September 9, 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 submitted August 21, 2013
Form 10-Q for Fiscal Quarter Ended June 30, 2013
Filed August 14, 2013
File No. 001-35141

Dear Ms. Ravitz:

We are responding to the Staff's comment letter dated September 4, 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.

Form 10-K for Fiscal Year Ended March 31, 2013

Item 1. Business, page 4

1. We note your CEO's multiple references to Foundation Medicine's registration statement on Form S-1 in your August 13, 2013 earnings call and your CEO's statement encouraging investors to "review [the Form S-1] and consider [your company's] potential." Please tell us what information contained in Foundation Medicine's Form S-1 is relevant to an investor's understanding of your business. Please also tell us whether that information has been disclosed in your filings.

While there were thirteen mentions of "Foundation Medicine" in the earnings call, those mentions were all grouped within a few related and sequential paragraphs in the transcript that accomplished the following: (i) noting to investors that Foundation Medicine is a pioneer in multi-gene testing in oncology and that such testing is in its infancy; (ii) alerting investors that Foundation Medicine filed an S-1, which because it and CollabRx have some overlap in served markets, any information included within that document related to industry trends, market opportunity and/or competition may be relevant to CollabRx investors; and (iii) noting the difference between Foundation Medicine and CollabRx by making a clear contrast between what Foundation Medicine offers (namely a laboratory testing service) and what CollabRx offers (the independent interpretation of the results from a test). Regrettably, you omitted the first part of the sentence quoted above which gives proper meaning to the sentence. That sentence reads in full: "The Foundation Medicine S-1 is a good overview of the market we serve with the GVA service, so I would encourage CollabRx investors to review it and consider our company's potential." In an emerging and complex market that has not been extensively analyzed by market research professionals and is not well understood by the public, we believe that pointing out the existence of any relevant information is useful to our investors' understanding of our business.

In our previous responses to the staff's inquiries about our market-related disclosures, we have indicated that, in the absence of specific reliable estimates of market size with respect to the services we offer, we have opted to include a broad discussion of the overall size of the market for cancer diagnostics and therapeutics. This appears to have been the approach taken by Foundation Medicine in their S-1 filing, as well, although the differing perspectives of a test provider versus an information-only provider are evident.

We undertake to monitor to the extent practical the available sources of market information in cancer diagnostics and interpretive reporting and to make additions and refinements to our market related disclosures in our future filings.

Competition, page 9.

2. Please tell us why you have not identified Foundation Medicine as a competitor. Also explain the basis for your belief that "none of the existing competitors offer an array of … tools and services" that you do, given your CEO's comparison of your business with that of Foundation Medicine in your earnings call.

We generally regard all genomic testing labs, including Foundation Medicine (to whom we have offered our GVA service), as potential customers rather than competitors. Until now, the interpretation of test results has been tightly linked with the test itself and offered to ordering physicians as an integrated product by laboratories that develop such tests. There has been a common understanding that laboratories compete with one another based on the integrated product, including the test design, the quality of the facility conducting the test, specific testing platform (i.e., hardware and process), along with the interpretation of the results. A cursory analysis of the Foundation Medicine S-1 shows clearly that the large majority of its operating expenses are devoted to the operation of the laboratory and the performance of the test, rather than the test interpretation, and that its revenue primarily results from the sale of the test.

We understand that, at the present time, Foundation Medicine uses a company in Boston called "N-of-One" to assist with the test interpretation. N-of-One is the closest competitor to CollabRx that we have been able to identify. However, based on our discussions with many labs other than Foundation Medicine, we do not believe that N-of-One offers the array of tools and services that we do. This includes our Semantic Integration Platform, which allows for the automated processing of test results, our formal network of over 75 key opinion leaders, and our web-based tools, such as our Therapy Finders, which allow access by physicians and patients to portions of our knowledgebase. Among these, the most important to our prospective lab customers is our automated process, which can scale to the volume of tests that some labs are expecting in the future.

