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 31, 2007

GTx, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**000-50549**	**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, 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))

ITEM 2.02 Results of Operations and Financial Condition.

On July 31, 2007, GTx, Inc. issued an earnings release for the second quarter ended June 30, 2007, 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 31, 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 31, 2007

By: /s/ Mark E. Mosteller
Name: Mark E. Mosteller
Title: Vice President and Chief Financial Officer
(principal accounting and financial officer)

Exhibit 99.1

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

GTx, Inc. Reports Second Quarter 2007 Financial Results

MEMPHIS, TENN. — July 31, 2007 — GTx, Inc. (NASDAQ: GTXI) today reported financial results for the second quarter of 2007. The net loss for the second quarter and six months ended June 30, 2007 was $9.2 million and $17.3 million, respectively, compared with a net loss of $10.0 million and $19.9 million for the same periods in 2006. At June 30, 2007, GTx had cash and cash equivalents of $102.0 million.

“We are pleased with the progress of the two ACAPODENE clinical development programs and with the initiation of the Phase IIb clinical trial of Ostarine, our first-in-class SARM,” said Mitchell S. Steiner, MD, CEO of GTx. “The last patient will complete the Phase III ACAPODENE ADT trial in late November, and we expect to announce top line results of the trial during the first quarter of 2008. The Phase III ACAPODENE high grade PIN clinical trial should have a sufficient number of cancer events for us to conduct a planned interim efficacy analysis and also announce the results during the first quarter of 2008. As for our SARM program, the Phase IIb Ostarine cancer cachexia clinical trial is now underway, and we expect to initiate the Phase IIb Ostarine chronic kidney disease muscle wasting clinical trial by year end.”

Second quarter 2007 corporate highlights

- GTx announced late stage clinical development plans and timelines for Ostarine™. Ostarine is being developed for the treatment of cancer cachexia and for chronic kidney disease (CKD) muscle wasting. On July 3, 2007, GTx announced the initiation of a Phase IIb Ostarine cancer cachexia clinical trial with the release of top line data from the trial expected during the summer of 2008. The Phase IIb Ostarine cancer cachexia clinical trial is a randomized, double blind, placebo controlled study in 150 patients with non-small cell lung cancer, colorectal cancer, or non-Hodgkin’s lymphoma 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 initiate a Phase IIb Ostarine CKD muscle wasting clinical trial in the fourth quarter of 2007.

- GTx introduced two new product candidates for clinical development: GTx-838, another of our SARMs, for the treatment of sarcopenia, and GTx-878, an estrogen receptor beta agonist, a new class of drugs for the treatment of benign prostatic hyperplasia and prostatitis. GTx is planning to file an Investigational New Drug (IND) application for GTx-838 by year end 2007 and for GTx-878 during 2008.
- GTx strengthened its senior management team with the hiring of Ronald A. Morton, Jr., MD, as Vice President, Chief Medical Officer and Jeff Hesselberg, as Vice President, Regulatory Affairs.

Recent Events

In July, an independent Data Safety Monitoring Board (DSMB) conducted a planned, semi-annual review of unblinded safety data from the approximately 3,000 patients participating in the two Phase III ACAPODENE® clinical trials and recommended that the two clinical trials should continue as planned.

Second quarter 2007 financial highlights

The net loss for the quarter ended June 30, 2007 was $9.2 million, compared with a net loss of $10.0 million for the same period in 2006.

Revenue for the second quarter of 2007 was $1.8 million, compared to $623,000 for the same period in 2006. Revenue for the second quarter of 2007 included $360,000 of net sales of FARESTON® (toremifene citrate 60 mg), marketed for the treatment of metastatic breast cancer in postmenopausal women, and $1.5 million of collaboration revenue from our partner, Ipsen, Ltd.

For the three months ended June 30, 2007, research and development expenses were $8.6 million and general and administrative expenses were $3.6 million, compared to $8.4 million and $2.7 million, respectively, for the same period in 2006.

At June 30, 2007, GTx had cash and cash equivalents of $102.0 million. GTx has no debt and no warrants.

Updated 2007 Financial Guidance

GTx now believes its net loss for the full year 2007 will be within the range of $40 to $46 million, which is less than the previously stated guidance of a net loss of $45 to $55 million. This change is primarily a result of the timing of the occurrence of research and development activities and the related expenses across our portfolio of product candidates.

Conference Call

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

- 800-237-9752 from the United States and Canada or
- 617-847-8706 (International)
  The passcode for the call is 63833634.

A playback of the call will be available beginning today at 11:00 a.m. Eastern Time through August 14, 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 16356010.

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 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 the treatment of cancer cachexia. GTx 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. GTx is also developing two other product candidates, GTx-838, another GTx SARM, for the treatment of sarcopenia, and GTx-878, an estrogen receptor beta agonist, a new class of drugs for the treatment of benign prostatic hyperplasia and chronic prostatitis. GTx is planning to file an Investigational New Drug application (IND) with the FDA for GTx-838 by year end 2007 and to file an IND for GTx-878 during 2008.

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.

GTx, Inc.
CONDENSED BALANCE SHEETS
(in thousands, except share data)

	June 30, 2007 (unaudited)	December 31, 2006
ASSETS		
Current assets:		
Cash and cash equivalents	$ 102,028	$ 119,550
Accounts receivable, net	107	61
Inventory	142	207
Prepaid expenses and other current assets	2,933	1,882
Total current assets	105,210	121,700
Property and equipment, net	1,638	1,448
Intangible assets, net	4,538	4,714
Other assets	1,349	1,393
Total assets	$ 112,735	$ 129,255
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,364	$ 1,336
Accrued expenses	3,460	3,149
Deferred revenue — current portion	5,852	5,852
Total current liabilities	12,676	10,337
Deferred revenue, less current portion	18,628	21,554
Other long term liability	263	300
Capital lease obligation	13	15
Commitments and contingencies		
Stockholders' equity:		
Common stock, $0.001 par value: 60,000,000 shares authorized; 34,890,371 shares issued and outstanding at June 30, 2007 and 34,822,362 shares issued and outstanding at December 31, 2006	35	35
Additional paid-in capital	328,226	326,793
Accumulated deficit	(247,106)	(229,779)
Total stockholders' equity	81,155	97,049
Total liabilities and stockholders' equity	$ 112,735	$ 129,255

GTx, Inc.
CONDENSED STATEMENTS OF OPERATIONS
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2007	2006	2007	2006
Revenues:				
Product sales, net	$ 360	$ 288	$ 552	$ 1,164
Collaboration revenue	1,463	335	2,926	669
Total revenue	1,823	623	3,478	1,833
Costs and expenses:				
Cost of product sales	206	170	315	637
Research and development expenses	8,575	8,444	16,582	16,885
General and administrative expenses	3,609	2,692	6,726	5,642
Total costs and expenses	12,390	11,306	23,623	23,164
Loss from operations	(10,567)	(10,683)	(20,145)	(21,331)
Interest income	1,364	699	2,818	1,423
Net loss	$ (9,203)	$ (9,984)	$ (17,327)	$ (19,908)
Net loss per share:				
Basic	$ (0.26)	$ (0.32)	$ (0.50)	$ (0.64)
Diluted	$ (0.26)	$ (0.32)	$ (0.50)	$ (0.64)
Weighted average shares used in computing net loss per share:				
Basic	34,885,213	31,002,338	34,863,807	30,999,044
Diluted	34,885,213	31,002,338	34,863,807	30,999,044