UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-K/A

Amendment No. 1

[X] Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2010

or

[] Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission file number - 1-11353

LABORATORY CORPORATION OF AMERICA HOLDINGS

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

358 South Main Street, Burlington, North Carolina (Address of principal executive offices) **13-3757370** (I.R.S. Employer Identification No.)

> 27215 (Zip Code)

(Registrant's telephone number, including area code) 336-229-1127

Securities registered pursuant to Section 12(b) of the Act: Title of each class Common Stock, \$0.10 par value

Name of exchange on which registered New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant is well-known seasoned issuer, as defined in Rule 405 of Regulation S-K. Yes [X] No [].

Indicate by check mark whether the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes [] No [X].

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [].

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (paragraph 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [].

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [].

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "small reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [X] Non-accelerated filer [] (Do not check if a smaller reporting company)

Accelerated Filer [] Smaller reporting company []

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes [] No [X].

As of June 30, 2010, the aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$7.8 billion, based on the closing price on such date of the registrant's common stock on the New York Stock Exchange.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: 100.0 million shares as of February 18, 2011.

DOCUMENTS INCORPORATED BY REFERENCE

List hereunder the following documents incorporated by reference and the Part of the Form 10-K into which the document is incorporated: Portions of the Registrant's Notice of Annual Meeting and Proxy Statement to be filed no later than 120 days following December 31, 2010 are incorporated by reference into Part III.

EXPLANATORY NOTE

The sole purpose of this Amendment No. 1 on Form 10-K/A to Laboratory Corporation of America Holdings' Form 10-K for the fiscal year ended December 31, 2010 (the "Form 10-K") is to update Exhibit 15 to furnish the interactive data files as Exhibit 101. Exhibit 101 to this report provides the following items from the Company's Form 10-K formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Changes in Shareholders' Equity, (iv) the Consolidated Statements of Cash Flows, (v) the Notes to Consolidated Financial Statements and (vi) the Financial Statement Schedule II - Valuation and Qualifying Accounts and Reserves.

Users of this data are advised that pursuant to Rule 406T of Regulation S-T these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, are deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, and otherwise are not subject to liability under those Sections. No other changes have been made to the Form 10-K other than those described above. This Amendment No. 1 does not reflect subsequent events occurring after the original filing date of the Form 10-K or modify or update in any way disclosures made in the Form 10-K.

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) List of documents filed as part of this amendment
 - (3) Index to and List of Exhibits

Exhibits:

Exhibits 10.1 through 10.24 and 10.26 through 10.31 are management contracts or compensatory plans or arrangements.

