

GTx, Inc.  
175 Toyota Plaza  
Memphis, TN 38103

January 3, 2018

VIA EDGAR

United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, DC 20549

**Re: GTx, Inc.**  
**Registration Statement on Form S-3**  
**Filed December 22, 2017**  
**File No. 333-222268**

**Acceleration Request**

**Requested Date: January 5, 2018**  
**Requested Time: 4:00 p.m. Eastern Time**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, the undersigned registrant hereby requests that the Securities and Exchange Commission take appropriate action to cause the above-referenced Registration Statement (the "Registration Statement") on Form S-3 to become effective at 4:00 p.m. Eastern Time on January 5, 2018 or as soon thereafter as is practicable.

Once the Registration Statement has been declared effective, please orally confirm that event with Chadwick Mills of Cooley LLP, counsel to the Registrant, at (650) 843-5654.

Sincerely,

**GTx, INC.**

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

cc: Chadwick L. Mills, Esq.

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