

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

FORM 8-K

CURRENT REPORT

**Pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported) May 13, 2008

ADHEREX TECHNOLOGIES INC.

(Exact name of registrant as specified in its charter)

Canada

(State or other jurisdiction of incorporation)

001-32295

(Commission File Number)

20-0442384

(IRS Employer ID Number)

4620 Creekstone Drive, Suite 200, Durham, North Carolina 27703

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code (919) 484-8484

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

On May 13, 2008, Adherex Technologies Inc. entered into a License Agreement with Stichting Antoni van Leeuwenhoek Ziekenhuis or the Netherlands Cancer Institute (“NKI-AVL”) that provides Adherex with an exclusive, worldwide license to use data from a Phase III trial of sodium thiosulfate (“STS”) and follow-up STS studies (the “Licensed Data”) for a new drug application with the U.S. Food and Drug Administration and equivalent regulatory agencies worldwide. NKI-AVL retains the non-exclusive, royalty-free right to use the Licensed Data for academic purposes. Adherex is required to make upfront payments and regulatory milestone payments to NKI-AVL that could total up to 220,000 Euro.

The License Agreement continues until termination by either party. Adherex or NKI-AVL may terminate the License Agreement for a breach by the other party that remains uncured for 30 days. Adherex may terminate the License Agreement upon 3 months’ notice if it decides not to continue developing STS.

A copy of the press release announcing the License Agreement is attached to this current report on Form 8-K as Exhibit 99.1. A copy of the License Agreement will be filed as an exhibit to Adherex’s Quarterly Report on Form 10-Q for the quarter ending June 30, 2008.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

| <u>Exhibit No.</u> | <u>Description of Document</u> |
|--------------------|--|
| 99.1 | Press Release dated May 14, 2008 announcing the License Agreement. |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned hereunto duly authorized.

Adherex Technologies Inc.

By: /s/ James A. Klein, Jr.

James A. Klein, Jr.

Chief Financial Officer

Dated: May 19, 2008



PRESS RELEASE

ADHEREX ANNOUNCES AGREEMENT FOR STS PHASE III DATA

Research Triangle Park, NC, May 14, 2008 - Adherex Technologies Inc. (AMEX:ADH, TSX:AHX), a biopharmaceutical company devoted to solving problems for patients with cancer, announced today a license agreement with the Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital (NKI-AVL) for the exclusive use of data from a Phase III trial conducted by Dr. Charlotte Zuur and colleagues of the NKI-AVL with sodium thiosulfate (STS) to prevent hearing loss in adults with head and neck cancer, published in the Journal of Clinical Oncology in August 2007 and entitled "Ototoxicity in a Randomized Phase III Trial of Intra-Arterial Compared With Intravenous Cisplatin Chemoradiation in Patients with Locally Advanced Head and Neck Cancer". The agreement includes an exclusive license to data from a planned study intended to provide long-term follow-up on the hearing status, disease-free status and overall survival of patients from the completed Phase III trial.

"This agreement and the long-term follow-up data are valuable additions to our ongoing STS Phase III studies with SIOPEL and the Children's Oncology Group and our planned trial in adult head and neck cancer patients," said Dr. William P. Peters, Chairman and CEO of Adherex. "As many as 2,000 children and up to 30,000 adults in the U.S. alone are at risk for platinum chemotherapy related hearing loss annually. With this trial, we will have safety and efficacy data for an aggregate of more than 550 patients in our ongoing and completed Phase II and Phase III studies."

"Cisplatin related hearing loss is frequent, significant and irreversible," said Dr. Charlotte Zuur of the Netherlands Cancer Institute. "Our studies have indicated that STS can significantly prevent the hearing loss commonly seen with cisplatin therapy, with a reduction in the need for hearing aids noted in our study, and without jeopardizing the effectiveness of the chemotherapy in these patients."

As previously reported in the Journal of Clinical Oncology, the NKI-AVL Phase III trial included 158 randomized patients with head and neck cancer being treated with cisplatin and demonstrated a 13% reduction in the need for hearing aids with no effect on progression-free and overall survival at two years. The goal of the planned follow-up study is to further evaluate hearing status, disease-free status and overall survival in these patients at approximately five years.

Adherex is currently evaluating STS in a multi-centered, randomized Phase III trial in collaboration with Children's Oncology Group (COG) in children receiving cisplatin chemotherapy for newly diagnosed germ cell, liver (hepatoblastoma), brain (medulloblastoma), nerve tissue (neuroblastoma) or bone (osteosarcoma) cancers. The trial is expected to enroll up to 120 patients over approximately three years in up to 230 COG centers in the United States, Canada, Australia and Europe. Adherex is also conducting a multi-centered, randomized Phase III trial of STS in children with liver (hepatoblastoma) cancer in collaboration with the International Childhood Liver Tumour Strategy Group (known as SIOPEL), a multi-disciplinary group of specialists under the umbrella of the International Society of Pediatric Oncology (SIOP), which is expected to enroll up to 100 patients in centers in up to 33 participating countries.

About Adherex Technologies

Adherex Technologies Inc. is a biopharmaceutical company dedicated to the discovery and development of novel cancer therapeutics. We are in the business of solving problems for patients with cancer. We have multiple products in the clinical stage of development, including eniluracil, ADH-1 and sodium thiosulfate (STS). Eniluracil, an oral dihydropyrimidine dehydrogenase (DPD) inhibitor, is being developed to improve the tolerability and effectiveness of 5-fluorouracil (5-FU), one of the most widely used oncology drugs in the world. ADH-1 is a biotechnology compound which selectively targets N-cadherin, a protein present on certain tumor cells and the blood vessels of solid tumors. STS is a chemoprotectant being developed to reduce or prevent hearing loss that may result from treatment with platinum-based chemotherapy drugs. With a diversified portfolio of unique preclinical and clinical-stage cancer compounds and a management team with expertise in identifying, developing and commercializing novel cancer therapeutics, Adherex aims to become a leader in developing innovative treatments that address important unmet medical needs in cancer. For more information, please visit our website at www.adherex.com.

This press release contains forward-looking statements that involve significant risks and uncertainties. The actual results, performance or achievements of the Company might differ materially from the results, performance or achievements of the Company expressed or implied by such forward-looking statements. Such forward-looking statements include, without limitation, those regarding the development plans of the Company and the expected timing or results of our development. We can provide no assurance that such development will proceed as currently anticipated or that the expected timing or results of such development will be realized. We are subject to various risks, including the uncertainties of clinical trials, drug development and regulatory review, the early stage of our product candidates, our reliance on collaborative partners, our need for additional capital to fund our operations, our history of losses, and other risks inherent to the biopharmaceutical industry. For a more detailed discussion of related risk factors, please refer to our public filings available at www.sedar.com and www.sec.gov.

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For further information, please contact:

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