UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 5, 2006

AVI BioPharma, Inc.

(Exact name of registrant as specified in its charter)

Oregon

(State or other jurisdiction of incorporation or organization)

0-22613 (Commission File Number) 93-0797222 (IRS Employer Identification Number)

One S.W. Columbia, Suite 1105 Portland, OR 97258 (Address of principal executive offices)

(503) 227-0554

Registrant's telephone number, including area code

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition.

On May 5, 2006, AVI BioPharma, Inc. issued a press release announcing its financial results for the three months ended March 31, 2006. The press release is attached to this Form 8-K as Exhibit 99.1.

Item 7.01 Regulation FD Disclosure

Information furnished under Item 2.02.

Item 9.01 Financial Statements, Pro Forma Financial Information and Exhibits.

(d) <u>Exhibits</u>

99.1. Press release dated May 5, 2006, announcing financial results for the three months ended March 31, 2006.

Note: The information contained in this report on Form 8-K (including Exhibit 99.1) shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Portland, State of Oregon, on May 8, 2006.

AVI BioPharma, Inc.

Alan P. Timmins President and Chief Operating Officer (Principal Operating Officer)

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EXHIBIT INDEX

99.1. Press release dated May 5, 2006, announcing financial results for the three months ended March 31, 2006.

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PRESS RELEASE

Company Contact: AVI BioPharma, Inc. Michael Hubbard (hubbard@avibio.com) (503) 227-0554

Investor Contacts: Lippert/Heilshorn & Associates, Inc. Jody Cain (jcain@lhai.com) Brandi Floberg (bfloberg@lhai.com) (310) 691-7100

For Immediate Release

Press Contact: Waggener Edstrom Bioscience Andie Long (andreal@waggeneredstrom.com) (202) 326-0791

AVI BIOPHARMA ANNOUNCES FIRST QUARTER FINANCIAL RESULTS

PORTLAND, Ore. (May 5, 2006) – AVI BioPharma, Inc. (Nasdaq: AVII) today reported financial results for the three months ended March 31, 2006.

For the first quarter of 2006, AVI reported a net loss of \$9.1 million, or \$0.18 per share, compared with a net loss of \$5.5 million, or \$0.13 per share, for the first quarter of 2005. Results for the first quarter of 2006 include stock-based compensation expenses of approximately \$1.9 million, of which approximately \$1.1 million was upon adoption of SFAS 123R and approximately \$830,000 related to the acceleration of the vesting of certain stock options. Results for the first quarter of 2005 do not include SFAS 123R compensation expenses since the adoption occurred at the beginning of January 1, 2006. Revenues for the first quarter of 2006 were \$66,000, compared with \$45,000 for the first quarter of 2005, reflecting higher grant revenues.

Research and development (R&D) expenses were \$6.8 million in the first quarter of 2006, compared with \$4.1 million in the first quarter of 2005. This increase was due primarily to an additional \$1.1 million in employee costs, including approximately \$540,000 upon adoption of SFAS 123R and approximately \$430,000 related to the acceleration of the vesting of certain stock options. The increase in R&D expense also reflects \$500,000 in AVI common stock issued to Chiron Corporation as the first milestone payment due under a license agreement granting AVI a nonexclusive license to Chiron's patents and patent applications for the research, development and commercialization of antisense therapeutics against hepatitis C virus, and \$400,000 in contracting costs for the production of GMP subunits, which are used by AVI to manufacture compounds for future clinical trials. The remaining R&D increase was due to higher clinical trial and consultant costs.

General and administrative (G&A) expenses were \$2.8 million in the first quarter of 2006, compared with \$1.4 million in the first quarter of 2005. This increase was due primarily to an additional \$1.2 million in employee costs, including approximately \$510,000 upon adoption of SFAS 123R and approximately \$400,000 related to the acceleration of the vesting of certain stock options. The remaining increase in G&A was due to higher accounting and legal costs.

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AVI had cash, cash equivalents and short-term securities of \$49.4 million as of March 31, 2006, an increase of \$2.4 million from December 31, 2005. This increase was due primarily to the receipt of \$5.0 million in net proceeds from a stock purchase agreement with Cook Group Inc. and \$3.0 million from the exercise of warrants and options during the first quarter of 2006, offset by \$5.3 million used in operations and approximately \$290,000 used for purchases of property and equipment and patent-related costs.

In January 2006 AVI announced that the final version of the 2006 defense appropriations act had been approved, which included an allocation of \$11.0 million to fund AVI's ongoing defense-related programs. AVI's NEUGENE[®] technology is being used to develop therapeutic agents against Ebola, Marburg and dengue viruses, as well as to develop countermeasures for anthrax exposure and antidotes for ricin toxin. This additional funding for 2006 has not been received and has not been reflected in AVI's 2006 first quarter financial statements.