We undertake to expand our discussion of competitors in future filings, including a discussion of integrated laboratories, such as Foundation Medicine, as well as N-of-One.

Index to Exhibits, page 60

3. Please expand your response to prior comment 4 to provide us the authority on which you relied to determine that the disclosure required by Regulation S-K Item 601(b)(10)(ii)(B) depends upon the relationship between the agreement and how you fund your operating expenses, and your expectation of future business from "several other companies who are interested in purchasing [y]our content." In this regard, we note that Item 601(a)(4) requires that a material contract be filed as an exhibit if it is "executed or becomes effective during the reporting period." Also refer to Regulation S-K Compliance and Disclosure Interpretations Questions 146.05 and 146.06.

In our prior response to the staff's inquiry on this subject, we noted that that we expect other companies to purchase our content in a similar arrangement as Life Technologies as support for our contention that this contract was entered in the ordinary course of business, referencing Item 601(b)(10)(i). In fact, our business is the sale of our content in various forms to different customers, we are currently engaged in multiple negotiations with other companies. We believe our agreement with Life Technologies is of the type that ordinarily accompanies the business in which we are engaged. As a development stage company just entering its commercialization phase, our agreement with Life Technologies was the first agreement of its kind that we entered into, but we do not believe that means that our business is substantially dependent on the Life Technologies agreement. We cited the relationship of our quarterly operating expenses relative to the revenue generated from this contract as evidence under Item 601(b)(10(ii)(B) that our business was not then, and is not currently, "substantially dependent" on the Life Technologies agreement. Further, we do not believe that this agreement is "material" based on our assessment that a reasonable shareholder would not consider it important in deciding whether or not to invest in our company, since the revenues generated from it are only a fraction of our operating expenses, and it is terminable by either party for convenience upon 30 days notice. The sole "material" aspect of this agreement was that it was made with Life Technologies, a large and well-known company. Agreements with prominent companies such as Life Technologies are significant because they lend credibility to our approach and business prospects, but are not necessarily material to our business. The execution of our agreement with Life Technologies was disclosed both in a press release and in our earnings call.

Form 10-Q for Fiscal Quarter Ended June 30, 2013

Item 6. Exhibits, page 37

4. Please tell us why you did not file as an exhibit your multi-year agreement with Everyday Health, Inc. announced in your August 13, 2013 earnings call. In this regard, we note you CEO's statement on that call that the agreement "is the most significant agreement that we have made to date with any company." Also tell us why you have not discussed this agreement in your Form 10-Q.

We announced the Everyday Health agreement in a press release on the morning of August 13, 2013, not in the earnings call. We did not file the agreement as an exhibit to the 10-Q and did not discuss the agreement in detail in the 10-Q for the following reasons: (i) it is an agreement entered in the ordinary course of business and we are not "substantially dependent" on it (in fact, it was a replacement and extension of an agreement that was already in place with Everyday Health); and (ii) it is not "material" based on our assessment that a reasonable shareholder would not consider it important in deciding whether or not to invest in our company, as it is a development agreement which includes no defined or estimable revenues. The sole "material" aspect of this agreement was that it was made with Everyday Health, a large and well-known company. This fact was disclosed in both our press release and our earnings call. Although entered into in the ordinary course of our business and immaterial with respect to its terms and conditions (which included no defined or estimable revenues), we regard the agreement as significant based on the prominence and reach of the MedPage Today part of Everyday Health, Inc. As stated above, agreements with large and prominent companies are significant because they lend credibility to our approach and business prospects, but they are not necessarily material to our business.

We undertake to include a discussion of our agreement with Everyday Health, as well as similar agreements that we may enter into in the future, in future filings.

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.

Should the Staff have any comments on the contents of this letter, please contact the undersigned at (415) 248-5350 or William Davisson of Goodwin Procter LLP at (650) 752-3114.

Sincerely yours,

Thomas R. Mika
President & CEO
CollabRx, Inc.

cc: William Davisson
Goodwin Procter LLP