Mail Stop 6010

March 20, 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.
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.

Comments Applicable to the Entire Document

1. We note that your filing contains numerous omissions throughout the prospectus which relate to the offering price range or the number of shares you will sell. These omissions include but are not limited to:

- Summary Financial Data
- Use Of Proceeds
- Capitalization
- The Option Grants Table
- Shares Eligible For Future Sale
- The Principal Stockholders Table

- Dilution
- Description of Capital Stock

Rule 430A requires you to include this information in your filing based upon an estimate of the offering price within a bona fide range you disclose on the cover page and based upon an estimate of the number of shares you will sell. We consider a bona fide range to be $2 if the price is under $20 and 10% if it is above $20. You should include the required information in an amendment prior to circulating a "red herring" prospectus.

2. Provide us with copies of all the graphic, photographic or artistic materials you intend to include in the prospectus prior to its printing and use. Please note that we may have comments. Please also note that all textual information in the graphic material should be brief and comply with the plain English guidelines regarding jargon and technical language.

3. We note that you have not filed a number of agreements, including your collaboration and licensing agreement with Alcon Manufacturing, your opinion of counsel and your financial advisory and investor relations consulting agreement with PM Holdings Ltd. We note further that the Exhibit List indicates that you are seeking confidential treatment for portions of the Alcon agreement. As of today's date, Commission records do not indicate that you have filed such a request. Please note that Rule 406, which applies to requests for confidential treatment, specifies that your request for confidential treatment should have been filed at the same time you filed the registration statement. Please file the application promptly.

4. Please update your financial statements and related financial information as required by Rule 3-12 of Regulation S-X.

Prospectus Summary – page 1

Overview

5. Please disclose, in the "Overview" section of the summary, that you have had no revenues to date and provide quantified disclosure regarding your losses. Also briefly discuss the source of your funds to date.

6. Please also disclose in the "Overview" section that you have only conducted in vitro tests and have not begun human testing of any of your products.

7. Please revise the sections called "Our Solution" and "Our Strategy" to present a balanced picture of your company. You should identify the impediments to your strategy and your solution with the same degree of detail you use to describe the positive aspects.

8. Do you have a website? If so, include its address with your other corporate information on page 3.

Risk Factors – page 7

We currently do not have any marketable products, and if we are unable to develop and obtain regulatory approval for products that we develop, we may never generate product revenues. – page 8

If we fail to obtain the necessary regulatory approvals, we will not be able to commercialize our proposed products, and we will not generate product revenues. – page 12

9. These risk factors appear to be duplicative. Please consolidate them and eliminate any overlap.

If we do not maintain our current research collaboration with Alcon and enter into additional collaborations, a portion of our funding may decrease and inhibit our ability to develop new products. – page 9

10. Please expand the risk factor to identify and briefly describe the terms of your agreement with Alcon, including the term. The disclosure should also be quantified.

We may be unable to raise additional capital on acceptable terms in the future which may in turn limit our ability to develop and commercialize products and technologies. – page 10

11. The disclosure in this risk factor should be quantified to the extent practicable. For example, how much do you anticipate it will cost to commercialize one of your proposed products? How long do you anticipate the proceeds from this offering will last? What is your current burn rate? Do you anticipate that it will increase in the future? You need to provide a factual context for an investor to evaluate the risk you are describing.

We depend on skilled and experienced personnel to operate our business effectively. If we are unable to recruit, hire and retain these employees, our ability to manage and expand our business will be harmed, which would impair our future revenue and profitability – page 11

It may be difficult to recruit and retain independent members for our Board of Directors. – page 11

12. In both risk factors, please disclose any difficulties you may have had to date.

If our facilities become inoperable, we will be unable to perform our research and development activities, fulfill the requirements under our collaboration agreement and continue developing products and, as a result, our business will be harmed. – page 12

13. Please expand the risk factor to explain why your insurance coverage for damage to your property and the disruption of your business may not be sufficient to cover all of your potential losses.

