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): **March 25, 2010**

AVI BioPharma, Inc.

(Exact name of registrant as specified in its charter)

Oregon	**001-14895**	**93-0797222**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

3450 Monte Villa Parkway, Suite 101
Bothell, WA 98021
(Address of principal executive offices)

(425) 354-5038
Registrant's telephone number, including area code

(Former name or former address, if changed since last report.)

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 7.01. Regulation FD Disclosure.

On March 25, AVI BioPharma, Inc. ("AVI" or the "Company") issued a press release announcing that, on April 14, 2010, the Company will provide an update on the preclinical evaluation of AVI-5038, its lead therapeutic candidate for Duchenne muscular dystrophy, at the American Academy of Neurology ("AAN") annual meeting. A copy of this press release is attached hereto as Exhibit 99.1.

Previously presented data of a preclinical study found AVI-5038 to be generally well tolerated at doses up to 9 mg/kg administered once weekly by bolus intravenous injection for 4 weeks. Preliminary results from an ongoing, longer duration preclinical study at doses up to 15 mg/kg for 12 weeks, will also be presented at the AAN annual meeting. The 12-week preclinical study demonstrated significant toxicological findings in some groups following bolus intravenous administration. The in-life portion of the study is complete, but the collection and analysis of data from the study is still ongoing. The Company believes the data set is not yet sufficient for the company to make a decision on the future development of this drug candidate.

The information in this Item 7.01 and the press release attached as Exhibit 99.1 to this Form 8-K, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, nor shall this Item 7.01, such Exhibit 99.1, or any of the information contained therein be deemed incorporated by reference in any filing under the Securities Exchange Act of 1934 or the Securities Act of 1933, except as shall be expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

Exhibit No.	**Description**
99.1	Press release, dated March 25, 2010, entitled "AVI BioPharma Announces Update on AVI-5038, its PPMO Duchenne Muscular Dystrophy Drug Candidate, to be Presented April 14, 2010 at the American Academy of Neurology Annual Meeting"

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 Bothell, State of Washington, on March 25, 2010.

AVI BioPharma, Inc.

By: /s/ Leslie Hudson, Ph.D.

Leslie Hudson, Ph.D.
President and Chief Executive Officer
(Principal Operating Officer)

EXHIBIT INDEX

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Exhibit 99.1

AVI Press and Investor Contact:
David A. Walsey
Senior Director, Investor Relations & Corporate Communications
425.354.5140
Investorrelations@avibio.com

AVI BioPharma Announces Update on AVI-5038, its PPMO Duchenne Muscular Dystrophy Drug Candidate, to be Presented April 14, 2010 at the American Academy of Neurology Annual Meeting

BOTHELL, WA — **March 25, 2010 —** AVI BioPharma, Inc. (NASDAQ: AVII), a developer of RNA-based drugs, today announced that on April 14, 2010, at the American Academy of Neurology Annual Meeting (AAN), it will provide an update on the preclinical evaluation of AVI-5038, its lead peptide-conjugated morpholino-modified phosphorodiamidate oligomer (PPMO) drug candidate for Duchenne muscular dystrophy. PPMOs are based on AVI's core phosphorodiamidate morpholino oligomers chemistry.

Previously presented data of a preclinical study found AVI-5038 to be generally well tolerated at doses up to 9 mg/kg administered once weekly by bolus intravenous injection for 4 weeks. Preliminary results from an ongoing, longer duration preclinical study at doses up to 15 mg/kg for 12 weeks, will also be presented at AAN. The 12 week preclinical study demonstrated significant toxicological findings in some groups following bolus intravenous administration. The in-life portion of the study is complete, but the collection and analysis of data from the study is still ongoing. We believe the data set is not yet sufficient for the company to make a decision on the future development of this drug candidate.

About AVI BioPharma

AVI BioPharma is focused on the discovery and development of RNA—based medicines utilizing proprietary derivatives of its antisense chemistry (morpholino-modified phosphorodiamidate oligomers or PMOs) that can be applied to a wide range of diseases and genetic disorders through several distinct mechanisms of action. Unlike other RNA therapeutic approaches, AVI's antisense technology has been used to directly target both messenger RNA (mRNA) and its precursor (pre-mRNA), allowing for both up- and down-regulation of targeted genes and proteins. AVI's RNA—based drug programs are being evaluated for the treatment of Duchenne muscular dystrophy, including an ongoing systemic Phase 1b/2 clinical trial of exon skipping with AVI-4658. AVI's antiviral programs have demonstrated promising outcomes in Ebola Zaire and Marburg Musoke virus infections and may prove applicable to other viral targets such as Junín, influenza, HCV or Dengue viruses. For more information, visit www.avibio.com.

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"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

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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.