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): June 9, 2010 (June 7, 2010)

GTx, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**000-50549**	**62-1715807**
(State or other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

175 Toyota Plaza **7th Floor** **Memphis, Tennessee**	**38103**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: **(901) 523-9700**

(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:

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 June 7, 2010, GTx, Inc. issued a press release announcing additional results from the Ostarine™ Phase IIb study demonstrating an improvement in quality of life (fatigue and anorexia) in cancer patients with muscle wasting (cancer cachexia) who demonstrated improvement in functional performance as measured by stair climb. Ostarine (GTx-024) is GTx's lead selective androgen receptor modulator (SARM) which the company is developing for the treatment of cancer cachexia. A copy of the press release is furnished as Exhibit 99.1 to this Current Report.

ITEM 9.01 Financial Statements and Exhibits.

(c) Exhibits

Exhibit Number	Description
99.1	Press Release issued by GTx, Inc. dated June 7, 2010

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: June 9, 2010

By: /s/ Mark E. Mosteller
Name: Mark E. Mosteller
Title: Vice President, Chief Financial Officer

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

GTx Presents Additional Study Results in Quality of Life Improvements from the Phase IIb Clinical Trial Evaluating Ostarine™ for Cancer Induced Muscle Wasting

Chicago, June 7, 2010 – GTx, Inc. (Nasdaq: GTXI) today presented additional results from the Ostarine™ Phase IIb study demonstrating an improvement in quality of life (fatigue and anorexia) in cancer patients with muscle wasting (cancer cachexia) who demonstrated improvement in functional performance as measured by stair climb. Ostarine (GTx-024) is GTx's lead selective androgen receptor modulator (SARM) which the company is developing for the treatment of cancer cachexia. The quality of life results (abstract #9147) were presented at the 2010 American Society of Clinical Oncology Annual Meeting.

"In three clinical trials in more than 380 patients, including this Phase IIb clinical trial in patients with cancer cachexia, Ostarine has demonstrated the ability to build muscle mass and improve functional performance," said Mitchell S. Steiner, MD, CEO of GTx. "We are encouraged that Ostarine has the potential to make a difference in a cancer patient's quality of life as measured by FACIT fatigue and FAACT anorexia scales."

The 16 week study evaluated Ostarine 1 mg and 3 mg compared to placebo in 159 cancer patients with non-small cell lung cancer, colorectal cancer, breast cancer, chronic lymphocytic leukemia, or non-Hodgkin's lymphoma with cancer cachexia. Ostarine treatment resulted in a statistically significant increase in lean body mass and improvement in physical performance as measured by stair climb time and power.

In the study, improvements in stair climb speed or power (defined as a decrease in stair climb time greater than one second or an increase in power greater than 9.8 watts) also resulted in improvements in quality of life as measured by FAACT (Functional Assessment of Anorexia/Cachexia Treatment) and FACIT-F (Functional Assessment of Chronic Illness Treatment Fatigue) scales, as well as a separate FACIT-fatigue subscale.

Ostarine treated subjects were more likely than patients receiving placebo to demonstrate an improvement in stair climb time (58% compared to 22%, $p<0.001$) and stair climb power (47% compared to 31%, $p=0.1$). Subjects with improvements in stair climb time or stair climb power also demonstrated statistically significant and clinically meaningful improvements in fatigue and anorexia scales and fatigue subscales when compared to patients with no improvements in stair climb speed or power ($p<0.03$ for all scale and subscale measurements).

About cancer cachexia
Cachexia is a complex metabolic condition associated with underlying illness and characterized by loss of skeletal muscle. It is a comorbidity of many clinical conditions, including cancer, diabetes, acquired immune deficiency syndrome (AIDS), burns, chronic obstructive pulmonary disease, chronic heart failure, chronic renal failure, rheumatoid arthritis, hypogonadism, and sepsis. Common clinical manifestations include muscle wasting, anemia, reduced caloric intake,

and altered immune function, which contribute to increased disability, fatigue, diminished quality of life, and reduced survival.

Up to 70 percent of cancer patients present with weight loss at diagnosis, and much of this weight loss can be attributed to selective muscle wasting, or cancer cachexia. In the United States, it has been estimated that cancer cachexia affects greater than 1.3 million people (approximately 30% of all individuals with cancer). The presence of cancer cachexia is a predictor of poor treatment outcomes, increased toxicity in patients receiving chemotherapy, and mortality.

The physical wasting and loss of function that cancer patients experience, coupled with the ineffectiveness of dietary support to reverse cachexia, results in a substantial burden for the patient and family.

About GTx
GTx, Inc., headquartered in Memphis, Tenn., is a biopharmaceutical company dedicated to the discovery, development, and commercialization of small molecules that selectively target hormone pathways for the treatment and prevention of cancer, the treatment of side effects of anticancer therapy, cancer supportive care, and other serious medical conditions.

GTx is developing toremifene 80 mg for the reduction of fractures and treatment of other estrogen deficiency side effects of androgen deprivation therapy for prostate cancer. GTx has completed a successful toremifene 80 mg Phase III clinical trial and expects to initiate TREAT 2, the second Phase III clinical trial by year end 2010

GTx is also developing Ostarine™ (GTx-024) and other selective androgen receptor modulators, or SARMs, for cancer cachexia and other muscle wasting diseases. GTx is meeting with the FDA this summer to discuss the late stage clinical development plan for Ostarine for cancer cachexia.

GTx's newest product candidate is GTx-758, an oral LH inhibitor, which is in a Phase II clinical trial. GTx-758 has the potential to achieve medical castration without causing bone loss, hot flashes, impotence and other serious side effects of currently available androgen deprivation therapy for prostate cancer. GTx expects to receive results of the Phase II clinical trial this summer.

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 include, but are not limited to, statements relating to GTx's plans to continue to pursue the development of and marketing approval for, and the potential commercialization of, toremifene 80 mg, and the continued development and potential commercialization of GTx's other product candidates. 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 (i) that GTx and its collaboration partner will not be able to commercialize their product candidates if clinical trials do not demonstrate safety and efficacy in humans, including in any additional clinical trials that GTx may conduct for toremifene 80 mg to reduce fractures in men with prostate cancer on ADT; (ii) that GTx may not be able to obtain required regulatory approvals to commercialize its product candidates, including toremifene 80 mg to reduce fractures in men with prostate cancer on ADT, in a timely manner or at all; (iii) that clinical trials being conducted or planned to be conducted by GTx and its

collaboration partner may not be initiated or completed on schedule, or at all, or may otherwise be suspended or terminated; (iv) related to GTx's dependence on its collaboration partner for product candidate development and commercialization efforts; (v) related to GTx's reliance on third parties to manufacture its product candidates and to conduct its clinical trials; and (vi) that 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 candidate 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 annual report on Form 10-Q filed with the SEC on May 4, 2010 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.