

August 20, 2013

Via Edgar and Email

Ms. Amanda Ravitz Assistant Director Securities and Exchange Commission Division of Corporation Finance Washington, D.C. 20549

> Re: CollabRx, Inc. Form 10-K for the Fiscal Year Ended March 31, 2013 Filed June 27, 2013 Response dated August 2, 2013 File No. 001-35141

Dear Ms. Ravitz:

We are responding to the Staff's comment letter dated August 16, 2013 on behalf of CollabRx, Inc. ("CollabRx" or the "Company"). A courtesy copy of this letter is being submitted to the Staff via email. The Staff's comments are set forth below, followed by CollabRx's response to the Comment in Italics.

Overview of Our Current Business, page 5

1. We note your response to prior comment 4 and your disclosure on page 5 that a professional version of your Therapy Finder is offered to registered physicians through the website MedPage Today. Please tell us, and revise future filings as appropriate to clarify, the difference between the free of charge version of you product offered on your website and the professional version. Also tell us whether your product is offered free of charge on MedPage Today.

Our Therapy Finder™ products are available free-of-charge on both our website and on the MedPage Today website. There is no material difference between the Therapy Finders presented on both websites. The only differences are cosmetic, such as background color and placement of individual frames. Initially, the language used in our Therapy Finders presented on our website was geared toward patients. When the opportunity arose in connection with MedPage Today, we modified the language to be more physician-friendly and indicated this by appending "Professional" to the title "Therapy Finder." In order to avoid confusion, we replaced the patient oriented version on our website with the professional version that is distributed through MedPage Today. At the same time, we also undertook to revise the other Therapy Finders appearing on our website, but not yet distributed through MedPage today, to the professional (physician-friendly) version, and labeled them as such. Nevertheless, we anticipate offering both professional and patient oriented versions of our Therapy Finders in the future.

CollabRx, Inc.

44 Montgomery St, Ste. 800, San Francisco, CA 94104

415-248-5350

We undertake to make clear the difference in our Therapy Finder versioning and their availability through multiple channels free-ofcharge in our future filings.

2. We note the first two paragraphs of your response to prior comment 5. Please confirm that you will revise future filings to disclose the reasons for including the market data information in your filings so investors may understand the relevance of your estimates, given that you are unable to accurately estimate the size of your particular segment within the broader cancer testing market.

We undertake in future filings to disclose the reasons for including the market data information in our filings so investors may understand the relevance of our estimates.

Index to Exhibits, page 60

3. We have reviewed your response to prior comment 11. Please note that Regulation S-K Item 601(b)(3)(i) requires that a complete copy of your articles as amended be contained in one filing, but that you did not file a complete copy of your certificate of incorporation with all of the amendments thereto as an exhibit to your Form 10-Q filed on August 14, 2013. Please confirm that you will include such an exhibit in your next appropriate filing.

In response to prior comment 11, we compiled the related documents, but this process was not completed in time for inclusion as an exhibit to our recently filed 10-Q. We confirm and undertake that we will file a complete copy of our certificate of incorporation with all amendments thereto as an exhibit to our next appropriate filing.

4. We note your response to prior comment 12. Please tell us the basis for your belief that you are not substantially dependent on your agreement with Life Technologies, Inc. In this regard, we note your disclosure at the top of page 29 of your Form 10-K regarding the increase in your gross profits resulting from your commercialization activities pursuant to that agreement, and on page 7 of your Form 10-Q filed on August 14, 2013 that Life Technologies accounted for 93% of your revenue and accounts receivable for the three months ended June 30, 2013.

While it is true that Life Technologies, Inc. has been the major contributor to our revenues and gross profits for the past two quarters, we have funded the Company's operating expenses primarily with cash on hand and net proceeds from the sale of discontinued assets, as disclosed on page 30 of our 10-K and page 24 of our 10-Q. Life Technologies paid for content as we developed it, and was the first of what we expect will be many companies to do so. We are actively engaged in negotiations with several other companies who are interested in purchasing our content on similar terms or under annual subscriptions or software-as-a-service arrangements. We respectfully submit that we are not "substantially dependent" on Life Technologies or any other company with which we have an agreement.

The Company hereby acknowledges 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.

CollabRx, Inc.

44 Montgomery St, Ste. 800, San Francisco, CA 94104

415-248-5350

Securities and Exchange Commission August 20, 2013 Page 3 of 3

Should the Staff have any comments on the contents of this letter, please contact William Davisson, Goodwin Procter LLP at (650) 752-3114.

Sincerely yours,

in

Thomas R. Mika President & CEO CollabRx, Inc.

cc: William Davisson Goodwin Procter LLP

CollabRx, Inc.

44 Montgomery St, Ste. 800, San Francisco, CA 94104

415-248-5350