

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[Table of Contents](#)

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

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of
the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material under §240.14a-12

GTx, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:

 - (2) Aggregate number of securities to which transaction applies:

 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

 - (4) Proposed maximum aggregate value of transaction:

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 - (2) Form, Schedule or Registration Statement No.:

 - (3) Filing Party:

 - (4) Date Filed:





175 Toyota Plaza
7th Floor
Memphis, Tennessee 38103
(901) 523-9700

March 28, 2016

Dear Stockholder:

I would like to extend a personal invitation for you to join us at our Annual Meeting of Stockholders to be held on Wednesday, May 4, 2016, at 3:00 p.m. Central Daylight Time at the Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103.

At this year's meeting, you will be asked to approve the election of the two nominees for director named in the accompanying proxy statement and to ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for 2016. You will also be asked to approve a series of alternate amendments to GTx's charter to effect a reverse stock split, as well as to approve a series of alternate amendments to GTx's charter to effect a corresponding reduction in the number of authorized shares of GTx's common stock if the reverse stock split proposal is approved and implemented.

I urge you to vote, as the Board of Directors has recommended, for both of our director nominees and for each of the other proposals to be presented to our stockholders for approval at the Annual Meeting.

Attached you will find a notice of meeting (which includes a notice of Internet availability of our proxy materials) and proxy statement that contains further information about these items as well as specific details of the meeting.

Your vote is important. Whether or not you expect to attend the meeting, I encourage you to vote. Please sign and return your proxy card, or use the telephone or Internet voting prior to the meeting. This will assure that your shares will be represented and voted at the meeting, even if you cannot attend.

Sincerely,

A handwritten signature in black ink that reads "Marc S. Hanover".

Marc S. Hanover
Chief Executive Officer



175 Toyota Plaza, 7th Floor
Memphis, Tennessee 38103
(901) 523-9700

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

You are invited to attend the 2016 GTx, Inc. Annual Meeting of Stockholders:

WHEN	3:00 p.m. (Central Daylight Time) on Wednesday, May 4, 2016.
WHERE	The Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103.
ITEMS OF BUSINESS	<ol style="list-style-type: none">To elect the two nominees for Class III director named in the accompanying proxy statement to serve until the 2019 Annual Meeting of Stockholders and until their successors have been duly elected and qualified (Proposal No. 1);To ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2016 (Proposal No. 2);To approve a series of alternate amendments to GTx's Restated Certificate of Incorporation to effect, at the option of the Board of Directors, a reverse stock split of GTx's common stock at a reverse stock split ratio ranging from one-for-five (1:5) and one-for-fifteen (1:15), inclusive, with the effectiveness of one of such amendments and the abandonment of the other amendments, or the abandonment of all amendments, to be determined by the Board of Directors prior to GTx's 2017 Annual Meeting of Stockholders (Proposal No. 3);To approve a series of alternate amendments to GTx's Restated Certificate of Incorporation to effect, if and only if Proposal No. 3 is both approved and implemented, a reduction in the total number of authorized shares of GTx's common stock as illustrated in the table under the caption "—Effects of the Authorized Shares Reduction" in the section of the accompanying proxy statement entitled "Proposal No. 4—Approval of Reduction in the Number of Authorized Shares of Common Stock" (Proposal No. 4); andTo conduct such other business as may properly come before the meeting or any adjournment or postponement thereof.
RECORD DATE	You are entitled to vote if you are a stockholder of record at the close of business on March 7, 2016.
VOTING BY PROXY	The Board of Directors is soliciting your proxy to assure that a quorum is present and that your shares are represented and voted at the meeting. Please see the attached proxy statement and enclosed proxy card for information on submitting your proxy over the Internet, by telephone, or by mailing back the traditional proxy card (no extra postage is needed for the enclosed envelope if mailed in the U.S.). If you later decide to vote at the meeting, information on revoking your proxy prior to the meeting is also provided. You may receive more than one set of proxy materials and proxy cards. Please promptly complete, sign and return each proxy card you receive in order to ensure that all of your shares are represented and voted. Please note that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.
ATTENDANCE AT MEETING	If you plan to attend, please be sure to mark the box provided on the proxy card or indicate your attendance when prompted during your Internet or telephone submission.
RECOMMENDATIONS	The Board of Directors recommends that you vote "FOR" both of our nominees for Class III director, and "FOR" the approval of Proposals Nos. 2, 3 and 4.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be Held on May 4, 2016, at the Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103

**The proxy statement and annual report to stockholders are available at
www.edocumentview.com/GTXI**

Your vote is important. Whether or not you expect to attend the meeting, please submit your proxy promptly in order to assure that a quorum is present. Thank you for your attention to this important matter.

By Order of the Board of Directors,

Henry P. Doggrell
Vice President, Chief Legal Officer and Secretary

Memphis, Tennessee
March 28, 2016

TABLE OF CONTENTS

	<u>Page</u>
Information About the Meeting	1
Information About Voting	2
Additional Meeting-Related Information	6
Proposal No. 1 – Election of Directors	8
Additional Information About the Board of Directors and Certain Corporate Governance Matters	9
Audit Committee Report	22
Proposal No. 2 – Ratification of Appointment of Independent Registered Public Accounting Firm	24
Proposals Nos. 3 and 4 – Background	26
Proposal No. 3 – Approval of Reverse Stock Split of our Common Stock	28
Proposal No. 4 – Approval of Reduction in the Number of Authorized Shares of Common Stock	37
Equity Compensation Plan Information	40
Security Ownership of Certain Beneficial Owners and Management	42
Section 16(a) Beneficial Ownership Reporting Compliance	46
Compensation Discussion and Analysis	47
Compensation Committee Report	63
Executive Compensation	64
Director Compensation	80
Compensation Committee Interlocks and Insider Participation	85
Certain Relationships and Related Party Transactions	86
Other Matters	88

GTx, Inc.

175 Toyota Plaza, 7th Floor
Memphis, Tennessee 38103
(901) 523-9700

PROXY STATEMENT FOR THE 2016 ANNUAL MEETING OF STOCKHOLDERS

The enclosed proxy is solicited by the Board of Directors of GTx, Inc. for use at the 2016 Annual Meeting of Stockholders. **Your vote is very important.** For this reason, the Board of Directors is requesting that you allow your shares to be represented at the 2016 Annual Meeting of Stockholders by the proxies named on the enclosed proxy card. In connection with the solicitation of proxies by the Board of Directors, we are mailing this proxy statement, the enclosed proxy card, and our 2015 Annual Report to all stockholders entitled to vote at the Annual Meeting beginning on or about April 5, 2016.

In this proxy statement, terms such as "we," "us" and "our" refer to GTx, Inc., which may also be referred to from time to time as "GTx."

INFORMATION ABOUT THE MEETING

When is the Annual Meeting?

The Annual Meeting will be held at 3:00 p.m., Central Daylight Time, on Wednesday, May 4, 2016.

Where will the Annual Meeting be held?

The Annual Meeting will be held at the Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103. For directions to attend the Annual Meeting, please contact Investor Relations. The contact information for Investor Relations is described under "Who should I contact if I have any questions?" below. Information on how to vote in person at the Annual Meeting is discussed below.

What items will be voted on at the Annual Meeting?

There are four matters scheduled for a vote:

- To elect the two nominees for Class III director named herein to serve until the 2019 Annual Meeting of Stockholders and until their successors have been duly elected and qualified;
- To ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2016;
- To approve a series of alternate amendments to GTx's Restated Certificate of Incorporation to effect, at the option of the Board of Directors, a reverse stock split of GTx's common stock at a reverse stock split ratio ranging from one-for-five (1:5) and one-for-fifteen (1:15), inclusive, with the effectiveness of one of such amendments and the abandonment of the other amendments, or the abandonment of all amendments, to be determined by the Board of Directors prior to GTx's 2017 Annual Meeting of Stockholders (which proposal we refer to in this proxy statement as the "Reverse Stock Split Proposal"); and

- To approve a series of alternate amendments to GTX's Restated Certificate of Incorporation to effect, if and only if the Reverse Stock Split Proposal is both approved and implemented, a reduction in the total number of authorized shares of GTX's common stock as illustrated in the table under the caption "—Effects of the Authorized Shares Reduction" in the section of the accompanying proxy statement entitled "Proposal No. 4—Approval of Reduction in the Number of Authorized Shares of Common Stock" (which proposal we refer to in this proxy statement as the "Authorized Shares Reduction Proposal").

As of the date of this proxy statement, we are not aware of any other matters that will be presented for consideration at the Annual Meeting.

What are the Board of Directors' recommendations?

Our Board of Directors recommends that you vote:

- "FOR" the election of both of the nominees named herein to serve on the Board of Directors;
- "FOR" the ratification of the appointment of Ernst & Young LLP as GTX's independent registered public accounting firm for the fiscal year ending December 31, 2016;
- "FOR" the Reverse Stock Split Proposal; and
- "FOR" the Authorized Shares Reduction Proposal.

Will GTX's directors be in attendance at the Annual Meeting?

GTX encourages, but does not require, its directors to attend annual meetings of stockholders. However, GTX currently anticipates that all of its directors will attend the Annual Meeting. All but two of GTX's then-current directors attended the 2015 Annual Meeting of Stockholders.

INFORMATION ABOUT VOTING

Who is entitled to vote at the Annual Meeting?

Only stockholders of record at the close of business on the record date, March 7, 2016, are entitled to receive notice of the Annual Meeting and to vote the shares for which they are stockholders of record on that date at the Annual Meeting, or any postponement or adjournment of the Annual Meeting. As of the close of business on March 7, 2016, GTX had 141,749,150 shares of common stock outstanding.

