Metabolix, Inc. 21 Erie Street Cambridge, MA 02139

May 6, 2011

Via EDGAR

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street N.E. Washington, D.C. 20549

Attention: Sherry Haywood

RE: Metabolix, Inc.

Registration Statement on Form S-3

File No. 333-172725

Ladies and Gentlemen:

Pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended, Metabolix, Inc. ("Metabolix") hereby respectfully requests that the effectiveness of the above-referenced registration statement on Form S-3 be accelerated to 4:30 p.m. Eastern Standard Time on May 9, 2011 or as soon as practicable thereafter.

Metabolix hereby acknowledges the following:

- Should the Securities and Exchange Commission (the "Commission") or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- · The action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve Metabolix from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- · Metabolix may not assert the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you should have any questions regarding this request, please do not hesitate to contact me at (617) 583-1700 or Joseph C. Theis, Esq. (617) 570-1928 of Goodwin Procter LLP.

Very truly yours,

METABOLIX, INC.

By: /s/ Sarah P. Cecil
Name: Sarah P. Cecil, Esq.

Title: General Counsel