

## INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

OMB Number: 3235-0104  
Estimated average burden  
hours per response: 0.5Filed 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>Barber James J</u>  (Last) (First) (Middle) <u>C/O METABOLIX, INC.</u> <u>21 ERIE STREET</u>  (Street) <u>CAMBRIDGE MA</u> <u>02139</u>  (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>11/09/2006</u>	3. Issuer Name and Ticker or Trading Symbol <u>METABOLIX, INC. [ MBLX ]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>President and CEO</u>	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

## 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)
<u>Common Stock</u>	<u>13,342</u>	<u>D</u>	

## 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				
<u>Stock Option (right to buy)</u>	<u>(1)</u>	<u>01/22/2010</u>	<u>Common Stock</u>	<u>178,723</u>	<u>3.3</u>	<u>D</u>
<u>Stock Option (right to buy)</u>	<u>(1)</u>	<u>01/22/2010</u>	<u>Common Stock</u>	<u>47,403</u>	<u>13.21</u>	<u>D</u>
<u>Stock Option (right to buy)</u>	<u>(2)</u>	<u>12/14/2015</u>	<u>Common Stock</u>	<u>198,795</u>	<u>1.84</u>	<u>D</u>
<u>Stock Option (right to buy)</u>	<u>(3)</u>	<u>12/14/2015</u>	<u>Common Stock</u>	<u>41,954</u>	<u>1.84</u>	<u>D</u>
<u>Stock Option (right to buy)</u>	<u>(4)</u>	<u>12/14/2015</u>	<u>Common Stock</u>	<u>41,955</u>	<u>1.84</u>	<u>D</u>

## Explanation of Responses:

- This option is fully vested and exercisable.
- This option was vested as to 35,961 shares immediately upon grant. The remainder vests at the rate of 6.25% per quarter from 1/1/05.
- This option vests as to 50% of the shares upon completion of the Issuer's initial public offering. The remainder will vest at the rate of 6.25% per quarter from 1/1/05.
- This option vested as to 50% of the shares on 7/12/06. The remainder vests at the rate of 6.25% per quarter from 1/1/05.

## Remarks:

Exhibit 24 - Power of Attorney/s/ Sarah P. Cecil, attorney-in-fact 11/09/2006

\*\* 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.

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints Thomas G. Auchincloss, Jr., Aninda Katragadda, Sarah Cecil, Christopher J. Denn, John M. Mutkoski, and Robert E. Puopolo, and any one of them acting singly, the true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for the undersigned and in the undersigned's name, place and stead, in any and all capacities (until revoked in writing) to execute for and on behalf of the undersigned, in any and all of the undersigned's capacities, any and all statements on Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by Metabolix, Inc. (the "Company") in accordance with Sections 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission, and with any other entity when and if such is mandated by the Exchange Act or by the By-laws of the National Association of Securities Dealers, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary fully to all intents and purposes as the undersigned might or could do in person thereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of November 5, 2006.

Signature:        /s/ James J. Barber

Name: James J. Barber