Government agencies may establish usage guidelines that directly apply to our proposed products or change legislation or regulations to which we are subject. – page 13

14. You appear to be describing two separate risks in this risk factor. Please separate the risks and present each of them under an appropriate and descriptive subheading.

15. Please expand the second paragraph of the risk factor to identify the indications you are referring to and briefly explain why they might be regulated as medical devices. You also need to be more specific and descriptive about the potential adverse consequences.

Conducting clinical trials of our product candidates may expose us to expensive liability claims, and we may not be able to maintain liability insurance on reasonable terms or at all. – page 14

16. Please disclose the amount of the liability coverage you carry.

Because our clinical development activities rely heavily on sensitive and personal information, an area which is highly regulated by privacy laws, we may not be able to generate, maintain or access essential patient samples or data to continue our research and development efforts in the future on reasonable terms and conditions, which may adversely affect our business. – page 16

17. Please identify the "certain privacy-related laws" you are referring to and describe the obligations they impose on you. Also, explain why you might not be able to "access essential patient samples or data." The information in the risk factor is currently so

vague and generic that the risk to you is not clear. Please revise it to include an adequate factual context.

If we are unable to protect our intellectual property, our competitors could develop and market products similar to ours that may reduce demand for our products. – page 16.

18. We note that the risk factor indicates that you apply for patents covering your "technologies." Please disclose whether you also apply for patents covering the substance of your proposed products. If the substance of your proposed products is not patentable, you should clearly say so and discuss the potential adverse consequences.

19. Please disclose the types of intellectual property you currently possess. For example, do you own patents, trademarks, licenses, etc.? If so, you should disclose how many you have and briefly describe what they cover. If not, you should clearly say that you don't.

If we are unable to protect the intellectual property and market exclusivity of Aganocide compounds and products, thereby enabling other parties to commercialize competing products, our ability to generate revenues from the sale of our products may be limited or diminished. – page 17

20. Please refer to the discussion of NVC-101 in the fourth paragraph of the risk factor. This appears to be the first reference to this product in the registration statement, so readers will not know what you are referring to. Please provide appropriate disclosure regarding the product, its developmental status, purpose, etc. The information you need to provide is that which will put the risk and its consequences in context.

If we were deemed to be an investment company, we would become subject to provisions of the Investment Company Act that likely would have a material adverse impact on our business. – page 24

21. The information included in this risk factor raises more questions than it answers. Please identify the exception that you are relying on and why it is applicable to you. Explain why you might be considered an investment company. Please also explain what circumstances would require you to register as an investment company, and what, specifically the consequences would be for the way you operate your business.

22. It is unclear to us why you suggest that the SEC has not "interpreted" the exception you are relying on. Please either delete the statement, or explain to us, with a view towards disclosure in the registration statement, why your situation is outside the safe harbor

established by the Commission for companies involved in research and development activities. We may have additional comments after reviewing your response.

Use of Proceeds – page 26

23. 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.

Management's Discussion and Analysis – page 32

24. Please delete the cross reference to the risk factor disclosure currently found in the last paragraph of page 32. Since the risk factors summarize more detailed disclosure contained here, the cross reference is inappropriate.

Research and Development Expense - page 33

25. Please expand your disclosure by referring 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: http://www.sec.gov/divisions/corpfin/cfcrq032001.htm#secviii.

    a. Please disclose the costs incurred during each period presented and to date for each of your major research and development projects. 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; and,

    b. The risks and uncertainties associated with completing development on schedule and the consequences to operations, financial position and liquidity if the project is not completed timely.

Critical Accounting Policies and Estimates

Stock-Based Compensation - page 35

26. It appears that you have elected to use the calculated value method for stock-based awards to employees and directors and use the fair value method for non-employees. If you grant awards to non-employees it appears that you must use the fair value method for employees, as well. Please explain to us your basis for using the calculated value method for employees when you use the fair value method for non-employees.

27. Notwithstanding the preceding comment, please describe the change in accounting policy that will be required by SFAS 123R in subsequent periods as a public entity and the reasonably likely material future effects. Please refer to the Interpretive Response to Question 4 in SAB Topic 14:B.

