

**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) **February 14, 2013**

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.)

**175 Toyota Plaza
7th Floor
Memphis, Tennessee**
(Address of principal executive offices)

38103
(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 (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 8.01 Other Events.

On February 14, 2013, GTx, Inc. issued a press release announcing that new preclinical data will be presented on AKR1C3, as an androgen receptor-selective coactivator and promoter of growth in prostate cancer cells and castration resistant prostate cancer. A copy of the press release is furnished as Exhibit 99.1 to this Current Report.

ITEM 9.01 Financial Statements and Exhibits.

(d) Exhibits

**Exhibit
Number**
99.1

Description
Press Release issued by GTx, Inc. dated February 14, 2013

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: February 14, 2013

By: /s/ Henry P. Doggrell
Name: Henry P. Doggrell
Title: Vice President, Chief Legal Officer
and Secretary

GTx To Present Preclinical Data on a New Therapeutic
Target in Prostate Cancer

MEMPHIS, TN.—February 14, 2013—GTx, Inc. (NASDAQ: GTXI) announced today that new preclinical data will be presented indicating that AKR1C3, a steroidogenic enzyme, is an androgen receptor-selective coactivator and promoter of growth in prostate cancer cells and castration resistant prostate cancer (CRPC), and may represent the first nuclear hormone receptor coactivator that can be pharmacologically targeted in the treatment of advanced prostate cancer. The presentation will be given by Dr. Ramesh Narayanan, Director, Drug Discovery for GTx, Inc. on February 14 at the 2013 American Society of Clinical Oncology (ASCO) Genitourinary (GU) Cancer Symposium in Orlando, Florida.

CRPC may occur by several mechanisms, including up-regulation of the androgen receptor, coactivators and steroidogenic enzymes, including AKR1C3. *In vitro* cellular and molecular biological techniques and novel AKR1C3-selective inhibitors developed by GTx facilitated the identification of AKR1C3 as a unique androgen receptor -selective coactivator that promotes prostate cancer growth. Over expression of AKR1C3 promotes both androgen-dependent prostate cancer and CRPC growth with concomitant reactivation of androgen signaling in xenograft models. The coactivator and growth promoting functions of AKR1C3 were inhibited by a novel AKR1C3-selective, competitive inhibitor developed by GTx.

Permanent Abstract ID: 100

Session Title: General Poster Session A: Prostate Cancer

Date: Thursday, February 14, 2013

Time: 11:45AM - 1:15PM

Location: Gatlin Ballroom B

About GTx

GTx, Inc., headquartered in Memphis, Tenn., is a biopharmaceutical company dedicated to the discovery, development and commercialization of small molecules for the treatment of cancer, cancer supportive care and other serious medical conditions.

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, and include, but are not limited to, statements relating to GTx's drug discovery programs. 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 Securities and Exchange Commission on November 8, 2012 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.

Source: GTx, Inc.

GTx, Inc.
Marc Hanover, President, 901-523-9700
