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): March 22, 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 1.01 Entry into a Material Definitive Agreement.

As previously announced, GTx, Inc. ("GTx") and Ipsen Biopharm Limited (successor-in-interest to Ipsen Developments Limited) ("Ipsen") entered into an amendment to that certain Collaboration and License Agreement, made effective as of September 7, 2006, by and between GTx and Ipsen (the "Collaboration Agreement"). The amendment to the Collaboration Agreement (the "First Amendment") was entered into and became effective on March 22, 2010.

Pursuant to the Collaboration Agreement, GTx granted to Ipsen exclusive rights to develop and commercialize toremifene in all indications except the treatment and prevention of breast cancer in the European Union, Switzerland, Norway, Iceland, Lichtenstein, and the Commonwealth of Independent States (collectively, the "European Territory"). Under the terms of the Collaboration Agreement, among other things, GTx was eligible for up to an aggregate of €39.0 million in milestone payments depending on the successful development and launch of toremifene in certain countries of the European Territory for the prevention of prostate cancer in men with high grade prostatic intraepithelial neoplasia (the "HGPIN Indication"), subject to certain conditions, and/or the treatment or prevention of the side effects of androgen deprivation therapy in men with prostate cancer (the "ADT Indication"). Under the Collaboration Agreement, Ipsen also agreed to pay GTx a royalty equal to a graduating percentage of aggregate net sales of products containing toremifene, with such rates dependent on whether such sales are for the HGPIN Indication or the ADT Indication.

Under the terms of the First Amendment, Ipsen agreed to pay to GTx up to €42.0 million in clinical development milestone payments for the purpose of conducting a second pivotal Phase III clinical trial evaluating toremifene 80 mg to reduce fractures in men with prostate cancer on ADT, which trial will be designed to address the deficiencies identified by the FDA in the October 2009 Complete Response Letter GTx received from the FDA regarding its new drug application ("NDA") for toremifene 80 mg (such milestones, the "Development Milestone Payments"). Ipsen agreed to pay the Development Milestone Payments upon the completion of specific clinical development milestones throughout the course of such second pivotal Phase III clinical trial. Although Ipsen has agreed to make the Development Milestone Payments, if the projected cost of such second pivotal Phase III clinical trial of toremifene 80 mg exceeds €42.0 million by a certain amount, GTx and Ipsen may determine not to initiate the trial, in which event, Ipsen would not be obligated to provide any of the Development Milestone Payments. In any event, any costs in excess of €42.0 million related to such second pivotal Phase III clinical trial would be borne by GTx. In addition, if the FDA rejects GTx's proposed protocol for a second pivotal Phase III clinical trial and imposes additional requirements that GTx and Ipsen believe to be too burdensome and costly, GTx and Ipsen may determine not to pursue any additional clinical trials for toremifene 80 mg and to cease further development of the product candidate.

In exchange for the Development Milestone Payments, GTx released Ipsen of its obligation under the Collaboration Agreement to make certain potential milestone payments totaling €18.0 million related to European regulatory approval of toremifene 80 mg and pricing approvals. In addition, the territory in which Ipsen has the right to develop and commercialize toremifene was expanded under the First Amendment to include, in addition to the European Territory, Australia and certain countries in North Africa, the

Middle East and Asia (excluding Japan) (collectively, the “Ipsen Territory”). Ipsen was also granted the right under the First Amendment to co-promote toremifene 80 mg for the ADT Indication in the United States based on a co-promotion agreement to be executed between the parties or, at Ipsen’s election, in lieu of co-promotion, to receive a double digit royalty from GTx on U.S. net sales of toremifene 80 mg for the ADT Indication which declines as net sales increase beyond an established base. If Ipsen elects to retain its rights to the HGPIN Indication under the Collaboration Agreement, Ipsen may exercise its right under the First Amendment to be released from its obligation to pay up to €20.0 million in aggregate milestone payments and its share of development and clinical trial expenses for the HGPIN Indication in exchange for a reduction in the royalty payable by GTx on U.S. net sales of toremifene 80 mg for the ADT Indication. Additionally, Ipsen’s royalty obligation on net sales of toremifene 80 mg for the ADT Indication in the Ipsen Territory was reduced to a fixed low-teens rate (12%) under the First Amendment (versus the graduating royalty provided for under the original terms of the Collaboration Agreement). Finally, GTx granted to Ipsen a first right of negotiation under the First Amendment, subject to certain conditions, with respect to development, marketing, sale and distribution in the Ipsen Territory of GTx-758. The First Amendment will expire or terminate upon the expiration or termination of the Collaboration Agreement, unless earlier terminated by the parties.

The foregoing is only a brief description of certain of the terms of the Collaboration Agreement and the First Amendment, does not purport to be complete and is qualified in its entirety by reference to the Collaboration Agreement that was filed as Exhibit 10.37 to GTx’s quarterly report on Form 10-Q for the quarter ended September 30, 2006, and the First Amendment that will be filed as an exhibit to GTx’s quarterly report on Form 10-Q for the quarter ending March 31, 2010.

This current report on Form 8-K contains forward-looking statements based upon GTx’s current expectations. Forward-looking statements include, but are not limited to, statements relating to future matters under the Collaboration Agreement, including potential milestone and royalty payments, and 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 Ipsen will not be able to commercialize its product candidates if clinical trials do not demonstrate safety and efficacy in humans, including in any additional clinical trials that GTx may conduct in connection with the NDA 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 or toremifene 20 mg for the prevention of prostate cancer in high risk men with high grade prostatic intraepithelial neoplasia, in a timely manner or at all; (iii) that clinical trials being conducted or planned to be conducted by GTx and Ipsen 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 Ipsen 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 current report on Form 8-K. GTx's annual report on Form 10-K filed with the SEC on March 15, 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.

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: March 26, 2010

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