UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

SCHEDULE TO/A

(RULE 14d-100)

TENDER OFFER STATEMENT UNDER SECTION 14(D)(1) OR SECTION 13(E)(1) OF THE SECURITIES EXCHANGE ACT OF 1934 (Amendment No. 2)

Monogram Biosciences, Inc.

(Name of Subject Company (Issuer))

Mastiff Acquisition Corp.

a wholly owned subsidiary of

Laboratory Corporation of America Holdings

(Name of Filing Persons (Offeror))

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

60975U207

(CUSIP Number of Class of Securities)

F. Samuel Eberts III Senior Vice President and Chief Legal Officer Laboratory Corporation of America Holdings 358 South Main Street Burlington, North Carolina 27215 (336) 229-1127

(Name, address and telephone number of person authorized to receive notices and communications on behalf of filing persons)

with copies to:

Michael J. Silver John H. Booher William I. Intner Hogan & Hartson LLP 111 South Calvert Street, 16th Floor Baltimore, Maryland 21202 (410) 659-2700

CALCULATION OF FILING FEE

Transaction Valuation*	Amount of Filing Fee**
\$142,647,242	\$7,959.72

Estimated for purposes of calculating the filing fee only. This amount assumes the purchase of up to 31,351,042 shares of common stock, par value \$0.001 per share, of Monogram Biosciences, Inc., at a purchase price of \$4.55 per share. Such number of shares represents the fully diluted number of shares of common stock on June 19, 2009 and consists of: (i) 23,042,427 shares of common stock issued and outstanding; (ii) approximately 4,733,255 shares of common stock subject to outstanding options under Monogram's stock plans; (iii) up to 4,465 shares issuable upon the exercise of

outstanding warrants; (iv) approximately 3,524,598 shares that could be issued upon conversion of Monogram's Amended and Restated 3% Senior Secured Convertible Note due 2010 and 0% Convertible Senior Unsecured Notes due 2026; and (v) up to approximately 46,297 shares of common stock that could be issued in lieu of quarterly cash payments pursuant to Monogram Biosciences Inc.'s Amended and Restated 3% Senior Secured Convertible Note. The calculation of the filing fee is based on capitalization information provided by Monogram Biosciences, Inc. as of June 19, 2009. The amount of the filing fee, calculated in accordance with Rule 0-11 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Fee Rate Advisory #5 for fiscal year 2009 equals 0.0000558 of the transaction valuation. X Check the box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number or the Form or Schedule and the date of its filing. \$7,959.72 Amount Previously Paid: Form or Registration No.: Schedule TO Filing Party: Mastiff Acquisition Corp. and Laboratory Corporation of America Holdings Date Filed: July 1, 2009 Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer. Check the appropriate boxes below to designate any transactions to which the statement relates: Check the appropriate boxes below to designate any transactions to which the statement relates: third-party tender offer subject to Rule 14d-1. issuer tender offer subject to Rule 13e-4. going-private transaction subject to Rule 13e-3. amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer: \Box If applicable, check the appropriate boxes below to designate the appropriate rule provisions relied upon:

Rule 13e-4(i) (Cross-Border Issues Tender Offer)

Rule 14d-1(d) (Cross-border Third-Party Tender Offer)

This Amendment No. 2 (this "Amendment") amends and supplements the Tender Offer Statement on Schedule TO (as previously amended and supplemented by Amendment No. 1 filed on July 13, 2009) filed with the Securities and Exchange Commission ("SEC") on July 1, 2009 (the "Schedule TO"), by Mastiff Acquisition Corp., a Delaware corporation (the "Purchaser") and a wholly owned subsidiary of Laboratory Corporation of America Holdings, a Delaware corporation ("LabCorp"). The Schedule TO relates to the offer by the Purchaser to purchase all of the outstanding shares of common stock, par value \$0.001 per share, (the "Shares") of Monogram Biosciences, Inc., a Delaware corporation ("Monogram"), at a price of \$4.55 per Share in cash, without interest and subject to applicable withholding of taxes, upon the terms and subject to the conditions set forth in the Offer to Purchase, dated July 1, 2009 (the "offer to purchase"), a copy of which is attached to the Schedule TO as Exhibit (a)(1)(A), and the related Letter of Transmittal and instructions thereto, a copy of which is attached to the Schedule TO as Exhibit (a)(1)(B), as they may be amended or supplemented from time to time. This Amendment is being filed on behalf of the Purchaser and LabCorp.

The information set forth in the Schedule TO remains unchanged, except that such information is hereby amended and supplemented to the extent specifically provided herein. Capitalized terms used but not defined herein have the meanings ascribed to them in the Schedule TO.

Item 11. Additional Information.

The information set forth in Item 11 of the Schedule TO and in Section 15—"Certain Legal Matters—Antitrust Matters" of the offer to purchase, which is incorporated by reference into Item 11 of the Schedule TO, is hereby amended and supplemented by adding the following paragraph as the third paragraph of such section of the offer to purchase:

"The initial waiting period applicable to the offer and the merger under the HSR Act expired at 11:59 p.m., New York City time, on July 16, 2009, with no action by either the FTC or DOJ. Accordingly, the condition to the offer relating to the expiration or termination of the waiting period under the HSR Act has been satisfied. The merger will not require an additional filing under the HSR Act if we own at least 50% of Monogram's outstanding shares of common stock within one year after the HSR Act waiting period applicable to the offer has expired."

