

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 – December 21, 2006

CHEMOKINE THERAPEUTICS CORP.
(Exact name of registrant as specified in charter)

Delaware
(State or other jurisdiction
of incorporation)

333-117858
(Commission
File Number)

33-0921251
(IRS Employer
Identification No.)

**6190 Agronomy Road, Suite 405
University of British Columbia
Vancouver, British Columbia**
(Address of principal executive offices)

V6T 1Z3
(Zip Code)

Registrant's telephone number, including area code **(604) 822-0301**

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 (see General Instruction A.2. below):

- 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 8.01. Other Events.

December 21, 2006 Chemokine Therapeutics Corp. announced the results of clinical trials of its hematological drug candidate, CTCE-0214.

ITEM 9.01. Financial Statements and Exhibits.

- a. Not applicable.
- b. Not applicable.
- c. Exhibits.

Exhibit Number

Description of Exhibit

99.1

December 21, 2006 Chemokine Therapeutics Corp. announced the results of clinical trials of its hematological drug candidate, CTCE-0214.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Chemokine Therapeutics Corp.,
a Delaware corporation

Date: December 21, 2006

By: /s/ Hassan Salari
Hassan Salari,
President and Chief Executive Officer



FOR IMMEDIATE RELEASE

TSX: CTI

OTCBB: CHKT

CHEMOKINE THERAPEUTICS ANNOUNCES RESULTS FROM CTCE-0214 CLINICAL TRIALS PROGRAM

Vancouver, BC (December 21, 2006) – Chemokine Therapeutics Corp. (the “Company”) (TSX:CTI, OTCBB:CHKT), a biotechnology company developing chemokine-based therapies to treat cancer, blood disorders, and vascular diseases, is pleased to announce results of clinical trials of its hematological drug candidate, CTCE-0214.

The Company has completed the first two stages of the three part phase Ib clinical trials for CTCE-0214. A total of 57 normal healthy volunteers were evaluated using various doses and comparing intravenous versus subcutaneous routes of administration. The study demonstrated CTCE-0214 to be safe and well tolerated when administered intravenously as a single or after multiple doses were administered on a daily basis for five consecutive days. There were no serious adverse events reported. Subjects receiving subcutaneous administrations of CTCE-0214 did however experience transient injection site reactions and local pain after single and repeated administration of the drug. As demonstrated in an earlier study, administration of CTCE-0214 subcutaneously resulted in a 300% increase in neutrophil counts that peaked at approximately 12 hours and were sustained above the baseline value for approximately 48 hours after each administration. Administration using the intravenous route demonstrated a modest pharmacological neutrophil response to each dose administered after each consecutive day of administration with a noticeable increase in stem cell numbers at 3 days using colony forming assay techniques.

“We are encouraged by the results of these clinical studies which will serve as a foundation for future development of CTCE-0214”, said Dr. Hassan Salari, President and CEO of Chemokine Therapeutics. “The third part of the phase Ib trial should provide us with additional information on the benefits of combining CTCE-0214 with G-CSF.”

The primary objective of the recently completed phase Ib study conducted under a US-IND was to evaluate the safety of CTCE-0214 in normal health volunteers as well as to evaluate the effects of intravenous versus subcutaneous administration. The original protocol was amended to include a subcutaneous cohort of subjects for comparison to the planned intravenous route of administration. These trials are designed to test primarily the safety and optimal route of administration of CTCE-0214 in preparation for future clinical trials that will evaluate the mobilization and regeneration of infection-fighting white blood cells and other cells of hematopoietic (blood) origin in a patient setting.

CTCE-0214 has the potential to restore a cancer patient's immune system and blood cells between cycles of chemotherapy. In this clinical scenario, patients might be able to receive aggressive chemotherapy without delay by restoring infection-fighting white blood cells and increasing platelet counts to protect patients from bleeding, and/or increase in blood stem cells suitable for transplant.

About CTCE-0214

CTCE-0214 is a stable peptide agonist of stromal cell-derived factor-1 (SDF-1), a key signaling molecule in the proliferation, homing, engraftment and expansion of hematopoietic stem cells and white blood cells. SDF-1 is also believed to work as a traffic controller for infection-fighting white blood cells and progenitor cell migration providing an essential function to combat immunosuppression. CTCE-0214, based on Chemokine's preclinical research, mimics the activity of the natural chemokine SDF-1 by increasing the level of white blood cells (neutrophils), bleeding prevention cells (platelets) and stem cells (primitive blood forming cells) in the blood. These findings have been confirmed through independent laboratories at Memorial Sloan Kettering Cancer Center and Cornell Medical School in New York and the Walther Cancer Institute in Indianapolis.

About Chemokine Therapeutics Corp. (TSX: CTI, OTCBB: CHKT)

Chemokine Therapeutics is a product-focused biotechnology company developing drugs in the field of chemokines. Chemokines are a class of signaling proteins which play a critical role in the growth, differentiation, and maturation of cells necessary for fighting infection as well as tissue repair and regeneration. Chemokines also have an important role in cancer metastasis and growth. Chemokine Therapeutics is a leader in research in the field of chemokines and has several products in various stages of development.

Safe Harbor Statement under the U. S. Private Securities Litigation Reform Act of 1995: Statements in this document regarding managements' future expectations, beliefs, goals, plans or prospects constitute forward-looking statements that involve risks and uncertainties, which may cause actual results to differ materially from the statements made. For this purpose, any statements that are contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes", "anticipates", "plans", "intends", "will", "should", "expects", "projects", and

Similar expressions are intended to identify forward-looking statements. You are cautioned that such statements are subject to a multitude of risks and uncertainties that could cause actual results, future circumstances, or events to differ materially from those projected in the forward-looking statements. These risks include, but are not limited to, those associated with the success of research and development programs, the regulatory approval process, competition, securing and maintaining corporate alliances, market acceptance of the Company's products, the availability of government and insurance reimbursements for the Company's products, the strength of intellectual property, financing capability, the potential dilutive effects of any financing, reliance on subcontractors and key personnel and other risks detailed from time-to-time in the Company's public disclosure documents and other filings with the U.S. Securities and Exchange Commission and Canadian securities regulatory authorities. Forward-looking statements are made as of the date hereof, and the Company disclaims any intention and has no obligation or responsibility, except as required by law, to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

For further information contact:

Chemokine Therapeutics Corp.

Mr. Don Evans

Director of Public Relations

Phone: (604) 822-0305 or 1-888-822-0305

Fax: (604) 822-0302

E-mail: devans@chemokine.net

Internet: www.chemokine.net