# 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 May, 2011

Commission File Number 1-32001

# Lorus Therapeutics Inc.

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|--|--|----------------|
|  | (Translation of registrant's name into English)  |                |
|  | 2 Meridian Road, Toronto, Ontario M9W 4Z7  |                |
|  | (Address of principal executive offices)   |                |
| Indicate by check mark whether th  | e 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 regis                                      | trant 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 regis                                      | trant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):   |                |
| issuer must furnish and make publ<br>under the rules of the home country | (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 pricunder the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "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 registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission. | ), or<br>to be |
| Indicate by check mark whether th 12g3-2(b) under the Securities Exc     | e registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to February 2015.  | Rule           |
|  | 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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### SIGNATUR

| Pursuant to the requirements of the Securities Exchange Act of | 1934, the registrant has duly caused this report t | o be signed on its behalf by the undersi | gned, thereunto duly |
|--|--|--|----------------------|
| authorized.  |  |  |                      |

Lorus Therapeutics Inc.

Date: May 3, 2011 By: <u>/s/ "Elizabeth Williams"</u>

Elizabeth Williams

Director of Finance and Controller

## EXHIBIT INDEX

99.1

News Release dated May 3, 2011 - Lorus Therapeutics Announces Allowance of United StatesPatent for Cancer Drug LOR-2040 in the Treatment of Acute Myeloid Leukemia



## **NEWS RELEASE**

# Lorus Therapeutics Announces Allowance of United States Patent for Cancer Drug LOR-2040 in the Treatment of Acute Myeloid Leukemia

**TORONTO, CANADA, May 3, 2011 -** Lorus Therapeutics Inc. (TSX: LOR) ("Lorus"), a biopharmaceutical company specializing in the discovery, research and development of pharmaceutical products and technologies for the management of cancer, today announced that the United States Patent and Trademark Office has allowed a new patent for the Company's lead clinical stage cancer drug LOR-2040 in the treatment of Acute Myeloid Leukemia (AML).

The new U.S. patent covers methods of treating AML patients with LOR-2040 in combination with cytarabine. This is Lorus' third U.S. patent covering LOR-2040, and its first U.S. patent to specifically protect LOR-2040 for the treatment of relapsed or refractory AML, which is the Company's lead clinical indication for this drug. Similar patents that protect the treatment of AML with LOR-2040 plus cytarabine have issued in Australia and are pending in Canada, Europe and Japan.

"We're very pleased to receive this new U.S. patent, which builds on our robust IP portfolio for LOR-2040 in a key market," said Dr. Aiping Young, Lorus' President and CEO. "LOR-2040 has shown strong clinical efficacy in Phase I and II clinical trials in relapsed and refractory AML. This patent should be useful in our partnership discussions that are aimed towards advancing clinical development of this drug in this indication."

LOR-2040 recently completed a Phase II trial with LOR-2040 in combination with high dose cytarabine in a Phase II clinical study in patients with relapsed or refractory AML, and is currently being tested as a single agent in a Phase I trial in acute leukemias and high-grade myelodysplastic syndrome. LOR-2040 has also completed a series of U.S. NCI-sponsored clinical studies in AML and solid tumor indications, including prostate cancer, non-small cell lung cancer, and breast cancer.

#### About LOR-2040

LOR-2040 is an RNA-targeted drug that specifically targets the R2 component of ribonucleotide reductase, which is required for DNA synthesis and cell proliferation. The R2 target has been described as a malignant determinant that is elevated in a wide range of tumor types, which can cooperate with a variety of cellular cancer causing genes known as oncogenes to enhance tumor growth and metastatic potential. Through downregulation of R2, LOR-2040 has demonstrated strong antitumor and antimetastatic activity in a variety of tumor types in both *in vitro* and *in vivo* models, and has been explored in a multiple Phase I/II clinical program, including an advanced Phase II clinical trial with LOR-2040 and high dose Ara-C (HiDAC) in refractory and relapsed Acute Myeloid Leukemia (AML).

### **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. The Company also has expertise in antimicrobial drug discovery. Lorus Therapeutics Inc. is listed on the Toronto Stock Exchange under the symbol LOR.

### **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 continue as a going concern, 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 continue as a going concern, 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 Commissi

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).

### **Enquiries:**

For further information, please contact:

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