Item 12. Exhibits

Item 12 of the Schedule TO is hereby amended and supplemented by adding the following to the list of exhibits:

(a)(5)(F) Joint Press Release issued by LabCorp and Monogram on July 17, 2009.

SIGNATURES

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

LABORATORY CORPORATION OF AMERICA HOLDINGS

By: /s/ F. Samuel Eberts III

Name: F. Samuel Eberts III

Title: Senior Vice President and Chief Legal Officer

Dated: July 17, 2009

MASTIFF ACQUISITION CORP.

By: /s/ F. Samuel Eberts III

Name: F. Samuel Eberts III Title: President and Secretary

Dated: July 17, 2009

EXHIBIT INDEX

 $\frac{\text{Exhibit No.}}{(a)(5)(F)}$

Exhibit
Joint Press Release issued by LabCorp and Monogram on July 17, 2009.





FOR IMMEDIATE RELEASE

LabCorp's Acquisition of Monogram Biosciences, Inc. Clears Antitrust Review

Burlington, NC, South San Francisco, Calif.—July 17, 2009—Laboratory Corporation of America® Holdings (NYSE: LH) and Monogram Biosciences, Inc. (NASDAQ: MGRM) today announced that the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, or HSR Act, applicable to the acquisition of Monogram by LabCorp has expired with no action by either the Federal Trade Commission or the U.S. Department of Justice.

As previously announced, LabCorp commenced a tender offer on July 1, 2009 for all of the outstanding shares of common stock of Monogram for \$4.55 per share in cash.

The expiration of the waiting period under the HSR Act satisfies one of the conditions necessary for the consummation of the pending acquisition. The tender offer and any withdrawal rights are scheduled to expire at 12:00 midnight, New York City Time, at the end of the day on Wednesday, July 29, 2009, unless the tender offer is extended.

Consummation of the tender offer remains subject to other customary closing conditions, including satisfaction of the minimum tender condition under the agreement and plan of merger entered into by LabCorp and Monogram on June 22, 2009.

Important Additional Information Has Been Filed with the Securities and Exchange Commission ("SEC")

The tender offer described in this news release has commenced, but this news release is for informational purposes only and is neither an offer to purchase nor a solicitation of an offer to sell shares of Monogram Biosciences, Inc.'s common stock. The tender offer is being made pursuant to a tender offer statement and related materials. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ BOTH THE TENDER OFFER STATEMENT AND RELATED MATERIALS AND THE SOLICITATION/RECOMMENDATION STATEMENT REGARDING THE TENDER OFFER BECAUSE THEY CONTAIN IMPORTANT INFORMATION. The tender offer statement and related materials, including an offer to purchase and letter of transmittal, have been filed by Laboratory Corporation of America Holdings and Mastiff Acquisition Corp. with the SEC, and the solicitation/recommendation statement has been filed by Laboratory Corporation of America Holdings and Mastiff Acquisition Corp. or Monogram Biosciences, Inc. with the SEC at the website maintained by the SEC at www.sec.gov. The tender offer statement and related materials, solicitation/recommendation statement, and such other documents may be obtained for free by directing such requests to D.F. King & Co., Inc., the information agent for the tender offer, at 1-212-269-5550 for banks and brokers or 1-800-549-6746 for shareholders and all others.

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 \$4.5 billion in 2008, over 28,000 employees worldwide, 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, ViroMed Laboratories, Inc., The Center for Esoteric Testing, Litholink Corporation, 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.

About Monogram Biosciences, Inc.

Monogram Biosciences, Inc. (NASDAQ: MGRM) is advancing individualized medicine by discovering, developing and marketing innovative products to guide and improve treatment of serious infectious diseases and cancer. Monogram Biosciences, Inc.'s products are designed to help doctors optimize treatment regimens for their patients that lead to better outcomes and reduced costs. Monogram Biosciences, Inc.'s technology is also being used by numerous biopharmaceutical companies to develop new and improved anti-viral therapeutics and vaccines as well as targeted cancer therapeutics. More information about Monogram Biosciences, Inc. and its technology can be found on its web site at www.monogrambio.com.

Caution Concerning Forward-Looking Statements

Investors are cautioned that statements in this press release that are not strictly historical statements, including, without limitation, statements relating to the expected timing of the transaction, constitute forward-looking statements. These statements are based on current expectations, forecasts and assumptions of LabCorp and Monogram Biosciences, Inc. that are subject to risks and uncertainties that could cause actual outcomes and results to differ materially from those statements. Risks and uncertainties include, among others, the risk that the conditions to the tender offer or the merger set forth in the agreement and plan of merger will not be satisfied and the transactions will not be consummated, uncertainties as to the timing of the tender offer and merger, uncertainties as to how many Monogram Biosciences, Inc. stockholders will tender their stock in the offer, changes in Monogram Biosciences, Inc.'s business during the period between now and the closing that could cause a condition to closing not to be satisfied; as well as other factors detailed in LabCorp's and Monogram Biosciences, Inc.'s fillings with the Securities and Exchange Commission, including LabCorp's Annual Report on Form 10-K for the year ended December 31, 2008 and subsequent SEC fillings, and Monogram Biosciences, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 and subsequent

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Contacts:

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