Liquidity and Capital Resources, page 38

28. You disclose that recently begun to generate revenue through your agreement with Alcon. Please include a discussion of the expected effects of material new contracts and the achievement of milestones on operations and financial position. Disclose the amount and timing of estimated milestone fees scheduled to be received and to be recognized as revenue from your collaborative agreement over each of the next five years. Discuss any material uncertainties affecting the future realization of these revenues.

Quarterly Results of Operations, page 41

29. Please revise your pro forma net loss per share amounts to present this data only for the most recent fiscal year and interim period consistent with your presentations in other sections of the filing. Please refer to Rule 11-02(c) of Regulation S-X.

Contractual Obligations, page 42

30. Please include the capital lease entered into in December 2006 in your updated table of Contractual Obligations.

Business – page 44

31. We note that your development efforts are all at the pre-clinical stage. We do not understand why you have included so much detailed disclosure regarding your

preliminary development of proposed products, and why you have given prominence to conclusions such as that you have "established proof of concept." In several instances you have even included statements such as "proof of concept expected 2008" and "test of concept expected 2008." Statistics indicate that most proposed drugs do not reach clinical testing, and even fewer result in products that are actually commercialized. We think that inclusion of detailed information regarding your pre-clinical efforts is likely to lead investors to believe that your proposed products are further along in development and more likely to succeed than statistics indicate is likely. Please provide us with your analysis of why these detailed discussions of your pre-clinical activities are information that is appropriate for inclusion in the prospectus, and why the discussions are not likely to be confusing to investors. We note, in addition, that you have included no caveats where you discuss your research in the summary section or in this section regarding the difficulties you will face in bringing any of these pre-clinical products to NDA approval and commercial development and the low probability that any pre-clinical product will progress to FDA approval based upon the industry's historical rate of success. If you cannot explain why inclusion of this information is appropriate, you should delete it. We expect to have additional comments after reviewing your response.

Other Aganocide Compounds – page 49

32. Please provide additional disclosure explaining that the in vitro tests you are describing merely suggest that if and when you complete Phase I, II and III testing in humans, they may prove to be safe and effective enough to be approved by the FDA. You should also state that often, positive in vitro results are not followed by positive in vivo test results.

Characteristics of the Aganocide Compounds – page 49

33. Please revise the last paragraph on page 49 to clearly indicate that you are discussing vitro results, and not the treatment of actual infections in humans. Also disclose the nature and type of additional information you will need to include along with this information in any IND application you submit to the FDA.

34. It is unclear from the disclosure on page 50 what the context was for your submission to the FDA. It is also unclear why you have included a statement in the prospectus indicating that you submitted this information to the FDA. We note that you have not yet submitted an IND application to the FDA, so it is unclear to us what the significance of this information sharing is. Please tell us what conclusions you expect a potential investor to derive from this information and why it is appropriate to include this preliminary development information in the registration statement. We may have additional comments after reviewing your response.

35. Please clarify here, and in every other place that you refer to tests "conducted by independent outside laboratories" whether the testing you refer to was done on your behalf, and under your direction. Also disclose whether the information you refer to is information that you will include in an IND application you will submit to the FDA.

36. Please explain what the numbers in the chart on page 50 refer to. Also, explain why this information is material to a potential investor at this stage of your product development. Also, the information appears to be out of context. Please expand the disclosure to include all information necessary for an investor to understand the significance of this information. Finally, since you indicate that NVC-422 is your lead product, we do not understand the prominence you are giving to information about NVC-101.

37. Please refer to the last paragraph on page 50 and the graphs on the following page. Please explain why it is appropriate to include this information in the registration statement and what an investor is supposed to learn from it. Is this the only information you will include in your IND for NVC-422? How is this information tied to the requirements you need to meet to have an IND approved?