Stockholders of Record: Shares Registered in Your Name. If on March 7, 2016, your shares were registered directly in your name with GTX's transfer agent, Computershare Investor Services, then you are a stockholder of record. As a stockholder of record, you may vote in person at the Annual Meeting or vote by proxy. Whether or not you plan to attend the Annual Meeting, we urge you to fill out and return the enclosed proxy card, or vote by proxy over the telephone or on the Internet as instructed below, to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank. If on March 7, 2016, your shares were held in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and these proxy materials are being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have

the right to direct your broker or other agent on how to vote the shares in your account. You are also invited to attend the Annual Meeting. However, since you are not the stockholder of record, you may not vote your shares in person at the Annual Meeting unless you request and obtain a valid proxy from your broker or other agent.

How do I vote?

You may either vote "FOR" each nominee to the Board of Directors or you may withhold your vote for any nominee that you specify. With respect to Proposals Nos. 2, 3 and 4, you may vote "FOR" or "AGAINST", or abstain from voting. The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name. If you are a stockholder of record, you may vote in person at the Annual Meeting, vote by proxy using the enclosed proxy card, vote by proxy over the telephone, or vote by proxy on the Internet. Whether or not you plan to attend the Annual Meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the Annual Meeting and vote in person even if you have already previously voted by proxy, in which event your proxy vote will be disregarded.

- To vote in person, come to the Annual Meeting and we will give you a ballot when you arrive.
- To vote using the enclosed proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the postage paid envelope provided. If you return your signed proxy card to us before the Annual Meeting, we will vote your shares as you direct.
- To submit a proxy over the telephone, dial toll-free 1-800-652-VOTE (8683) within the United States, U.S. territories and Canada using a touch-tone phone and follow the instructions provided by the recorded message. Your vote must be received by 1:00 a.m. Central Daylight Time on May 3, 2016 to be counted.
- To submit a proxy on the Internet, go to www.envisionreports.com/GTXI to complete an electronic proxy card and follow the steps outlined on the secured website. Your vote must be received by 1:00 a.m. Central Daylight Time on May 3, 2016 to be counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank. If you are a beneficial owner of shares registered in the name of your broker, bank or other nominee, you should have received a proxy card and voting instructions with these proxy materials from that organization rather than from GTX. Simply complete and mail the proxy card to ensure that your vote is counted.

Alternatively, you may vote by proxy over the telephone or on the Internet as instructed by your broker or bank. To vote in person at the Annual Meeting, you must obtain a valid proxy from your broker, bank or other nominee. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

We provide Internet proxy voting to allow you to vote your shares on-line, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your Internet access, such as usage charges from Internet access providers and telephone companies.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of March 7, 2016.

What if I return a proxy card but do not make specific choices?

Stockholder of Record: Shares Registered in Your Name. If you are a stockholder of record and you do not specify your vote on each proposal individually when submitting a proxy via the internet or by telephone, or if you sign and return a proxy card without giving specific voting instructions, then your shares will be voted as follows:

- "FOR" the election of both of the nominees named herein to serve on the Board of Directors;
- "FOR" the ratification of the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2016;
- "FOR" the Reverse Stock Split Proposal; and
- "FOR" the Authorized Shares Reduction Proposal.

If any other matter is properly presented at the Annual Meeting, your proxy (one of the individuals named on your proxy card) will vote your shares as recommended by the Board of Directors or, if no recommendation is given, will vote your shares using his or her best judgment.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank. If you are a beneficial owner of shares registered in the name of your broker, bank or other nominee, and you do not provide the broker or other nominee that holds your shares with voting instructions, the broker or other nominee will determine if it has the discretionary authority to vote on the particular matter.

Can I change my vote after submitting my proxy card?

Yes. You can revoke your proxy at any time before the final vote at the Annual Meeting. If you are the record holder of your shares, you may revoke your proxy in any one of three ways:

- You may submit another properly completed proxy bearing a later date;
- You may send a written notice that you are revoking your proxy to GTx, Inc. at 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103, Attention: Henry P. Doggrell, Corporate Secretary; or
- You may attend the Annual Meeting and notify the election officials at the Annual Meeting that you wish to revoke your proxy and vote in person. Simply attending the Annual Meeting will not, by itself, revoke your proxy.

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

How are votes counted?

Votes will be counted by the inspector of election appointed for the Annual Meeting, who will separately count "FOR," "WITHHOLD" and broker non-votes with respect to the election of directors, and, with respect to Proposals Nos. 2, 3 and 4, "FOR" and "AGAINST" votes, abstentions and broker non-votes. A broker non-vote occurs when a nominee, such as a broker or bank, holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary authority to vote with respect to that proposal and has not received instructions with respect to that proposal from the beneficial owner. In the event that a broker, bank, custodian,

nominee or other record holder of our common stock indicates on a proxy that it does not have discretionary authority to vote certain shares on a particular proposal, then those shares will be treated as broker non-votes with respect to that proposal. In this regard, the election of directors (Proposal No. 1) is a matter considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore GTx expects broker non-votes on Proposal No. 1. In addition, it is possible that brokers will not have discretionary voting authority with respect to the Reverse Stock Split Proposal (Proposal No. 3) and the Authorized Shares Reduction Proposal (Proposal No. 4), in which case, if you do not instruct your broker how to vote with respect to Proposals Nos. 3 and 4, your broker may not vote with respect to those proposals. Accordingly, if you own shares through a nominee, such as a broker or bank, please be sure to instruct your nominee how to vote to ensure that your vote is counted on all of the proposals.

Abstentions and broker non-votes will be treated as shares present for the purpose of determining the presence of a quorum for the transaction of business at the Annual Meeting. Abstentions will be counted towards the tabulation of shares present in person or represented by proxy and entitled to vote and will have the same effect as "AGAINST" votes on Proposals Nos. 2, 3 and 4. Although broker non-votes will be treated as shares present for the purpose of determining the presence of a quorum, broker non-votes will not be counted for purposes of determining the number of shares present in person or represented by proxy and entitled to vote with respect to a particular proposal. Thus, a broker non-vote will not affect the outcome of the vote on Proposals Nos. 1 and 2. Broker non-votes will, however, have the same effect as "AGAINST" votes on Proposals Nos. 3 and 4.

What is the vote required for each proposal?

- For the election of the Class III directors, the two nominees receiving the most "FOR" votes (among votes properly cast in person or by proxy) will be elected.
- To be approved, Proposal No. 2, the ratification of the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2016, must receive a "FOR" vote from at least a majority of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on the matter.
- To be approved, Proposal No. 3, the Reverse Stock Split Proposal, must receive a "FOR" vote from at least a majority of the outstanding shares of our common stock.
- To be approved, Proposal No. 4, the Authorized Shares Reduction Proposal, must receive a "FOR" vote from at least a majority of the outstanding shares of our common stock.

How many shares must be present to constitute a quorum for the Annual Meeting?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if at least a majority of the outstanding shares entitled to vote are represented by stockholders present at the Annual Meeting or by proxy. On March 7, 2016, the record date, there were 141,749,150 shares outstanding and entitled to vote. Thus, at least 70,874,576 shares must be represented by stockholders present at the Annual Meeting or by proxy to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the Annual Meeting. Abstentions and broker non-votes will be treated as shares present for the purpose of determining the presence of a quorum. If there is no quorum, either the Chairman of the meeting or a majority of the votes present in person or represented by proxy at the Annual Meeting may adjourn the Annual Meeting to another date.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. Final results are expected to be published in a current report on Form 8-K filed by GTX with the Securities and Exchange Commission on or before the fourth business day following the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days following the Annual Meeting, we intend to file a Form 8 K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

ADDITIONAL MEETING-RELATED INFORMATION

How and when may I submit a stockholder proposal for GTX's 2017 Annual Meeting?

Our annual meeting of stockholders generally is held in April or May of each year. We will consider for inclusion in our proxy materials for the 2017 Annual Meeting of Stockholders, stockholder proposals that are received at our executive offices no later than December 6, 2016 and that comply with all applicable requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended. However, if our 2017 Annual Meeting of Stockholders is not held between April 4, 2017 and June 3, 2017, then the deadline will be a reasonable time prior to the time we begin to print and send our proxy materials. Proposals must be sent to our Corporate Secretary at GTX, Inc., 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103.

Pursuant to GTX's bylaws, stockholders wishing to submit proposals or director nominations that are not to be included in our proxy materials must have given timely notice thereof in writing to our Corporate Secretary. To be timely for the 2017 Annual Meeting of Stockholders, you must notify our Corporate Secretary, in writing, not later than the close of business on December 6, 2016, nor earlier than the close of business on November 6, 2016. We also advise you to review GTX's bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations, including the different notice submission date requirements in the event that we do not hold our 2017 Annual Meeting of Stockholders between April 4, 2017 and June 3, 2017. A stockholder's notice to our Corporate Secretary must set forth the information required by GTX's bylaws with respect to each matter the stockholder proposes to bring before the annual meeting. The Chairman of the 2017 Annual Meeting of Stockholders may determine, if the facts warrant, that a matter has not been properly brought before the meeting and, therefore, may not be considered at the meeting. In addition, the proxy solicited by the Board of Directors for the 2017 Annual Meeting of Stockholders will confer discretionary voting authority with respect to (i) any proposal presented by a stockholder at that meeting for which GTX has not been provided with timely notice and (ii) any proposal made in accordance with GTX's bylaws, if the proxy statement for the 2017 Annual Meeting of Stockholders briefly describes the matter and how management proxy holders intend to vote on it, if the stockholder does not comply with the requirements of Rule 14a-4(c)(2) promulgated under the Securities Exchange Act of 1934, as amended.

How can I obtain a copy of GTX's Form 10-K?

We will mail to you without charge, upon written request, a copy of our Form 10-K filed with the Securities and Exchange Commission for the fiscal year ended December 31, 2015, as well as a copy of any exhibit specifically requested. Requests should be sent to: Corporate Secretary, GTX, Inc., 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103. A copy of our Annual Report on Form 10-K has also been filed with the SEC and may be accessed from the SEC's homepage (www.sec.gov).

In addition, a copy of our 2015 Annual Report to Stockholders is being mailed along with this proxy statement and is also available at www.edocumentview.com/GTXI. Our 2015 Annual Report to

Stockholders is not incorporated into this proxy statement and shall not be considered proxy solicitation material.

What proxy materials are available on the Internet?

This proxy statement and our 2015 Annual Report to Stockholders are available at www.edocumentview.com/GTXI.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these mailed proxy materials, our directors and employees may also solicit proxies in person, by telephone or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

How many copies should I receive if I share an address with another stockholder?

The SEC has adopted rules that permit companies and intermediaries, such as brokers, to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement and annual report addressed to those stockholders. This process, which is commonly referred to as "householding," potentially provides extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are GTx stockholders will be householding our proxy materials by delivering a single proxy statement and annual report to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that it will be householding materials to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement and annual report in the future you may notify your broker or GTx. You can notify us by sending a written request to GTx, Inc., c/o Henry P. Doggrell, Corporate Secretary, 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103, or by calling (901) 523-9700. Stockholders who currently receive multiple copies of the proxy statement and annual report at their address and would like to request "householding" of their communications should contact their broker. In addition, GTx will promptly deliver, upon written or oral request to the address or telephone number above, a separate copy of the annual report and proxy statement to a stockholder at a shared address to which a single copy of the documents was delivered.

Who should I contact if I have any questions?

If you have any questions about the Annual Meeting, our proxy materials or your ownership of our common stock, please contact Henry P. Doggrell, Corporate Secretary, 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103, Telephone 901-523-9700, by Fax: 901-844-8075 or by e-mail at investor.relations@gtxinc.com.

**PROPOSAL NO. 1
ELECTION OF DIRECTORS**

GTx's Board of Directors is divided into three classes. GTx's charter documents provide that each class must consist, as nearly as possible, of one-third of the total number of directors, and each class has a three-year term. Vacancies on the Board of Directors may be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board. A director elected by the Board to fill a vacancy in a class shall serve for the remainder of the full term of that class and until the director's successor is elected and qualified. This includes vacancies created by an increase in the authorized number of directors.

The Board of Directors presently has six members. There are currently two directors in Class III, the class whose term of office expires at the Annual Meeting: Michael G. Carter and J. R. Hyde, III, each of whom is an incumbent Class III director. The Nominating and Corporate Governance Committee reviewed the qualifications and performance of each of these directors, and recommended each of them for re-election to our Board of Directors, which then nominated these directors for re-election. Each of Dr. Carter and Mr. Hyde was also previously elected to our Board of Directors by our stockholders. If elected at the Annual Meeting, each of Dr. Carter and Mr. Hyde will serve until the 2019 Annual Meeting of Stockholders and until his successors is elected and qualified, or until his earlier death, resignation or removal.

Directors are elected by a plurality of the votes present in person or represented by proxy and entitled to vote at the Annual Meeting. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of each of Dr. Carter and Mr. Hyde. In the event that any nominee should be unavailable for election as a result of an unexpected occurrence, shares that would have been voted for that nominee will instead will be voted for the election of such substitute nominee as the Nominating and Corporate Governance Committee may propose. Each of Dr. Carter and Mr. Hyde has agreed to serve if elected and has consented to being named as a nominee in this proxy statement.

The following includes a brief biography of each of the nominees standing for election to the Board of Directors at the Annual Meeting, with each biography including information regarding the experiences, qualifications, attributes or skills that caused the Nominating and Corporate Governance Committee and the Board of Directors to determine that the applicable nominee should serve as a member of our Board of Directors.

Class III Director Nominees for Election for a Three-Year Term Expiring at the 2019 Annual Meeting

Michael G. Carter, M.D., Ch.B., F.R.C.P.

Dr. Carter, age 78, was appointed as a director in May 2006 and currently serves as Chair of the Compensation Committee and as a member of both the Audit Committee and the Scientific and Development Committee. Dr. Carter was a non-executive director of Santarus, Inc. from 2004 to 2013, served as a non-executive director of Micromet AG from 2001 to 2005 and of MICROMET, Inc. from 2006 to March 2012, and served as a non-executive director of Fulcrum Pharma, PLC from 2005 to 2010. Dr. Carter was a member of the Advisory Board of Paul Capital Royalty Fund from 2005 to 2008, and has been a venture partner with SV Life Sciences Advisors, LLP since 1998 and a member of the strategic advisory board of Healthcare Royalty Partners (HCRP) since September 2009 and as a member of the HCRP Investment Committee since 2015. Dr. Carter was the non-executive chairman of Metris Therapeutics, Ltd., a biotechnology firm specializing in women's healthcare from 1999 to 2008. He was also a non-executive director of OncoEthix from June 2013 until its sale to Merck & Co., Inc. in December 2014, and is currently a non-executive director of Atopix Therapeutics Ltd. Dr. Carter

served on the Pharmaceutical Board of ICI Pharmaceuticals/Zeneca Pharmaceuticals, a predecessor company of AstraZeneca, and held various positions with ICI Pharmaceuticals/Zeneca from 1984 to 1998, including International Medical Director and International Marketing Director. From 1985 to 1995, Dr. Carter served as a member of the U.K. Government's Medicines Commission. Dr. Carter is an Elected Fellow of the Royal Pharmaceutical Society, Faculty of Pharmaceutical Medicine, and of the Royal College of Physicians of Edinburgh. Dr. Carter holds a degree in pharmacy from London University (U.K.) and a medical degree from Sheffield University Medical School (U.K.). Dr. Carter brings to the GTx Board specific expertise in the development and commercialization of pharmaceutical products by both large pharmaceutical companies and small specialty biotech companies.

J. R. Hyde, III

Mr. Hyde, age 73, has served as a director since November 2000, and currently serves as a member of the Compensation Committee and the Nominating and Corporate Governance Committee. From November 2000 to March 2015, Mr. Hyde served as non-executive Chairman of our Board of Directors. In connection with Dr. Wills' assumption of duties as our Executive Chairman in March 2015, Mr. Hyde was appointed as our Lead Director. Since 1989, Mr. Hyde has been the sole stockholder and President of Pittco Holdings, Inc., a private institutional investment company. Since 1996, when Mr. Hyde made a substantial contribution to support Dr. Steiner's research, Mr. Hyde has been instrumental in forming and financing GTx and is our largest stockholder. Mr. Hyde was the Chairman of the Board of Directors of AutoZone, Inc. (NYSE: AZO) from 1986 to 1997 and the Chief Executive Officer of AutoZone from 1986 to 1996. From March 2005 to June 2007, Mr. Hyde served as the non-executive chairman of the Board of Directors of AutoZone, Inc., and continues to serve as a member of the Board. He was also Chairman and Chief Executive Officer of Malone & Hyde, Inc., AutoZone's former parent company, from 1972 until 1988. Mr. Hyde also served as a director of FedEx Corporation (NYSE: FDX) from 1977 to 2011. As our largest stockholder and with a long history of serving as both Chairman and Chief Executive Officer of a large publicly-traded company and a member of the board of directors of other public companies, Mr. Hyde has continued to serve as a principal architect of our public company governance structure, and continues to be a primary advisor to senior management on all matters of strategic importance. The Board believes that Mr. Hyde's leadership role and public company experience, as well as his significant ownership interest in the company, qualifies him as the best candidate to serve as the Lead Director of our Board of Directors.

The Board of Directors unanimously recommends a vote in favor of both of our nominees for Class III Director.

**ADDITIONAL INFORMATION ABOUT THE BOARD OF DIRECTORS
AND CERTAIN CORPORATE GOVERNANCE MATTERS**

Continuing Directors

In addition to the two Class III director nominees, GTx has four other persons serving as directors and who will continue in office after the Annual Meeting with terms expiring in 2017 and 2018. In this regard, there are currently two directors serving in Class I whose term expires at the 2017 annual meeting of stockholders, and two directors in Class II whose term of office expires at the 2018 annual meeting of stockholders. The following includes a brief biography of each director composing the remainder of the Board with terms expiring as shown, with each biography including information regarding the experiences, qualifications, attributes or skills that caused the Nominating and Corporate Governance Committee and the Board to determine that the applicable director should serve as a member of our Board of Directors.

Class I Directors Continuing in Office Until the 2017 Annual Meeting

Marc S. Hanover

Mr. Hanover, age 53, a co-founder of GTx, served as our President and Chief Operating Officer from our inception in September 1997 until his appointment as our permanent Chief Executive Officer in February 2015, and served as our acting Principal Financial Officer from December 31, 2013 until his appointment as our interim Chief Executive Officer on April 3, 2014. He also previously served as a member of our Board of Directors from September 1997 to August 2011. Prior to joining GTx, Mr. Hanover was a founder of Equity Partners International, Inc., a private equity firm in Memphis, Tennessee, and participated as a founder and investor in three healthcare companies. From 1985 to 1997, Mr. Hanover was a Senior Vice President and a member of the Executive Management Committee of National Bank of Commerce in Memphis, Tennessee. Mr. Hanover holds a B.S. in Biology from the University of Memphis and an MBA in Finance from the University of Memphis. Mr. Hanover serves as our Chief Executive Officer and he is responsible for overseeing all aspects of our business, including product development and business strategies. Accordingly, the Nominating and Corporate Governance Committee and our Board of Directors has determined that Mr. Hanover should serve as a member of our Board of Directors since he is best able to impart to our Board of Directors the business and financial acumen essential for a complete understanding by our Board of Directors of GTx's operations, strategies and developmental plans.

Kenneth S. Robinson, M.D., M.Div.

Dr. Robinson, age 61, has served as a director since May 2008 and currently serves as Chair of the Nominating and Corporate Governance Committee and as a member of the Audit Committee. From 2003 through 2007, Dr. Robinson served in the cabinet of Tennessee Governor Phil Bredesen as Commissioner of Health, and in April 2009, Dr. Robinson accepted an appointment to provide executive-level public health leadership and consultation as the Health Officer of Shelby County, Tennessee, the county in which GTx is located. In February 2011, Dr. Robinson was appointed as Public Health Policy Advisor for Shelby County, Tennessee. From 1982 through 1991, Dr. Robinson taught and practiced internal medicine at Vanderbilt University School of Medicine, and from 1991 through 2003, he was an Assistant Dean at the University of Tennessee College of Medicine. Since 2015, he has served as President and CEO of United Way of the Mid-South. Dr. Robinson holds a B.A., cum laude, from Harvard University, a M.D. from Harvard Medical School, and a Master of Divinity from Vanderbilt Divinity School. As a Harvard-trained physician who has experience in overseeing the complexities of federal and state agencies' provision of healthcare to elderly and indigent patients, Dr. Robinson brings to the Board expertise in governance, governmental reimbursement related issues, population health data and priorities, and the role of government in the development and delivery of healthcare services. Dr. Robinson, an African-American, adds an element of racial balance to the Board and also provides a voice for GTx with state and local officials.

Class II Directors Continuing in Office Until the 2018 Annual Meeting

J. Kenneth Glass

Mr. Glass, age 69, has served as a director since March 2004, and currently serves as the Chair of the Audit Committee and also currently serves on the Compensation Committee. Mr. Glass retired as Chairman of the Board, President and Chief Executive Officer of First Horizon National Corporation (NYSE: FHN), or First Horizon, as of January 29, 2007. Mr. Glass was named President and Chief Executive Officer of First Horizon in July 2002, and he also became First Horizon's Chairman of the Board in January 2004. From 2003 through 2007, Mr. Glass served as a director of FedEx Corporation (NYSE: FDX). From July 2001 through July 2002, Mr. Glass was President and

Chief Operating Officer of First Horizon. From 1993 to 2001, Mr. Glass was Business Unit President of First Tennessee Bank. Mr. Glass received his B.A. in Accounting from Harding University and graduated from Harvard Business School's Advanced Management Program. As Chairman and Chief Executive Officer of one of the largest banks in Tennessee, Mr. Glass was recruited to the GTx Board to provide financial and business leadership expertise to the Board. With his background in accounting and as a Chief Executive Officer, Mr. Glass serves in the role of a financial expert for our Audit Committee, and his years of experience leading a publicly-owned bank holding company has provided him with the organizational skills, risk management expertise and leadership he currently brings to the Board and the Audit Committee.

Robert J. Wills, Ph.D.

Dr. Wills, age 62, joined GTx as Executive Chairman of the Board of Directors and as the Chairman of the Board's Scientific and Development Committee on March 2, 2015. Prior to joining GTx, Dr. Wills served as Vice President, Alliance Manager for Johnson & Johnson, or J&J, and was responsible for managing strategic alliances for J&J's Pharmaceutical Group worldwide since 2002. Prior to this, Dr. Wills spent 22 years in pharmaceutical drug development, 12 of which were at J&J and 10 of which were at Hoffmann-La Roche Inc. Before assuming his alliance management role at J&J, Dr. Wills served as Senior Vice President Global Development at J&J where he was responsible for its late stage development pipeline and was a member of several internal commercial and research and development operating boards. Since 2015, Dr. Wills has served as the chairman of the board of Cymabay Therapeutics Inc. (NASDAQ: CBAY). Dr. Wills holds a B.S. in Biochemistry and a M.S. in Pharmaceutics from the University of Wisconsin and a Ph.D. in Pharmaceutics from the University of Texas. The Board of Directors has determined that Dr. Wills should serve as a member of our Board of Directors because he brings to our Board of Directors and GTx's management team in excess of 35 years of pharmaceutical industry experience and leadership, including extensive experience in clinical research and development and initiating and managing strategic partnerships and alliances.

Director Independence

As required under the NASDAQ listing standards, a majority of the members of a listed company's Board of Directors must qualify as "independent," as affirmatively determined by the Board of Directors. Consistent with the requirements of the SEC and NASDAQ, our Board of Directors reviews all relevant transactions or relationships between each director, and GTx, its senior management and its independent registered public accounting firm. During this review, the Board considers whether there are any transactions or relationships between directors or any member of their immediate family (or any entity of which a director or an immediate family member is an executive officer, general partner or significant equity holder) and members of GTx's senior management or their affiliates. The Board consults with GTx's corporate counsel to ensure that the Board's determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent NASDAQ listing standards, as in effect from time to time.

As a result of this review, the Board affirmatively determined that the following four of our six directors are independent members of the Board of Directors within the meaning of the applicable NASDAQ listing standards: Dr. Carter (Nominee), Mr. Hyde (Lead Director and Nominee), Mr. Glass and Dr. Robinson. As a result of Mr. Hyde's significant stock ownership in GTx, Mr. Hyde is not considered "independent" under applicable NASDAQ and SEC standards pertaining to membership of the Audit Committee (Mr. Hyde is not a member of the Audit Committee). Barrington J. A. Furr, Ph.D., who served as a director from January 2011 until his death in February 2015, was previously determined to be an independent director. Neither Mr. Hanover nor Dr. Wills are "independent"

within the meaning of the NASDAQ listing standards since each of Mr. Hanover and Dr. Wills serve as executive officers of GTX. In determining that Mr. Hyde was independent, the Board considered Mr. Hyde's significant ownership interest in GTX as well as his significant investments in our private placements of common stock and warrants that we effected in 2014.

The Compensation Committee and the Nominating and Corporate Governance Committee of the Board are comprised entirely of directors who are independent within the meaning of the NASDAQ listing standards, and the members of the Audit Committee are independent under applicable NASDAQ listing standards and SEC rules. In addition, the Board of Directors has determined that Mr. Glass, the Chair of the Audit Committee, qualifies as an "audit committee financial expert" within the meaning of the SEC rules. In determining whether Dr. Carter, Mr. Hyde and Mr. Glass are independent within the meaning of the NASDAQ listing standards pertaining to membership of the Compensation Committee, the Board determined that, based on its consideration of factors specifically relevant to determining whether any such director has a relationship to GTX that is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, no member of the Compensation Committee has a relationship that would impair that member's ability to make independent judgments about GTX's executive compensation. In particular, the Board considered, among other things, the source of each member's compensation, including compensation paid to such member by GTX, and also considered Mr. Hyde's significant stock ownership in and status as an affiliate of GTX and determined that such compensation and affiliation, as applicable, would not impair the applicable member's ability to make independent judgments about GTX's executive compensation. In the case of Mr. Hyde, the Board determined that, as a significant stockholder, his interests are aligned with other stockholders in seeking an appropriate executive compensation program for GTX.

Board Leadership Structure and Risk Oversight

Since we became a public company in February 2004, we historically operated with a non-executive Chairman of the Board, Mr. Hyde, who led the Board, and a Chief Executive Officer with responsibility for running GTX who is also a member of the Board. In early 2015, we elected a new Board member, Dr. Wills, who serves as our Executive Chairman. Dr. Wills was appointed as our Executive Chairman to provide complimentary leadership to our management team by someone who has spent his career in pharmaceutical clinical development and business strategies. Mr. Hyde, who served as our non-executive Chairman until this change, has assumed the role of Lead Director and interacts routinely with both our Executive Chairman and our Chief Executive Officer. In his role as Executive Chairman, Dr. Wills is responsible for, among other things:

- providing leadership to the Board complimentary to the Lead Director;
- setting the Board meeting agendas in consultation with our Chief Executive Officer and Lead Director;
- presiding at Board meetings and stockholder meetings; and
- facilitating the flow of information between management and the directors on a regular basis.

In his role as Lead Director, Mr. Hyde is responsible for, among other things:

- providing leadership to the Board complementary to the Executive Chairman;
- providing the Executive Chairman and the Chief Executive Officer with input as to the preparation of Board meeting agendas;

- presiding at Board meetings if the Executive Chairman is not in attendance;
- consulting with the Executive Chairman and the Chief Executive Officer from time to time as to the quality, quantity and timeliness of the flow of information from management that is necessary for the independent directors to effectively and responsibly perform their duties;
- coordinating and developing the agenda for, and chairing, executive sessions of the Board's independent directors; and
- acting as principal liaison between the independent directors and the Executive Chairman and the Chief Executive Officer.

We believe that our Executive Chairman allows Mr. Hanover to focus on the challenges that GTx faces in the current business environment while receiving complimentary leadership from a seasoned pharmaceutical executive. While our Guidelines on Governance Issues (a copy of which can be found on our corporate website at www.gtxinc.com under "About GTx" at "Governance") do not require that we separate the duties of Chairman of the Board from those of the Chief Executive Officer, we believe that by combining Dr. Wills' strategic focus with the day-to-day operational skills provided by our Chief Executive Officer will ensure a mature, thoughtful and complete review of matters of importance to GTx. We also believe that having a Lead Director, Mr. Hyde, separate from our Chief Executive Officer and Executive Chairman, reinforces the independence of the Board of Directors in its oversight of the business and affairs of the company. In addition, we believe that having a Lead Director, who is independent of management, creates an environment that is more conducive to objective evaluation and oversight of management's performance, increasing management accountability and improving the ability of the Board of Directors to monitor whether management's actions are in the best interests of GTx and its stockholders. In this regard, having the opportunity for the independent directors to meet in executive session under the direction of the Lead Director gives our Board ample opportunity to openly question and discuss matters pertaining to management, including the appropriateness of their direction and actions. Pursuant to our bylaws and our Guidelines on Governance Issues, our Board determines the best Board leadership structure for our company from time to time. As part of our annual Board self-evaluation process, the Board evaluates our leadership structure in an effort to ensure that it provides the optimal structure for our company and for our stockholders.

Our Board currently has four independent members within the meaning of the applicable NASDAQ listing standards and two non-independent members—Mr. Hanover, our Chief Executive Officer, and Dr. Wills, our Executive Chairman. A number of our independent Board members have served as members of senior management of other public companies and are serving or have served as directors of other public companies. Our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are each comprised solely of independent directors within the meaning of the applicable NASDAQ listing standards, each with a different independent director serving as the Chair of the committee. We also have a fourth Board committee, the Scientific and Development Committee, established in 2012, which is comprised of one independent director, Dr. Carter, and Dr. Wills, with Dr. Wills serving as the Chair of that committee. Typically, all members of our Board attend each scheduled meeting of the Scientific and Development Committee. We believe that the number of independent, experienced directors who make up our Board, along with the independent oversight of the Board by our Lead Director, Mr. Hyde, benefits GTx and our stockholders.

