

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

February 21, 2008
(Date of earliest event reported)

**LABORATORY CORPORATION OF
AMERICA HOLDINGS**

(Exact Name of Registrant as Specified in its Charter)

DELAWARE

(State or other jurisdiction
of Incorporation)

1-11353

(Commission
File Number)

13-3757370

(I.R.S. Employer
Identification No.)

**358 SOUTH MAIN STREET,
BURLINGTON, NORTH CAROLINA**

(Address of principal executive offices)

27215

(Zip Code)

336-229-1127

(Registrant's telephone number including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 7.01. Regulation FD Disclosure

On February 21, 2008, Laboratory Corporation of America[®] Holdings (LabCorp[®]) (NYSE: LH) announced that Yale University has released the results of its Phase II study on a blood test to detect early stage ovarian cancer. Using six biomarkers, this blood test can discriminate between disease-free women and ovarian cancer patients (stage I-IV) with high specificity (99.4%) and sensitivity (95.3%). A Phase III trial is under way and should be completed in a few months. Initial studies are focused on women who have increased risk for the development of ovarian cancer.

Exhibits

99.1 Press Release dated February 21, 2008

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Laboratory Corporation of America Holdings
(Registrant)

Date: February 21, 2008

By: /s/Bradford T. Smith
Bradford T. Smith, Executive Vice President
and Secretary

Laboratory Corporation of America® Holdings
358 South Main Street
Burlington, NC 27215
Telephone:(336) 584-5171

FOR IMMEDIATE RELEASE

Investor/Media Contact: Eric Lindblom - 336-436-6739

Shareholder Direct: 800-LAB-0401

Company Information: www.labcorp.com

**PHASE II RESULTS FOR YALE'S EARLY STAGE OVARIAN
CANCER BLOOD TEST 99% ACCURATE**

Burlington, NC, February 21, 2008 – Laboratory Corporation of America® Holdings (LabCorp®) (NYSE: LH) today announced that Yale University has released the results of its Phase II study on a blood test to detect early stage ovarian cancer. Using six biomarkers, this blood test can discriminate between disease-free women and ovarian cancer patients (stage I-IV) with high specificity (99.4%) and sensitivity (95.3%). A Phase III trial is under way and should be completed in a few months. Initial studies are focused on women who have increased risk for the development of ovarian cancer.

Ovarian cancer is the fifth leading cause of cancer-related deaths in women in the United States and is the leading cause of gynecologic cancer deaths. Despite being one-tenth as common as breast cancer, it is three times more lethal and the average woman carries a 1:70 lifetime risk of being diagnosed with ovarian cancer. This year, approximately 20,180 women will be diagnosed with ovarian cancer, and 15,310 will die from the disease.

“Being able to detect early stage ovarian cancer will enable physicians to treat this disease early,” said Myla P. Lai-Goldman, M.D., Executive Vice President, Chief Scientific Officer and Medical Director of LabCorp. “Survival rates for women with the disease detected early can be as high as 90 percent, yet, if not diagnosed early, the survival rate drops to only 20 percent.”

“The ability to recognize almost 100 percent of new tumors will have a major impact on the high death rates of this cancer,” said Gil Mor, associate professor of reproductive sciences at the medical school and lead researcher of the study. “While initial studies are focused on women with increased risk, we hope this test will eventually become the standard of care for women having routine examinations.” You can listen to Dr. Mor’s iTunes U podcast at: <http://deimos3.apple.com/WebObjects/Core.woa/Browse/yale.edu.1320598949> (scroll down to Dr. Mor’s name).

LabCorp signed an exclusive license agreement with Yale University in 2006 to commercialize the university’s blood testing technology for ovarian cancer. LabCorp and Yale are hopeful that this test will be available to women by the end of the year. For more information on the Phase III trials, please visit Yale’s website at <http://www.yaleobgyn.org/reproimmuno/discovery.html>.

About Yale Office of Cooperative Research

The Yale University Office of Cooperative Research (YU-OCR) manages intellectual assets created at Yale to achieve the maximum benefit for the public and provide a return to support the broader research and education missions of the University. YU-OCR is comprised of trusted experts in professional disciplines, increasing private sector awareness within the university and identifying opportunities for collaborations with companies, investors and other academic institutions. Information on licensing agreements is available through ocr@yale.edu or at <http://www.yale.edu/ocr/> online.

About LabCorp®

Laboratory Corporation of America® Holdings, a S&P 500 company, is a pioneer in commercializing new diagnostic technologies and the first in its industry to embrace genomic testing. With annual revenues of \$4.1 billion in 2007, over 26,000 employees nationwide, and more than 220,000 clients, LabCorp offers clinical assays ranging from routine blood analyses to HIV and genomic testing. LabCorp combines its expertise in innovative clinical testing technology with its Centers of Excellence: The Center for Molecular Biology and Pathology, National Genetics Institute, Inc., ViroMed Laboratories, Inc., The Center for Esoteric Testing, DIANON Systems, Inc., US LABS, and Esoterix and its Colorado Coagulation, Endocrine Sciences, and Cytometry Associates laboratories. LabCorp conducts clinical trial testing through its Esoterix Clinical Trials Services division. LabCorp clients include physicians, government agencies, managed care organizations, hospitals, clinical labs, and pharmaceutical companies. To learn more about our organization, visit our Web site at: www.labcorp.com.

Each of the above forward-looking statements is subject to change based on various important factors, including without limitation, competitive actions in the marketplace and adverse actions of governmental and other third-party payors. Actual results could differ materially from those suggested by these forward-looking statements. Further information on potential factors that could affect LabCorp’s financial results is included in the Company’s Form 10-K for the year ended December 31, 2006, and subsequent SEC filings, and will be available in the Company’s Form 10-K for year ended December 31, 2007, when filed.