FORM 6-K
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Report of Foreign Issuer

Pursuant to Rule 13a-16 or 15d-16 of
the Securities Exchange Act of 1934

For the Month of June, 2008

Commission File Number 1-32001

Lorus Therapeutics Inc.

(Translation of registrant's name into English)

2 Meridian Road, Toronto, Ontario M9W 4Z7

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ____

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ____

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes ☐ No ☒

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):82-_____.

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, thereunto duly authorized.

Lorus Therapeutics Inc.

Date: June 23, 2008

By: /s/ "Elizabeth Williams"
Elizabeth Williams
Director of Finance and Controller

EXHIBIT INDEX

99.1	News Release dated June 23, 2008 - Lorus Therapeutics announces that the European Medicines Agency (EMEA) has granted the orphan drug designation to LOR-2040 for the treatment of Acute Myeloid Leukemia (AML)

Exhibit 99.1

News release via Canada NewsWire, Toronto 416-863-9350

Attention Business Editors:
Lorus Therapeutics announces that the European Medicines Agency (EMEA) has granted the orphan drug designation to LOR-2040 for the treatment of Acute Myeloid Leukemia (AML)

- Orphan Drug designation by the EMEA demonstrates the potential of LOR-2040 to provide significant therapeutic benefit to AML patients -

TORONTO, June 23 /CNW/ - Lorus Therapeutics Inc. (TSX: LOR, AMEX: LRP) ("Lorus" or the "Corporation"), a biopharmaceutical company specializing in the research and development of pharmaceutical products and technologies for the management of cancer, today announced that its lead Clinical drug, LOR-2040, has been granted Orphan Drug status for the treatment of Acute Myeloid Leukemia (AML) by the Committee for Orphan Medicinal Products (COMP) of the European Medicines Agency (EMEA).

For a medicinal product to be designated as an orphan medicinal product in the European Union (EU), the sponsor must establish that a satisfactory method of treatment, which has been authorized in the European Community, does not exist for the condition, or, if such a method exists, that the medicinal product will be of significant benefit to those affected by that condition.

LOR-2040 is currently in an advanced Phase II clinical study in patients with relapsed or refractory AML. To provide an adequate supply of LOR-2040 for ongoing and projected clinical trials, Lorus has already secured additional supply of LOR-2040 from Avecia Biotechnology Inc., a leading private biotechnology company focused on the development and manufacture of innovative medicines.

"Obtaining orphan drug designation in Europe for LOR-2040 is another important step in the path toward commercialization of this therapeutic approach," said Dr. Aiping Young, President and CEO of Lorus. "Orphan drug status, together with our broad patent coverage achieved for this drug in the EU, has served to strengthen and align our proprietary European market position with the level we have achieved in the United States."

Orphan drug designation when granted by the EMEA provides market exclusivity for treatment of a qualifying disease for up to 10 years following drug approval, in addition to Scientific Advice to optimize development, guidance on the proposed clinical design, and in preparation for the marketing application. In addition, orphan drug designation may qualify for fee reductions for access to the centralized community procedures before and after marketing authorization.

The EMEA represents 25 EU countries, including the United Kingdom, France, Italy, Germany and Spain.

About LOR-2040

LOR-2040 (formerly GTI-2040) is an antisense drug that specifically targets the R2 component of ribonucleotide reductase, which is required for DNA synthesis and cell proliferation. Through downregulation of R2, LOR-2040 has demonstrated strong antitumor and antimetastatic activity in a variety of tumor types in both in vivo and in vitro models and is under study in a multiple Phase II clinical program. The present Phase II study was based on a completed Phase I and pharmacodynamic study in a similar AML population which demonstrated a correlation of favourable complete response frequency with R2 downregulation. R2 has been described as a malignant determinant that is elevated in a wide range of tumors, which can cooperate with a variety of cellular cancer causing genes known as oncogenes to enhance tumor growth and metastatic potential.

About Lorus

Lorus is a biopharmaceutical company focused on the research and development of novel therapeutics in cancer. Lorus' goal is to capitalize on its research, preclinical, clinical and regulatory expertise by developing new drug candidates that can be used, either alone, or in combination with other drugs, to successfully manage cancer. Through its own discovery efforts and an acquisition and in-licensing program, Lorus is building a portfolio of promising anticancer drugs. Lorus Therapeutics Inc. is listed on the Toronto Stock Exchange under the symbol LOR, and on the American Stock Exchange under the symbol LRP.

Forward Looking Statements

This press release may contain forward-looking statements within the meaning of Canadian and U.S. securities laws. Such statements include, but are not limited to, statements relating to: our research program plans, our plans to conduct clinical trials, the successful and timely completion of clinical studies and the regulatory approval process, our ability to fund future research, our plans to obtain partners to assist in the further development of our product candidates, the establishment of corporate alliances, the Company's plans, objectives, expectations and intentions and other statements

including words such as "continue", "believe", "plan", "expect", "intend", "will", "should", "may", and other similar expressions. Such statements reflect our current views with respect to future events and are subject to risks and uncertainties and are necessarily based upon a number of estimates and assumptions that, while considered reasonable by us are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause our actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements, including, among others: our ability to obtain the capital required for research and operations, the inherent risks in early stage drug development including demonstrating efficacy, development time/cost and the regulatory approval process; the progress of our clinical trials; our ability to find and enter into agreements with potential partners; our ability to attract and retain key personnel; changing market conditions; and other risks detailed from time-to-time in our ongoing quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the United States Securities and Exchange Commission.

Should one or more of these risks or uncertainties materialize, or should the assumptions set out in the section entitled "Risk Factors" in our Annual Information Form underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein. These forward-looking statements are made as of the date of this press release and we do not intend, and do not assume any obligation, to update these forward-looking statements, except as required by law. We cannot assure you that such statements will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

Lorus Therapeutics Inc.'s recent press releases are available through the Company's website at www.lorusthera.com. For Lorus' regulatory filings on SEDAR, please go to www.Sedar.com. For SEDAR filings prior to July 10, 2007 you will find these under the company profile for Global Summit Real Estate Inc. (Old Lorus).

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/For further information: Lorus Therapeutics Inc., Dr. Saeid Babaei, (416) 798-1200 ext. 490, ir(at)lorusthera.com/
(LOR. LRP)

CO: Lorus Therapeutics Inc.

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