



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

May 29, 2009

VIA U.S. MAIL AND FAX 650-404-5901

Mr. Steven M. VanDick
Chief Financial Officer
Hansen Medical, Inc.
800 East Middlefield Road
Mountain View, California 94043

**Re: Hansen Medical, Inc.
Form 10-K for the year ended December 31, 2008
Filed March 16, 2009
File No. 001-33151**

Dear Mr. VanDick:

We have reviewed your filings 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 year ended December 31, 2008

Government Regulation, page 22

U.S. Food and Drug Administration Regulation, page 23

1. We note on page 25 that you are required to file a report to the FDA whenever you receive or become aware of information that reasonably suggests that a device marketed by you “may have caused or contributed to a death or serious injury” or has malfunctioned and, if the malfunction were to recur, likely would cause or contribute to a death or serious injury. We also note that you filed 16 such reports as of December 31, 2008. Please explain to us the facts and the circumstances behind these reports and how you account for any contingent liabilities associated with your products. If it is at least reasonably possible that any unaccrued amount related to any contingency (if negatively resolved) could have a material negative impact on your financial statements, the notes to the financial statements must either disclose the range of possible loss or indicate no such estimate can be made. Refer to paragraph 10 of Statement 5. Please revise future filings to address the concerns outlined in our comment.

Financial Statements, page 76

Consolidated Balance Sheets, page 78

2. We note disclosures on page 97 that indicate you reclassified the remaining unamortized balance in deferred stock-based compensation to additional paid-in capital at the adoption of SFAS 123(R), which is consistent with Paragraph 74 of SFAS 123(R). Yet, we see you still present deferred stock-based compensation as contra-equity accounts in your December 31, 2007 and 2008 balance sheets. Specifically tell us why you believe a contra equity account for unearned compensation resulting from the issuance of equity instruments is permitted under U.S. GAAP.

3. Investments and Fair Value Measurements, page 89

Fair Value Measurements, page 89

3. We note that you valued approximately \$11,842,000 of Corporate Debt Securities based on Level 2 inputs. Please address the following.
 - Describe to us *in detail* what type of level 2 inputs (such as, but not limited to, assumptions and methodologies) were used to determine the fair value of these investments and how you validated the methodologies and assumptions used.
 - We see you classified \$5,096,000 out of a total of \$11,842,000 Corporate Debt Securities at December 31, 2008 as cash equivalents. As you know, cash equivalents

are short term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Generally, only investments with original maturities of three months or less qualify under that definition. Refer to paragraph 8 of SFAS 95. If these securities are highly liquid investments and mature within three months of the balance sheet date, then please explain to us why you were not able to obtain the fair value based on Level 1 inputs.

In order to help the readers of your financial statements, please revise your disclosure in future filings to address the issues outlined in our comment.

5. Asset Purchase, page 91

AorTx, Inc., page 91

4. We see that in November 2007 you acquired AorTx, Inc. and accounted the transaction as an asset acquisition. We also see that you allocated approximately \$11,350,000 of the purchase price to acquired in-process research and development. Please address the following:
 - You disclosed that “As technological feasibility of the acquired in-process research and development had *not been reached at the time of acquisition* and the technology had only *limited alternative future uses*, the amount allocated to purchased research and development was charged to the statement of operations”. We also noted disclosures that “Since the acquisition, the research and development positions focused on developing the AorTx valve technology have been eliminated and (the Company) plans to pursue the application of robotics to structural heart procedures, but does not expect that the technologies acquired from AorTx will form a material, or any, part of that strategy.” Since you wrote-off a significant amount of the assets you purchased in the acquisition, please explain to us in detail and revise future filings to disclose why you acquired AorTx, Inc. (i.e. – the business purpose of the transaction).
 - We see you also disclosed “Under the terms of the AorTx acquisition, the Company must decide by May 15, 2009 whether to make a \$5 million payment to the former AorTx stockholders or license the acquired AorTx technologies back to an entity formed by the former AorTx stockholders.” Given your intentions for the AorTx business (as described above), tell us and revise future filings to disclose the reason for any future payments. In future filings, consider the need to disclose matters associated with known or expected payments to former AorTx stockholders in Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Item 11. Executive Compensation, page 105

5. We note your disclosure under “Objectives of Hansen Medical’s Compensation Program” that you have incorporated by reference from page 29 of your proxy statement of a “competitive total compensation package.” In future filings, please specify what you mean by the phrase. For example, do you intend the compensation to be average for your industry? How do you define your industry?
6. We note your disclosure on page 31 under “Base Salary” that you refer to factors such as “the scope of their responsibilities,” “knowledge,” “skills” and “performance” in determining the base salary of your named executive officers. In future filings, please describe specifically how these factors were used to make compensation decisions during the applicable periods. If compensation decisions were instead based on the subjective discretion of the compensation committee, please say so clearly and directly without implying that objective factors were used.

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. 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 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.

Mr. Steven M. VanDick
Hansen Medical, Inc.
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You may contact Andri Boerman at (202) 551-3645, or Jay Webb at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or Jay Mumford at (202) 551-3601 if you have questions on other comments.

Sincerely,

Angela Crane
Branch Chief