



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

DIVISION OF  
CORPORATION FINANCE

February 9, 2011

Mitchell S. Steiner  
Chief Executive Officer, Vice Chairman and Director  
GTx, Inc.  
175 Toyota Plaza, 7<sup>th</sup> Floor  
Memphis, Tennessee 38103

**Re: GTx, Inc.**  
**Form 10-K**  
**Filed March 15, 2010**  
**File No. 000-50549**

Dear Mr. Steiner:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Jeffrey Riedler  
Assistant Director