



DIVISION OF
CORPORATION FINANCE

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

September 4, 2012

Via e-mail

D. Joseph Gersuk
Executive Vice-President, Chief Financial Officer and
Treasurer
AngioDynamics, Inc.
14 Plaza Drive
Latham, New York 12110

**Re: AngioDynamics, Inc.
Form 10-K for the fiscal year ended May 31, 2012
Filed August 14, 2012
Form 8-K dated July 12, 2012
Filed July 12, 2012
File No. 000-50761**

Dear Mr. Gersuk:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. 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, 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 the fiscal year ended May 31, 2012

Item 8. Financial Statements and Supplementary Data

Note C. Acquisitions, Acquisition of Navilyst, page 83

1. You disclose that you valued the 9.5 million common shares issued as consideration for the acquisition of Navilyst using the closing price of your common stock *the day prior* to the date you completed the acquisition. Please tell us how you applied ASC 805-25-10-6 through 7 and ASC 805-30-30-7 which states that consideration issued for a business combination should be valued at its acquisition-date fair value.

Form 8-K dated July 12, 2012

Exhibit 99.1

2. In future filings, please revise to reconcile EBITDA to net income (loss) rather than operating income (loss). Note that operating income would not be considered the most directly comparable GAAP financial measure because EBITDA makes adjustments for items that are not included in operating income. Refer to Question 103.02 of the Compliance & Disclosure Interpretations on Non-GAAP financial measures located at <http://sec.gov/divisions/corpfin/guidance/nongaapinterp.htm>.

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.

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 Kristin Lochhead, Staff Accountant, at (202) 551-3664, or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have any questions on these comments. You may also contact me at (202) 551-3671 with any other questions.

Sincerely,

/s/ Kate Tillan for

Martin James
Senior Assistant Chief Accountant