Via Facsimile and U.S. Mail Mail Stop 6010

September 20, 2007

Dennis R. Burger, Ph.D. Chairman of the Board and Chief Executive Officer AVI BioPharma, Inc. One SW Columbia Street, Suite 1105 Portland, Oregon 97258

Re: AVI BioPharma, Inc. Form 10-K for Fiscal Year Ended December 31, 2006 Filed March 16, 2007 File No. 001-14895

Dear Dr. Burger:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In our comments, we ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

## Form 10-K - December 31, 2006

Item 7. Management's Discussion and Analysis or Plan of Operations, page 21

## Results of Operations, page 23

1. Please refer to the Division of Corporation Finance "Current Issues and Rulemaking Projects Quarterly Update" under section VIII – Industry Specific Issues – Accounting and Disclosure by Companies Engaged in Research and Development Activities. You can find it at the following website address:

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http://www.sec.gov/divisions/corpfin/cfcrq032001.htm. Please disclose the following information for each of your major research and development projects:

- a) The costs incurred during each period presented and to date on the project;
- b) The nature, timing and estimated costs of the efforts necessary to complete the project;
- c) The anticipated completion dates;
- d) The period in which material net cash inflows from significant projects are expected to commence.
- e) To the extent that information requested above is not known or estimable, disclose that fact and the reason why it is not known.

Regarding a), if you do not maintain any research and development costs by project, disclose that fact and explain why management does not maintain and evaluate research and development costs by project. Provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the project.

Regarding b). and c), disclose the amount or range of estimated costs and timing to complete the phase in process and each future phase. To the extent that information is not estimable, disclose those facts and circumstances indicating the uncertainties that preclude you from making a reasonable estimate.

Item 15. Exhibits, Financial Statements Schedules and Reports on Form 8-K, page 31

Financial Statements – December 31, 2006, page F-3

## 4. Shareholders' Equity, page F-15

2. Please provide us with your analysis demonstrating why you do not account for the warrants issued in December 2003, January 2004 and January and November 2005 that are discussed in the first four paragraphs of this note as derivative instruments within the scope of SFAS No. 133 and EITF 00-19. From disclosure in your Forms 8-K disclosing the financings, the securities were sold pursuant to effective registration statements. It would, therefore, appear that you must maintain the effectiveness of the registration statements while the warrants are outstanding. Refer to paragraph 25 of EIFT 00-19.

\* \* \* \*

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact James Peklenk, Staff Accountant, at (202) 551-3661, or Jim Atkinson, Accounting Branch Chief, at (202) 551-3674, if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant