

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**PRE-EFFECTIVE AMENDMENT NO. 1 TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

METABOLIX, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

04-3158289
(I.R.S. Employer
Identification No.)

**21 Erie Street
Cambridge, Massachusetts 02139
(617) 583-1700**
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Joseph Shaulson
President and Chief Executive Officer
Metabolix, Inc.
21 Erie Street
Cambridge, MA 02139
(617) 583-1700**
(Name, address, including zip code, and telephone number, including area code, of agent for service)

with copies to:

Sarah P. Cecil, Esq.
General Counsel
Metabolix, Inc.
21 Erie Street
Cambridge, MA 02139
(617) 583-1700

**John M. Mutkoski, Esq.
Thomas S. Levato, Esq.**
Goodwin Procter LLP
Exchange Place
Boston, Massachusetts 02109
(617) 570-1000

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box:

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box:

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Metabolix, Inc. is filing this pre-effective Amendment No. 1 (this "Amendment") to the Registration Statement on Form S-3 (Registration No. 333-193397) (the "Registration Statement") as an exhibit-only filing to re-file Exhibit 5.1 previously filed with the Registration Statement. Accordingly, this Amendment consists only of the facing page, this explanatory note, Item 16 of Part II of the Registration Statement, the signature page to the Registration Statement, the exhibit index and the re-filed Exhibit 5.1. The prospectus and the balance of Part II of the Registration Statement are unchanged and have been omitted.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 16. EXHIBITS

<u>Exhibit No.</u>	<u>Description</u>
1.1**	Form of Underwriting Agreement
4.1	Amended and Restated Certificate of Incorporation of the Company (incorporated by reference herein to the exhibits to the Company's Registration Statement on Form S-1 (File No. 333-135760))
4.2	Amended and Restated By-Laws of the Company (incorporated by reference herein to the exhibits to the Company's Registration Statement on Form S-1 (File No. 333-135760))
4.3	Certificate of Designations, Preferences and Rights of a Series of Preferred Stock of Metabolix, Inc. classifying and designating the Series A Junior Participating Cumulative Preferred Stock (incorporated herein by reference to the exhibits to the Company's Registration Statement on Form 8-A filed on July 8, 2009 (File No. 001-33133))
4.4	Shareholder Rights Agreement, dated as of July 7, 2009, between Metabolix, Inc. and American Stock Transfer & Trust Company, LLC, as Rights Agent (incorporated herein by reference to the exhibits to the Company's Registration Statement on Form 8-A filed on July 8, 2009 (File No. 001-33133))
4.5	Amendment No. 1 to Shareholder Rights Agreement, dated as of February 6, 2012, between Metabolix, Inc. and American Stock Transfer & Trust Company, LLC, as Rights Agent (incorporated herein by reference to the exhibits to the Company's Current Report on Form 8-K filed on February 10, 2012)
4.6	Specimen Stock Certificate for shares of the Company's Common Stock (incorporated by reference herein to the exhibits to the Company's Registration Statement on Form S-1 (File No. 333-135760))
4.7**	Form of Common Stock Warrant Agreement (together with form of Common Stock Warrant Certificate)
4.8**	Form of Preferred Warrant Agreement (together with form of Preferred Stock Warrant Certificate)
4.9**	Form of Certificate of Designation for the Preferred Stock (together with Preferred Stock Certificate)
4.10**	Form of Rights Agreement
4.11**	Form of Rights Certificate
5.1	Legal Opinion of Goodwin Procter LLP
23.1*	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm
23.2	Consent of Goodwin Procter LLP (included in the opinion filed as Exhibit 5.1)
24.1*	Power of Attorney (included on signature page to the Registration Statement)

* Previously filed.

** To be subsequently filed, if applicable, by an amendment to the Registration Statement or by a Current Report on Form 8-K.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this pre-effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the

METABOLIX, INC.

By: /s/ Joseph Shaulson

Name: Joseph Shaulson

Title: *President and Chief Executive Officer*

Pursuant to the requirements of the Securities Act of 1933, as amended, this pre-effective Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Joseph Shaulson</u> Joseph Shaulson	President and Chief Executive Officer and Director (principal executive officer)	February 12, 2014
<u>/s/ Joseph D. Hill</u> Joseph D. Hill	Chief Financial Officer (principal accounting and financial officer)	February 12, 2014
* <u>Peter N. Kellogg</u>	Director	February 12, 2014
* <u>Celeste Beeks Mastin</u>	Director	February 12, 2014
* <u>Oliver P. Peoples</u>	Director	February 12, 2014
* <u>Anthony J. Sinskey</u>	Director	February 12, 2014
* <u>Matthew Strobeck</u>	Director	February 12, 2014
* <u>Robert L. Van Nostrand</u>	Director	February 12, 2014
<u>/s/ Joseph D. Hill</u> * Joseph D. Hill, as Attorney-in-Fact		

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February 12, 2014

Metabolix, Inc.
21 Erie Street
Cambridge, MA 02139

Re: Securities Being Registered under Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-3 (as amended or supplemented, the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of up to \$100,000,000 of any combination of (i) common stock, par value \$0.01 per share (the "Common Stock"), of Metabolix, Inc., a Delaware corporation (the "Company"), (ii) preferred stock, par value \$0.01 per share, of the Company (the "Preferred Stock"), (iii) warrants to purchase Common Stock or Preferred Stock ("Warrants") and (iv) subscription rights to purchase securities of the Company ("Subscription Rights"). The Common Stock, Preferred Stock, Warrants and Subscription Rights are sometimes referred to collectively herein as the "Securities." Securities may be issued in an unspecified number. The Registration Statement provides that the Securities may be offered separately or together, in separate series, in amounts, at prices and on terms to be set forth in one or more prospectus supplements (each a "Prospectus Supplement") to the prospectus contained in the Registration Statement.

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions expressed below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

The opinions set forth below are limited to the Delaware General Corporation Law (which includes reported judicial decisions interpreting the Delaware General Corporation Law), the law of New York, and the federal law of the United States. Without limiting the generality of the foregoing, we express no opinion with respect to (i) state securities or "blue sky" laws, or (ii) state or federal antitrust laws.

For purposes of the opinions set forth below, without limiting any other exceptions or qualifications set forth herein, we have assumed that after the issuance of any Securities offered pursuant to the Registration Statement, the total number of issued shares of Common Stock or Preferred Stock, as applicable, together with the total number of shares of such stock issuable upon the exercise, exchange, conversion or settlement, as the case may be, of any exercisable,

exchangeable or convertible security (including without limitation any Warrant or Subscription Right), as the case may be, then outstanding, will not exceed the total number of authorized shares of Common Stock or Preferred Stock, as applicable, under the Company's certificate of incorporation as then in effect (the "Charter").

For purposes of the opinions set forth below, we refer to the following as the "Future Authorization and Issuance" of Securities:

- with respect to any of the Securities, (a) the authorization by the Company of the amount, terms and issuance of such Securities (the "Authorization") and (b) the issuance of such Securities in accordance with the Authorization therefor upon the receipt by the Company of the consideration (which, in the case of shares of Common Stock or Preferred Stock, is not less than the par value of such shares) to be paid therefor in accordance with the Authorization;
- with respect to Preferred Stock, (a) the establishment of the terms of such Preferred Stock by the Company in conformity with the Charter and applicable law and (b) the execution, acknowledgement and filing with the Delaware Secretary of State, and the effectiveness of, a certificate of designations to the Charter setting forth the terms of such Preferred Stock in accordance with the Charter and applicable law; and
- with respect to Warrants or Subscription Rights, (a) the authorization, execution and delivery by the Company and the other parties thereto of any agreement under which such Securities are to be issued and (b) the establishment of the terms of such Securities, and the execution and delivery of such Securities, in conformity with any applicable agreement under which such Securities are to be issued and applicable law.

Based upon the foregoing, and subject to the additional qualifications set forth below, we are of the opinion that:

1. Upon the Future Authorization and Issuance of shares of Common Stock, such shares of Common Stock, will be validly issued, fully paid and nonassessable.
2. Upon the Future Authorization and Issuance of shares of Preferred Stock, such shares of Preferred Stock will be validly issued, fully paid and nonassessable.
3. Upon the Future Authorization and Issuance of Warrants, such Warrants will be valid and binding obligations of the Company.

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4. Upon the Future Authorization and Issuance of Subscription Rights, such Subscription Rights will be valid and binding obligations of the Company.

The opinions expressed above are subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other similar laws of general application affecting the rights and remedies of creditors and to general principles of equity.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Goodwin Procter LLP

GOODWIN PROCTER LLP