"We believe that our third-generation NEUGENE antisense technology has proven potential in many unmet and underserved medical needs, some of which represent large market opportunities. Based on our robust development pipeline, we have the strategic option to out-license development for certain indications, while using our internal resources to pursue the development of others," said Denis R. Burger, Ph.D., chief executive officer of AVI BioPharma. "Our decision to license the device-delivery of AVI-4126 targeting a single gene in the field of vascular disease to one of the pre-eminent vascular device companies in the world, Cook Group, represents our ability to execute on this strategy.

"The strategic importance of the agreement with Cook Group is several fold," he continued. "Cook has both the resources and the experience to run drugdevelopment programs targeting vascular disease, which typically are large and expensive undertakings. Cook also has the sales and marketing resources for product commercialization. Further, with this agreement in place we are now able to more fully focus on other promising opportunities, including hepatitis C, influenza A and coronary bypass artery graphing, among other programs."

Product Pipeline Update

Technology Overview

AVI has developed proprietary third-generation NEUGENE antisense technology, which is characterized by a novel synthetic backbone. NEUGENE antisense compounds are designed to bind to specific disease-causing gene sequences to disable or inactivate the disease process. AVI believes that this chemistry allows NEUGENE antisense agents to be more stable, specific, efficacious and safer than second-generation antisense compounds in clinical development by others.

AVI's clinical development is focused in two disease categories: cardiovascular disease and infectious disease. In addition, AVI applies its technology to certain other clinical applications that it believes are particularly amenable to antisense drug development, namely, genetic disorders, inflammatory diseases and oncology.

In September 2005 the company announced a new application of its proprietary NEUGENE technology, called ESPRIT (Exon Skipping Pre-RNA Interference Technology). ESPRIT therapeutics allow for fine genetic surgery at the RNA processing level that enables the deletion of disease-causing genetic sequences or the skipping of functional sequences that are over-expressed or harmful in certain diseases. In February 2006 the company announced publication of an article in *Nature Medicine* indicating that AVI's ESPRIT technology

may hold significant potential to bypass faulty dystrophin gene expression in patients with muscular dystrophy. The company is applying the ESPRIT therapeutic approach in genetic disorders, including a potential collaborative program in muscular dystrophy, as well as to diseases with an immunologic component, such as diabetes and multiple sclerosis.

Cardiovascular Disease Program

Resten-NG (AVI-4126) is a NEUGENE antisense drug for treating cardiovascular restenosis, the re-narrowing of a coronary artery following angioplasty. Resten-NG inhibits the expression of the c-myc gene, which plays a key role in the development of the pathology leading to restenosis. In a completed Phase II study, AVI demonstrated that Resten-NG prevented restenosis at the site of balloon angioplasty as measured by angiography and intravascular ultrasound at six months. In March 2006, AVI announced a development and commercialization agreement with Cook Group Inc., in which Cook licensed AVI-4126 for the down-regulation of c-myc gene expression in vascular diseases. This agreement covers device-delivery of Resten-NG as well as Resten-MPTM, the microparticle formulation of AVI-4126, for treating cardiovascular restenosis. As part of this agreement, Cook has assumed control of the ongoing APPRAISAL Phase II clinical study, in which Resten-MP is being evaluated in the prevention of cardiovascular restenosis when delivered intravenously in conjunction with the placement of one or more bare-metal stents. In preclinical studies, Resten-MP was as effective as AVI-4126 delivered by catheters or stents in preventing cardiovascular restenosis.

AVI is focusing in house efforts on developing AVI-5126 for the treatment of coronary artery bypass grafting based on strong preclinical data. The company plans to enter Phase Ib/II development with this program during 2006.

Infectious Disease Program

AVI's infectious disease program is extensive, and encompasses research on more than 50 different viruses representing most viral families and involves collaborations with investigators worldwide. Results from these studies have enhanced AVI's ability to design effective agents for emerging as well as for engineered pathogens. AVI's antiviral research program has produced antisense drugs shown to be active in preclinical studies against a wide range of RNA viruses, including HCV, influenza A virus, West Nile virus (WNV), dengue virus, SARS coronavirus, Ebola virus and Marburg virus. AVI has confirmation through independent laboratories of NEUGENE antisense efficacy in preclinical experiments against multiple strains of influenza, including avian influenza strain H5N1, a potential worldwide public health threat.

