



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

Mail Stop 3030

March 12, 2009

Via Facsimile and U.S. Mail

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 the year ended October 31, 2008
File No. 0-13907**

Dear Mr. Reynolds:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your filings 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 comment or on any other aspects 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 October 31, 2008

Item 1. Business

Intellectual Property, page 5

1. We note your disclosure on page 5 that "...a significant portion of [y]our technology is protected by patents, trade secrets, and proprietary know-how." Please provide the disclosure required by Item 101(c)(iv) of Regulation S-K.

Item 10. Directors, Executive Officers and Corporate Governance

Compensation Committee, page 6

2. We note your disclosure on page 14 that Committee "considered data provided by an outside compensation consulting firm...." In future filings, please specifically describe the nature and scope of each compensation consultant's assignment, and describe the material elements of the instructions or directions given to the consultants with respect to the performance of their duties under the engagement as required by Item 407(e)(3)(iii) of Regulation S-K.

Item 11. Executive Compensation

Compensation Discussion and Analysis, page 10

3. We note that you "compare [y]our compensation programs with the...policies, practices and levels at medical device companies and other select companies specifically selected for comparison by [y]our Compensation Committee." We also note your disclosure on page 12 that your Compensation Committee "seeks to set executive officer base salary at moderately to aggressively competitive levels...." Please clarify the extent to which compensation decisions are derived from a comparison to peer companies or otherwise describe your methodologies for utilizing comparative information when implementing your compensation policies or making specific compensation awards. Identify the component companies and discuss how each element of compensation relates to the data you analyzed. To the extent specific elements of compensation are tied to a benchmark, discuss where actual payments and awards fall within this targeted range, and to the extent that actual compensation was outside of this range, explain the reasons for the deviation. See Item 402(b)(2)(xiv) of Regulation S-K.

Base Salary, page 12

4. We note that your Compensation Committee relied in part upon a “third-party independent compensation study” when determining base salary. Please identify the survey used and its components, including component companies; also identify the elements of compensation that are benchmarked and how you determine such benchmarks.

Short-Term Incentive Compensation, page 12

5. We note your disclosure on page 13 that your annual cash incentive compensation was based upon the Compensation Committee’s evaluation of “individual performance incentives (‘IPI’) and achievement of specific individual objectives” by your named executive officers. Please provide enhanced discussion and analysis of how individual performance contributed to actual compensation for the named executive officers. For example, disclose the elements of individual performance, both quantitative and qualitative, and *specific* contributions by named executive officers that the Compensation Committee considered in determining actual payouts for the named executive officers. See Regulation S-K Item 402(b)(2)(vii).
6. We note that you have not provided a quantitative discussion of the “[k]ey strategic corporate goals” to be achieved in order for your named executive officers to earn their respective annual cash incentive payments. See the disclosure on page 13. Please discuss the specific performance objectives established for the current year and how your incentive awards are specifically structured around such performance goals. Refer to Item 402(b)(2)(v) and Instruction 2 to Item 402(b) of Regulation S-K. Please note that qualitative goals generally need to be presented to conform to the requirements of Item 402(b)(2)(v). To the extent you believe that disclosure of the information would result in competitive harm such that you may omit the information under Instruction 4 to Item 402(b) of Regulation S-K, please provide a detailed explanation supporting your conclusion. If it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b). Refer also to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm. We would expect to see disclosure that contains appropriate insight into the factors considered by the Compensation Committee in setting performance-related objectives such as

assessments of historical bonus practice and the incentive parameters set for the relevant fiscal period.

Note 1. Business Description and Summary of Significant Accounting Policies, page 35

Revenue Recognition, page 36

7. We note that you recognize revenue “shipped to the customer *if* there is evidence that the customer has agreed to purchase the products, delivery and performance have occurred, the price and terms of sale are fixed and collection of the receivable is expected.” Please tell us and revise future filings to disclose those situations where some or all of these criteria are not met at shipment. Clearly explain how you recognize revenue for those transactions.

Note 5. Supplemental Net Revenue Information, page 42

8. If revenues from any individual foreign country are material, please revise future filings to disclose the name of the foreign country and the amount of revenues derived from that country. Refer to paragraph 38(a) of SFAS 131.

Note 6. Investments, page 43

9. We note that your investments at October 31, 2008 include six auction rate securities (“ARS”) with a par value of \$9 million and that given the lack of an observable market, you performed a valuation assessment to determine the fair value of your ARS at October 31, 2008. Please revise future filings to:
 - Disclose the valuation methodology and any significant assumptions you used in valuing your ARS.
 - Provide MD&A discussion regarding how you determined your valuation assumptions and how the resulting fair value of your ARS and possible changes to those values, could impact your results of operations, liquidity, and capital resources.
10. As a related matter, we note your disclosure on page 24 that “based on [y]our ability to access [y]our cash and cash equivalents, [y]our expected operating cash flows, and [y]our other sources of cash, [you] do not anticipate the current lack of liquidity on these investments will affect [y]our ability to operate [y]our business as usual.” Please tell us and disclose in future filings whether or not you believe you have the intent and the ability to hold the securities until a forecasted recovery of fair value. Discuss how you applied the accounting literature you relied upon in assessing whether or not there was an other than temporary impairment of the securities. Include a discussion of your analysis of the

expected recovery period and the factors you considered in determining whether you have the intent and ability to hold the security until its recovery. Refer to the guidance in SFAS 157, 115, FSP FAS 115-1, and SAB Topic 5M.

Note 7. Income Taxes, page 44

11. Please revise future filings to include disclosure of the components of income (loss) before income tax expense (benefit) as either domestic or foreign as required by Rule 4-08(h)(1)(i) of Regulation S-X.

Exhibit 32.1

12. The certifications provided under section 906 of the Sarbanes-Oxley Act are not dated. Please file a full amendment to your Form 10-K that includes the proper certifications required by Items 601(b)(31) and (32) of Regulation S-K.

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.

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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.

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. Please contact Celia Soehner, Staff Attorney, at (202) 551-3463 or Jay Ingram, Special Counsel at (202) 551-3397 if you have questions on other comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief