



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

DIVISION OF  
CORPORATION FINANCE

May 22, 2014

Via E-mail

Mr. Patrick J. Balthrop  
President and Chief Executive Officer  
Luminex Corporation  
12212 Technology Blvd.  
Austin, Texas 78727

**Re: Luminex Corporation  
Form 10-K for the Fiscal Year Ended December 31, 2013  
Filed February 26, 2014  
File No. 0-30109**

Dear Mr. Balthrop:

We have reviewed your filing 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, 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, 2013

Liquidity and Capital Resources, page 54

1. We note the in-process research and development related to your acquisition of GenturaDx. If material, please revise future filings to provide a discussion of the status of the in-process research and development, including a discussion of the remaining costs you expect to incur relating to the IPR&D.

Note 17 – Commitments and Contingencies, page 93

Legal Proceedings, page 94

2. In future filings, please disclose your accounting policy for reasonably possible losses and your policy for assessing whether a loss is reasonably estimable. Refer to paragraph

450-20-25-5 of the FASB Accounting Standards Codification. Please also revise future filings to provide the disclosures required by paragraphs 450-20-50-3 and 450-20-50-4 of the FASB Accounting Standards Codification.

3. We further note you exclude the costs associated with legal proceedings from your non-GAAP measures presented in Form 8-K on April 28, 2014. Please revise future filings to disclose your accounting policy for such costs associated with legal contingencies.

Note 21 – Selected Quarterly Results (unaudited), page 96

4. We note the fluctuations of income (loss) from operations and net income (loss) for 2013. Please describe the effect of any items identified in Item 302(a)(3) of Regulation S-K material to the results of these quarters in future filings.

Controls and Procedures, page 97

Management’s Report on Internal Control Over Financial Reporting, page 97

5. Please revise future filings to disclose whether you applied the COSO 1992 Framework or the COSO Updated Framework for your assessment made under Item 308(a)(2) of Regulation S-K.

Form 8-K Filed April 28, 2014

Exhibit 99.1

6. We note both non-GAAP measures presented exclude costs associated with legal proceedings. Giving consideration to the fact that these are a recurring expense and an ongoing part of your normal operations, explain to us in greater detail why you believe measures that exclude these amounts are more indicative of your ongoing performance and provide useful information to investors. Refer to Item 10(e)(1)(i) of Regulation S-K .

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;

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- 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 Gary Newberry at (202) 551-3761 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) 551-3671.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn  
Accounting Branch Chief