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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): May 16, 2006 (May 15, 2006)

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))

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ITEM 8.01 Other Events.

On May 15, 2006, GTx, Inc. issued a press release announcing that it initiated a Phase II clinical trial of ostarine designed to evaluate the ability of ostarine, a selective androgen receptor modulator (SARM), to build muscle and to promote bone, as well as to assess its safety in both elderly men and postmenopausal women, 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 May 15, 2006

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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: May 16, 2006

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

EXHIBIT 99.1

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

GTX, INC. INITIATES PHASE II CLINICAL TRIAL OF OSTARINE, A FIRST-IN-CLASS DRUG

MEMPHIS, TENN. - May 15, 2006 -- GTx, Inc. (Nasdaq: GTXI), the Men's Health Biotech Company, announced today that it has initiated a proof of concept Phase II clinical trial of ostarine, a first-in-class drug. The clinical trial is designed to evaluate the ability of ostarine, a selective androgen receptor modulator (SARM), to build muscle and to promote bone, as well as to assess its safety in both elderly men and postmenopausal women.

"We are excited about the progress of ostarine in clinical development," said Mitchell S. Steiner, M.D., Chief Executive Officer of GTx. "Ostarine was discovered by GTx scientists and is the first SARM to enter Phase II clinical testing. We are pleased to attain this important milestone."

GTx believes that with unique, tissue selective anabolic activity, ostarine has the potential to distinguish itself from current osteoporosis drugs which only treat bone loss. In preclinical studies, ostarine not only strengthened bone by both building bone and preventing bone loss, but it also increased muscle. Greater muscle mass and strength help to prevent fall-related skeletal fractures by providing stronger support for bone and by improving a patient's balance and gait.

Ostarine had an approximately 24 hour half-life in a single ascending dose Phase I clinical trial in 96 healthy male volunteers. In a 14 day multiple ascending dose Phase I clinical trial in 48 healthy male volunteers and 23 elderly men, ostarine had positive changes on muscle without clinically detectable side effects on the prostate or the skin.

The proof-of-concept Phase II ostarine clinical trial is a randomized, placebo controlled, double blind, dose finding study in 60 elderly men and 60 postmenopausal women. Study participants will receive one of 4 doses of ostarine or placebo orally each day for three months. Endpoints of the trial include measurements of bone, fat, muscle mass, and performance.

"A positive outcome of this Phase II ostarine clinical trial would distinguish ostarine from existing therapies for muscle and bone loss," said Steiner. "The clinical data will determine ostarine's novel anabolic effects and tissue selectivity. These data will support further development of ostarine for acute muscle wasting indications such as cancer, end stage renal disease, or burn injury wasting conditions, and for chronic indications such as osteoporosis and age related frailty."

GTx has all rights to ostarine. GTx expects to report clinical data in the second half of 2006.

ABOUT GTX, INC.

GTx, headquartered in Memphis, Tenn., is a biopharmaceutical company dedicated to the discovery, development and commercialization of therapeutics for cancer and serious conditions related to men's health. GTx's lead drug discovery and development programs are focused on small molecules that selectively modulate the effects of estrogens and androgens, two essential classes of hormones. GTx is developing ACAPODENE(R) (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 PIN. GTx also is developing ostarine, a selective androgen receptor modulator, or SARM, for a variety of indications including muscle wasting and bone loss in frail elderly patients, osteoporosis, muscle wasting in end stage renal disease patients, and severe burn wounds and associated muscle wasting. GTx has licensed to Ortho Biotech Products, L.P., a subsidiary of Johnson & Johnson, another of its SARMs, andarine, under a joint collaboration and license agreement.

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 on May 5, 2006 contains 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.