April 14, 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 March 25, 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 one. Please provide us with your projections by segment that supports your conclusion that all of your segments are expect to exhibit similar revenue growth rates, gross margins and operating margins in the next three to five years. If such information is not available, please explain to us in greater detail how you are able to conclude that the segments are expected to exhibit similar economic characteristics in the next three to five years.

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