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 (Date of earliest event reported): July 3, 2007

GTx, Inc.

(Exact name of Registrant as specified in its charter)

Delaware	**005-79588**	**62-1715807**
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(I.R.S. Employer Identification No.)

3 N. Dunlap Street
Van Vleet Building
Memphis, Tennessee 38163
(901) 523-9700
(Address, including zip code, of Registrant's principal executive offices
Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

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):

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 8.01 Other Events.

On July 3, 2007, GTx, Inc. issued a press release announcing it initiated a Phase IIb clinical trial evaluating Ostarine, a selective androgen receptor modulator (SARM), for the treatment of cancer cachexia, a copy of which is furnished as Exhibit 99.1 to this Current Report.

This release is furnished by GTx pursuant to Item 2.02 of Form 8-K and is not to be considered "filed" under the Exchange Act, and shall not be incorporated by reference into any previous or future filing by the Registrant under the Securities Act or the Exchange Act.

ITEM 9.01 Financial Statements and Exhibits.

(c) Exhibits

Exhibit Number	Description
99.1	Press Release issued by GTx, Inc. dated July 3, 2007

SIGNATURE

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

GTx, Inc.

Date: July 3, 2007

By: /s/ Henry P. Doggrell
Name: Henry P. Doggrell
Title: Vice President, General Counsel/Secretary

Exhibit 99.1

Contact:
McDavid Stilwell
GTx, Inc.
Director, Corporate Communications & Financial Analysis
901-523-9700

GTx Initiates Phase IIb Ostarine Clinical Trial For Cancer Cachexia

MEMPHIS, TENN. – July 3, 2007 — GTx, Inc. (Nasdaq: GTXI), announced today that it has initiated the Phase IIb clinical trial evaluating Ostarine™, a selective androgen receptor modulator, or SARM, for the treatment of cancer cachexia.

“We are pleased to initiate the Ostarine Phase IIb cancer cachexia clinical trial on schedule,” said Mitchell S. Steiner, MD, Chief Executive Officer of GTx. “Cancer cachexia, as a large unmet medical need, is an important first indication for the late-stage development of Ostarine.”

The Phase IIb cancer cachexia clinical trial is a randomized, double blind, placebo controlled study of muscle wasting in 150 patients with non-small cell lung cancer, colorectal cancer, non-Hodgkin’s lymphoma, or chronic lymphocytic leukemia. The clinical trial is being conducted at approximately 35 clinical sites in the United States and Argentina. Study participants are being randomized to receive placebo, Ostarine 1 mg, or Ostarine 3 mg for four months. The primary endpoint of the trial is the change in total lean body mass (muscle) at 16 weeks. Secondary endpoints include functional performance and safety.

GTx expects to report top line data in the summer of 2008.

Cachexia is a debilitating, progressive muscle wasting condition manifested by unintentional weight loss, muscle weakness, anemia, fatigue, and death. More than 50% of cancer patients present with or subsequently develop cachexia. Patients with advanced cancer suffering from cachexia may respond poorly to, or not be able to undergo, chemotherapy and radiation therapy. Cancer cachexia is associated with a poor prognosis and can adversely affect a patient’s quality of life. There are no drugs approved by the FDA for the treatment of cancer cachexia.

“If Ostarine shows similar increases in lean body mass and improvements in functional performance in the various types of cancer patients in the Phase IIb clinical trial as were observed in the recently completed Phase II proof of concept clinical trial, then Ostarine could become an important therapy for the treatment of cancer cachexia,” said Ronald A. Morton, Jr., Chief Medical Officer of GTx.

In 2006, GTx conducted a randomized, double blind, placebo controlled Phase II proof of concept clinical trial of Ostarine in 120 elderly men and postmenopausal women. The top line data revealed a dose dependent increase in total lean body mass in all subjects treated with Ostarine with the 3 mg cohort achieving an increase of 1.4 kg compared to placebo ($p<0.001$) after three months of treatment. Ostarine therapy also resulted in a dose dependent improvement in physical performance measured by a stair climb test with the 3 mg cohort achieving a statistically significant improvement in both speed and power. Ostarine was tissue selective with no apparent change in measurements for serum PSA (prostate), sebum production (skin and hair), or serum LH (pituitary). No serious adverse events were reported in the clinical trial. The most common side effects reported among subjects in both the placebo and Ostarine treatment arms were headache, back pain, and diarrhea.

GTx is also planning to initiate a Phase IIb Ostarine clinical trial for the treatment of chronic kidney disease (CKD) muscle wasting by the end of the year.

About GTx

GTx, headquartered in Memphis, Tenn., is a biopharmaceutical company dedicated to the discovery, development, and commercialization of small molecules that selectively target hormone pathways to treat cancer, osteoporosis and bone loss, muscle wasting and other serious medical conditions. GTx is developing ACAPODENE® (toremifene citrate), a selective estrogen receptor modulator, or SERM, in two separate clinical programs in men: first, a pivotal Phase III clinical trial for the treatment of serious side effects of androgen deprivation therapy for advanced prostate cancer, and second, a pivotal Phase III clinical trial for the prevention of prostate cancer in high risk men with high grade prostatic intraepithelial neoplasia, or PIN. GTx has licensed to Ipsen Limited exclusive rights in Europe to develop and commercialize ACAPODENE®. GTx also is developing Ostarine™, a first-in-class selective androgen receptor modulator, or SARM. GTx has initiated a Phase IIb Ostarine™ clinical trial for cancer cachexia and plans to initiate a Phase IIb Ostarine™ clinical trial for the treatment of chronic kidney disease muscle wasting by the end of 2007. GTx believes that Ostarine™ also has the potential to treat a variety of other indications associated with muscle wasting and bone loss including sarcopenia and osteoporosis.

Forward-Looking Information is Subject to Risk and Uncertainty
This press release contains forward-looking statements based upon GTx’s current expectations. Forward-looking statements involve risks and uncertainties. GTx’s actual results and the timing

of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, the risks that (i) GTx will not be able to commercialize its product candidates if clinical trials do not demonstrate safety and efficacy in humans; (ii) GTx may not be able to obtain required regulatory approvals to commercialize its product candidates; (iii) GTx's clinical trials may not be completed on schedule, or at all, or may otherwise be suspended or terminated; and (iv) GTx could utilize its available cash resources sooner than it currently expects and may be unable to raise capital when needed, which would force GTx to delay, reduce or eliminate its product development programs or commercialization efforts. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this press release. GTx's quarterly report on form 10-Q filed with the U.S. Securities and Exchange Commission on May 7, 2007, contains under the heading "Risk Factors," a more comprehensive description of these and other risks to which GTx is subject. GTx expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in its expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based.