



DIVISION OF
CORPORATION FINANCE

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

February 7, 2013

Via E-mail

Peter J. Mariani
Chief Financial Officer
Hansen Medical, Inc.
800 East Middlefield Road
Mountainview, CA 94043

**Re: Hansen Medical, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2011
Filed March 15, 2012
Form 10-Q for the Quarter Period Ended September 30, 2012
Filed November 9, 2012
File No. 001-33151**

Dear Mr. Mariani:

We have reviewed your response letter dated January 23, 2013 and filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2011

Results of Operations, page 88

1. Please expand your response to prior comment 3 to more fully explain the factors that contributed to the changes in the gross margin percentage during the year and most recently reported interim period. For example, what was the effect on margins of unit volume? What portion of the margin change was due to the shift in product mix? What was the magnitude of the effect of selling price? How did manufacturing yields change during the period presented? What was the magnitude of the start-up costs? Are these all one-time costs? Also, please tell us magnitude of the contribution of the Magellan system to revenues. Revise future filings as appropriate.

Item 11. Executive Compensation, page 140

2. Refer to your response to prior comment 5:
 - We note your disclosure that you take into account “competitive market compensation” and that Mr. Barclay’s overall compensation was based on competitive market target bonus data. Please tell us, and clarify in future filings, what you mean by those phrases. For example, do you intend the compensation to be average for your industry? Please also note the requirement of Regulation S-K Item 402(b)(2)(xiv) to identify the component companies of a benchmark.
 - Please tell us, and clarify in future filings, what elements of the executive officer’s “performance” resulted in the change to salary; ensure that your response makes clear what the compensation was designed to reward. If the compensation was instead based on the subjective discretion of the board, please state so clearly and directly without implying that objective factors were used.

Form 10-Q for the Quarterly Period Ended September 30, 2012

Item 1. Condensed Consolidated Financial Statements

Note 8. Stockholders’ Equity

Stock-based Compensation, page 14

3. Further to your response to prior comment 6, please summarize the terms of the employee stock purchase plan and relate those terms to the types of plans discussed in FASB ASC 718-50-55-2 through 55-5. For example, discuss whether your plan results in a fixed or variable number of shares and whether there are multiple purchase periods. Then discuss the reasons that the number of shares actually issued increases (for example, whether due to the circumstances discussed in FASB ASC 718-50-35-1).
4. Given your response above, please discuss how you determine the fair value of the compensation under the employee stock purchase plan and relate your response to the examples provided in FASB ASC 718-50-55-6 through 55-35.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 17

5. We note your response to prior comment 7. With a view toward clarified disclosure of the evaluation program, please tell us the extent that the Magellan and Sensei systems can operate with a catheter that you do not produce. Are compatible third-party catheters available and approved in all jurisdictions where you sell the systems?

Peter Mariani
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You may contact Kevin Kuhar, Staff Accountant, at (202) 551-3662 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Brian Soares at (202) 551-3580 or Russ Mancuso at (202) 551-3617 if you have questions on other comments. In this regard, do not hesitate to contact me at (202) 551-3671 with any other questions.

Sincerely,

/s/ Kate Tillan for

Martin James
Senior Assistant Chief Accountant