UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM S-8

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.)

Metabolix, Inc. 21 Erie Street Cambridge, MA 02139

(Address of Principal Executive Offices) (Zip Code)

Joseph Shaulson Restricted Stock Unit Award Agreement Joseph Shaulson Non-Qualified Stock Option Agreement

(Full Title of the Plans)

Joseph Shaulson Chief Executive Officer Metabolix, Inc. 21 Erie Street Cambridge, MA 02139

(Name and Address of Agent for Service)

(617) 583-1700

(Telephone Number, Including Area Code, of Agent For Service)

Copies to:

Sarah P. Cecil General Counsel Metabolix, Inc. 21 Erie Street Cambridge, MA 02139 (617) 583-1700 John M. Mutkoski, Esq. Goodwin Procter LLP Exchange Place Boston, MA 02109 (617) 570-1000

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.

Large accelerated filer o Non-accelerated filer o Accelerated filer o Smaller reporting company x

CALCULATION OF REGISTRATION FEE

Title of Securities To Be Registered	Amount To Be Registered(1)	Maximum Maxim Offering Price Aggres		Proposed Maximum Aggregate offering Price	Amount of Registration Fee(4)		
Joseph Shaulson Restricted Stock Unit Award Agreement Common Stock, par value \$.01 per share	600,000 shares	\$	1.445(2)	\$	867,000	\$	112
Joseph Shaulson Non-Qualified Stock Option Agreement Common Stock, par value \$.01 per share	1,150,000 shares	\$	1.33(3)	\$	1,529,500	\$	197

- Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall also cover any additional shares of common stock, par value \$0.01 per share ("Common Stock"), which become issuable by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of outstanding shares of Common Stock.
- (2) The price of \$1.445 per share, which is the average of the high and low sales price for a share of Common Stock as reported on the Nasdaq Global Market on March 24, 2014, is set forth solely for purposes of calculating the registration fee pursuant to Rule 457(c) and (h) of the Securities Act.
- (3) Such shares are issuable upon the exercise of an outstanding option with a fixed exercise price. Pursuant to Rule 457(h) of the Securities Act, the aggregate offering price and the fee have been computed upon the basis of the price at which the option may be exercised.
- (4) Calculated pursuant to Section 6(b) of the Securities Act.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

The document(s) containing the information required in this Part I will be sent or given to employees as specified by Rule 428(b)(1) of the Securities Act. In accordance with the rules and regulations of the Securities and Exchange Commission (the "SEC") and the instructions to Form S-8, such documents are not being filed with the SEC either as part of this registration statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act. These documents and the documents incorporated by reference in the registration statement pursuant to Item 3 of Part II of this Form, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

This Registration Statement relates to an employment inducement option to purchase 1,150,000 shares of the Company's Common Stock and an employment inducement grant of restricted stock units with respect to 600,000 shares of the Company's Common Stock (collectively, the "Inducement Grants"), each awarded to Joseph Shaulson. The Inducement Grants were made outside of the Company's 2006 Stock Option and Incentive Plan, as amended from time to time, as a material inducement to the decision by Mr. Shaulson to accept employment as Chief Executive Officer of the Company.

Item 3. <u>Incorporation of Documents by Reference</u>.

The following documents filed with the Commission are incorporated by reference in this Registration Statement:

- (a) The Registrant's Annual Report on Form 10-K for the year ended December 31, 2013, filed on March 28, 2014;
- (b) All other reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act ") since December 31, 2013; and
- (c) The section entitled "Description of Registrant's Securities to be Registered" contained in the Registrant's Registration Statement on Form 8-A, filed pursuant to Section 12(b) of the Exchange Act, on November 6, 2006, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed with the Commission by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered herein have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part thereof from the date of filing of such documents.

Item 6. Indemnification of Directors and Officers.

