pay the principal of, or any premium or interest on, the subordinated debt securities. If an event of default accelerates the subordinated debt securities, we may not make any payment on the subordinated debt securities until we have paid all senior indebtedness or the acceleration is rescinded. If the payment of subordinated debt securities accelerates because of an event of default, we must promptly notify holders of senior indebtedness of the acceleration.

If we experience a bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of subordinated debt securities may receive less, ratably, than our other creditors. The indenture for subordinated debt securities may not limit our ability to incur additional senior indebtedness.

Form, Exchange and Transfer

We will issue debt securities only in fully registered form, without coupons, and only in denominations of \$1,000 and integral multiples thereof. The holder of a debt security may elect, subject to the terms of the indentures and the limitations applicable to global securities, to exchange them for other debt securities of the same series of any authorized denomination and of similar terms and aggregate principal amount.

Holders of debt securities may present them for exchange as provided above or for registration of transfer, duly endorsed or with the form of transfer duly executed, at the office of the transfer agent we designate for that purpose. We will not impose a service charge for any registration of transfer or exchange of debt securities, but we may require a payment sufficient to cover any tax or other governmental charge payable in connection with the transfer or exchange. We will name the transfer agent in the prospectus supplement. We may designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, but we must maintain a transfer agent in each place in which we will pay on debt securities.

If we redeem the debt securities, we will not be required to issue, register the transfer of or exchange any debt security during a specified period prior to mailing a notice of redemption. We are not required to register the transfer of or exchange any debt security selected for redemption, except the unredeemed portion of the debt security being redeemed.

Global Securities

The debt securities may be represented, in whole or in part, by one or more global securities that will have an aggregate principal amount equal to that of all debt securities of that series. We will deposit each global security with a depositary or a custodian. The global security will bear a legend regarding the restrictions on exchanges and registration of transfer.

No global security may be exchanged in whole or in part for debt securities registered, and no transfer of a global security in whole or in part may be registered, in the name of any person other than the depositary or any nominee or successor of the depositary unless:

- the depositary is unwilling or unable to continue as depositary; or
- the depositary is no longer in good standing under the Securities Exchange Act of 1934, as amended, or the Exchange Act, or other applicable statute or regulation.

The depositary will determine how all securities issued in exchange for a global security will be registered.

As long as the depositary or its nominee is the registered holder of a global security, we will consider the depositary or the nominee to be the sole owner and holder of the global security and the underlying debt securities. Except as stated above, owners of beneficial

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interests in a global security will not be entitled to have the global security or any debt security registered in their names, will not receive physical delivery of certificated debt securities and will not be considered to be the owners or holders of the global security or underlying debt securities. We will make all payments of principal, premium and interest on a global security to the depositary or its nominee. The laws of some jurisdictions require that some purchasers

of securities take physical delivery of such securities in definitive form. These laws may prevent the debt holder from transferring its beneficial interests in a global security.

Only institutions that have accounts with the depositary or its nominee and persons that hold beneficial interests through the depositary or its nominee may own beneficial interests in a global security. The depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants. The ownership of beneficial interests in a global security will be shown only on, and the transfer of those ownership interests will be effected only through, records maintained by the depositary or any such participant.

The policies and procedures of the depositary may govern payments, transfers, exchanges and others matters relating to beneficial interests in a global security. We and the trustee will assume no responsibility or liability for any aspect of the depositary's or any participant's records relating to, or for payments made on account of, beneficial interests in a global security.

Payment and Paying Agents

Unless we indicate otherwise, we will pay principal and any premium or interest on a debt security to the person in whose name the debt security is registered at the close of business on the regular record date for such interest.

Unless we indicate otherwise, we will pay principal and any premium or interest on the debt securities at the office of our designated paying agent. Unless we indicate otherwise, the corporate trust office of the trustee will be the paying agent for the debt securities.

We will name any other paying agents for the debt securities of a particular series in the prospectus supplement. We may designate additional paying agents, rescind the designation of any paying agent or approve a change in the office through which any paying agent acts, but we must maintain a paying agent in each place of payment for the debt securities.

