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: April 27, 2006 (Date of earliest event reported)

GTx, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 000-50549 (Commission File Number) 62-1715807 (I.R.S. Employer Identification No.)

3 N. Dunlap Street Van Vleet Building Memphis, Tennessee 38163 (901) 523-9700

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

(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 2.02 Results of Operations and Financial Condition ITEM 9.01 Financial Statements and Exhibits SIGNATURE Press release dated April 27,2006 ITEM 2.02 Results of Operations and Financial Condition.

On April 27, 2006, GTx, Inc. issued an earnings release for the first quarter ended March 31, 2006, 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 April 27, 2006

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: April 27, 2006

By: /s/ Mark E. Mosteller

Name: Mark E. Mosteller Title: Vice President and Chief Financial Officer

(principal accounting and financial officer)

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

GTX, INC. REPORTS FIRST QUARTER 2006 FINANCIAL RESULTS

MEMPHIS, TENN. -- April 27, 2006--GTx, Inc. (Nasdaq: GTXI), the Men's Health Biotech Company, today reported financial results for the first quarter of 2006. The net loss for the quarter ended March 31, 2006 was \$9.9 million, compared with a net loss of \$9.1 million for the same period in 2005. At March 31, 2006, GTx had cash and cash equivalents of \$65.3 million.

"In the first quarter, GTx continued to make substantial progress in our clinical programs," said Mitchell S. Steiner, M.D., CEO of GTx. "GTx is pushing ahead with plans for the commercialization of ACAPODENE(R) in the US and in the rest of the world. We are excited that ostarine, our lead SARM, will enter a Phase II proof of concept trial next month. The trial will lay the groundwork for us to position this drug candidate for an array of acute and chronic indications related to bone and muscle loss."

Revenue for the first quarter was \$1.2 million, compared to \$0.7 million for the same period in 2005. Revenues included net sales of FARESTON(R) (toremifene citrate 60 mg), marketed for the treatment of metastatic breast cancer in postmenopausal women, and collaboration revenue for andarine from our partner, Ortho Biotech Products, LP, a subsidiary of Johnson & Johnson.

Research and development expenses for the quarter were \$8.4 million, compared to \$7.3 million for the same period in 2005. The increase in research and development expenses was primarily the result of the company's continued investment in its clinical programs.

General and administrative expenses for the quarter were \$3.0 million, compared to \$2.5 million for the same period in 2005.

EVENTS SUBSEQUENT TO THE FIRST QUARTER

GTx expects to announce within one week that it has attained its enrollment goal of 1,260 men in its pivotal Phase III clinical trial evaluating ACAPODENE (toremifene citrate) in a 20 mg dose for the prevention of prostate cancer in men with high grade prostatic intraepithelial neoplasia, or PIN. Enrollment of the trial began in the first quarter of 2005. The trial is being conducted under a Special Protocol Assessment with the United States Food & Drug Administration. The trial is designed as a 36 month study but provides for an interim efficacy analysis after a sufficient number of cancer events have occurred. GTx believes this interim analysis will occur in the fourth quarter of 2007 or the first quarter of 2008. If the efficacy endpoint is statistically achieved, we plan to file a new drug application with the FDA during 2008.

"Within the next few days we will reach the enrollment goal of our pivotal Phase III high grade PIN trial," said Steiner. "We believe the rapid enrollment of this large clinical trial is an indication that both doctors and their patients recognize the significant risks of this disease."

FIRST QUARTER 2006 CORPORATE HIGHLIGHTS

* An independent drug safety monitoring board (DSMB) conducted a per protocol interim review of safety data of more than 2,000 patients enrolled in two pivotal Phase III clinical trials of ACAPODENE and recommended that GTx continue the two clinical development programs as planned. In addition to the trial evaluating ACAPODENE for prevention of prostate cancer in men with high grade PIN, GTx is evaluating ACAPODENE in an 80 mg dose for the treatment of multiple side effects of androgen deprivation therapy for advanced prostate cancer.

* MacroArray Technologies, LLC, one of five diagnostic companies collaborating with GTx on the development of a diagnostic test for high grade PIN, announced at the 2006 annual meeting of the American Association for Cancer Research that it has identified the ABCA5 protein as a selective molecular marker for high grade PIN. Identification of this protein may lead to the development of a commercial non-invasive diagnostic test.

