

**UNITED STATES
SECURITIES AND EXCHANGE
COMMISSION**

Washington, D.C. 20549

SCHEDULE 13G

OMB APPROVAL
OMB Number: 3235-0145
Expires: December 31, 2005
Estimated average burden hours per response. . 11

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

Adherex Technologies Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

00686R 10 1

(CUSIP Number)

December 31, 2004

(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)
- Rule 13d-1(c)
- 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. 00686R 10 1

1. Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only)
HBM BioVentures (Cayman) Ltd.

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

- (a)
- (b)

3. SEC Use Only

4. Citizenship or Place of Organization
Cayman Islands, British West Indies

Number of Shares Beneficially Owned by Each

5. Sole Voting Power
34,445,380 (1)

6. Shared Voting Power
0

Reporting
Person With

7. Sole Dispositive Power
34,445,380 (1)

8. Shared Dispositive Power
0

9. Aggregate Amount Beneficially Owned by Each Reporting Person
34,445,380 (1)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)
18.0%

12. Type of Reporting Person (See Instructions)
PN

(1) Includes 11,838,937 shares of common stock issuable pursuant to warrants that are exercisable within 60 days of December 31, 2004.

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Item 1.

- (a) Name of Issuer
Adherex Technologies Inc.
-
- (b) Address of Issuer's Principal Executive Offices
2300 Englert Drive, Suite G
Research Triangle Park
Durham, North Carolina 27713
-

Item 2.

- (a) Name of Person Filing
HBM BioVentures (Cayman) Ltd.
-
- (b) Address of Principal Business Office or, if none, Residence
Centennial Towers, Third Floor, 2454 West Bay Road
Grand Cayman, Cayman Islands, British West Indies
-
- (c) Citizenship
Cayman Islands, British West Indies
-
- (d) Title of Class of Securities
Common Stock
-
- (e) CUSIP Number
00686R 10 1
-

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. 78o).
- (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 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).
- Not applicable.

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:
34,445,380

(b) Percent of class:
18.0%

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

(i) Sole power to vote or to direct the vote
34,445,380

(ii) Shared power to vote or to direct the vote
0

(iii) Sole power to dispose or to direct the disposition of
34,445,380

(iv) Shared power to dispose or to direct the disposition of
0

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

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

Not applicable.

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

Not applicable.

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.

September 1, 2005

Date

/s/ John Arnold

Signature

John Arnold, Chairman and Managing Director

Name/Title