May 3, 2017

VIA EDGAR

Mr. Rufus Decker Accounting Branch Chief Office of Beverages, Apparel and Mining Division of Corporation Finance Securities and Exchange Commission 100 F Street, NE Washington, DC 20549

Re: Laboratory Corporation of America Holdings Form 10-K for the Fiscal Year Ended December 31, 2016 Response Dated April 17, 2017 File Number 001-11353

Dear Mr. Decker:

We have reviewed the comments of the staff, as set forth in its letter dated April 24, 2017, with respect to the above-referenced filing. Enclosed herewith are the staff's comments followed by responses on behalf of Laboratory Corporation of America Holdings (the "Company").

Form 10-K for the Fiscal Year Ended December 31, 2016

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations (in millions)

Results of Operations, page 48

Comment:

1. You discuss the changes in segment operating earnings margin between reporting periods in your proposed example of the disclosure in response to comment 1. Please further revise the segment operating earnings (loss) table to present the segment operating earnings margin in all reporting periods.

Response:

Consistent with the Company's letter of April 17, 2017, the Company included the requested segment operating earnings (loss) table in its First Quarter 2017 Form 10-Q filed April 27, 2017. In that 10-Q, the segment operating earnings margin for the relevant segment was presented and the Company will include a similar presentation in future filings on Forms 10-Q and 10-K. Below is the table as presented in the First Quarter 2017 Form 10-Q:

Operating Results by Segment

Three Months Ended

March 31,
2017 2016 Change

LCD \$ 309.5 \$ 274.7 12.7% LCD operating margin 18.0% 17.3% 0.7% CDD 56.1 62.9 (10.8)8.0% 8.9% (0.8%)CDD operating margin General corporate expenses (32.9) (38.1) (13.6%) \$ 332.7 11.1% Total \$ 299.5

LCD operating earnings were \$309.5 for the three months ended March 31, 2017, an increase of 12.7% over operating earnings of \$274.7 in the corresponding period of 2016. The increase in operating income was primarily due to strong revenue growth of 8.0% and savings from LaunchPad. LaunchPad remains on track to deliver net savings of \$150.0 through the three-year period ending in 2017.

CDD operating earnings were \$56.1 for the three months ended March 31, 2017, a decrease of 10.8% over operating earnings of \$62.9 in the corresponding period of 2016. The decline was primarily due to personnel costs, and strategic investments to support future growth, partially offset by cost synergies. The Company remains on track to deliver cost synergies of \$100.0 related to the integration of the Acquisition through the three-year period ending in 2017.

General corporate expenses are comprised primarily of administrative services such as executive management, human resources, legal, finance, corporate affairs, and information technology. Corporate expenses were \$32.9 for the three months ended March 31, 2017, a decrease of 13.6% over corporate expenses of \$38.1 in the corresponding period of 2016. The decrease in corporate expenses in 2017 is primarily due to lower acquisition related costs.

If you have any questions concerning this letter or if you would like any additional information, please do not hesitate to call me at (336) 436-4602.

Very truly yours,

/s/ Glenn A. Eisenberg

Glenn A. Eisenberg Executive Vice President -Chief Financial Officer

cc: Michael J. Silver, Hogan Lovells US LLP

T. Crawford Pounds, PricewaterhouseCoopers L.L.P.