

May 30, 2008

Mail Stop 6010

Registrar & Transfer Co.
As Agent for NovaRay Medical, Inc.
10 Commerce Drive
Cranford, New Jersey 07016

Re: NovaRay Medical, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed May 5, 2008
File No. 333-149917

Dear Sir/Madam:

We have limited our review of your filing to those issues we have addressed in our 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 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 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.

Selling Stockholders, page 13

1. Given your responses to our prior comments, we are unable to agree that this transaction is eligible to be made on a shelf basis under Rule 415(a)(1)(i). Therefore, if you are not eligible to register a primary offering on Form S-3, please:
 - a. file a registration statement for the offering at the time of each conversion because you are not eligible to conduct the offering on a delayed or continuous basis under Rule 415(a)(1)(x);
 - b. identify the selling shareholders as underwriters in the registration statement;
 - c. include the fixed price at which the underwriters will sell the securities throughout the duration of the offering.

2. Please disclose in footnotes 2 and 9 that Lynda Wijcik is the chairman of your board of directors. Please also disclose in footnote 3 that George J.M. Hersbach serves on your board of directors.
3. Please expand your response to prior comment 13 to tell us the nature of the business of the entities that invested in your preferred stock.
4. Please disclose in this section the terms of the transactions in which each selling shareholder acquired the offered securities, including the consideration paid for the offered securities and the securities that may be converted into the offered securities.

Security Ownership of Certain Beneficial Owners and Management, page 36

5. We note your disclosure on page 37 that W Capital Partners II, L.P. purchased your securities from entities affiliated with AIG Global Investment Corp. on January 16, 2008. Please reconcile this disclosure with your Form S-1 registration statement filed on March 31, 2008 which discloses on pages 13-14 that entities affiliated with AIG Global Investment Corp. owned these shares at the time you filed the registration statement.

Index to Consolidated Financial Statements, page F-1

6. Please update the financial statements to comply with Rule 8-08 of Regulation S-X.
7. Please refer to prior comment 22, 23 and 24. We note that several of your financial statements appear to have been restated due to the correction of errors. Please revise the filing to label all financial statements with corrected amounts as “restated” and to include the disclosures required by paragraph 26 of SFAS 154. Alternatively, please tell us why no such no disclosure is required.

Consolidated Balance Sheets, page F-4

8. Please refer to prior comment 20. We note the revisions made to your disclosure on page F-8. However, it is still not clear to us the types of transactions that you recorded as deferred assets. Accordingly, please revise the filing to clearly indicate the nature of the transactions recorded within deferred interest and deferred consulting and to disclose the periods over which the deferred assets will be amortized.

Consolidated Statements of Operations, page F-5

9. Please refer to prior comment 21. We note your revision to your statement of operations to separately identify the gain on extinguishment of debt and the revisions to your MD&A on page 32 discussing the transaction. However, we note no disclosure of this debt extinguishment in the footnotes to your financial statements. Please revise the notes to your financial statements to disclose all significant information about this transaction.

Note 2. Notes Payable, page F-10

10. Please refer to prior comment 25. We note the revisions to your filing on page F-11 in response to our comment. We see that in consideration for the extinguishment of debt of \$2.8 million, you issued preferred shares valued at approximately \$3.2 million and also issued a warrant with a fair value of \$240,000. However, you did not provide us with the previously requested references to the authoritative accounting literature which supports your accounting. Please explain for us how you concluded that no gain or loss on the extinguishment was appropriate and provide us with a discussion of the authoritative accounting literature which supports that position.

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 information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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

You may contact Kevin Kuhar at (202) 551-3662 or Angela Crane at (202) 551-3554 if you have questions regarding comments on the financial statements and related matters. Please contact Joseph McCann at (202) 551-6262 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso
Branch Chief

cc (via fax): Michael C. Phillips, Esq.