38. In the first full paragraph of page 51 you state that "NVC-101 and our Aganocide compounds have killed all bacteria and yeasts against which they have been tested." This statement appears to suggest that your proposed product is a success. If you retain this statement, please expand the discussion to include all caveats and information needed to put the conclusion in context, including the process you will need to undertake to determine whether these results will be confirmed in human clinical trials and what requirements you must satisfy to obtain FDA marketing approval for the product. Your revised disclosure should clearly explain the difference between your in vitro laboratory results, animal results and the criteria you will need to satisfy to translate these results into a marketable product for use in your target markets. This comment also applies to the graphic information included on pages 52-53. Please make similar revisions to the disclosure on those pages.

39. In the next to last paragraph on page 51 you refer to "efficacy" in infected animal models. Please explain what the term "efficacy" means in this context and distinguish it from the results you will need to obtain in order to get your product approved for use in humans.

Conjunctivitis – page 54

40. On page 55 you refer to a study by Frost and Sullivan and others reported in the British Journal of General Practice and the New England Journal of Medicine and cite statistical

information contained in each. Please provide us with copies of the documents you are relying on marked to show the location of the specific information you cite. You should also tie your support to each claim. Provide us with similar supporting information for all other statistical claims you make in the prospectus.

Sinus Infections - page 55

41. Please delete the statement that your "tests indicate that our Aganocide compounds offer more effective treatment for sinusitis than existing antibiotics." Since you have not completed pre-clinical and clinical development of the compounds, your conclusion is premature.

Ear Infections – page 56

42. Please delete the statements you make under "Value of Our Approach." They contain conclusions that cannot be reached until your research is completed.

Woundcare Indications – page 57

43. Please revise the bullets at the bottom of page 58 to explain what a 510(k) submission is. Also, explain what you mean by the phrase "an early formulation of NVC-101."

44. Up to this point in the document, you have referred to your proposed products only by codes. In this section, you also refer to NVC-101 as "NeutroPhase." Please revise the document to use the same name throughout.

45. You say, in the first paragraph of page 58, that you have demonstrated that a product is "safe," "effective," and has "no product related adverse effects." Since this determination will be made by the FDA, after you submit an application for product approval, which you have not yet done, the statement is inappropriate and should be deleted.

Cystic Fibrosis – page 59

46. Please delete the statement that Aganocide compounds are effective against biofilm.

Alcon Collaboration Agreement – page 63

47. Please disclose the aggregate milestones you might receive under the agreement.

Competition – page 64

48. To the extent you are aware of them, please expand your discussion to identify and describe the specific products in development by your competitors. You also need to compare your potential products to the treatments currently in use and the ones being developed by your competitors. Your discussion should be more specific about the actual products and treatments that are, or will be, competitive with your potential products.

Our Device Candidates – page 69

49. Please expand the disclosure to discuss the factual and legal basis for your conclusion that any medical device coated with NVC-422 or any other Aganocide compound will be regulated as a class III device. You have not described any "devices" up to this point in the prospectus, so a reader will have no idea what devices you are discussing. Also, up to this point you have described NVC-101 as a drug, not a device, so it is not clear what you are discussing.

50. The discussion in this section suggests that Aganocide compounds are currently in use. However, disclosure throughout the remainder of the prospectus suggests that these are new drugs. Please reconcile this inconsistency.

Financial Statements

Report of Independent Registered Public Accounting Firm, page F-2

51. We note that the audit report on your financial statements was issued by an audit firm based in Vancouver, Canada. Please tell us why you did not use a US firm, given that you appear to have no operations in Canada. Please refer to Section 5.K of "International Reporting and Disclosure Issues in the Division of Corporation Finance" regarding the appropriateness of the location from which the audit report is rendered. You can find it on our website at: http://www.sec.gov/divisions/corpfin/internatl/cfirdissues1104.htm#P442_69217.

Statements of Operations, page F-4

52. It appears that legal costs associated with patent expenses should be excluded from research and development expenses. Please refer to paragraph 10 of SFAS 2. Please

revise your financial statements and related disclosures or explain to us why your current presentation is appropriate.

* * * * *

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

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