**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 financial year ended May 31, 2005

**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 Form 20-F or Form 40-F.]

Form 20-F ___ ____ Form 40-F __ X__

[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 ____X___

[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: May 5, 2005

By: "Shane Ellis"
Shane Ellis
Vice President, Legal Affairs &
Corporate Secretary

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**THE U. S. FOOD AND DRUG ADMINISTRATION GRANTS ORPHAN DRUG STATUS TO LORUS' GTI-2040 IN ACUTE MYELOID LEUKEMIA**

*Lorus to Present at Rodman & Renshaw Annual Global Healthcare Conference in Paris, May 4h*

**TSX: LOR**

**AMEX: LRP**

**TORONTO, CANADA, May 4, 2005 –** Lorus Therapeutics Inc. ('Lorus'), a biopharmaceutical company specializing in the development and commercialization of pharmaceutical products and technologies for the management of cancer, today announced that the U.S. Food and Drug Administration (FDA) has awarded orphan drug status to GTI-2040, the company's lead anticancer drug for the treatment of acute myeloid leukemia (AML).

This most recent orphan drug status designation in AML, together with an ongoing clinical study program using GTI-2040 in different drug combinations, indicates potential for efficacy in a number of different tumor types. GTI-2040 was also granted orphan drug status for renal cell carcinoma in 2004.

The significance of orphan drug status is that it can result in the opportunity to obtain additional financial support from the U.S government for clinical study costs, exemption from certain fees at the time of submission of GTI-2040 to the FDA for marketing approval, and a grant of seven years of market exclusively in the U.S. Orphan drug designation typically means that FDA marketing review times are expedited in comparison to other drugs since orphan drug status denotes serious or life-threatening diseases that afflict less than 200,000 patients annually in the U.S.

(more)



"The commitment of the U.S. FDA is important to companies like Lorus, whose business strategy includes advancing new treatments in clinical development for debilitating diseases like AML," said Dr. Jim Wright, CEO, Lorus. "This support helps Lorus optimize the commercial potential of GTI-2040 in this cancer indication, and enhances our continuing track-record of success as an innovative cancer research and drug development company."

In partnership with the United States National Cancer Institute's Cancer Therapy Evaluation Program (CTEP) under a clinical trials agreement, GTI 2040 is being investigated in a Phase II clinical trials program for AML, breast cancer, lung cancer, prostate cancer, colon cancer and a variety of solid tumors.

While significant progress has been made in treating other leukemias, AML has the lowest five-year survival rate. The poor prognosis for AML is associated with a high number of patients refractory to initial treatment and a high relapse coupled with the development of resistance to standard therapy, typically cytarabine. Given the poor prognosis and limited treatment options available to patients with relapsed disease, novel therapeutics that can act cooperatively with chemotherapy and have the potential to increase efficacy of standard drugs by decreasing resistance stand to have a significant impact on the treatment of AML.

## RODMAN & RENSHAW TECHVEST 2ND ANNUAL GLOBAL HEALTHCARE CONFERENCE IN PARIS, FRANCE

On Wednesday, May 4th, 2005, at 9:30 a.m., Dr. Jim Wright, President and CEO, Lorus Therapeutics, will present a corporate overview of the company at the Rodman & Renshaw Techvest 2nd Annual Global HealthCare Conference in Paris, France. The conference, which runs May 4 th and 5th provides an informational service and networking opportunity for healthcare companies and investors.

About Lorus

Lorus is a biopharmaceutical company focused on the development and commercialization of cancer therapies. 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, 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. Late-stage clinical development and marketing may be done in cooperation with strategic pharmaceutical partners. Lorus currently has three products in human clinical trials with a pipeline of eight clinical trials in phase II clinical trial programs and one phase III registration clinical trial. Lorus Therapeutics Inc. is a public company listed on the Toronto Stock Exchange under the symbol LOR, and on the American Stock Exchange under the symbol LRP. Virulizin ® is a registered trademark of Lorus Therapeutics Inc.

About GTI-2040

GTI-2040 is an antisense 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 deregulation can cooperate with a variety of cellular cancer causing genes known as oncogenes to enhance tumor growth and metastatic potential. GTI-2040 showed significant antitumor activity against many different human tumors in preclinical studies, and successfully completed a Phase I clinical trial in the U.S. GTI-2040 is currently the subject of a Clinical Trials Agreement with the United States National Cancer Institute (NCI) under which GTI-2040 is being tested in combination chemotherapy in six different clinical trials. All six of these trials have been initiated. GTI 2040 recently completed a phase II study in combination chemotherapy for the treatment of renal cell carcinoma. In this study of late stage patients 52% of the patient population displayed disease stabilizations with few unexpected side effects and tumor regressions were observed in some patients.

Forward Looking Statements

Except for historical information, this press release contains forward-looking statements, which reflect the Company's current expectation and assumptions, and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated. These forward-looking statements involve risks and uncertainties, including, but not limited to, changing market conditions, the Company's ability to obtain patent protection and protect its intellectual property rights, commercialization limitations imposed by intellectual property rights owned or controlled by third parties, intellectual property liability rights and liability claims asserted against the Company, the successful and timely completion of clinical studies, the establishment of corporate alliances, the impact of competitive products and pricing, new product development, uncertainties related to the regulatory approval process, product development delays, the Company's ability to attract and retain business partners and key personnel, future levels of government funding, the Company's ability to obtain the capital required for research, operations and marketing and other risks detailed from time-to-time in the Company's ongoing quarterly filings, annual information form, annual reports and 40 -F filings. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Lorus Therapeutics Inc.'s press releases are available through the Company's Internet site: http://www.lorusthera.com.

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