The paying agent will return to us all money we pay to it for the payment of the principal, premium or interest on any debt security that remains unclaimed for a specified period. Thereafter, the holder may look only to us for payment, as an unsecured general creditor.

Consolidation, Merger and Sale of Assets

Under the terms of the indentures, so long as any securities remain outstanding, we may not consolidate or enter into a share exchange with or merge into any other person, in a transaction in which we are not the surviving corporation, or sell, convey, transfer or lease our properties and assets substantially as an entirety to any person, unless:

- · the successor assumes our obligations under the debt securities and the indentures; and
- · we meet the other conditions described in the indentures.

Events of Default

Each of the following will constitute an event of default under each indenture:

- our failure to pay the principal of or any premium on any debt security when due;
- · our failure to pay any interest on any debt security when due, for more than a specified number of days past the due date;
- · our failure to deposit any sinking fund payment when due;
- our failure to perform any covenant or agreement in the indenture that continues for a specified number of days after written notice has been given by the trustee or the holders of a specified percentage in aggregate principal amount of the debt securities of that series;
- · certain events of our bankruptcy, insolvency or reorganization; and
- $\cdot \quad$ any other event of default specified in the prospectus supplement.

If an event of default occurs and continues, both the trustee and holders of a specified percentage in aggregate principal amount of the outstanding securities of that series may declare the principal amount of the debt securities of that series to be immediately due and payable. The holders of a majority in aggregate principal amount of the outstanding securities of that series may, under certain

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circumstances, rescind and annul the acceleration if all events of default, other than the nonpayment of accelerated principal, have been cured or waived.

Except for certain duties in case of an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request or direction of any of the holders, unless the holders have offered the trustee reasonable indemnity. If they provide this indemnification, the holders of a majority in aggregate principal amount of the outstanding securities of any series may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities of that series.

No holder of a debt security of any series may institute any proceeding with respect to the indentures, or for the appointment of a receiver or a trustee, or for any other remedy, unless:

• the holder has previously given the trustee written notice of a continuing event of default;

- the holders of a specified percentage in aggregate principal amount of the outstanding securities of that series have made a written request upon the trustee, and have offered reasonable indemnity to the trustee, to institute the proceeding;
- the trustee has failed to institute the proceeding for a specified period of time after its receipt of the notification; and
- the trustee has not received a direction inconsistent with the request within a specified number of days.

Modification and Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters, including:

- · to fix any ambiguity, defect or inconsistency in the indenture; and
- · to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, we and the trustee may change the rights of holders of a series of notes with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, we and the trustee may only make the following changes with the consent of the holder of any outstanding debt securities affected:

- · extending the fixed maturity of the series of notes;
- · reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption, of any debt securities; or
- · reducing the percentage of debt securities the holders of which are required to consent to any amendment.

The holders of a majority in principal amount of the outstanding debt securities of any series may waive any past default under the indenture with respect to debt securities of that series, except a default in the payment of principal, premium or interest on any debt security of that series or in respect of a covenant or provision of the indenture that cannot be amended without each holder's consent.

Except in certain limited circumstances, we may set any day as a record date for the purpose of determining the holders of outstanding debt securities of any series entitled to give or take any direction, notice, consent, waiver or other action under the indentures. In certain limited circumstances, the trustee may set a record date. To be effective, the action must be taken by holders of the requisite principal amount of such debt securities within a specified period following the record date.

Defeasance

We may apply the provisions in the indentures relating to defeasance and discharge of indebtedness, or to defeasance of certain restrictive covenants, to the debt securities of any series. The indentures provide that, upon satisfaction of the requirements described below, we may terminate all of our obligations under the debt securities of any series and the applicable indenture, known as legal defeasance, other than our obligation:

- to maintain a registrar and paying agents and hold moneys for payment in trust;
- · to register the transfer or exchange of the notes; and
- \cdot to replace mutilated, destroyed, lost or stolen notes.

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In addition, we may terminate our obligation to comply with any restrictive covenants under the debt securities of any series or the applicable indenture, known as covenant defeasance.

We may exercise our legal defeasance option even if we have previously exercised our covenant defeasance option. If we exercise either defeasance option, payment of the notes may not be accelerated because of the occurrence of events of default.

