[AVI BIOPHARMA LETTERHEAD]

February 17, 2010

Jeffrey P. Riedler
Assistant Director
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, DC. 20549

RE: AVI BioPharma, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
Schedule 14A filed April 14, 2009
File Number: 001-14895

Dear Mr. Riedler:

This letter responds to the Commission's comment letter dated February 2, 2010 received by AVI BioPharma, Inc. (the "Company").

Form 10-K for the Fiscal Year Ended December 31, 2008

Item 1. Business
Strategic Alliances, page 5

1. **We note your response to our prior comment 1. With respect to several of the agreements, you describe the royalty as a "double-digit" royalty. Since double-digit could be anywhere from 10% to 99%, please revise your proposed disclosure to provide a narrower range of royalties (for example, low teens or high teens).**

   Also the termination of several of the agreements depends in part on the expiration of the last to expire patent. Please revise your proposed disclosure to provide an indication of the year in which the last patent for the applicable agreement will expire.

RESPONSE:

In response to the Commission's previous comment letter, the Company provided proposed additions and modifications to the disclosure contained in its Form 10-K for the fiscal year ended December 31, 2009. In response to the Commission's February 2, 2010 comment letter, the Company proposes to make additional modifications to the draft disclosure previously provided by the Company. The disclosure below is the text previously provided to the Commission, with deletions to the text previously provided in brackets, and additions to the text previously provided underlined. Dollar amounts will ultimately be provided in any blank spaces contained in the proposed modifications to the disclosure in the Company's Form 10-K for the fiscal year ended December 31, 2009.

A. Chiron Agreement

After the existing text under the heading "Chiron Agreement," the following text would be added:

"Subject to the satisfaction of certain milestones triggering the obligation to make any such payments, AVI may be obligated to make milestone payments of up to $5 million in the aggregate under this agreement. As of December 31, 2009, AVI has not made, and is not under any current obligation to make, any such milestone payments, as the conditions triggering any such milestone payment obligations have not been satisfied. The range of percentage royalty payments required to be made by AVI under the terms of this agreement is in the single digits. Chiron is not obligated to make any milestone payments or royalty payments under the agreement. This agreement will terminate as of the later of (i) the 20th anniversary of the effective date of the agreement, or (ii) the expiration date of the last to expire patent among certain patents issued to Chiron, which expiration date is in 2016."

B. Cook Group Agreement

The second sentence of the second paragraph under the heading "Cook Group Agreement" will be deleted in its entirety, and the following text would be added after the first sentence of the second paragraph:

"The Company is not obligated to make any milestone payments under the agreements with Cook. Subject to the satisfaction of a commercialization milestone relating to net sales of products developed under the agreement, Cook is obligated to make a one-time milestone payment of $10 million under the license and development agreement. As of December 31, 2009, Cook has not made, and is not under any current obligation to make, any such milestone payment, as the condition triggering such milestone payment obligation has not been satisfied. The license and development agreement also provides for payment to AVI of a [double-digit]low-teens percentage royalty on net sales by Cook. Cook has the right to terminate the agreements upon 90 days' written notice to AVI. AVI has the right to terminate the agreements upon 60 days' written notice to Cook if, following an assignment of Cook's rights under the agreements in connection with a merger or sale of assets, the assignee terminates its development efforts under the license and development agreement. In the absence of any such termination by Cook or AVI, the agreement terminates by its own terms with the expiration of the last to expire patent among certain patents, which expiration date is in 2024. AVI does not expect to be entitled to or receive any milestone payment from Cook under this agreement."

C. Ercole Agreements

The existing text under this heading will be deleted in its entirety, and replaced with the following:

"In December 2006, AVI and Ercole entered into a collaboration and license agreement for purposes of identifying and developing drugs that direct the splicing of precursor messenger RNA (pre-mRNA) to treat a variety of genetic and acquired diseases. Under the collaboration and license agreement, each party selected gene targets for their research and development efforts. Subject to the satisfaction of certain development-related milestones, Ercole was obligated to pay milestone payments to AVI of up to $2.2 million in the aggregate with respect to each therapeutic candidate resulting from Ercole's work on the gene targets selected by Ercole. AVI had a reciprocal obligation to Ercole with respect to each therapeutic candidate resulting from AVI's work on the gene targets selected by AVI. Subject to the satisfaction of certain commercialization milestones relating to net sales of drugs successfully developed under the agreement, AVI was also obligated under the collaboration and license agreement to pay Ercole $20 million for each drug resulting from AVI's work on the gene targets selected by AVI, up to a maximum aggregate amount of $100 million in such payments. The parties also had reciprocal obligations to pay a single-digit percentage royalty to one another on net sales of drugs developed from the gene targets they selected. The collaboration and license agreement provided that it would terminate as of the later of (i) the expiration date of the last to expire patent among certain patents, which expiration date is in 2020, or (ii) if all such patents were found to be invalid or unenforceable, 10 years. The obligations of the parties to one another under this agreement were terminated by operation of law when AVI acquired Ercole in March 2008. At the time the acquisition was completed, no milestone payments had been made by one party to the other, and no royalties had been paid under the agreement.

