



DIVISION OF
CORPORATION FINANCE

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

May 24, 2011

Brett Reynolds
Chief Financial Officer
Synovis Life Technologies, Inc.
2575 University Avenue W.,
St. Paul, Minnesota 55114-1024

Re: Synovis Life Technologies, Inc.
Form 10-K for fiscal year ended October 31, 2010
Filed January 5, 2011
File No. 0-13907

Dear Mr. Reynolds:

We have reviewed your letter dated May 4, 2011 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 or do not believe an amendment is appropriate, 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 fiscal year ended October 31, 2010

Note 5 – Supplemental Net Revenue Information, page 40

1. We note your response to prior comment 1. Based on the analysis provided, it does not appear that the Ortho and Wound operating segment exhibits similar economic characteristics and therefore would not apply for aggregation with the other operating segments. Please revise future filings to disaggregate this operating segment. In this regard, please refer to the guidance in paragraph 280-10-50-34 of the FASB Accounting Standards Codification.
2. With respect to the conclusion to aggregate the Surgical and Microsurgical segments, please explain to us how aggregation of these operating segments is consistent with the objectives and basic principles of FASB ASC 280. Please explain to us why you believe that providing disaggregated information would not help users of the financial statements

better understand your performance, better assess its prospects for future net cash flows and make more informed judgments about the public entity as a whole. In this regard, please note that paragraph 280-10-50-11 of the FASB Accounting Standards Codification requires that aggregation of operating segments be consistent with the objectives and basic principles of FASB ASC 280. In connection with responding to this comment, please address the following:

- Giving consideration to your prior assertion that these two operating segments are similar based on the criteria in FASB ASC 280, explain why management separately analyzes the two operating segments in its internal reporting.
- Discuss how the chief operating decision maker (CODM) utilizes the information broken down by operating segment in making decisions regarding your operations. Address why such information is important for the CODM to analyze the business but would not similarly provide users of the financial statements with a better understanding of your performance.
- Provide us with the historical financial information regarding these operating segments. Discuss how you considered differences in the historical periods in concluding that aggregation was appropriate.

You may contact Eric Atallah, Staff Accountant at (202) 551-3663 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3643 with any questions.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief