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): January 23, 2009

GTx, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

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

3 N. Dunlap Street Van Vleet Building Memphis, Tennessee 38163

(Address of principal executive offices, including Zip Code)

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

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 2.02. Results of Operations and Financial Condition.

GTx, Inc. (the "Company") is furnishing the following information regarding its unaudited financial results for the fourth quarter and year ended December 31, 2008:

- Net loss for the fourth quarter and year ended December 31, 2008 was \$13.9 million and \$51.8 million, respectively, compared with a net loss of \$12.8 million and \$40.4 million for the same periods in 2007.
- Revenue for the fourth quarter and year ended December 31, 2008 was \$3.0 million and \$13.5 million, respectively, compared to \$1.9 million and \$7.1 million for the same periods in 2007. Revenue for the fourth quarter of 2008 included collaboration income of \$2.8 million and \$242,000 of net sales of FARESTON® (toremifene citrate) 60 mg. Revenue for the year ended December 31, 2008 included collaboration income of \$12.4 million and \$1.1 million of net sales of FARESTON® (toremifene citrate) 60 mg.
- Research and development expenses for the fourth quarter and year ended December 31, 2008 were \$10.6 million and \$44.3 million, respectively, compared to \$12.0 million and \$38.5 million for the same periods in 2007.
- General and administrative expenses for the fourth quarter and year ended December 31, 2008 were \$6.3 million and \$23.1 million, respectively, compared to \$3.6 million and \$13.5 million for the same periods in 2007.
- At December 31, 2008, the Company had cash, cash equivalents and short-term investments of \$97.7 million.

The foregoing financial results have not been audited by the Company's independent registered public accounting firm, and may be subject to adjustment. Investors should be aware that the Company's unaudited financial results reflect management's estimates, which could differ from actual results, if the information on which the estimates were based ultimately proves to be incomplete or incorrect.

The information furnished under Item 2.02 of this Current Report on Form 8-K shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section 11 and 12(a)(2) of the Securities Act of 1933, as amended. The information contained herein shall not be incorporated by reference into any filing with the U.S. Securities and Exchange Commission made by the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURES

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

Dated: January 23, 2009

GTx, Inc.

By: /s/ Henry P. Doggrell Henry P. Doggrell,

Vice President, General Counsel and Secretary