

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

**SCHEDULE 13G/A**

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

**Adherex Technologies Inc.**

(Name of Issuer)

**Common Shares**

(Title of Class of Securities)

**00686R 10 1**

(CUSIP Number)

**December 31, 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:

- 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  
Reporting  
Person With

5. Sole Voting Power  
6,802,220(1)

6. Shared Voting Power  
0

7. Sole Dispositive Power  
6,802,220(1)

8. Shared Dispositive Power  
0

---

9. Aggregate Amount Beneficially Owned by Each Reporting Person  
6,802,220(1)

---

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o  
Not Applicable

---

11. Percent of Class Represented by Amount in Row (9)  
12.18%

---

12. Type of Reporting Person (See Instructions)  
CO

---

---

(1) Includes 2,689,218 Common Shares issuable pursuant to warrants that are exercisable within 60 days of December 31, 2006.

2

---

CUSIP No. 00686R 10 1

---

Reference is hereby made to the statement on Schedule 13G originally filed with the U.S. Securities and Exchange Commission (the "Commission") on September 1, 2005 (the "Schedule 13G"). Terms defined in the Schedule 13G are used herein as so defined.

The following Item of the Schedule 13G is hereby amended and restated to read in its entirety as follows:

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:

6,802,220(1)

---

(b) Percent of class:

12.18%

---

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

---

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

6,802,220(1)

---

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

0

---

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

6,802,220(1)

---

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

0

---

---

(1) Includes 2,689,218 Common Shares issuable pursuant to warrants that are exercisable within 60 days of December 31, 2006.

3

---

**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.

Date: February 12, 2007

**HBM BIOVENTURES (CAYMAN) LTD.**

By: /s/ John Arnold

John Arnold  
Name

Chairman & Managing Director  
Title