- 1.1 Underwriting Agreement, dated November 16, 2010 between Laboratory Corporation of America Holdings and Citigroup Global Markets Inc. as representative of the several Underwriters trustee (incorporated by reference to Exhibit 1.1 to the Company's Current Report on Form 8-K filed on November 19, 2010).
- 2.1 Asset Purchase Agreement by and among Genzyme Corporation and Laboratory Corporation of America Holdings dated as of September 13, 2010 (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on September 16, 2010).
- 3.1 Amended and Restated Certificate of Incorporation of the Company dated May 24, 2001 (incorporated herein by reference to the Company's Registration Statement on Form S-3, filed with the Commission on October 19, 2001, File No. 333-71896).
- 3.2 Amended and Restated By-Laws of the Company dated March 25, 2008 (incorporated herein by reference to the Company's current report on Form 8-K, filed with the Commission on March 31, 2008).
- 4.1 Specimen of the Company's Common Stock Certificate (incorporated herein by reference to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001).
- 4.2 Rights Agreement dated December 13, 2001 between the Company and American Stock Transfer & Trust Company, as rights Agent (incorporated herein by reference to the Company's Registration Statement on Form 8-A, filed with the Commission on December 21, 2001, File No. 001-11353).
 4.2 Inductor dated as of Lawrence 21, 2002 between the Company and Michael Association on December 21, 2001, File No. 001-11353).
- Indenture dated as of January 31, 2003 between the Company and Wachovia Bank, National Association, as trustee (incorporated herein by reference to the January 31, 2003 Form 8-K, filed with the Commission on February 3, 2003).
 Registration Rights Agreement, dated as of January 28, 2003 between the Company and the Initial Purchasers (incorporated herein by reference to
- 4.4 Registration Rights Agreement, dated as of January 28, 2003 between the Company and the Initial Purchasers (incorporated herein by reference to the January 31, 2003 Form 8-K, filed with the Commission on February 3, 2003).
- 4.5 Indenture dated as of December 5, 2005, between the Company and The Bank of New York, as trustee (Senior Debt Securities) (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated December 14, 2005).
- 4.6 Indenture, dated as of October 23, 2006, between the Company and The Bank of New York, as trustee, including the Form of Global Note attached as Exhibit A thereto (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on October 24, 2006).
- 4.7 Indenture, dated as of November 19, 2010, between the Company and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 19, 2010).
- 4.8 First Supplemental Indenture, dated as of November 19, 2010, between the Company and U.S. Bank National Association, as trustee, including the form of the 2016 Notes (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on November 19, 2010).
- 4.9 Second Supplemental Indenture, dated as of November 19, 2010, between the Company and U.S. Bank National Association, as trustee, including the form of the 2020 Notes (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on November 19, 2010).
- 10.1 National Health Laboratories Incorporated Pension Equalization Plan (incorporated herein by reference to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1992).
- 10.2 Laboratory Corporation of America Holdings amended and restated new Pension Equalization Plan (incorporated herein by reference to the Company's Quarterly Report for the period ended September 30, 2004).
- 10.3 First Amendment to the Laboratory Corporation of America Holdings amended and restated new Pension Equalization Plan (incorporated herein by reference to the Company's Quarterly Report for the period ended September 30, 2004).
- 10.4 Second Amendment to the Laboratory Corporation of America Holdings amended and restated new Pension Equalization Plan. (incorporated herein by reference to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004).
- 10.5 National Health Laboratories 1988 Stock Option Plan, as amended (incorporated herein by reference to the Company's Registration Statement on Form S-1, filed with the Commission on July 9, 1990, File No. 33-35782).

- 10.6 National Health Laboratories 1994 Stock Option Plan (incorporated herein by reference to the Company's Registration Statement on Form S-8, filed with the Commission on August 12, 1994, File No. 33-55065).
- 10.7 Laboratory Corporation of America Holdings Senior Executive Transition Policy (incorporated herein by reference to the Company's Quarterly Report for the period ended June 30, 2004).
- 10.8 Laboratory Corporation of America Holdings 1995 Stock Plan for Non-Employee Directors dated September 26, 1995 (incorporated herein by reference to the Company's Registration Statement on Form S-8, filed with the Commission on September 26, 1995, File No. 33-62913).
- 10.9 Amendment to the 1995 Stock Plan for Non-Employee Directors (incorporated herein by reference to the Company's 1997 Annual Proxy Statement, filed with the Commission on June 6, 1997).
- 10.10 Amendment to the 1995 Stock Plan for Non-Employee Directors (incorporated herein by reference to Annex I of the Company's 2001 Annual Proxy Statement, filed with the Commission on April 25, 2001).
- 10.11Laboratory Corporation of America Holdings 1997 Employee Stock Purchase Plan (incorporated herein by reference to Annex I of the Company's
Registration Statement on Form S-8 filed with the Commission on December 13, 1996, File No. 333-17793).
- 10.12 Amendments to the Laboratory Corporation of America Holdings 1997 Employee Stock Purchase Plan (incorporated herein by reference to the Company's Registration Statement on Form S-8, filed with the Commission on January 10, 2000, File No. 333-94331).
- 10.13 Amendments to the Laboratory Corporation of America Holdings 1997 Employee Stock Purchase Plan (incorporated herein by reference to the Company's Registration Statement on Form S-8, filed with the Commission on May 26, 2004, File No. 333-115905).
- 10.14 Laboratory Corporation of America Holdings Amended and Restated 1999 Stock Incentive Plan (incorporated herein by reference to Annex I of the Company's 1999 Annual Proxy Statement filed with the Commission of May 3, 1999).
- 10.15 Laboratory Corporation of America Holdings 2000 Stock Incentive Plan (incorporated herein by reference to the Company's Registration Statement on Form S-8, filed with the Commission on June 5, 2000, File No. 333-38608).
- 10.16 Amendments to the 2000 Stock Incentive Plan (incorporated herein by reference to the Company's Registration Statement on Form S-8, filed with the Commission on June 19, 2002, File No. 333-90764).
- 10.17 Dynacare Inc., Amended and Restated Employee Stock Option Plan (incorporated herein by reference to the Company's Registration Statement on Form S-8, filed with the Commission on August 7, 2002, File No. 333-97745).
- 10.18 DIANON Systems, Inc. 1996 Stock Incentive Plan, DIANON Systems, Inc. 1999 Stock Incentive Plan, DIANON Systems, Inc. 2000 Stock Incentive Plan, DIANON Systems, Inc. 2001 Stock Incentive Plan, and UroCor, Inc. Second Amended and Restated 1992 Stock Option Plan (incorporated herein by reference to the Company's Registration Statement on Form S-8, filed with the Commission on January 21, 2003, File No. 333-102602).
- 10.19 Laboratory Corporation of America Holdings Deferred Compensation Plan (incorporated herein by reference to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004).
- 10.20 First Amendment to the Laboratory Corporation of America Holdings Deferred Compensation Plan (incorporated herein by reference to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004).
- 10.21 Third Amendment to the Laboratory Corporation of America Amended and Restated New Pension Equalization Plan (incorporated herein by reference to the Company's Quarterly Report for the period ended June 30, 2005).
- 10.22 Second Amendment to the Laboratory Corporation of America Holdings Deferred Compensation Plan (incorporated herein by reference to the Company's Quarterly Report for the period ended June 30, 2005).

