FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Check this box if no longer subject to Section 16. Form 4 or Form 5	STATEMENT OF CHA
obligations may continue. See	
Instruction 1(b).	Filed pursuant to Section

NGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* LABORATORY CORP OF AMERICA HOLDINGS						2. Issuer Name and Ticker or Trading Symbol Monogram Biosciences, Inc. [[MGRM]]											all app Direc	o of Repor licable) tor er (give titl	J	X 10	Owner (specify	
(Last) 358 S M	(Last) (First) (Middle)					3. Date of Earliest Transaction (Month/Day/Year) 08/04/2009											belov				ow)	
(Street) BURLINGTON NC 27215 (City) (State) (Zip)					- 4. I	4. If Amendment, Date of Original Filed (Month/Day/Year)										Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person						
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																						
1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Yea				Year)	2A. Deemed Execution Date, if any (Month/Day/Year)			3. Transactio Code (Insti 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and					Benefic Owned		es ally Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)		
						Code	v	Amount		(A)	or	Price	Tr	Reported Transaction(s) (Instr. 3 and 4)				(111301.4)				
Common Stock 08				08/04/20	09	19					10,623,670(1		1)	A	\$4.5	5	30,343,276		I		By Mast Acquisit Corp. ⁽²⁾	
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																						
1. Title of Derivative Security (Instr. 3) 2. Conversion or Exercise Price of Derivative Security (Instr. 3) 3. Transaction Date Execution (Month/Day/Year) Execution of Exercise (Month/Day/Year) (Month/D						Transaction Code (Instr.		mber ative rities ired osed . 3, 4	Exp (Mo	Date Expiration	Da		7. Title and Amount of Securities Underlying Derivative Security (Instr. : and 4)		nstr. 3	Deriv Secu	erivative ecurity	9. Numbe derivative Securities Beneficial Owned Following Reported Transactic (Instr. 4)	e S Illy	10. Ownersh Form: Direct (D or Indire (I) (Instr.	Beneficial Ownership ct (Instr. 4)	
					Code	v	(A)	(D)	Date Exercis		le	Expiration Date	Amour or Number of Shares		mber							

Explanation of Responses:

- 1. These shares were acquired pursuant to the exercise of the Top-Up Option set forth in the Agreement and Plan of Merger, dated June 22, 2009 among Laboratory Corporation of America Holdings, Mastiff Acquisition Corp., and the issuer.
- 2. These shares are owned directly by Mastiff Acquisition Corp., which is a wholly-owned subsidiary of LabCorp. LabCorp is the indirect beneficial owner of the reported securities.

/s/ F. Samuel Eberts III, **Authorized Person**

08/06/2009

** Signature of Reporting Person

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.