* In January, GTx signed an exploratory research collaboration agreement with Gen-Probe, Inc., to evaluate the ability of Gen-Probe's research-stage PCA3 Assay to detect

high grade PIN. Under terms of the agreement, GTx is providing Gen-Probe with urine samples from patients enrolled in GTx's clinical trials testing ACAPODENE for the prevention of prostate cancer in men with high grade PIN. Gen-Probe will evaluate the samples from this special patient cohort with its research-stage test for PCA3 gene expression.

In addition to MacroArray Technologies and Gen-Probe, GTx is continuing to work with three other diagnostic companies, diaDexus, Inc., Hybritech, Inc., and Tessera, Inc., in developing a non-invasive diagnostic test for high grade PIN.

* With respect to ostarine, GTx's first-in-class selective androgen receptor modulator, or SARM, GTx plans to initiate in the second quarter a proof of concept Phase II clinical trial in 60 elderly men and 60 postmenopausal women. The trial is designed to provide extensive proof of concept data demonstrating ostarine's effects on building muscle and promoting bone and to evaluate dose and safety in both men and women. Endpoints of the trial will include measurements of bone, fat, muscle mass and function, and performance. GTx anticipates receiving data from the trial in the second half of 2006.

CONFERENCE CALL

There will be a conference call today at 9 a.m. Eastern Time today to discuss GTx's first quarter financial results and to provide a company update. To listen to the conference call, please dial:

- 800-688-0836 from the United States and Canada or
- 617-614-4072 (International)

The access code for the call is 44385455.

A playback of the call will be available beginning today at 11:00 a.m., Eastern Time through May 11, and may be accessed by dialing:

- 888-286-8010 from the United States and Canada or
- 617-801-6888 (International)

The reservation number for the replay is 72588019.

Additionally, you may access the live and subsequently archived webcast of the conference call from the Investor Relations section of the company's website at http://www.gtxinc.com.

ABOUT GTX

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 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 annual report on form 10-K filed with the U.S. Securities and Exchange Commission on March 2, 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.

GTx, INC. CONDENSED BALANCE SHEETS (IN THOUSANDS, EXCEPT SHARE DATA)

	MARCH 31, 2006 (UNAUDITED)		DECEMBER 31, 2005	
ASSETS Current assets:				
Cash and cash equivalents Accounts receivable Inventory	\$	68 171		74,014 153 135
Prepaid expenses and other current assets		2,430		1,702
Total current assets Property and equipment, net Purchased intangible assets, net Other assets		1,790		76,004 1,746 4,978 83
Total assets		74,712		
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable Accrued expenses Deferred revenue current portion	\$	1,967 4,391 1,337	\$	
Total current liabilities Deferred revenue, less current portion Other long term liability Capital lease obligation Stockholders' equity: Common stock, \$0.001 par value: 60,000,000 shares authorized; 30,998,217 shares issued and outstanding at March 31, 2006 and 30,993,967 shares		7,695		5,974 2,958 280 20
issued and outstanding at December 31, 2005 Deferred stock compensation Additional paid-in capital Accumulated deficit		(204,193)		31 (1,725) 269,542 (194,269)
Total stockholders' equity		64,004		73,579
Total liabilities and stockholders' equity	\$	74,712	\$	82,811

GTx, INC. CONDENSED STATEMENTS OF OPERATIONS (IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA) (UNAUDITED)

	THREE MONTHS ENDED MARCH 31,				
		2006	2005		
Revenues: Product sales, net Collaboration revenue	\$	876 334	\$	353 334	
Total revenues Costs and expenses: Costs of product sales Research and development expenses General and administrative expenses		1,210		687 245 7,326 2,520	
Total costs and expenses		11,858		10,091	
Loss from operations		(10,648)			
Interest income		724		324	
Net loss		(9,924)			
Net loss per share:					
Basic		(0.32)			
Diluted	+	(0.32)	·	(0.37)	
Weighted average shares used in computing net loss per share: Basic		30,995,714		24,664,716	
Diluted	30	995,714	24,	664,716	