The Delaware General Corporation Law and our By-laws provide for indemnification of our directors and officers for liabilities and expenses that they may incur in those capacities. In general, directors and officers are indemnified with respect to actions taken in good faith in a manner reasonably believed to be in, or not opposed to, the best interests of the Registrant, and with respect to any criminal action or proceeding, actions that the indemnitee had no reasonable cause to believe were unlawful. We refer you to our Amended and Restated By-laws filed as Exhibit 3.3 to our Registration Statement on Form S-1 filed with the SEC on July 14, 2006 (File No. 333-135760).

The Registrant has entered into agreements with certain of its officers and directors that also provide for such indemnification and expenses and liability reimbursement. These agreements require the Registrant to indemnify such persons against liabilities that may arise by reason of their status or service as officers and directors and to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified. In addition, the Registrant has an existing directors and officers liability insurance policy to insure such persons against certain liabilities.

Item 8. Exhibits.

See the Exhibit Index on the page immediately preceding the exhibits for a list of exhibits filed as part of this Registration Statement on Form S-8, which Exhibit Index is incorporated herein by reference.

Item 9. Undertakings.

- (a) The Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act.
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high and of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement.
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 6, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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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-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on March 28, 2014.

METABOLIX, INC.

By: /s/ Joseph Shaulson

Joseph Shaulson

President, Chief Executive Officer and Director

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Metabolix, Inc. (the "Company"), hereby severally constitute and appoint Joseph Shaulson, Joseph D. Hill, and Sarah P. Cecil, and each of them singly, our true and lawful attorneys, with full power to them, and to each of them singly, to sign for us and in our names in the capacities indicated below, any and all amendments to this Registration Statement, and all other documents in connection therewith to be filed with the Securities and Exchange Commission, and generally to do all things in our names and on our behalf in such capacities to enable the Company to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

/s/ Joseph Shaulson Joseph Shaulson	Director, President and Chief Executive Officer (Principal Executive Officer)	March 28, 2014
/s/ Joseph D. Hill Joseph D. Hill	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 28, 2014
/s/ Peter N. Kellogg Peter N. Kellogg	Director	March 28, 2014
/s/ Celeste Beeks Mastin Celeste Beeks Mastin	Director	March 28, 2014
/s/ Oliver P. Peoples Oliver P. Peoples	Director	March 28, 2014
/s/ Anthony J. Sinskey Anthony J. Sinskey	Director	March 28, 2014
/s/ Matthew Strobeck Matthew Strobeck	Director	March 28, 2014
/s/ Robert L. Van Nostrand Robert L. Van Nostrand	Director	March 28, 2014

Exhibit No.	Description of Exhibit
5.1	Opinion of Goodwin Procter LLP
23.1	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
23.2	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm
24.1	Power of Attorney (included as part of the signature page of this Registration Statement)
99.1	Restricted Stock Unit Award Agreement between the Registrant and Joseph Shaulson dated January 2, 2014 (incorporated by reference to Exhibit 10.14 to the Registrant's Annual Report on Form 10-K filed with the Commission on March 28, 2014)
99.2	Non-Qualified Stock Option Agreement between the Registrant and Joseph Shaulson dated December 19, 2013 (incorporated by reference to Exhibit 10.13 to the Registrant's Annual Report on Form 10-K filed with the Commission on March 28, 2014)
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Metabolix, Inc. 21 Erie Street Cambridge, MA 02139

Re: <u>Securities Being Registered under Registration Statement on Form S-8</u>

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to an aggregate of 1,750,000 shares (the "Shares") of Common Stock, \$0.01 par value per share, of Metabolix, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's Restricted Stock Unit Award Agreement with Joseph Shaulson and the Company's Non-Qualified Stock Option Agreement with Joseph Shaulson (collectively, the "Grants").

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

The opinion expressed below is limited to the Delaware General Corporation Law (which includes reported judicial decisions interpreting the Delaware General Corporation Law).

For purposes of the opinion expressed below, we have assumed that a sufficient number of authorized but unissued shares of the Company's Common Stock will be available for issuance when the Shares are issued.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Grants will be validly issued, fully paid and nonassessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to 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

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 28, 2014 relating to the financial statements which appear in Metabolix, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2013.

/s/ PricewaterhouseCoopers LLP Boston, Massachusetts March 28, 2014