

Mail Stop 6010
Via Facsimile and U.S. Mail

December 6, 2007

Mr. John D. Stanton
Chief Executive Officer and
Chief Financial Officer
Nanobac Pharmaceutical, Inc.
4730 North Habana Avenue, Suite 205
Tampa, Florida 33614

Re: Nanobac Pharmaceuticals Inc.
Form 10-KSB for the fiscal year ended December 31, 2006
Filed May 4, 2007
Form 10-QSB/A for the quarterly period ended September 30, 2007
Filed November 20, 2007
File No. 033-80612

Dear Mr. Stanton:

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 to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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 filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-KSB for December 31, 2006

General

1. The file number on the cover page of your document does not agree with the file number, 033-80612, used in the EDGAR system. Please confirm to us that you will correct the commission file number on the cover page in future filings.

Item 8A. Controls and Procedures, page 29

Disclosure controls and procedures

2. Please revise your disclosure to state the conclusion of your principal executive officer and principal financial officer on the effectiveness of disclosure controls and procedures as of the end of the period covered by the report as required by Rule 307 of Regulation S-B and not within 90 days of the filing date of this report. This comment also applies to your disclosure in the Form 10-QSB/A for September 30, 2007.
3. Your disclosure that “our principal executive officer and principal financial officer have concluded that there are material weakness in our internal controls and procedures” is vague. Please revise your disclosure to state whether your principal executive and principal financial officer concluded that your “disclosure controls and procedures” were effective or not effective at December 31, 2006. Please disclose whether or not the material weakness identified at June 30, 2006 has been corrected as of December 31, 2006 to support the conclusion of your principal executive and principal financial officer regarding the effectiveness of your disclosure controls and procedures as of December 31, 2006.

Changes in internal controls

4. Please revise your disclosure to state if there has been any change in “internal control over financial reporting” that occurred during your last fiscal quarter (the fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect your internal control over financial reporting. Please refer to Item 308(c) of Regulation S-B. This comment also applies to your disclosure in the Form 10-QSB/A for September 30, 2007.

Consolidated Financial Statements

Notes to Consolidated Financial Statements

9. Stockholders Equity, page F-13

5. Please explain to us why the fair value of the stock settlement liability has not changed since December 31, 2005. Based on your disclosure it appears that the

value of the variable number of shares to be issued under the Subscription Agreements should be adjusted at each subsequent reporting period.

Form 10-QSB/A for September 30, 2007

Condensed Consolidated Balance Sheets, page 4

6. Please refer to Note 3 and your disclosure of a derivative liability totaling \$838,667. Tell us where the derivative liability is classified on your balance sheet at September 30, 2007.

Item 3: Controls and Procedures, page 23
Disclosure controls and procedures

7. Your disclosure that “our principal executive officer and principal financial officer have concluded that there are no material weakness in our internal controls and procedures” does not state the conclusion of your principal executive and principal financial officer regarding the effectiveness of your “disclosure controls and procedures”. Please revise your disclosure to state whether your principal executive and principal financial officer concluded that your “disclosure controls and procedures” were effective or not at September 30, 2007.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Your letter should key your responses to our comments. Detailed cover letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes 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 comment, 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 filings;
- 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

Mr. John D. Stanton
Nanobac Pharmaceuticals Inc.
December 6, 2007
Page 4

- 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 Donald Abbott, Senior Staff Accountant, at (202) 551-3608, 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