In May 2007, the parties entered into a second collaboration and license agreement for purposes of expanding the collaboration between the parties to include the discovery and development of drugs to treat muscular dystrophy and beta thalassemia. The parties agreed to share certain research and development costs under this agreement. The second collaboration and license agreement provided that it would terminate as of the later of (i) the expiration date of the last to expire patent among certain patents, which expiration date is in 2020, or (ii) if all such patents were found to be invalid or unenforceable, 10 years. The obligations of the parties to one another under this agreement were likewise terminated by operation of law when AVI acquired Ercole in March 2008."

D. Eleos Agreement

The fifth sentence under the heading "Eleos Agreement" shall be deleted in its entirety, and replaced with the following:

"Subject to the satisfaction of certain development and commercialization milestones, Eleos may be obligated to make milestone payments of up to $19.5 million in the aggregate with respect to drugs resulting from Eleos' use of AVI intellectual property licensed to Eleos under the agreement. AVI has a reciprocal obligation to Eleos with respect to drugs resulting from AVI's use of Eleos' intellectual property licensed to AVI under the agreement. As of December 31, 2009, neither Eleos nor AVI has made, and neither Eleos nor AVI is under any current obligation to make, any such milestone payments, as the conditions triggering any such milestone payment obligations have not been satisfied. Percentage royalty payments required to be made by Eleos to AVI under the terms of this agreement range from single digits to [double digits]low teens on net sales of drugs resulting from Eleos' use of AVI's intellectual property licensed to Eleos under the agreement. AVI is required to pay to Eleos a [double-digit]low-teens percentage royalty on net sales of drugs resulting from AVI's use of Eleos' intellectual property."

The last sentence under the heading "Eleos Agreement" shall also be deleted in its entirety, and replaced with the following:

"For the fiscal years ending December 31, 2009, 2008 and 2007, AVI recognized $, $, and $, respectively, in revenue from this agreement. This agreement will terminate as of the later of (i) the expiration date of the last to expire patent among certain patents licensed under the agreement having claims covering a product using AVI or Eleos intellectual property licensed under the agreement, which expiration date is in 2024, or (ii) 10 years from the date of the first commercial sale of a product using AVI or Eleos intellectual property licensed under the agreement."

E. Charley's Fund Agreement

The existing text under this heading will be deleted in its entirety, and replaced with the following:

"In October 2007, AVI and Charley's Fund, Inc., a nonprofit organization that funds drug development and discovery initiatives specific to Duchenne muscular dystrophy (DMD), announced that AVI had been awarded a $2.45 million research grant from Charley's Fund for the purposes of supporting a new product development program using proprietary exon skipping technologies developed by AVI to overcome the effects of certain genetic errors in the dystrophin gene. The parties entered into a sponsored research agreement in October 2007. The parties subsequently entered into an amendment of the sponsored research agreement in May 2009.

At the time of the execution of the amendment by the parties, of the $2.45 million to be paid, $2 million had already been paid to AVI by Charley's Fund, of which $1.35 million had been spent by AVI under the terms of the agreement. The May 2009 amendment allocated the remaining $650,000 already received by AVI, but not yet spent by AVI, toward a revised list of research and development tasks to be performed by AVI. Under the terms of the May 2009 amendment, subject to the satisfaction of certain milestones, Charley's Fund agreed that it would pay up to an additional $3 million to AVI in milestone payments over and above the $2 million it had already paid to AVI at the time of the execution of the amendment. As of December 31, 2009, Charley's Fund has made an aggregate of $ in milestone payments to AVI, an amount which includes the $2 million amount paid to AVI prior to the execution of the amendment to the sponsored research agreement. AVI recognized $, $22,500 and $37,500, respectively, in revenue from Charley's Fund for the years ended December 31, 2009, 2008 and 2007.

Depending on the timing of the obtainment of a license by Charley's Fund to any product containing any molecular candidate arising or derived from the research sponsored by Charley's Fund, percentage royalty payments on net sales required to be made by Charley's Fund to AVI under the terms of the sponsored research agreement, as amended, range from single digits to [double digits]low teens. Under the terms of the sponsored research agreement, as amended, if the parties are able to successfully commercialize any molecular candidate arising or derived from the research sponsored by Charley's Fund either through sales of products or through licensing or partnership arrangements with a third party that include rights for such third party to sell, distribute, promote or market such products or the underlying intellectual property, then AVI is obligated to repay the research funds paid to AVI by Charley's Fund, up

to an amount equal to the total amount of funds provided by Charley's Fund to AVI. In connection with this repayment obligation, AVI agreed that it would pay a single-digit percentage royalty on net sales of products containing any molecular candidate arising or derived from the research sponsored by Charley's Fund (up to an amount equal to the total amount of funds provided by Charley's Fund to AVI). This agreement will terminate by its own terms at the completion of the research being sponsored by Charley's Fund. The Company technology upon which the agreement is based is covered by certain patents, the last of which expires following the termination of the agreement."

F. U.S. Department of Defense Agreements

The existing text under this heading will be deleted in its entirety, and replaced with the following:

"The Company currently has several contracts with the U.S. Department of Defense and its agencies funding its programs, including the Company's clinical stage programs for the Ebola, Marburg, and Junín and Swine Flu viruses. The continued funding of these programs from the U.S. government is critical to the ongoing development of these programs. Future funding of these programs is subject to availability of budgeted funds from the U.S. Department of Defense. As of December 31, 2009, the Company had received an aggregate of $ million in contract awards from the U.S. government, and an aggregate of $ million in milestones payments had been made by the U.S. government to AVI under such awards. AVI is not required to make any milestone payments or royalty payments to the U.S. government under these contracts. Unless terminated earlier by the U.S. government, these agreements terminate upon completion of the research funded by the award. The Company technology upon which the agreements are based is covered by certain patents, all of which expire after the termination of the agreements."

Schedule 14A filed April 14, 2009

Executive Compensation
Compensation Discussion and Analysis
Performance Factors in 2008, page 12

2. **Your response to our prior comment 3 indicates that you will quantify the achievement of goals/milestones, to the extent those are quantifiable, "except where, consistent with Instruction 4 to Item 402(b) of Regulation S-K, disclosure of which would result in competitive harm for the Company." Please provide us with a detailed analysis supporting your belief that quantification of any of the goals/milestones would result in competitive harm to the Company.**

RESPONSE:

Many of the goals and milestones relate to topics that the Company believes are not only confidential, but the disclosure of which would not benefit investors. Included within these topics are the possible sale, acquisition or reconfiguring of business units, internal research and/or development milestones, modifications in prescribed operational controls or processes and others. In each case, to the extent not disclosed, the Company believes that the information constitutes trade secrets and, thus, is protectable under SEC policies.

For example, disclosure of a milestone relating to the acquisition of a business unit would provide information to the Company's competitors that, if shared, would either eliminate a potential competitive advantage the Company otherwise holds over its competitors or create such an advantage in the Company's competitors by providing insight and exposure to the Company's growth plans. Further, disclosure of the milestone may compromise the Company's ability to actually consummate such an acquisition and to properly meet its disclosure obligations under applicable securities laws by forcing the Company to explain to the investment community details of the milestone and the strategy it represents at a time where the impact on the Company from achievement of such a milestone is speculative. In short, disclosure of such a milestone would represent a competitive harm to the Company while providing no appreciable benefit to investors. Satisfaction of the milestone, to the extent it otherwise constitutes discloseable information under applicable securities laws, would be disclosed accordingly.

Similar analysis is applicable to milestones that are tied to internal research and development milestones, changes in internal operational processes and controls and other similar milestones.

Because of the fact that this letter will eventually become part of the public domain, the Company is reluctant to provide more detail in support of its position to not disclose detailed information regarding certain milestones in its proxy statement. The Company is happy to discuss the particular milestones and its reasoning for not providing detailed disclosure with Staff by telephone at Staff's convenience.

In connection with the Company's foregoing response to the Commission's comments, the undersigned hereby acknowledges on behalf of the Company that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you have any questions regarding the foregoing, please do not hesitate to contact me at your convenience at (425) 354-5038.

Sincerely,

AVI BioPharma, Inc.

/s/ J. David Boyle II

J. David Boyle II