

**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 April, 2008

Commission File Number 1-32001

**Lorus Therapeutics Inc.**

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(Translation of registrant's name into English)

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**2 Meridian Road, Toronto, Ontario M9W 4Z7**

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(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-\_\_\_\_\_.

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## 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: April 16, 2008

By: /s/ "Elizabeth Williams"

Elizabeth Williams

Director of Finance and Controller

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## EXHIBIT INDEX

99.1 News Release dated April 16, 2008 - Lorus Therapeutics presents new findings for the anticancer drugs LOR-253 and LOR-2040

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

Attention Business Editors:  
Lorus Therapeutics presents new findings for the anticancer drugs  
LOR-253 and LOR-2040

- Scientific Presentation at the 99th Annual Meeting of the American  
Association for Cancer Research (AACR) -

TORONTO, April 16 /CNW/ - Lorus Therapeutics Inc. ("Lorus") (TSX: LOR; AMEX: LRP), a biopharmaceutical company specializing in the research, development and commercialization of pharmaceutical products and technologies for the management of cancer, today announced presentations of further preclinical data from its two lead anticancer drugs at the Annual Meeting of the AACR in San Diego, CA, April 12-16, 2008.

The first presentation titled, "Preclinical development of LOR-253, a novel anticancer drug candidate that functions by modulating intracellular labile zinc homeostasis leading to cell cycle arrest," will be presented on April 16, 2008.

In this presentation, Lorus provided data on the preclinical development of LOR-253 (formerly known as LT-253), the Company's lead anticancer small molecule, with a novel cellular target. In animal studies, LOR-253 showed a favorable pharmacokinetic profile following intravenous dosing. A key finding of the study was the tissue distribution of LOR-253, where the drug was detected in tumor tissues in animal models, with significant affinity for lung and colon tissues. These results strongly support the potential treatment of these cancers with LOR-253, which has shown selective and potent anticancer activity in animal models of non-small cell lung cancer and colon cancer.

LOR-253 is currently in IND-enabling GLP toxicology studies, which are to be completed by mid-2008. Planning of a Phase I clinical trial in cancer indications for LOR-253 is in progress.

The second presentation, presented on April 13, 2008 titled, "GTI-2040 displays cooperative anti-tumor activity, when combined with chemotherapeutics and immunotherapeutics against human renal carcinoma xenografts".

This study reported preclinical results from combination therapies with GTI-2040, which is now known as LOR-2040. The data showed that LOR-2040 significantly improved the anticancer efficacy of an important group of cytokine immunotherapeutic agents, including interferon alpha and interleukin-2, which have been used in the treatment of solid tumors. The findings expand the potential avenues for development of LOR-2040.

"We are pleased to be able to present and discuss our findings at the AACR annual meeting", commented Dr. Aiping Young, President and CEO of Lorus. "These studies show our continued commitment to high quality preclinical research that is in-line with our ongoing clinical programs and corporate strategy".

#### About LOR-2040

LOR-2040 is a DNA-based drug that specifically targets the R2 component of ribonucleotide reductase, which is required for DNA synthesis and cell proliferation. R2 has also been described as a malignant determinant that is elevated in a wide range of tumors, and through down regulation can cooperate with a variety of cellular cancer causing genes known as oncogenes to enhance tumor growth and metastatic potential. Currently, LOR-2040 is in seven clinical studies, including a Phase II trial in AML, Phase I in MDS and Acute Leukemias, and five Phase I/II trials in solid tumors.

#### About LOR-253

LOR-253 is a small molecule compound that has shown selective and potent antitumor activity in a variety of human cancers, including colon cancer and non-small cell lung cancer, and has an excellent therapeutic window due to its low toxicity. The mode of action of LOR-253 involves the downregulation of cyclin D1, an important regulator of cell cycle progression and cell proliferation, and induction of the tumor suppressor Kruppel like factor 4 (KLF-4). Alterations in KLF-4 expression and the cyclin D1 regulatory pathway have been linked to the development of cancer.

#### 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 contains forward-looking statements within the meaning

of Canadian and U.S. securities laws. Such statements include, but are not limited to, statements relating to: financings and corporate reorganizations, the establishment of corporate alliances, the Company's plans, objectives, expectations and intentions and other statements including words such as "continue", "expect", "intend", "will", "should", "would", "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 described in this press release. Such expressed or implied forward looking statements could include, 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 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 filings with Canadian securities regulators and the United States Securities and Exchange Commission 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 its website at [www.lorusthera.com](http://www.lorusthera.com). For Lorus' regulatory filings on SEDAR, please go to [www.Sedar.com](http://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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CO: Lorus Therapeutics Inc.

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