FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

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

STATEMENT OF CHANGES 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							Issuer Name and Ticker or Trading Symbol ORCHID CELLMARK INC [ORCH] Jate of Earliest Transaction (Month/Day/Year)									Relationship of Reporti (Check all applicable) Director Officer (give title below)			X 10% C	Owner (specify
(Last) (First) (Middle) 358 S MAIN ST							12/15/2011 4. If Amendment, Date of Original Filed (Month/Day/Year)									ndividual	or Joint/Grou	ıp Filir		
(Street) BURLINGTON NC 27215					,										ne Reporting Person ore than One Reporting					
(City)		(Sta		Zip)																
Table I - Non-Deriva 1. Title of Security (Instr. 3) 2. Transact Date (Month/Day						ction	ion 2A. Deemed Execution Date,			3. Transaction Code (Instr. 8)		4. Securities Acquired (A) of Disposed Of (D) (Instr. 3, 4 5)) or	5. Amo Securi Benefi	ount of ties cially I Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)
										Code	v	Amount	(A (D	() or ()	Price	Transa	ction(s) 3 and 4)			(IIISU. 4)
Common Stock, par value \$.001 12/15/2						2011)11			p (2)		51,937		A	\$2.8	26,	26,182,896			See footnote ⁽¹⁾
Common Stock, par value \$.001 12/15/20						2011	011			p (3)		8,273,06	5	A	\$2.8	34,	34,455,961			See footnote ⁽¹⁾
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)	tive Conversion Date Execut ity or Exercise (Month/Day/Year) if any			3A. Deen Executio if any (Month/D	n Date, Transac Code (Ir			tion of		6. Date I Expirati (Month/I	on Da		7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)		tr. 3	B. Price of Derivative Security Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction((Instr. 4)	у	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership t (Instr. 4)
						Code	v	(A)	(D)	Date Exercisa	able	Expiration Date	Title	Amo or Num of Shai	ber					

Explanation of Responses:

- 1. The Reporting Person is filing this Form 4 on behalf of itself and OCM Acquisition Corp. ("OCM"), a Delaware corporation and a wholly owned subsidiary of the reporting person.
- 2. These shares were acquired by OCM during the subsequent offering period of the tender offer for all outstanding shares of common stock of the Issuer, including, to the extent outstanding, the associated preferred stock purchase rights issued under the Rights Agreement, dated July 27, 2001, as amended, between the Issuer and American Stock Transfer & Trust Company, as rights agent (the "Offer"). The Offer was made upon the terms and subject to the conditions set forth in the Offer to Purchase, dated April 19, 2011, which was annexed to and filed with the Schedule TO filed by the Reporting Person with the Securities and Exchange Commission on April 19, 2011.
- 3. These shares were acquired by OCM pursuant to the exercise of the Top-Up Option set forth in the Agreement and Plan of Merger, dated April 5, 2011, as amended, among the Reporting Person, OCM and

/s/ F. Samuel Eberts III, Senior Vice President and Chief Legal

Officer of Laboratory

Corporation of America

Holdings

** Signature of Reporting Person

Date

12/16/2011

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.