Mail Stop 6010

May 21, 2007

Ron Najafi, Ph.D.
Chairman of the Board, Chief Executive Officer and President
NovaBay Pharmaceuticals, Inc.
5980 Horton Street – Suite 550
Emeryville, California 94608

Re: NovaBay Pharmaceuticals, Inc.
Amendment No. 2 to Form S-1 Registration Statement
File No. 333-140714

Dear Mr. Najafi:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 filing. 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.

Summary – Page 1

Overview

1. Please revise the "Overview" section to include the information contained in the first two sentences of the last paragraph on page 51.

2. Please revise the disclosure in both the "Overview" section of page 1 and the last paragraph of page 51 to also state that Phases I, II and III clinical trials and any filing of an NDA will go on for years and will require the expenditure of a substantial amount of

funds. You should also provide your best estimate of the range of funds that may be needed and the typical amount of time in clinical testing for antibiotics that have been developed for treatment against super-resistant bacterial strains.

Risk Factors – page 8

3. We have considered your responses to comments 32 and 33. We think that you also need to include an appropriate risk factor addressing these issues. Please revise the document accordingly.

Use of Proceeds – page 28

4. We have considered our response to comment 23, but we continue to believe that you need to disclose the information we previously requested. Please expand the disclosure to describe, in significantly greater detail, what you will use the proceeds of this offering for. For example, please expand the first bullet to identify the specific products that the proceeds will be used to develop, the indication the product will be targeted toward, how much will be used for each product, how far along in the development process you anticipate the funds will take you, how much additional funding you will need to complete development, where you anticipate obtaining those funds, and other material information. Provide similar information for each proposed purpose included in the second bullet. In this regard, it appears that Alcon is paying for the research on your primary product. Your revised disclosure should also show how you are allocating proceeds you receive from Alcon among your research programs.

Business – page 44

5. We are considering your response to comment 31. Please provide us with a copy of the document you refer to which contains the "[h]istoric data analyzed and published by CMR International, Limited." Please mark the document to show the location of the information you are relying on. We expect to have further comments.

6. Please include a discussion of the general timeframes involved in taking your product candidates from their current status to the submission of an NDA to the FDA.

7. On page 54 you now indicate that you submitted an IND that the FDA cleared in 2004. Please explain what the acronym "IND" refers to. Also, explain what the 2004 IND permitted you to do and what you are requesting to do in the current IND.

8. On page 56, you refer to a "safety study" in humans with NVC-101. Please explain how this differs from a Phase I clinical trial.

Aganocide Compounds Are Analogs of a Natural Molecule – page 60

9. Please explain what the term "dehydrohalogenation" refers to.

Conjunctivitis – page 61

10. Please refer to comment 40 in our previous letter. You indicate in your response that you were providing, via FedEx, supplemental material responding to the comment. We have not received this data. Please provide it with your next amendment. Please ensure that the documents are marked to show the location of the specific information you cite. You should also tie your support to each claim in the document.

Competition – page 71

11. Please replace the acronym "MRSA" with the term it stands for.

Underwriting – page 112

12. We note that the underwriters intend to conduct this offering simultaneously in the U.S. and in certain Canadian provinces. Please tell us whether the sale of these securities in Canada requires the approval of any Canadian or provincial authorities, and if so, the names of the entities and the date(s) that the request for approval was submitted to them.

Financial Statements

Notes to Financial Statements

8. Stockholders' equity, page F-15

13. It appears that you have not provided all of the disclosures required by paragraphs 64 – 65 and A240 – A242 of SFAS 123R. Also refer to SAB Topic 14 for guidance. For example, please provide the following disclosures:

    a. For the most recent year for which an income statement is provided:

        - The weighted-average grant-date fair value (or intrinsic value, if applicable) for each of the following groups of equity instruments: (a)

those nonvested at the beginning of the year, (b) those nonvested at the end of the year, and those (c) granted, (d) vested, or (e) forfeited during the year.

b. For each year for which an income statement is provided:

- The weighted-average grant-date fair value (or intrinsic value, if applicable) of equity options or other equity instruments granted during the year.
- The total intrinsic value of options exercised (or share units converted), share-based liabilities paid, and the total fair value of shares vested during the year.
- A description of the method used during the year to estimate fair value) of awards under share-based payment arrangements.

14. Further, in order for us to fully understand the equity fair market valuations reflected in your financial statements, please provide an itemized chronological schedule covering all equity instruments issued since January 1, 2006 through the date of your response. Please provide the following information separately for each equity issuance:

a. The date of the transaction;

b. The number of shares/options issued/granted;

c. The exercise price or per share amount paid;

d. Management's fair market value per share estimate and how the estimate was determined;

e. An explanation of how the fair value of the convertible preferred stock and common stock relate, given the one for one conversion ratio;

f. The identity of the recipient, indicating if the recipient was a related party;

g. Nature and terms of concurrent transactions; and,

h. Any recorded compensation element.

Also, progressively bridge management's fair market value determinations in 2006 to the current estimated IPO price per share. Please reconcile and explain the differences between the mid-point of your estimated offering price range and the fair values included

in your analysis.

9. Collaboration and License Agreement

Alcon Manufacturing, Ltd., page F-21

15. Please disclose the material terms of the collaboration and license agreement with Alcon Manufacturing, Ltd, such as your rights and obligations under the agreement, the performance period of each obligation, the length of the agreement, how research and development support payments are determined, any milestone or royalty payments, and the termination provisions. Please clarify why you believe your performance obligations under the agreement will cease in August 2010.

General

16. In the event of a delay, please update your interim financial statements and related financial information as required by Rule 3-12 of Regulation S-X.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. We may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

- the company may not assert this action 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 connection with our review of your filing or in response to our comments on your filing.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please provide this request at least two business days in advance of the requested effective date and allow adequate time after the filing of any amendment for further review before submitting a request for acceleration.

You may contact Todd Sherman at 202-551-3665 or Don Abbott at 202-551-3608 if you have questions regarding comments on the financial statements and related matters. Please contact Mary Fraser at 202-551-3609 or me at 202-551-3710 with any other questions.

Regards,

Jeffrey P. Riedler
Assistant Director

Cc: Chris Barry, Esq.
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