UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No.)*

METABOLIX, INC.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

591018809

(CUSIP Number)

November 9, 2006

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- o Rule 13d-1(b)
- x Rule 13d-1(c)
- o Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 591018809

| 1. | Names of F Vertical Fur | Reporting Persons. I.R.S. Identification Nos. of above persons (entities only) ad I, L.P. | | | |
|--|---|--|--|--|--|
| 2. | Check the Appropriate Box if a Member of a Group (See Instructions) | | | | |
| | (a) | 0 | | | |
| | (b) | X | | | |
| 3. | SEC Use O | EC Use Only | | | |
| 4. Citizenship or Place of Organization Delaware | | or Place of Organization | | | |
| Number of | 5. | Sole Voting Power 988,809 | | | |
| Shares Beneficially | | | | | |

| | 7. | Sole Dispositive Power 988,809 | | |
|---|---|---|--|--|
| | 8. | Shared Dispositive Power 0 | | |
| 9. | Aggregate Amoun 988,809 | t Beneficially Owned by Each Reporting Person | | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o | | | |
| 11. | Percent of Class Represented by Amount in Row (9) 5.07% | | | |
| 12. | Type of Reporting Person (See Instructions) PN | | | |
| | | 2 | | |
| 1 | | 2 | | |
| CUSIP No. 5 | 91018809 | | | |
| 1. | Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only) Vertical Fund II, L.P. | | | |
| 2. | riate Box if a Member of a Group (See Instructions) | | | |
| | (a) 0 | | | |
| | (b) x | | | |
| 3. | SEC Use Only | | | |
| 4. | Citizenship or Place of Organization Delaware | | | |
| | 5. | Sole Voting Power 711,174 | | |
| Number of Shares Beneficially Owned by Each Reporting Person With | 6. | Shared Voting Power 0 | | |
| | 7. | Sole Dispositive Power 711,174 | | |
| | 8. | Shared Dispositive Power 0 | | |
| 9. | Aggregate Amoun 711,174 | t Beneficially Owned by Each Reporting Person | | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o | | | |

12. Type of Reporting Person (See Instructions) PN

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CUSIP No. 591018809

| 1. | Names of Rep Jack W. Lasers | oorting Persons. I.R.S. Identification Nos. of above persons (entities only) sohn | | | | |
|--|---|--|--|--|--|--|
| 2. | Check the Appropriate Box if a Member of a Group (See Instructions) | | | | | |
| | (a) | 0 | | | | |
| | (b) | X | | | | |
| | | | | | | |
| 3. | SEC Use Only | | | | | |
| 4. | Citizenship or Place of Organization United States | | | | | |
| Number of Shares Beneficially | 5. | Sole Voting Power 20,000 | | | | |
| | 6. | Shared Voting Power 1,719,983 | | | | |
| Owned by Each Reporting Person With | 7. | Sole Dispositive Power 20,000 | | | | |
| | 8. | Shared Dispositive Power 1,719,983 | | | | |
| 9. | Aggregate Amount Beneficially Owned by Each Reporting Person 1,719,983 | | | | | |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o | | | | | |
| 11. | Percent of Class Represented by Amount in Row (9) 8.80% | | | | | |
| 12. | Type of Reporting Person (See Instructions) IN | | | | | |
| | | | | | | |

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Item 1.

Metabolix, Inc.

(b) Address of Issuer's Principal Executive Offices
 21 Erie Street
 Cambridge, Massachusetts 02139

Item 2.

Item 3.

| (a) | Name of Person Filing Vertical Fund I, L.P. ("VFI") and Vertical Fund II, L.P. ("VFII" and together with VFI, the "Partnerships") Jack W. Lasersohn ("Lasersohn") |
|---------|--|
| (b) | Address of Principal Business Office or, if none, Residence Each of the Partnerships and Lasersohn has a principal business address at 25 DeForest Avenue, Summit, New Jersey 07901. |
| (c) | Citizenship Each of the Partnerships is a Delaware limited partnership. Lasersohn is a citizen of the United States. |
| (d) | Title of Class of Securities Common Stock |
| (e) | CUSIP Number 591018809 |
| | |
| If this | s statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a: |
| (a) | o Broker or dealer registered under section 15 of the Act (15 U.S.C. 780). |

- (b) o Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) o Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) o Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
- (e) o An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) o An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) o A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h) o A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) o A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) o Group, in accordance with §240.13d-1(b)(1)(ii)(J).

None of the above. The statement is filed pursuant to Rule 13d-1(c).

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Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned: 1,719,983 shares of Common Stock
 (b) Percent of class: 8.80%
 (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote 1,719,983
 - (ii) Shared power to vote or to direct the vote

| | <u> </u> |
|-------|---|
| (iii) | Sole power to dispose or to direct the disposition of |
| | 1,719,983 |
| (iv) | Shared power to dispose or to direct the disposition of |
| | 0 |

The foregoing amounts of shares and percentage represent the combined holdings of the two Partnerships and Lasersohn as of the date hereof. Of such amounts, VFI beneficially owns 893,382 shares (4.61% of the total outstanding) and also beneficially owns warrants to purchase an additional 95,427 shares (.49% of the total outstanding upon exercise of such warrants). VFII beneficially owns 666,542 shares (3.44% of the total outstanding) and also beneficially owns warrants to purchase an additional 44,632 shares (.23% of the total outstanding upon exercise of such warrants). Additionally, Lasersohn was granted an option to purchase an aggregate of 20,000 shares, which option is fully vested as of the date hereof. As a result, the shares underlying the option held by Lasersohn have been included for purposes of calculating his ownership and the total beneficial ownership set forth above. The Partnerships and Lasersohn are filing this statement jointly to reflect their combined ownership because the sole general partner of each Partnership is The Vertical Group, L.P., a Delaware limited partnership ("Vertical"), and Lasersohn is a general partner of Vertical, and the Partnerships and Lasersohn may be deemed to constitute a "group" as such term is used in Section 13(d)(3) of the Securities Exchange Act of 1934, as amended.

| Item 5. | Ownership of Five Percent or Less of a Class | | |
|--|---|--|--|
| If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o. | | | |
| | Not applicable. | | |
| | | | |
| Item 6. | Ownership of More than Five Percent on Behalf of Another Person | | |
| | Not applicable. | | |
| | | | |
| Item 7. | Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person | | |
| | Not applicable. | | |
| | | | |
| Item 8. | Identification and Classification of Members of the Group | | |
| | Not applicable. | | |
| | | | |
| Item 9. | Notice of Dissolution of Group | | |
| | Not applicable. | | |
| | | | |
| Item 10. | Certification | | |

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: November 21, 2006

VERTICAL FUND I, L.P.

By: THE VERTICAL GROUP, L.P. General Partner

By: /s/ John E. Runnells

John E. Runnells, General Partner.

VERTICAL FUND II, L.P.

By: THE VERTICAL GROUP, L.P. General Partner

By: /s/ John E. Runnells

John E. Runnells General Partner

/s/ Jack W. Lasersohn JACK W. LASERSOHN

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