



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

July 21, 2011

Via E-mail

Mr. Robert J. Krist
Chief Financial Officer
Endologix, Inc.
11 Studebaker
Irvine, CA 92618

**Re: Endologix, Inc.
Form 10-K for the fiscal year ended December 31, 2010
Filed March 16, 2011
File No. 000-28440**

Dear Mr. Krist:

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 December 31, 2010

Selected Financial Data, page 23

1. Please tell us the amount of restricted cash for each of the periods presented.

Management's Discussion and Analysis of Financial Condition and Results of Operation, page 24

Goodwill, Intangible Assets and Long-Lived Assets, page 25

2. Given the significance of your goodwill and intangible assets, please tell us the qualitative and quantitative key assumptions utilized in your long-lived impairment analysis. With a view toward enhanced disclosure in future filings, please also consider the following:
 - Clarify the nature of the key assumptions for the individual models, including how those key assumptions were determined.
 - Provide a discussion of the degree of uncertainty associated with the key assumptions.
 - Describe potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.

Consolidated Financial Statements

Notes to Consolidated Financial Statements, page F-6

3. Please tell us how you considered providing segment reporting information required by FASB ASC 280. For example, we refer to your sales information by geography on page 5.

Note 10. Related Party Transactions, page F-16

4. Please tell us the amount of payments to and sales from the affiliated hospital from June 12, 2009 to December 31, 2009.

Note 11. Income Taxes, page F-16

5. In future filings please disclose loss before income taxes separately for foreign and domestic operations. Refer to Rule 4-08(h) of Regulation S-X.

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:

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- 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 Leigh Ann Schultz at (202) 551-3628 or me at (202) 551-3676 if you have questions regarding these comments. You may also contact Martin James at (202) 551-3671 with any other questions.

Sincerely,

/s/ Brian Cascio

Brian Cascio
Accounting Branch Chief