Previously, our Board delegated many risk oversight functions to its committees, and while Board committees assist the Board in its oversight function, following our substantial workforce reduction in October 2013 and more focused efforts on our development programs, the committees and

the full Board decided to temporarily suspend the committees' more compartmentalized review of our operational risks. However, as questions about operational risks arise, certain Board committees may ask for more detailed information from management about how the company identifies specific risks and mitigates them. For example, at the February 2016 meeting of the Board's Scientific and Development Committee, a presentation was made by our clinical operations personnel about how the company seeks to identify and mitigate any risk of possible data fraud in our ongoing clinical studies. Similarly, the Board's Audit Committee received an overview from our intellectual property team outlining potential cybersecurity risks and the ways management intends to mitigate many of these risks. Additionally, our management team provides the Board with regular updates about our strategies and objectives and their assessment of operational risks inherent within them at regular meetings of the Board. Board meetings also provide a venue for our directors to discuss issues of concern with management. The Board calls special meetings when necessary to address specific issues or matters that should be addressed before the next regularly scheduled meeting. In addition, our directors have access to our management at all levels to discuss any matters of interest, including those related to risk. Those members of management most knowledgeable about the applicable issues attend Board meetings to provide additional insight into items being discussed, including exposures and mitigation strategies with respect to various risks. In addition, our Chief Legal Officer and principal financial officer report directly to our Chief Executive Officer, providing him with visibility to our risk profile. The Board of Directors believes that the work undertaken by the full Board and the Chief Executive Officer enables the Board to effectively oversee our risk management function.

Board and Committee Meetings; Attendance

GTx encourages, but does not require its directors to attend annual meetings of stockholders. All of our then-current directors, with the exception of Dr. Carter and Mr. Hyde, attended the 2015 Annual Meeting of Stockholders. For 2015, each director attended at least 75% of the aggregate of (a) all meetings of the Board and (b) any committees on which he served. In 2015, the Board of Directors held four meetings, and the number of meetings held by the Board committees, other than the Scientific and Development Committee, is set forth in the table below. In addition, our independent directors hold executive sessions after the conclusion of each regularly scheduled Board meeting. Mr. Hyde presides over each executive session of the Board.

Board Committees

GTx's Board of Directors currently has four standing committees: the Audit Committee, the Compensation Committee, the Nominating and Corporate Governance Committee and the Scientific and Development Committee. The charters for the Audit Committee, the Compensation Committee, the Nominating and Corporate Governance Committee and the Scientific and Development Committee are available on GTx's website (www.gtxinc.com) under "About GTx" at "Governance." The current membership of and information about our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are shown below. With respect to the Scientific and Development Committee, the purpose of the Scientific and Development Committee is to assist the

Board by reviewing and evaluating GTX's research strategy, as well as its research, development and clinical programs.

<u>Committee/Current Members</u>	<u>Committee Functions</u>
Audit Committee	<ul style="list-style-type: none">• Oversees financial and operational matters involving accounting, corporate finance, auditing, internal control over financial reporting, compliance, and business ethics.
<i>Current Members</i> Mr. Glass (Chair) Dr. Carter Dr. Robinson	<ul style="list-style-type: none">• Oversees other financial audit and compliance functions as assigned by the Board.• Primarily responsible for overseeing GTX's risk management process.• Has the sole authority to select, evaluate, replace and oversee GTX's independent registered public accounting firm.
<i>Number of Meetings held in 2015: 6</i>	<ul style="list-style-type: none">• Has the sole authority to approve non-audit and audit services to be performed by the independent registered public accounting firm.• Monitors the independence and performance of the independent registered public accounting firm.• Provides an avenue of communications among the independent registered public accounting firm, management and the Board of Directors.• Reviews, approves and provides oversight of "related party transactions."• Has the specific responsibilities and authority necessary to comply with the NASDAQ listing standards applicable to audit committees.

<u>Committee/Current Members</u>	<u>Committee Functions</u>
Compensation Committee	<ul style="list-style-type: none">• Reviews the performance of GTX officers and establishes overall executive compensation policies and programs.
<i>Current Members:</i> Dr. Carter (Chair) Mr. Glass Mr. Hyde	<ul style="list-style-type: none">• Reviews and approves compensation elements such as base salary, bonus awards, stock option grants and other forms of long-term incentives for GTX officers.• Has the authority, in its sole discretion, to retain (or obtain the advice of) any compensation consultant, legal counsel or other adviser to assist it in the performance of its duties.
<i>Number of Meetings held in 2015: 2</i>	<ul style="list-style-type: none">• Evaluates the independence of GTX's compensation advisers.• Has the direct responsibility for the appointment, compensation and oversight of the work of any advisers retained or engaged by the Compensation Committee.• Reviews Board compensation.• Reviews and discusses with management the information contained in the Compensation Discussion and Analysis section of our annual proxy statements.• Has the specific responsibilities and authority necessary to comply with the NASDAQ listing standards applicable to compensation committees.

<u>Committee/Current Members</u>	<u>Committee Functions</u>
Nominating and Corporate Governance Committee	<ul style="list-style-type: none">• Evaluates governance standards for GTx to ensure that appropriate governance policies and procedures have been established and are being followed.
<i>Current Members:</i> Dr. Robinson (Chair) Mr. Hyde	<ul style="list-style-type: none">• Develops criteria to determine the qualifications and appropriate tenure of directors.• Reviews such qualifications and makes recommendations to the Board regarding the nomination of current directors for re-election to the Board as well as new nominees to fill vacancies on the Board.
<i>Number of Meetings held in 2015: 4</i>	<ul style="list-style-type: none">• Considers stockholder recommendations for Board nominees, as described below.• Recommends to the Board the chairmanship and membership of each Board committee.• Considers applicable social and ethical issues and other matters of significance in areas related to corporate public affairs.• Reviews succession plans for GTx officers.

Nominating and Corporate Governance Committee Matters

The Nominating and Corporate Governance Committee expects, as minimum qualifications, that nominees to the Board (including incumbent directors) will enhance the Board's management, finance, commercial and/or scientific expertise, will not have a conflict of interest and will have a high ethical standard and, with respect to new members of the Board, a willingness to serve at least an initial three year term for the Nominating and Corporate Governance Committee to recommend them to the Board of Directors. A director nominee's knowledge and/or experience in areas such as, but not limited to, the medical, pharmaceutical, biotechnology, biopharmaceutical or life sciences industry, equity and debt capital markets and financial accounting are likely to be considered both in relation to the individual's qualification to serve on our Board of Directors and the needs of the Board as a whole. While we do not have a formal policy on Board diversity, the Nominating and Corporate Governance Committee takes into account a broad range of diversity considerations when assessing director candidates, including individual backgrounds and skill sets, professional experiences and other factors that contribute to our Board having an appropriate range of expertise, talents, experiences and viewpoints, and considers those diversity considerations, in view of the needs of the Board as a whole, when making decisions on director nominations. Other characteristics, including but not limited to, the director nominee's material relationships with GTx, time availability, service on other boards of directors and their committees, or any other characteristics which may prove relevant at any given time as determined by the Nominating and Corporate Governance Committee are reviewed for purposes of determining a director nominee's qualification.

Candidates for director nominees are evaluated by the Nominating and Corporate Governance Committee in the context of the current composition of the Board, the operating requirements of GTx and the long-term interests of GTx's stockholders. In the case of new director candidates, the Nominating and Corporate Governance Committee also determines whether the nominee must be independent for NASDAQ purposes, which determination is based upon applicable NASDAQ listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. The Nominating and Corporate Governance Committee then may use its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm. The Nominating and Corporate Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board. In the case of incumbent directors whose terms of office are set to expire, the Nominating and Corporate Governance Committee reviews such directors' overall service to GTx

during their term, including the number of meetings attended, level of participation, quality of performance, and any other relationships and transactions that might impair such directors' independence. The Nominating and Corporate Governance Committee meets to discuss and consider such candidates' qualifications and then selects a nominee for recommendation to the Board by majority vote. The Nominating and Corporate Governance Committee does not intend to alter the manner in which it evaluates candidates, including the minimum criteria set forth above, based on whether the candidate was recommended by a stockholder or not. To date, the Nominating and Corporate Governance Committee has not paid a fee to any third party to assist in the process of identifying or evaluating director candidates.

The Nominating and Corporate Governance Committee reviewed the qualifications and performance of each of the directors currently standing for re-election at the Annual Meeting, and recommended their nomination to the full Board of Directors.

The Board of Directors does not impose term limits or a mandatory retirement age for directors, except that our Chief Executive Officer (or any other officer of GTx, including our Executive Chairman, if he or she is a member of the Board) is required tender his or her resignation to the Board if he or she ceases to serve as an executive officer of GTx. The Nominating and Corporate Governance Committee will then consider all of the relevant facts and circumstances and recommend to the Board the action to be taken with respect to such offer of resignation. With respect to non-employee members of the Board, while it is believed that a director's knowledge and/or experience can continue to provide benefit to the Board of Directors following a director's retirement from his or her primary work affiliation, it is recognized that a director's knowledge of and involvement in ever changing business environments can weaken, and therefore his or her ability to continue to be an active contributor to the Board of Directors will be reviewed. Upon a director's change in his or her employment status, if any, he or she is required to notify the Nominating and Corporate Governance Committee of such change and, if determined by the Board of Directors upon recommendation of the Nominating and Corporate Governance Committee, to offer his or her resignation.