To exercise either defeasance option as to debt securities of any series, we must irrevocably deposit in trust with the trustee money and/or obligations backed by the full faith and credit of the U.S. that will provide money in an amount sufficient in the written opinion of a nationally recognized firm of independent public accountants to pay the principal of, premium, if any, and each installment of interest on the debt securities. We may establish this trust only if:

- · no event of default has occurred and continues to occur:
- · in the case of legal defeasance, we have delivered to the trustee an opinion of counsel to the effect that we have received from, or there has been published by, the IRS a ruling or there has been a change in law, which in the opinion of our counsel, provides that holders of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred;
- · in the case of covenant defeasance, we have delivered to the trustee an opinion of counsel to the effect that the holders of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred; and
- · we satisfy other customary conditions precedent described in the applicable indenture.

Notices

We will mail notices to holders of debt securities as indicated in the prospectus supplement.

Title

We may treat the person in whose name a debt security is registered as the absolute owner, whether or not such debt security may be overdue, for the purpose of making payment and for all other purposes.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the state of Oregon.

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DESCRIPTION OF WARRANTS

Warrant to Purchase Common Stock or Preferred Stock

The following summarizes the terms of common stock warrants and preferred stock warrants we may issue. We urge you to read the detailed provisions of the stock warrant agreement that we will enter into with a stock warrant agent we select at the time of issue.

General. We may issue stock warrants evidenced by stock warrant certificates under a stock warrant agreement independently or together with any securities we offer by any prospectus supplement. If we offer stock warrants, we will describe the terms of the stock warrants in a prospectus supplement, including:

- · the offering price, if any;
- the number of shares of common or preferred stock purchasable upon exercise of one stock warrant and the initial price at which the shares may be purchased upon exercise;
- · if applicable, the designation and terms of the preferred stock purchasable upon exercise of the stock warrants;
- the dates on which the right to exercise the stock warrants begins and expires;
- · U.S. federal income tax consequences;
- · call provisions, if any;
- · the currencies in which the offering price and exercise price are payable; and
- · if applicable, any antidilution provisions.

Exercise of Stock Warrants. The holder may exercise a stock warrant by surrendering to the stock warrant agent the stock warrant certificate, which indicates the holder's election to exercise all or a portion of the stock warrants evidenced by the certificate. The holder must pay the exercise price by cash or check when the holder surrenders its stock warrant certificate. The stock warrant agent will deliver certificates evidencing duly exercised stock warrants to the transfer agent. Upon receipt of the certificates, the transfer agent will deliver a certificate representing the number of shares of common stock or preferred stock purchased. If the holder exercises fewer than all the stock warrants evidenced by any certificate, the stock warrant agent will deliver a new stock warrant certificate representing the unexercised stock warrants.

No Rights as Shareholders. Holders of stock warrants are not entitled to vote, to consent, to receive dividends or to receive notice as shareholders with respect to any meeting of shareholders, or to exercise any rights whatsoever as shareholders.

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Warrants to Purchase Debt Securities

The following summarizes the terms of the debt warrants we may offer. We urge you to read the detailed provisions of the debt warrant agreement that we will enter into with a debt warrant agent we select at the time of issue.

General. We may issue debt warrants evidenced by debt warrant certificates independently or together with any securities offered by any prospectus supplement. If we offer debt warrants, we will describe the terms of the warrants in a prospectus supplement, including:

- the offering price, if any;
- the designation, aggregate principal amount and terms of the debt securities purchasable upon exercise of the warrants and the terms of the indenture under which the debt securities will be issued;
- · if applicable, the designation and terms of the debt securities with which the debt warrants are issued and the number of debt warrants issued with each debt security;

- · if applicable, the date on and after which the debt warrants and any related securities will be separately transferable;
- the principal amount of debt securities purchasable upon exercise of one debt warrant and the price at which the principal amount of debt securities may be purchased upon exercise;
- the dates on which the right to exercise the debt warrants begins and expires;
- · U.S. federal income tax consequences;
- · whether the warrants represented by the debt warrant certificates will be issued in registered or bearer form;
- · the currencies in which the offering price and exercise price are payable; and
- · if applicable, any antidilution provisions.

