



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

October 30, 2009

Johannes C. Keltjens
President and Chief Executive Officer
AngioDynamics, Inc.
603 Queensbury Avenue
Queensbury, New York 12804

Re: AngioDynamics, Inc.
Form 10-K for the fiscal year ended May 31, 2009
Filed August 14, 2009
File No. 0-50761

Dear Mr. Keltjens:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in future 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.

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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended May 31, 2009

Item 9A. Controls and Procedures

Management's Report on Internal Control over Financial Reporting, page 62

1. In your future filings, please include a statement that the registered public accounting firm that audited the financial statements included in your annual report has issued an attestation report on your internal control over financial reporting. Refer to Item 308(a)(4) of Regulation S-K.

Item 11. Executive Compensation, page 63

2. We note from your disclosure under "Base Salaries" that you have incorporated by reference from page 13 of your proxy statement that you target total cash compensation for your named executive officers at the 50th percentile of your peer companies. Given that you target the cash elements of your compensation packages, please briefly discuss in your applicable future filings how each element of cash compensation you provide to the named executive officers relates to the data you have analyzed from the peer companies and include an analysis of where actual payments under each element of cash compensation actually fell within the targeted range. If any of your named executive officers are compensated at levels that are materially different from the targeted levels of compensation, please also provide discussion and analysis as to why.
3. We note from your disclosure under "Annual Cash Incentives" that you have incorporated by reference from page 14 of your proxy statement that you do not disclose the amount of the targets or goals in order for your named executive officers to receive their non-equity incentive plan compensation. In future filings, please provide such disclosure as applicable. To the extent you believe that disclosure of such information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or goals, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. 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 targets or goals, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.
4. It appears that the annual cash incentives paid to your named executive officers should have been disclosed under the caption "Non-Equity Incentive Plan Compensation" in your Summary Compensation Table pursuant to Item 402(c)(2)(vii) of Regulation S-K, and that the threshold, target and maximum amounts related to those awards should have been disclosed in your "Grants of Plan Based Awards" table pursuant to Item 402(d)(2)(iii) of Regulation S-K. Please provide such disclosure in your future filings, to the extent then applicable, or provide us with your analysis as to why such information should not have been included in the referenced tables in accordance with the referenced Item requirements.

5. We refer to your disclosure under the caption “Long-Term, Equity-Based Incentive Awards” on page 14 of the proxy statement that you have incorporated by reference into your Form 10-K. We note minimal, if any, discussion and analysis as to how the annual stock option grants and performance share awards were determined. In your future filings, as applicable, please include substantive analysis and insight into how your Compensation Committee made its stock option grant and performance share award determinations with respect to each named executive officer. Refer to subparagraphs (b)(1)(iii) and (v) of Item 402 of Regulation S-K. For example, please discuss and analyze how the Compensation Committee determined the actual number of shares underlying the stock options that were awarded to your named executive officers and how and why those awards varied among the named executive officers.

As appropriate, please 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 response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please submit your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your 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.

Johannes C. Keltjens
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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 Tom Jones at (202) 551-3602 or me at (202) 551-3635 if you have any questions.

Sincerely,

Tim Buchmiller
Senior Attorney