Compensation Committee Matters

Scope of Authority. The Compensation Committee acts on behalf of the Board of Directors to establish the compensation of executive officers of GTx and provides oversight of GTx's compensation philosophy. The Compensation Committee also acts as the oversight committee with respect to GTx's benefit plans, stock plans and bonus plans covering executive officers and other senior management. In overseeing those plans, the Compensation Committee has the sole authority for the day-to-day administration and interpretation of the plans. The Compensation Committee retains the authority for establishing all matters with respect to the compensation of our executive officers, although our Compensation Committee may recommend to the full Board of Directors that it take action with respect to such compensation matters. Under its charter, the Compensation Committee has the authority, in its sole discretion, to retain (or obtain the advice of) any compensation consultant, legal counsel or other adviser to assist it in the performance of its duties. The Compensation Committee also has the direct responsibility for the appointment, compensation and oversight of the work of any advisers retained or engaged by the Compensation Committee. Finally, the Compensation Committee has the sole authority to approve the reasonable fees and the other terms and conditions of the engagement of any such advisor, including authority to terminate the engagement. GTx must provide for appropriate funding, as determined by the Compensation Committee, for the payment of reasonable compensation to any such adviser retained by the Compensation Committee.

Dr. Carter, as Chair of the Compensation Committee, is responsible for setting the agenda for meetings. Our Compensation Committee annually evaluates the performance, and determines the compensation, of the Executive Chairman of the Board, Chief Executive Officer and the other officers of GTx. More information regarding the Compensation Committee's process and procedures for determining and evaluating our executive officers' compensation packages can be found under the caption "Compensation Discussion and Analysis" below.

Role of Compensation Consultants in 2015 Compensation Determinations. In early 2012, the Compensation Committee retained the services of Radford, an AonHewitt Company, a third party compensation consultant recommended by one of the Compensation Committee members, for the limited purpose of reviewing the appropriate peer group to be used for compensation comparison purposes, for both Board and executive officer compensation. Based on recommendations from Radford, in February 2012, the Compensation Committee substantially revised its list of industry peers, and the Compensation Committee utilized this revised group of industry peers for purposes of evaluating whether levels of both our Board and executive officer compensation were appropriate. During 2012, the Compensation Committee also retained Radford to assess both the equity and cash compensation payment practices utilized by the Board to pay its members for their participation as Board and Board committee members, and based on the recommendation of Radford, moved to a "roles-based" compensation practice designed to recognize and reasonably pay members for their roles as members of the Board and members or chairpersons of various committees of the Board. In December 2014, the Compensation Committee again retained Radford to review and recommend revisions to the peer group we use for evaluating Board and executive officer compensation. After reviewing Radford's recommendations in February 2015, the Compensation Committee recommended that the full Board approve a revised peer group as well as specific modifications to the cash and equity compensation to be paid to the non-employee members of the Board and its committees, as described below. In each case, these non-employee director compensation decisions were based on compensation data provided by Equilar, Inc., an independent executive compensation survey database. For purposes of 2015 executive compensation determinations, however, neither Radford nor any other compensation consultant had any role in recommending for determination the levels or elements of our executive compensation program. For 2016 executive compensation determinations, the Compensation Committee did review and rely on data from Equilar regarding comparable cash and equity compensation payments made by our peers to their executive officers.

Roles of Executives in Establishing Executive Compensation. Historically, our human resource, finance and legal departments worked with senior management to design and develop compensation programs for our named executive officers for recommendation to the Compensation Committee. In addition, these management groups worked together to recommend changes to existing compensation programs, to recommend financial and other performance targets to be achieved under those programs, to prepare analyses of financial data, and to prepare peer data comparisons and other briefing materials for the Compensation Committee. In his previous role as President and Chief Operating Officer, Mr. Hanover would review the results of these efforts with our then Chief Executive Officer. Following any additional review or revision of management's proposals, Mr. Hanover and our then Chief Executive Officer would then present those proposals, along with any background information, to the Compensation Committee. Following our previous Chief Executive Officer's resignation and Mr. Hanover's appointment as our new Chief Executive Officer, Mr. Hanover now leads our human resource, finance and legal departments in designing and developing compensation programs for our executive officers, and presenting these proposals to the Compensation Committee. As Executive Chairman of the Board, Dr. Wills reviews and discusses all executive compensation proposals with Mr. Hanover and Henry P. Doggrell, our Chief Legal Officer, to offer his input and advice about any such proposals before they are presented to the Compensation Committee for its consideration. The Compensation Committee may approve, modify, or reject those proposals, or may request additional

information from management (or its own consultant, if it wished to retain one) on those matters. For more information on the role of our executive officers in establishing executive compensation please see "Compensation Discussion and Analysis" below.

Director Compensation. The Board of Directors sets non-employee directors' compensation at the recommendations of both the Nominating and Corporate Governance Committee and the Compensation Committee. The Compensation Committee and the Board of Directors believe that: director compensation should fairly compensate directors for work required in a company of GTX's size and scope; the compensation should align directors' interests with the long-term interest of stockholders; and the structure of the compensation should be simple, transparent and easy for stockholders to understand. In 2015, based on the recommendation of Radford, the Board substantially revised its list of peers to better reflect the size, financial condition and developmental stage of the company and approved modifications to the compensation paid to non-employee directors by GTX to bring our non-employee director compensation more in line with the median compensation being received by the non-employee directors of the company's industry peers. Noting that the cash compensation being paid to the non-employee directors for their service as Board and committee members was between the 25th and 50th percentile level of cash compensation being received by our peers' non-employee directors, Radford recommended limited increases to the cash compensation payments to non-employee directors, including a retainer of \$15,000 per year for our Lead Director. However, Radford noted that the equity awards historically granted to our non-employee directors on an annual basis was significantly less than the 25th percentile level of non-employee director equity awards by the companies in our new peer group. Accordingly, Radford recommended that the Board approve a one-time annual grant of stock options to purchase 100,000 shares of GTX common stock to our non-employee directors (with the exception of Mr. Hyde, who is not currently eligible for equity awards under our 2013 Non-Employee Director Equity Incentive Plan), which Radford stated was approximately equivalent to the annual equity awards being granted to non-employee directors at the 75th percentile level of the company's peers, to bring the equity awards closer to the median level of equity awards being received by non-employee directors of our industry peers. Based on these recommendations, in February 2015, the Board approved the limited increases in cash compensation to our non-employee directors and the grant of stock options to purchase 100,000 shares of GTX common stock to our non-employee directors on the day following the 2015 Annual Meeting. In the fourth quarter of 2015, utilizing the Radford recommendations as its guide, the Board again approved modest adjustments in the cash compensation payments to non-employee directors to maintain cash compensation at the approximately 50th percentile of cash payments made to board members by our peers, and determined that the number of shares subject to the automatic annual non-employee director option grants occurring on the date following the 2016 Annual Meeting will be 50,000 shares of GTX common stock. In each case, the determinations were based on relevant Equilar data. For more information on the compensation arrangements for our non-employee directors, please see the section entitled "Director Compensation" below.

Compensation Committee Charter. Our Compensation Committee reviews its charter on an annual basis and, if necessary, recommends changes to the Board of Directors for its approval. A copy of the Compensation Committee's charter can be found on our corporate website at www.gtxinc.com under "About GTX" at "Governance."

Stockholder Nomination Policy

It is the Nominating and Corporate Governance Committee's policy to review and consider all candidates for nomination and election as directors who may be suggested by any director or executive officer of GTX. The Nominating and Corporate Governance Committee will also consider any director candidate recommended by any stockholder if the recommendation is made in accordance with GTX's

charter, bylaws and applicable law although no director candidate has been recommended to date by any stockholder, other than members of the Board of Directors and management who are also stockholders of GTX. To be considered, a recommendation for director nomination should be submitted in writing to: GTX, Inc., Nominating and Corporate Governance Committee, Attention: Corporate Secretary, 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103. When submitting candidates for nomination to be elected at GTX's annual meetings of stockholders, stockholders must follow the notice procedures and provide the information required by GTX's bylaws. In particular, for the Nominating and Corporate Governance Committee to consider a candidate recommended by a stockholder for nomination at the 2017 Annual Meeting of Stockholders, the recommendation must be delivered to GTX's Corporate Secretary, in writing, not later than the close of business on December 6, 2016, nor earlier than the close of business on November 6, 2016, subject to the different notice submission date requirements provided for in GTX's bylaws in the event that GTX does not hold its 2017 Annual Meeting of Stockholders between April 4, 2017 and June 3, 2017. The recommendation must include the same information as is specified in GTX's bylaws for stockholder nominees to be considered at an annual meeting, including the following:

- the stockholder's name and address and the beneficial owner, if any, on whose behalf the nomination is proposed;
- the class and number of shares of GTX that are owned beneficially and of record by such stockholder and such beneficial owner;
- a description of all arrangements or understandings between the stockholder and the proposed nominee and any other person or persons regarding the nomination;
- the nominee's written consent to being named in GTX's proxy statement as a nominee and to serving as a director if elected; and
- all information regarding the nominee that would be required to be included in GTX's proxy statement by the rules of the SEC, including the nominee's age, business experience for the past five years and any directorships held by the nominee during the past five years.

Code of Business Conduct and Ethics and Guidelines on Governance Issues

Our Board of Directors has adopted a Code of Business Conduct and Ethics applicable to all officers, directors and employees as well as Guidelines on Governance Issues. These documents are available on GTX's website (www.gtxinc.com) under "Investors" at "Corporate Governance." GTX will provide a copy of these documents to any stockholder, without charge, upon request, by writing to: GTX, Inc., Corporate Secretary, 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of the Code of Business Conduct and Ethics by posting such information on our website at the address and the locations specified above.

Communications with the Board

Stockholders and other interested parties may communicate in writing with our Board of Directors, any of its committees, or with any of its non-management directors by sending written communications addressed to: GTX, Inc., Attention: Corporate Secretary, 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103. Our Corporate Secretary will review each communication and will forward such communication to the Board or to any individual director to whom the communication is addressed unless the communication is unduly hostile, threatening or similarly inappropriate, in which case, our Corporate Secretary will discard the communication.

