



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 3030

May 28, 2009

Via U.S. Mail and Facsimile to (605) 802-0401

Steven J. Murphy
Chief Financial Officer
Natus Medical Incorporated
1501 Industrial Road
San Carlos, CA 94070

Re: Natus Medical Incorporated
Form 10-K for the Fiscal-Year ended December 31, 2008
Filed March 10, 2009
Form 10-Q for the Fiscal-Quarter ended March 31, 2009
File No. 000-33001

Dear Mr. Murphy:

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 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.

Form 10-K for the Fiscal-Year ended December 31, 2008

Item 11. Executive Compensation, page 51

1. We note from your discussion under "Cash Compensation Element" on page 22 of the proxy statement that you have incorporated by reference into your Form 10-K that you have not disclosed the pre-tax earnings measure that was contained in the business plan for 2009 that needed to be achieved in order for your named executive officers to earn their respective annual cash incentive payments. Please provide disclosure of the historical earnings measures used in awarding incentive payments in your future filings, as applicable. To the extent you believe that disclosure of such information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available on our website at www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.

Financial Statements, page F-1

Note 1 – Organization and Significant Accounting Policies, page F-7

Revenue Recognition, page F-7

2. We see that you recognize revenue from the sale of certain of your diagnostic neurology and hearing systems in accordance with FASB Statement of Position No. ("SOP") 97-2 wherein revenue is recognized when there is persuasive evidence of an arrangement, delivery has occurred, the sales price is fixed or determinable, and collection is reasonably assured. We also see that for arrangements with multiple deliverables, revenue is allocated to the deliverables based on vendor specific objective evidence and that when undelivered elements, including installation and training services, are not considered essential to the functionality of the equipment you recognize revenues after the related products have been delivered. Please describe for us how you have concluded that installation and training services are not essential to the functionality of the delivered elements of the system under paragraphs 65 to 71 of SOP 97-2. Please make sure to specifically address how you have assessed the criteria outlined in paragraphs 70 and 71 of SOP 97-2 in your response to our comment. Finally, please revise your future filings to clearly disclose how you record revenues for diagnostic neurology and hearing systems (or other products) if any undelivered elements are deemed essential to their functionality

and disclose how you record revenues for any “non-essential” installation and training services.

Long-Lived Assets and Goodwill, page F-9

3. We see that goodwill is tested for impairment at least annually as of October 1st or whenever a change in circumstances indicates the carrying value of assets may be impaired. The impairment test for goodwill under SFAS 142 is a two-step test as described in paragraphs 19 – 22 of SFAS 142. Based on your current disclosures, it is not possible to easily determine how you assess and measure goodwill impairments under this two-step method. Please revise future filings to describe, in appropriate detail, how your goodwill accounting policies comply with the guidance discussed in paragraphs 18 – 22 of SFAS 142.

Note 11 – Share-Based Compensation, page F-21

4. We see that you have disclosed the amount of stock-based compensation expense recognized under SFAS 123R on a per share basis for each of the years presented. Note that paragraph 84 of SFAS 123R permits the per-share disclosure of the effects of adoption of SFAS 123R only in the year of adoption. Accordingly, please revise future filings to no longer disclose the per share effect of stock-based compensation or tell us why such presentation is appropriate.

Form 10-Q for the Quarterly Period Ended March 31, 2009

Financial Statements, page 3

Notes to Condensed Consolidated Financial Statements, page 6

Note 1 - Basis of Presentation, page 6

Foreign Currency, page 6

5. We see disclosures herein that “Effective January 1, 2009, the Company’s Canadian subsidiary, Xltek changed its functional currency to the U.S. dollar. The change in functional currency reflects the fact that Xltek now conducts the majority of its business transactions in U.S. dollars and maintains a significant portion of its balance sheet in U.S. dollar denominated accounts.” Note the guidance in paragraph 9 of SFAS 52 which indicates “Once the functional currency for a foreign entity is determined, that determination shall be used consistently unless significant changes in economic facts and circumstances indicate clearly that the functional currency has changed”. Please tell us more about the reason for the referenced change. Specifically address the factors

outlined at paragraph 42 of SFAS 52 (both before and after the change in function currency) in your response. Please also tell us the currency impact on your fiscal 2007 and 2008 historical financial statements of translating Xltek's accounts to U.S. dollars.

As appropriate, please respond to this comment within 10 business days or tell us when you will provide us with a response. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your response to our comment.

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 comments, please provide, in writing, 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 Kevin Kuhar, Staff Accountant, at (202) 551-3662 or me at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Alan Morris at (202) 551-3601 or Tim Buchmiller at (202) 551-3635 if you have questions on other comments. In this regard, do not hesitate to contact me or Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 with any questions.

Sincerely,

Jay Webb
Accounting Reviewer