SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 2)*

ABIOMED, INC.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

003654100

(CUSIP Number)

Martin P. Sutter

Essex Woodlands Health Ventures Fund VI, L.P.

Essex Woodlands Health Ventures Fund VII, L.P.

21 Waterway Avenue, Suite 225

The Woodlands, Texas 77380

(281) 364-1555

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

December 31, 2015

(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed
" Rule 13d-1(b)
x Rule 13d-1(c)

"Rule 13d-1(d)

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).

^{*} 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.

SCHEDULE 13G

CUSIP No. 003654100 Page 2 of 21 Pages

- 1 NAME OF REPORTING PERSON
 - S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
 - Essex Woodlands Health Ventures Fund VI, L.P.
- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " (b) x
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF

SHARES 946,818

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

-0-

EACH 7 SOLE DISPOSITIVE POWER

REPORTING

PERSON 946,818

8 SHARED DISPOSITIVE POWER

WITH

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

946,818

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.2%

12 TYPE OF REPORTING PERSON

PN

CUSIP No. 003654100 Page 3 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Essex Woodlands Health Ventures VI, L.P.

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " (b) x
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF

SHARES 946,818

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

-0-

EACH 7 SOLE DISPOSITIVE POWER

REPORTING

PERSON 946,818

8 SHARED DISPOSITIVE POWER

WITH

-0-

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946,818

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- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.2%

12 TYPE OF REPORTING PERSON

PN

CUSIP No. 003654100 Page 4 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Essex Woodlands Health Ventures VI, L.L.C.

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " (b) x
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF

SHARES 946,818

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

-0-

EACH 7 SOLE DISPOSITIVE POWER

REPORTING

PERSON 946,818

8 SHARED DISPOSITIVE POWER

WITH

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

946,818

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.2%

12 TYPE OF REPORTING PERSON

00

CUSIP No. 003654100 Page 5 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Essex Woodlands Health Ventures Fund VII, L.P.

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " (b) x
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF

SHARES 1,203,182

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

-0-

EACH

7 SOLE DISPOSITIVE POWER

REPORTING

PERSON 1,203,182

8 SHARED DISPOSITIVE POWER

WITH

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,203,182

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.9%

12 TYPE OF REPORTING PERSON

PN

CUSIP No. 003654100 Page 6 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Essex Woodlands Health Ventures VII, L.P.

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " (b) x
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF

SHARES 1,203,182

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

-0-

EACH 7 SOLE DISPOSITIVE POWER

REPORTING

PERSON 1,203,182

8 SHARED DISPOSITIVE POWER

WITH

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,203,182

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.9%

12 TYPE OF REPORTING PERSON

PN

CUSIP No. 003654100 Page 7 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Essex Woodlands Health Ventures VII, L.L.C.

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " (b) x
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF

SHARES 1,203,182

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

-0-

EACH

7 SOLE DISPOSITIVE POWER

REPORTING

1,203,182

PERSON 8 SHARED DISPOSITIVE POWER

WITH

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,203,182

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.9%

12 TYPE OF REPORTING PERSON

00

CUSIP No. 003654100 Page 8 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

James L. Currie

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " **(b)** x
- 3 **SEC USE ONLY**
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF

-0-**SHARES**

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

2,150,000

EACH

7 SOLE DISPOSITIVE POWER

REPORTING

-0-**PERSON**

8 SHARED DISPOSITIVE POWER

WITH

2,150,000

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9

2,150,000

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.1%

12 TYPE OF REPORTING PERSON

IN

CUSIP No. 003654100 Page 9 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Martin P. Sutter

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " **(b)** x
- 3 **SEC USE ONLY**
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF

162,372 **SHARES**

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

2,150,000

EACH

7 SOLE DISPOSITIVE POWER

REPORTING

PERSON

162,372

8 SHARED DISPOSITIVE POWER

WITH

2,150,000

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,312,372

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.4%

12 TYPE OF REPORTING PERSON

IN

CUSIP No. 003654100 Page 10 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Immanuel Thangaraj

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " **(b)** x
- 3 **SEC USE ONLY**
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF

-0-**SHARES**

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

2,150,000

EACH

7 SOLE DISPOSITIVE POWER

REPORTING

-0-**PERSON**

8 SHARED DISPOSITIVE POWER

WITH

2,150,000

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9

2,150,000

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.1%

12 TYPE OF REPORTING PERSON

IN

CUSIP No. 003654100 Page 11 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Jeff Himawan

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " (b) x
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF

SHARES -0-

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

2,150,000

EACH

7 SOLE DISPOSITIVE POWER

REPORTING

PERSON .