Policies on Reporting Certain Concerns Regarding Accounting and Other Matters

We have adopted policies on the reporting of concerns to our Compliance Officer and Audit Committee regarding any suspected misconduct, illegal activities or fraud, including any questionable accounting, internal accounting controls or auditing matters, or misconduct. Any person who has a concern regarding any misconduct by any GTx employee, including any GTx officer, or any agent of GTx, may submit that concern to: GTx, Inc., Attention: Compliance Officer, 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103. Employees may communicate all concerns regarding any misconduct to our Compliance Officer and/or the Audit Committee on a confidential and anonymous basis through GTx's "whistleblower" hotline, the compliance communication phone number established by GTx: 1-877-778-5463, or by filing an anonymous, confidential report through Report-it.com, a web-based online service for "whistleblower" communications accessed at www.reportit.net. Any communications received through the toll free number or the online service is promptly reported to GTx's Compliance Officer, as well as other appropriate persons within GTx.

AUDIT COMMITTEE REPORT⁽¹⁾

The Audit Committee of the Board of Directors operates under a written charter approved by the Board of Directors, which is available on GTx's website (www.gtxinc.com) under "Investors" at "Corporate Governance." The Audit Committee's charter specifies that the purpose of the Audit Committee is to assist the Board in its oversight of:

- the engagement and performance of the independent registered public accounting firm;
- the quality and integrity of GTx's financial statements;
- GTx's system of internal controls;
- compliance with legal and regulatory requirements; and
- GTx's risk management process.

In carrying out these responsibilities, the Audit Committee, among other things:

- monitors the preparation of quarterly and annual financial reports by GTx's management;
- supervises the relationship between GTx and its independent registered public accounting firm, including:
 - having direct responsibility for its appointment, compensation and retention;
 - reviewing the scope of its audit services;
 - approving audit and non-audit services; and
 - confirming the independence of the independent registered public accounting firm; and
- oversees management's implementation and maintenance of effective systems of internal and disclosure controls, including review of GTx's policies relating to legal and regulatory compliance, ethics and conflicts of interests.

Management is responsible for: the preparation, presentation and integrity of GTx's financial statements; accounting and financial reporting principles; establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)); establishing and maintaining internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)); evaluating the effectiveness of disclosure controls and procedures; evaluating the effectiveness of internal control over financial reporting; and evaluating any change in internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, GTx's internal control over financial reporting. The independent registered public accounting firm is responsible for performing an independent audit of GTx's financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and to issue a report thereon, as well as expressing an opinion on the effectiveness of GTx's internal control over financial reporting. The Audit Committee's responsibility is to monitor and oversee these processes.

(1) This Section is not "soliciting material," is not deemed filed with the SEC and is not to be incorporated by reference in any filing of GTx under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

In connection with these responsibilities, the Audit Committee met with management and the independent registered public accounting firm to review and discuss the audited financial statements, including a discussion of the quality and acceptability of GTX's financial reporting and controls. The Audit Committee also discussed with the independent registered public accounting firm the matters required to be discussed by the Auditing Standard No. 16, *Communications with Audit Committees*, as adopted by the Public Company Accounting Oversight Board. The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent registered public accounting firm's communications with the Audit Committee concerning independence, and the Audit Committee has discussed with the independent registered public accounting firm that firm's independence. The Audit Committee has also received both management's and the independent registered public accountant's reports on internal control over financial reporting.

Based upon the Audit Committee's discussions with management and the independent registered public accounting firm, and the Audit Committee's review of the representations of management and the independent registered public accounting firm, subject to the limitations on the role and responsibilities of the Audit Committee referred to above and in the Audit Committee Charter, the Audit Committee recommended that the Board of Directors include the audited financial statements in GTX's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the Securities and Exchange Commission.

THE AUDIT COMMITTEE

J. Kenneth Glass, Chair
Michael G. Carter
Kenneth S. Robinson

PROPOSAL NO. 2
RATIFICATION OF APPOINTMENT OF
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee has selected Ernst & Young LLP as GTX's independent registered public accounting firm for the fiscal year ending December 31, 2016, and the Board of Directors has further directed that management submit the appointment of the independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Ernst & Young LLP has audited GTX's financial statements since its inception in 1997. A representative of Ernst & Young LLP is expected to be present at the Annual Meeting to make a statement if he or she so desires and to answer any appropriate questions.

Stockholder ratification of the appointment of Ernst & Young LLP as GTX's independent registered public accounting firm is not required by GTX's bylaws or other governing documents. However, the Board is submitting the appointment of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate governance. The Audit Committee is not bound by a vote either for or against the proposal. The Audit Committee will consider a vote against Ernst & Young LLP by the stockholders in selecting our independent registered public accounting firm in the future. Even if the stockholders do ratify the appointment, the Audit Committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if it believes that such a change would be in the best interests of GTX and our stockholders.

Stockholder approval of this Proposal No. 2 requires a "FOR" vote from at least a majority of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on the matter.

***On behalf of the Audit Committee, the Board of Directors unanimously
recommends a vote "FOR" Proposal No. 2.***

Independent Registered Public Accounting Firm's Fees

The following table shows the fees paid or accrued by GTX for audit and other services provided by Ernst & Young LLP, GTX's independent registered public accounting firm, for the years ended December 31, 2014 and 2015.

<u>Year</u>	<u>Audit Fees⁽¹⁾</u>	<u>Audit-Related Fees⁽²⁾</u>	<u>Tax Fees⁽³⁾</u>	<u>All Other Fees</u>	<u>Total Fees</u>
2014	\$ 359,082	—	\$ 29,510	—	\$ 388,592
2015	\$ 424,362	—	\$ 31,252	—	\$ 455,614

- (1) "Audit Fees" consisted of fees for professional services provided in connection with the audit of our financial statements and review of our quarterly financial statements. Also includes fees for services provided in connection with other statutory or regulatory filings or engagements, such as comfort letters, attest service, consents and review of documents filed with the SEC.
- (2) "Audit-Related Fees" consisted of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under "Audit Fees." There were no audit-related fees billed for fiscal 2014 or fiscal 2015.
- (3) "Tax Fees" consisted of fees associated with tax compliance, including tax return preparation, and tax advice and tax planning services. Tax compliance services accounted for \$18,000 and \$19,000 of the total tax fees billed in 2014 and 2015, respectively. Tax advice and tax planning services of \$11,510 and \$12,252 in 2014 and 2015, respectively, related primarily to consultations on our net operating loss carryforwards.

Pre-Approval Policies and Procedures

Applicable SEC rules require the Audit Committee to pre-approve audit and non-audit services provided by our independent registered public accounting firm. Since March 18, 2004, our Audit Committee has pre-approved all new services provided by Ernst & Young LLP.

The Audit Committee pre-approves all audit and non-audit services to be performed for GTx by its independent registered public accounting firm. The Audit Committee does not delegate the Audit Committee's responsibilities under the Securities Exchange Act of 1934 to GTx's management. The Audit Committee has delegated to the Chair of the Audit Committee the authority to grant pre-approvals of audit services of up to \$20,000; provided that any such pre-approvals are required to be presented to the full Audit Committee at its next scheduled meeting. The Audit Committee has determined that the rendering of the services other than audit services by Ernst & Young LLP is compatible with maintaining Ernst & Young's independence.

**PROPOSALS NOS. 3 AND 4
BACKGROUND**

Our Board of Directors has unanimously approved a series of alternate amendments to our Restated Certificate of Incorporation that would:

- effect a reverse stock split of all issued and outstanding shares of our common stock at a reverse stock split ratio ranging from one-for-five (1:5) and one-for-fifteen (1:15), inclusive, or the Reverse Stock Split; and
- effect a corresponding reduction in the total number of authorized shares of our common stock, or the Authorized Shares Reduction.

Accordingly, effecting the Reverse Stock Split would reduce the number of outstanding shares of our common stock and, if Proposal No. 4 is also approved by our stockholders, the Authorized Shares Reduction would reduce the total number of authorized shares of our common stock. The effectiveness of any one of these amendments and the abandonment of the other amendments, or the abandonment of all of these amendments, will be determined by the Board of Directors following the 2016 Annual Meeting and prior to the 2017 Annual Meeting of Stockholders. Our Board of Directors has recommended that these proposed amendments be presented to our stockholders for approval. Our Board of Directors strongly believes that the Reverse Stock Split and corresponding Authorized Shares Reduction are necessary for the following reasons:

- 1. To maintain our listing on The NASDAQ Capital Market.**
- 2. To provide us with flexibility with respect to our capital sufficient to execute our business strategy.**

Accordingly, our stockholders are being asked to approve these proposed amendments pursuant to Proposals Nos. 3 and 4, and to grant authorization to our Board of Directors to determine, at its option, whether to implement the Reverse Stock Split, including its specific timing and ratio, and if (and only if) the Reverse Stock Split is implemented, to implement the resulting corresponding Authorized Shares Reduction. The corresponding Authorized Shares Reduction was designed in an effort to ensure that GTx does not have what some stockholders might view as an unreasonably high number of authorized shares of common stock that are unissued or reserved for issuance following the Reverse Stock Split.

At last year's Annual Meeting, our stockholders approved our reverse stock split proposal, which approval we sought in connection with our then being out of compliance with the \$1.00 per share bid price requirement to maintain the listing of our common stock on The NASDAQ Capital Market. Because we regained compliance with the \$1.00 per share bid price requirement in June 2015 (subsequent to last year's Annual Meeting), the Board of Directors elected to not effect a reverse stock split and therefore abandoned the proposed amendments approved by our stockholders at last year's Annual Meeting. Unfortunately, as explained in more detail below, although we regained compliance in June 2015, in December 2015 we were notified by NASDAQ that we are again out of compliance with the \$1.00 minimum bid price requirement and we are now asking our stockholders to approve Proposals Nos. 3 and 4 as a result.