- 10.23 Third Amendment to the Laboratory Corporation of America Holdings Deferred Compensation Plan (incorporated herein by reference to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2006).
- 10.24 Consulting Agreement between Thomas P. Mac Mahon and the Company dated July 20, 2006 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 21, 2006).
- 10.25 \$1 Billion Credit Agreement dated as of October 26, 2007, among the Company, the lenders named therein and Credit Suisse, as Administrative Agent, and Credit Suisse Securities (USA) LLC, as Bookrunner and Lead Arranger (incorporated by reference to Exhibit 10.31 to the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2007).
- 10.26 Fourth Amendment to the Laboratory Corporation of America Holdings Deferred Compensation Plan (incorporated herein by reference to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007).
- 10.27 Laboratory Corporation of America Holdings 2008 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on May 7, 2008).
- 10.28 Laboratory Corporation of America Holdings Amended and Restated Master Senior Executive Severance Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2009).
- 10.29Laboratory Corporation of America Holdings Master Senior Executive Change in Control Severance Plan (incorporated by reference to Exhibit 10.2
to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2009).
- 10.30 First Amendment to the Laboratory Corporation of America Holdings Master Senior Executive Change in Control Severance Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2010).
- 10.31 Second Amendment to the Laboratory Corporation of America Holdings Master Senior Executive Change in Control Severance Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2010).
- 12.1* Ratio of earnings to fixed charges
- 21* List of Subsidiaries of the Company
- 23.1* Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm
- 24.1* Power of Attorney of Thomas P. Mac Mahon
- 24.2* Power of Attorney of Kerrii B. Anderson
- 24.3* Power of Attorney of Jean-Luc Bélingard
- 24.4* Power of Attorney of N. Anthony Coles, M.D.
- 24.5* Power of Attorney of Wendy E. Lane
- 24.6* Power of Attorney of Robert E. Mittelstaedt, Jr.
- 24.7* Power of Attorney of Arthur H. Rubenstein, MBBCh
- 24.8* Power of Attorney of M. Keith Weikel, Ph.D.
- 24.9* Power of Attorney of R. Sanders Williams, M.D.
- 31.1* Certification by the Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a)
- 31.2* Certification by the Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a)
- 32* Written Statement of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350)
- 101.INS** XBRL Instance Document
- 101.SCH** XBRL Taxonomy Extension Schema
- 101.CAL** XBRL Taxonomy Extension Calculation Linkbase
- 101.DEF** XBRL Taxonomy Extension Definiton Linkbase
- 101.LAB** XBRL Taxonomy Extension Label Linkbase
- 101.PRE** XBRL Taxonomy Extension Presentation Linkbase
- * Previously filed
- ** Filed herewith

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this amendment to be signed on its behalf by the undersigned, thereunto duly authorized.

LABORATORY CORPORATION OF AMERICA HOLDINGS Registrant

By: <u>/s/ DAVID P. KING</u> David P. King Chairman of the Board, President and Chief Executive Officer

Dated: March 7, 2011