AVI plans to focus its antiviral drug development program on infectious diseases that represent large market opportunities. The company announced in June 2005 the acceptance of an Investigational New Drug (IND) application by the U.S. Food and Drug Administration (FDA) for the treatment of HCV using the company's NEUGENE compound AVI-4065. In September 2005 AVI announced the initiation of an HCV clinical trial to assess the safety, tolerability, pharmacokinetics and viral response to treatment with AVI-4065 in healthy volunteers and patients with chronic active HCV. The company reported favorable safety, tolerability and pharmacokinetic results in January 2006 from the first phase of its HCV program. AVI is currently in the second phase of the study involving patients with chronic HCV infection.

To address the large influenza commercial market, AVI has developed NEUGENE antisense drug candidates that target genetic regions of the influenza A virus that are highly conserved between the six viral subtypes that cause human disease. These include three subtypes that caused pandemics in the 20th century – the 1918 Spanish flu (H1N1), the 1957 Asian flu (H2N2) and the 1968 Hong Kong flu (H3N2) – and three subtypes of avian flu that have been reported to cause disease in humans (H5N1, H7N7 and H9N2). Collaborators have

confirmed that a single NEUGENE drug was effective in preclinical studies against most influenza subtypes, including the emerging H5N1 avian strain. AVI plans to file an IND later this year for its NEUGENE drug for avian flu that is also efficacious against the far more common influenza A viruses, which kill an average of 35,000 Americans every year.

The company is collaborating with the Centers for Disease Control and Prevention (CDC) in its dengue virus program, and expects dengue fever/dengue hemorrhagic fever to be the next viral program to move into clinical development.

Bio-Defense Program

AVI has an active collaborative program with the Department of Defense in the area of bio-threats and emerging diseases. In 2005 and early 2006, AVI received approximately \$4.6 million for ongoing programs in drug development for the highly lethal Ebola and Marburg viruses, and countermeasures for ricin and anthrax toxins. In January 2006, the final version of the 2006 defense appropriations act was approved, which included an allocation of \$11.0 million to fund AVI's ongoing defense-related programs.

Conference Call

AVI BioPharma has scheduled an investor conference call regarding this announcement, and its current and planned business activities, to be held today, beginning at 11:00 a.m. Eastern time.

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Individuals interested in listening to the conference call may do so by dialing (888) 803-8271 within the U.S. and Canada, or (706) 634-2467 for international callers. A telephone replay of the conference call will be available for 48 hours beginning within two hours of the conclusion of the call, by dialing (800) 642-1687 for domestic callers, or (706) 645-9291 for international callers, and entering reservation number 1085185.

The live conference call also will be available to private investors via the Internet at www.avibio.com. A replay of the call will be available on the company's Web site for 14 days following the completion of the call.

About AVI BioPharma

AVI BioPharma develops therapeutic products for the treatment of life-threatening diseases using third-generation NEUGENE antisense drugs. AVI's lead NEUGENE antisense compound is designed to target cell proliferation disorders, including cardiovascular restenosis, cancer and polycystic kidney disease. In addition to targeting specific genes in the body, AVI's antiviral program uses NEUGENE antisense compounds to combat disease by targeting single-stranded RNA viruses, including West Nile virus, hepatitis C virus, dengue virus, Ebola virus and influenza A virus. AVI has introduced a NEUGENE-based exonskipping technology called ESPRIT therapy. More information about AVI is available on the company's Web site at www.www.avibio.com.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: The statements that are not historical facts contained in this release are forward-looking statements that involve risks and uncertainties, including, but not limited to, the results of research and development efforts, the results of preclinical and clinical testing, the effect of regulation by the FDA and other agencies, the impact of competitive products, product development, commercialization and technological difficulties, and other risks detailed in the company's Securities and Exchange Commission filings.

[Tables to Follow]

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AVI BIOPHARMA, INC. (A Development-Stage Company)

(A Development-Stage Company)

STATEMENTS OF OPERATIONS (unaudited)

	Three months ended March 31,			
	2006	_	2005	
Revenues, from license fees, grants and research contracts	\$ 65,962	\$	45,192	
Operating expenses:				
Research and development	6,763,245		4,141,904	
General and administrative	2,821,726		1,448,530	
	 9,584,971		5,590,434	
Other income:				
Interest income, net	457,859		46,063	
Net loss	\$ (9,061,150)	\$	(5,499,179)	
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Net loss per share – basic and diluted	\$ (0.18)	\$	(0.13)	
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Shares used in per share calculations	51,715,050		42,455,512	
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BALANCE SHEET HIGHLIGHTS

(unaudited)

	March 31, 2006		December 31, 2005	
Cash, cash equivalents and short-term securities	\$ 49,446,509	\$	47,051,082	
Total current assets	50,767,209		48,653,394	
Total assets	58,119,048		56,407,982	
Total current liabilities	2,209,804		2,747,973	
Total shareholders' equity	\$ 55,909,244	\$	53,660,009	
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