



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

Mail Stop 3030

January 15, 2010

Dirk Kuyper
President and Chief Executive Officer
Alphatec Holdings, Inc.
5818 El Camino Real
Carlsbad, CA 92008

**Re: Alphatec Holdings, Inc.
Preliminary Proxy Statement on Form 14A
Filed December 24, 2009
File No. 000-52024**

Dear Mr. Kuyper:

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.

Selected Condensed Consolidated Financial Data of Scient'x, page 15

1. Please revise to describe or refer to a description of how the U.S. dollar data was measured and identify the exchange rates applied.

Unaudited Pro Forma Condensed Combined Financial Statements, page 101

Pro Forma Adjustments, page 101

2. You disclose that the cost to acquire the shares of Scient'x will be allocated to the assets acquired and liabilities assumed. Please tell us how the reference to an

allocation of the cost of the transaction to the assets acquired and liabilities assumed is consistent with the concepts of the acquisition method described in Section 805 of the FASB codification. Please revise the description of the method, as appropriate.

Notes to Unaudited Pro Forma Condensed Combined Financial Statements, page 106

2. Acquisition of Scient'x

3. With respect to the recent stock price used in determining the fair value of the consideration transferred, please expand to provide a sensitivity analysis for a range of possible outcomes based upon percentage increases and decreases in that recent stock price. Please consider Alphatec's stock price volatility in establishing appropriate percentages.

4. Pro Forma Adjustments

4. Under Note d, please briefly describe how you estimated the fair value of the significant intangible assets you expect to recognize upon consummation of the acquisition.
5. Under Note k, please disclose how you estimated the fair value of the non-controlling interest.
6. In light of the significance of the amount of goodwill you expect to recognize in the acquisition of Scient'x, please revise to describe the factors leading to a purchase price resulting in the recognition of the significant goodwill.
7. We note that pro forma adjustment r eliminates certain infrequent or non-recurring items included in the underlying historical statements of operations of Scient'x, such as goodwill impairment and in-process research and development. It is not normally appropriate to eliminate infrequent or non-recurring items included in the underlying historical financial statements of the Registrant or combining entities that are not directly affected by the transaction. Please tell us why it is appropriate under our guidance to eliminate these items from the pro forma statements of operations.

Note 6. Transaction Costs

8. If expected to be significant, please disclose an estimate of the transaction costs expected to be included in earnings in the 12 month period after consummation of the acquisition. Refer to Rule 11-02(b)(5) of Regulation S-X.

Selected Financial Projections, page 110

9. We note your statement that investors are “cautioned not to rely” on the selected financial projections. It is generally inappropriate to disclaim responsibility for your disclosure. Please revise this language or tell us why you believe it is appropriate to include this disclaimer for the information in your filing.
10. We see that you presented revenues and adjusted EBITDA. Tell us why you have not presented a measure of projected earnings determined according to GAAP pursuant to Item 10(b)(2) of Regulation S-K. Support that your presentation is appropriate under the cited guidance.
11. You have not provided reconciliation of forecasted adjusted EBITDA for the reasons cited in your disclosure. Please provide all required disclosures under Item 10(e) of Regulation S-K or tell us how this presentation is appropriate and complete under our rules. Refer also to Compliance & Disclosure Interpretation 101.01.

Other

12. Please update the financial statements when required by Rule 3-12 of Regulation S-X. Please also update the related pro forma data.

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

Dirk Kuyper
Alphatec Holdings, Inc.
January 15, 2010
Page 4

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.

Please contact Praveen Kartholy at 202-551-3778, Jay Mumford at (202) 551-3637 or me at (202) 551-3605 if you have any questions.

Sincerely,

Gary Todd
Reviewing Accountant

cc (via fax): Mike Fantozzi