-0-

8 SHARED DISPOSITIVE POWER

WITH

2,150,000

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,150,000

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.1%

12 TYPE OF REPORTING PERSON

IN

CUSIP No. 003654100 Page 12 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Petri Vainio

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " **(b)** x
- 3 **SEC USE ONLY**
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF

-0-**SHARES**

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

2,150,000

EACH

7 SOLE DISPOSITIVE POWER

REPORTING

-0-**PERSON**

8 SHARED DISPOSITIVE POWER

WITH

2,150,000

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9

2,150,000

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.1%

12 TYPE OF REPORTING PERSON

IN

CUSIP No. 003654100 Page 13 of 21 Pages

1 NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Ron Eastman

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 - (a) " **(b)** x
- 3 **SEC USE ONLY**
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF

-0-**SHARES**

6 SHARED VOTING POWER

BENEFICIALLY

OWNED BY

1,203,182

EACH

7 SOLE DISPOSITIVE POWER

REPORTING

-0-**PERSON**

8 SHARED DISPOSITIVE POWER

WITH

1,203,182

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9

1,203,182

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES "
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.9%

12 TYPE OF REPORTING PERSON

IN

ORIGINAL REPORT ON SCHEDULE 13G/A

Item 1.

- (a) Name of Issuer: ABIOMED, INC.
- (b) Address of Issuer s Principal Executive Offices: 22 Cherry Hill Drive

Danvers, Massachusetts 01923

Item 2.

- (a) Name of Person Filing: This Schedule 13G/A is being filed jointly by Essex Woodlands Health Ventures Fund VI, L.P., a Delaware limited partnership (Essex VI), Essex Woodlands Health Ventures Fund VII, L.P., a Delaware limited partnership (Essex VII , and together with Essex VI, the Funds), Essex Woodlands Health Ventures VI, L.P., a Delaware limited partnership, the general partner of Essex VI (the Essex VI GP), Essex Woodlands Health Ventures VII, L.P., a Delaware limited partnership, the general partner of Essex VII (the Essex VII GP and together with the Essex VI GP, the Fund GPs), Essex Woodlands Health Ventures VI, L.L.C., a Delaware limited liability company, the general partner of Essex VI GP (the Essex VI General Partner), Essex Woodlands Health Ventures VII, L.L.C., a Delaware limited company, (Essex VII General Partner and together with Essex VI General Partner, the General Partners), James L. Currie, an individual, Martin P. Sutter, an individual, Immanuel Thangaraj, an individual, Petri Vainio, an individual, Jeff Himawan, an individual, and Ron Eastman, an individual, (each a Manager , collectively, the Managers , and together with the Funds, Fund GPs and the General Partners, the Reporting Persons).
- (b) Address of Principal Business Office: The address of the principal business of each of the Reporting Persons is 21 Waterway, Suite 225, The Woodlands, Texas 77380.
- (c) Citizenship: (i) Essex Woodlands Health Ventures Fund VI, L.P. is a Delaware limited partnership; (ii) Essex Woodlands Health Ventures VI, L.P. is a Delaware limited partnership, (iii) Essex Woodlands Health Ventures VI, L.L.C. is a Delaware limited liability company; (iv) Essex Woodlands Health Ventures Fund VII, L.P. is a Delaware limited partnership; (v) Essex Woodlands Health Ventures VII, L.P. is a Delaware limited partnership, (vi) Essex Woodlands Health Ventures VII, L.L.C. is a Delaware limited liability company; (iv) James L. Currie, Martin P. Sutter, Immanuel Thangaraj, Petri Vainio, Jeff Himawan and Ron Eastman are all individuals who are citizens of the United States.
- (d) Title and Class of Securities: Common Stock, par value \$.001 per share
- (e) CUSIP Number: 003654100

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

(a) "Broker or dealer registered under section 15 of the Act (15 U.S.C. 780).

- (b) " Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) "Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).

- (d) " Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a 8).
- (e) "An investment adviser in accordance with 240.13d-1(b)(1)(ii)(E);
- (f) "An employee benefit plan or endowment fund in accordance with 240.13d-1(b)(1)(ii)(F);
- (g) " A parent holding company or control person in accordance with 240.13d-1(b)(1)(ii)(G);
- (h) " A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) " 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) " Group, in accordance with 240.13d-1(b)(1)(ii)(J).

