



DIVISION OF
CORPORATION FINANCE

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

May 28, 2015

Via E-mail

John J. Bostjancic
Chief Financial Officer
SeaSpine Holdings Corporation
2302 La Mirada Drive
Vista, California 92081

**Re: SeaSpine Holdings Corporation
Amendment No. 1 to Registration Statement on Form 10
Filed May 8, 2015
File No. 001-36905**

Dear Mr. Bostjancic:

We have reviewed your filing 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response and any amendment you may file in response to these comments, we may have further comments.

Form 10

1. We note your responses to prior comments 1, 4 and 16. Please be advised that we may have further comments after you file a materially complete document, including all required exhibits.

Exhibit 99.1

2. We note your response to prior comment 2. Please revise the disclosure on pages 106 and 107 to explain the terms "hyperlordotic cages" and "sagittal balance," respectively.

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Treatment of stock-based awards, page 9

3. Please provide us your analysis of whether the treatment mentioned in the new disclosure in this section affect whether the parent shareholders will have the same proportionate interest in the parent and the subsidiary both before and after the spinoff such that the spinoff is *pro rata* per the guidance in Staff Legal Bulletin No. 4.

Our Products, page 98

4. We note your response to prior comment 13. Please revise the disclosure in this section to identify which products are newly launched products.

Suppliers and Raw Materials, page 108

5. We note your response to prior comment 14. Please disclose the material terms of your written agreements with your sole suppliers.

Agreements between Integra and SeaSpine Relating to the Separation, page 121

6. We note your response to prior comment 16. Please disclose the duration of the agreements mentioned on pages 135-138.

Note 3. Transactions with Integra, page F-15

7. We noted your revisions to the filing in response to our prior comment 17 and refer to the added table on page F-16 that summarizes the components of the net (decrease) increase in Integra investment for the years ended December 31, 2014, 2013 and 2012 as well as the added disclosures that indicate "The total net effect of the settlement of these intercompany transactions is reflected in the combined statements of cash flows as a financing activity." In this regard, please explain to us why the balances as shown for "Cash pooling and general financing activities" or other line items in your table do not agree with or reconcile to the Integra net investment amounts as shown in your Cash Flow Statement on page F-6. Please revise the reconciliation and related disclosures in this note to include disclosures that also enable a reader to understand the nature of changes in the cash components of the Integra net investment amounts, as shown in your Cash Flow Statement, or to disclose why you are unable to do so.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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.

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In responding to our comments, please provide a written 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.

You may contact Dennis Hult at (202) 551-3618 or Jay Webb, Reviewing Accountant, at (202) 551-3603 if you have questions on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director

cc (via e-mail): Edward Sonnenschein, Esq.