ABIOMED INC
Form SC 13G/A
February 14, 2011

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No. 1)*

Abiomed Inc.

(Name of Issuer)

Common

(Title of Class of Securities)

003654100

(CUSIP Number)

December 31, 2010

(Date of Event Which Requires Filing of this Statement)

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

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

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1745 (3-06)

CUSIP No. 003654100

1. Names of Reporting Persons
I.R.S. Identification Nos. of above persons (entities only).
PRIMECAP Management Company 95-3868081

2. Check the Appropriate Box if a Member of a Group (See Instructions)
(a) o
(b) o

3. SEC Use Only

4. Citizenship or Place of Organization
225 South Lake Ave., #400, Pasadena, CA 91101

Number of Shares Beneficially Owned by Each Reporting Person With		
	5.	Sole Voting Power 2,199,473
	6.	Shared Voting Power 0
	7.	Sole Dispositive Power 2,884,296
	8.	Shared Dispositive Power 0

9. Aggregate Amount Beneficially Owned by Each Reporting Person
2,884,296

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)
7.62%

12. Type of Reporting Person (See Instructions)
IA

Item 1.

	(a)	Name of Issuer Abiomed Inc.
	(b)	Address of Issuer s Principal Executive Offices 22 Cherry Hill Dr., Danvers, MA 01923

Item 2.

	(a)	Name of Person Filing PRIMECAP Management Company
	(b)	Address of Principal Business Office or, if none, Residence 225 South Lake Ave., #400, Pasadena, CA 91101
	(c)	Citizenship U.S.A.
	(d)	Title of Class of Securities Common
	(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)	o	Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
(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)	x	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 association 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	A non-U.S. institution in accordance with § 240.13d 1(b)(1)(ii)(J);
(k)	o	Group, in accordance with § 240.13d 1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with § 240.13d 1(b)(1)(ii)(J), please specify the type of institution:_____

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:

2,884,296

(b) Percent of class:

7.62%

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote

2,199,473

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

0

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

2,884,296

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

0

Instruction. For computations regarding securities which represent a right to acquire an underlying security *see* §240.13d-1(d)(1).

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.

Instruction: Dissolution of a group requires a response to this item.

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

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than five percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person

If a parent holding company has filed this schedule, pursuant to Rule 13d-1(b)(ii)(G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company has filed this schedule pursuant to Rule 13d-1(c) or Rule 13d-1(d), attach an exhibit stating the identification of the relevant subsidiary.

Item 8. Identification and Classification of Members of the Group

If a group has filed this schedule pursuant to §240.13d-1(b)(1)(ii)(J), so indicate under Item 3(j) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to §240.13d-1(c) or §240.13d-1(d), attach an exhibit stating the identity of each member of the group.

Item 9. Notice of Dissolution of Group

Notice of dissolution of a group may be furnished as an exhibit stating the date of the dissolution and that all further filings with respect to transactions in the security reported on will be filed, if required, by members of the group, in their individual capacity. See Item 5.

Item 10. Certification

(a) The following certification shall be included if the statement is filed pursuant to §240.13d-1(b):

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and 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.

(b) The following certification shall be included if the statement is filed pursuant to §240.13d-1(c):

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.

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.

February 4, 2011
Date

/s/ Karen Chen
Signature

Karen Chen, CCO
Name/Title

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other that an executive officer or general partner of the filing person, evidence of the representative s authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. *See* §240.13d-7 for other parties for whom copies are to be sent.

ATTENTION
Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).