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.

For each of Essex VI, the Essex VI GP and the Essex VI General Partner, 946,818 shares.

For each of Essex VII, the Essex VII GP and the Essex VII General Partner, 1,203,182 shares.

For the Manager: Martin P. Sutter, 2,312,372 shares.

For each of the Managers: James L. Currie, Immanuel Thangaraj, Petri Vainio and Jeff Himawan, 2,150,000 shares.

For the Manager: Ron Eastman, 1,203,182 shares.

(b) Percent of Class.

For each of Essex VI, the Essex VI GP and the Essex VI General Partner, 2.2%.

For each of Essex VII, the Essex VII GP and the Essex VII General Partner, 2.9%.

For the Manager: Martin P. Sutter, 5.4%.

For each of the Managers: James L. Currie, Immanuel Thangaraj, Petri Vainio and Jeff Himawan, 5.1%.

For the Manager: Ron Eastman, 2.9%.

- (c) Number of shares as to which such person has:
- (i) Sole power to vote or to direct the vote:

For each of Essex VI, the Essex VI GP and the Essex VI General Partner, 946,818 shares.

For each of Essex VII, the Essex VII GP and the Essex VII General Partner, 1,203,182 shares.

For the Manager: Martin P. Sutter, 162,372 shares.

(ii) Shared power to vote or to direct the vote:

For each of the Managers: James L. Currie, Martin P. Sutter, Immanuel Thangaraj, Petri Vainio and Jeff Himawan, 2.150.000 shares.

For the Manager: Ron Eastman, 1,203,182 shares.

(iii) Sole power to dispose or to direct the disposition of:

For each of Essex VI, the Essex VI GP and the Essex VI General Partner, 946,818 shares.

For each of Essex VII, the Essex VII GP and the Essex VII General Partner, 1,203,182 shares.

For the Manager: Martin P. Sutter, 162,372 shares.

(iv) Shared power to dispose or to direct the disposition of:

For each of the Managers: James L. Currie, Martin P. Sutter, Immanuel Thangaraj, Petri Vainio and Jeff Himawan, 2,150,000 shares.

For the Manager: Ron Eastman, 1,203,182 shares.

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 ".

Item 6. Ownership of More than Five Percent on Behalf of Another Person

N/A

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company

N/A

Item 8. Identification and Classification of Members of the Group

N/A

Item 9. Notice of Dissolution of Group

N/A

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 the purpose or effect.

SIGNATURES

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

Date: February 12, 2016

ESSEX WOODLANDS HEALTH VENTURES FUND VI, L.P.

INDIVIDUALS:

/s/ James L. Currie

By: Essex Woodlands Health Ventures VI, L.P.,

Its General Partner

By: Essex Woodlands Health Ventures VI, .L.L.C.,

Its General Partner Name: James L. Currie

By: /s/ Martin P. Sutter /s/ Martin P. Sutter
Name: Martin P. Sutter
Name: Martin P. Sutter

Title: Managing Director

ESSEX WOODLANDS HEALTH VENTURES VI, L.P. /s/ Immanuel Thangaraj

Name: Immanuel Thangaraj

By: Essex Woodlands Health Ventures VI, .L.L.C.,

Its General Partner

By: /s/ Martin P. Sutter /s/ Jeff Himawan
Name: Martin P. Sutter Name: Leff Himawan

Name: Martin P. Sutter

Title: Managing Director

Name: Jeff Himawan

/s/ Petri Vainio
ESSEX WOODLANDS HEALTH VENTURES VI, L.L.C. Name: Petri Vainio

By: /s/ Martin P. Sutter
Name: Martin P. Sutter
Title: Managing Director

ESSEX WOODLANDS HEALTH VENTURES FUND VII,

L.P. INDIVIDUALS:

By: Essex Woodlands Health Ventures VII, L.P.,

Its General Partner

/s/ Ron Eastman

By: Essex Woodlands Health Ventures VII, .L.L.C.,

Its General Partner

Name: Ron Eastman

By: /s/ Martin P. Sutter

Name: Martin P. Sutter Title: Managing Director

ESSEX WOODLANDS HEALTH VENTURES VII, L.P.

By: Essex Woodlands Health Ventures VII, .L.L.C.,

Its General Partner

By: /s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing

Director

ESSEX WOODLANDS HEALTH VENTURES VII, L.L.C.

By: /s/ Martin P. Sutter Name: Martin P. Sutter Title: Managing Director