The holder may exchange debt warrant certificates for new debt warrant certificates of different denominations and may present debt warrant certificates for registration of transfer at the corporate trust office of the debt warrant agent, which we will list in the prospectus supplement. The holder will not have any of the rights of holders of debt securities, except to the extent that the consent of warrantholders may be required for certain modifications of the terms of an indenture or form of the debt security and the series of debt securities issuable upon exercise of the debt warrants. In addition, the holder will not receive payments of principal of and interest, if any, on the debt securities unless the holder exercises its debt warrant.

Exercise of Debt Warrants. The holder may exercise debt warrants by surrendering to the debt warrant agent the debt warrant certificate, with payment in full of the exercise price. Upon the exercise of debt warrants, the debt warrant agent will, as soon as practicable, deliver to the holder the debt securities in authorized denominations in accordance with the holder's instructions and at its sole cost and risk. If the holder exercises fewer than all the debt warrants evidenced by any debt warrant certificate, the agent will deliver to the holder a new debt warrant certificate representing the unexercised debt warrants.

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PLAN OF DISTRIBUTION

We may sell the securities through underwriters or dealers, through agents, or directly to one or more purchasers. We will describe the terms of the offering of the securities in a prospectus supplement, including:

- · the name or names of any underwriters, if any;
- the purchase price of the securities and the proceeds we will receive from the sale;
- \cdot $\;$ any underwriting discounts and other items constituting underwriters' compensation;
- · any initial public offering price;
- · any discounts or concessions allowed or reallowed or paid to dealers; and
- · any securities exchange or market on which the securities may be listed.

Only underwriters we name in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If we use underwriters in the sale, they will acquire the securities for their own account and may resell them from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all the securities of the series offered by the prospectus supplement. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

Securities may also be sold in one or more of the following transactions: (a) block transactions (which may involve crosses) in which a broker-dealer may sell all or a portion of the securities as agent but may position and resell all or a portion of the block as principal to facilitate the transaction; (b) purchases by a broker-dealer as principal and resale by the broker-dealer for its own account pursuant to a prospectus supplement; (c) ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers; (d) sales "at the market" to or through a market maker or into an existing trading market, on an exchange or otherwise, for securities; and (e) sales in other ways not involving market makers or established trading markets, including direct sales to purchasers. Broker-dealers may also receive compensation from purchasers of the securities which is not expected to exceed that customary in the types of transactions involved.

We may provide agents and underwriters with indemnification against certain civil liabilities, including liabilities under the Securities Act of 1933, as amended, or the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we offer other than common stock will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement (or a post-effective amendment).

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LEGAL MATTERS

Unless otherwise specified in the prospectus supplement accompanying this prospectus, Davis Wright Tremaine LLP, 1300 S.W. Fifth Avenue, 23rd Floor, Portland, Oregon 97201, will provide opinions regarding the authorization and validity of the securities. Any underwriters will also be advised about legal matters by their own counsel, which will be named in the prospectus supplement.

EXPERTS

The financial statements of AVI BioPharma, Inc. as of December 31, 2008 and 2007, and for each of the years in the three-year period ended December 31, 2008, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2008 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.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public from the SEC's web site at http://www.sec.gov. You may also read and copy any document we file at the SEC's public reference room in Washington, D.C. located at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of any document we file at prescribed rates by writing to the Public Reference Section of the Securities Exchange Commission at that address. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Information about us, including our SEC filings, is also available on our website at http://www.avibio.com; however, that information is not a part of this prospectus or any accompanying prospectus supplement.

INCORPORATION 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, 2008;
- · Quarterly Report on Form 10-Q for the quarter ended June 30, 2009;
- · Current Reports on Form 8-K filed on January 30, 2009, January 30, 2009, March 10, 2009, April 1, 2009, May 11, 2009, May 21, 2009, June 2, 2009, June 8, 2009, July 31, 2009, and August 10 and
- \cdot 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 4575 SW Research Way, Suite 200 Corvallis, OR 97333 Attn: Julie Rathbun (541) 224-2575