

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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* <u>LABORATORY CORP OF AMERICA HOLDINGS</u>	2. Date of Event Requiring Statement (Month/Day/Year) 12/09/2011	3. Issuer Name and Ticker or Trading Symbol <u>ORCHID CELLMARK INC [ORCH]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person
(Last) (First) (Middle) 358 S MAIN ST (Street) BURLINGTON NC 27215 (City) (State) (Zip)			

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock, par value \$.001	25,965,712	I	See footnote ⁽¹⁾

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)	
	Date Exercisable	Expiration Date					Amount or Number of Shares
Top-Up Option (right to buy)	(2)(3)	(2)(3)	Common Stock	(2)(3)	2.8	I	See footnote ⁽²⁾⁽³⁾

Explanation of Responses:

1. The Reporting Person is filing this Form 3 on behalf of itself and OCM Acquisition Corp. ("OCM"), a Delaware corporation and a wholly owned subsidiary of the Reporting Person. The shares of common stock to which this Form 3 relates were acquired by OCM on December 9, 2011 (the "Acceptance Time") following the expiration of the initial offering period for 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.

2. The Top-Up Option is exercisable, in whole but not in part, at any time after the Acceptance Time and prior to the earliest to occur (i) the Effective Time (as defined in the Agreement and Plan of Merger, as amended, dated April 5, 2011 among the Reporting Person, OCM and the Issuer (the "Merger Agreement"), filed as Exhibit 2.1 to the Form 8-k filed by the Issuer with the Securities and Exchange Commission on April 6, 2011), (ii) the termination of the Merger Agreement pursuant to Section 7.1 thereof and (iii) five business days following the expiration of any "subsequent offering period" (including any one or more extensions thereof) relating to the Offer. (Continued footnote in 3)

3. Pursuant to the Top-Up Option, the Issuer has granted to OCM an irrevocable option (the "Top-Up Option") to purchase at \$2.80 per share, that number of shares of common stock (the "Top-Up Option Shares") equal to the lowest number of shares of common stock, that when added to the number of shares of common stock owned by Reporting Person, OCM and their respective subsidiaries at the time of such exercise, shall constitute one share more than 90% of the shares of common stock then outstanding (after giving effect to the issuance of the Top-Up Option Shares).

/s/ F. Samuel Eberts III, Senior
Vice President and Chief Legal
Officer of Laboratory 12/13/2011
Corporation of America
Holdings

** Signature of Reporting Person Date

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 5 (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.