Should we receive the required stockholder approvals for both Proposals Nos. 3 and 4, the Board of Directors will have the sole authority to elect, at any time on or prior to the 2017 Annual Meeting of Stockholders, and without the need for any further action on the part of our stockholders: (1) whether to effect the Reverse Stock Split, and (2) if so, the number of whole shares of our common

stock, between and including five and fifteen, that will be combined and reclassified into one share of our common stock, with the resulting corresponding Authorized Shares Reduction as detailed under the captions "—Effects of the Reverse Stock Split" and "—Effects of the Authorized Shares Reduction" in Proposals Nos. 3 and 4, respectively.

Should we not receive the required stockholder approval for Proposal No. 3 or the Reverse Stock Split is not otherwise implemented on or prior to the 2017 Annual Meeting of Stockholders, then the Board of Directors will not implement the Authorized Shares Reduction. In this regard, the implementation of Proposal No. 4 is expressly conditioned upon the approval and implementation of Proposal No. 3; if Proposal No. 3 is not approved and implemented, then Proposal No. 4 will not be implemented. If we receive the required stockholder approval for Proposal No. 3 but do not receive the required stockholder approval for Proposal No. 4, then the Board of Directors will retain the option to implement the Reverse Stock Split and if so effected, the total number of authorized shares of our common stock would remain unchanged.

Notwithstanding approval of Proposals Nos. 3 and 4 by our stockholders, our Board of Directors may, at its sole option, abandon the proposed amendments and determine prior to the effectiveness of any filing with the Secretary of State of the State of Delaware not to effect the Reverse Stock Split and the corresponding Authorized Shares Reduction on or prior to the 2017 Annual Meeting of Stockholders, as permitted under Section 242(c) of the General Corporation Law of the State of Delaware. If the Board of Directors does not implement the Reverse Stock Split on or prior to the 2017 Annual Meeting of Stockholders, the Authorized Shares Reduction will not be implemented and stockholder approval would again be required prior to implementing any Reverse Stock Split.

By approving Proposals Nos. 3 and 4, our stockholders will: (a) approve a series of alternate amendments to our Restated Certificate of Incorporation pursuant to which any whole number of outstanding shares of common stock between and including five (5) and fifteen (15) could be combined and reclassified into one share of common stock and pursuant to which the total number of authorized shares of our common stock would be correspondingly reduced as detailed in Proposals Nos. 3 and 4; and (b) authorize our Board of Directors to file only one such amendment, as determined by the Board of Directors at its sole option, and to abandon each amendment not selected by the Board of Directors. The Board of Directors may also elect not to undertake any Reverse Stock Split and therefore abandon all amendments. The text of the proposed form of Certificate of Amendment to our Restated Certificate of Incorporation is attached hereto as Annex A.

If Proposals Nos. 3 and 4 are approved by our stockholders, and following such stockholder approval, our Board of Directors determines that effecting the Reverse Stock Split and implementing the corresponding Authorized Shares Reduction is in the best interests of GTx and its stockholders, the Reverse Stock Split and the corresponding Authorized Shares Reduction will become effective upon the filing of one such amendment with the Secretary of State of the State of Delaware. The amendment filed thereby will contain the number of shares of our common stock selected by our Board of Directors within the limits set forth in Proposal No. 3 to be combined and reclassified into one share of our common stock, and the resulting corresponding Authorized Shares Reduction set forth in Proposal No. 4, if any.

If Proposal No. 3 is approved by our stockholders but Proposal No. 4 is not approved by our stockholders, and following stockholder approval of Proposal No. 3, our Board of Directors determines that effecting the Reverse Stock Split is in the best interests of GTx and its stockholders, the Reverse Stock Split will become effective upon the filing of one such amendment with the Secretary of State of the State of Delaware. The amendment filed thereby will contain the number of shares selected by our Board of Directors within the limits set forth in Proposal No. 3 to be combined and reclassified into one share of our common stock, and without any corresponding Authorized Shares Reduction.

PROPOSAL NO. 3
APPROVAL OF REVERSE STOCK SPLIT OF OUR COMMON STOCK

Our Board of Directors believes that approval of the alternate amendments to our Restated Certificate of Incorporation that would effect the Reverse Stock Split is in the best interests of GTx and our stockholders and has unanimously recommended that the proposed amendments be presented to our stockholders for approval. Except for adjustments that may result from the treatment of fractional shares as described below, each GTx stockholder will hold the same percentage of our outstanding common stock immediately following the Reverse Stock Split as such stockholder held immediately prior to the Reverse Stock Split.

Reasons for the Reverse Stock Split

To maintain our listing on The NASDAQ Capital Market. By potentially increasing our stock price, the Reverse Stock Split would reduce the risk that our common stock could be delisted from The NASDAQ Capital Market. To continue our listing on The NASDAQ Capital Market, we must comply with NASDAQ Marketplace Rules, which requirements include a minimum bid price of \$1.00 per share. On December 23, 2015, we were notified by the NASDAQ Listing Qualifications Department that we do not comply with the \$1.00 minimum bid price requirement as our common stock had traded below the \$1.00 minimum bid price for 30 consecutive business days. We were automatically provided with a 180 calendar day period, ending on June 20, 2016, within which to regain compliance. To regain compliance, our common stock must close at or above the \$1.00 minimum bid price for at least 10 consecutive days or more at the discretion of NASDAQ. If we do not regain compliance by June 20, 2016, we may be eligible for an additional 180 calendar day compliance period. To qualify, we would need to meet, on June 20, 2016, the continued listing requirement for market value of publicly held shares and all other applicable standards for initial listing on The NASDAQ Capital Market, with the exception of the bid price requirement, and would need to provide written notice of our intention to cure the deficiency during the second compliance period by effecting a reverse stock split, if necessary. If we do not regain compliance by June 20, 2016 and are not granted a second 180-day compliance period, NASDAQ will notify us that our common stock will be subject to delisting. In that event, we may appeal the decision to a NASDAQ Listing Qualifications Panel. In the event of an appeal, our common stock would remain listed on The NASDAQ Capital Market pending a written decision by the Panel following a hearing. In the event that the NASDAQ Listing Qualifications Panel determines not to continue our listing and we are delisted from The NASDAQ Capital Market, our common stock may be delisted and trade on the OTC Bulletin Board or other small trading markets, such as the pink sheets.

The Board of Directors has considered the potential harm to us and our stockholders should NASDAQ delist our common stock from The NASDAQ Capital Market. Delisting could adversely affect the liquidity of our common stock since alternatives, such as the OTC Bulletin Board and the pink sheets, are generally considered to be less efficient markets. An investor likely would find it less convenient to sell, or to obtain accurate quotations in seeking to buy, our common stock on an over-the-counter market. Many investors likely would not buy or sell our common stock due to difficulty in accessing over-the-counter markets, policies preventing them from trading in securities not listed on a national exchange or for other reasons.

The Board of Directors believes that the proposed Reverse Stock Split is a potentially effective means for us to maintain compliance with the \$1.00 minimum bid requirement and to avoid, or at least mitigate, the likely adverse consequences of our common stock being delisted from The NASDAQ Capital Market by producing the immediate effect of increasing the bid price of our common stock. In addition, under the terms of the definitive securities purchase agreement we entered into in connection with a November 2014 private placement of our common stock and warrants, we agreed to take all

action reasonably necessary, including, if necessary, by effecting a reverse stock split, to continue the listing or quotation and trading of our common stock on a national securities exchange (which includes The NASDAQ Capital Market).

To potentially improve the marketability and liquidity of our common stock. The Board of Directors also believes that the increased market price of the common stock expected as a result of implementing the Reverse Stock Split could improve the marketability and liquidity of our common stock and will encourage interest and trading in our common stock. The Reverse Stock Split could allow a broader range of institutions to invest in our common stock (namely, funds that are prohibited from buying stocks whose price is below a certain threshold), potentially increasing trading volume and liquidity of our common stock. The Reverse Stock Split could help increase analyst and broker interest in our common stock as their policies can discourage them from following or recommending companies with low stock prices. Because of the trading volatility often associated with low-priced stocks, many brokerage houses and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. Some of those policies and practices may make the processing of trades in low-priced stocks economically unattractive to brokers. Additionally, because brokers' commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stocks, a low average price per share of common stock can result in individual stockholders paying transaction costs representing a higher percentage of their total share value than would be the case if the share price were higher.

To provide us with flexibility with respect to our authorized capital sufficient to execute our business strategy. As a matter of Delaware law, the implementation of the Reverse Stock Split does not require a reduction in the total number of authorized shares of our common stock under our Restated Certificate of Incorporation. However, if these Proposals Nos. 3 and 4 are approved by our stockholders and the Reverse Stock Split is implemented, the authorized number of shares of our common stock would be reduced according to the schedule set forth under "—Effects of the Reverse Stock Split" in connection with the implementation of the Reverse Stock Split. This is designed so that the authorized number of shares of our common stock would be effectively *increased* as a result of the Reverse Stock Split and corresponding Authorized Shares Reduction by a number of shares equal to approximately 50% of the number of authorized shares that would have resulted from a proportionate reduction in the authorized shares of common stock. As an example, if the Board determined to implement a one-for-ten Reverse Stock Split and Proposal No. 4 is approved by our stockholders, the number of authorized shares of our common stock would be correspondingly reduced from 400,000,000 shares to 60,000,000 shares, or an effective 50% increase to the 40,000,000 authorized shares that would have resulted from a proportionate reduction in the authorized number of shares of our common stock. Please see "—Effects of the Reverse Stock Split" below. Despite any such corresponding reduction, the practical effect of the Reverse Stock Split and the corresponding Authorized Shares Reduction would be to *increase* the number of authorized shares of our common stock. In addition, if Proposal No. 4 is not approved, then there would be no Authorized Shares Reduction and the authorized number of shares of our common stock would remain unchanged if the Reverse Stock Split is implemented. In either case, the Board of Directors desires to have the additional shares available to provide flexibility to use GTx common stock for business and financial purposes in the future as well to have sufficient shares available to provide appropriate equity incentives for our employees, including to give effect to future automatic increases to the shares reserved for issuance under our 2013 Equity Incentive Plan and our 2013 Non-Employee Director Equity Incentive Plan, or the 2013 Plans. At present, the Board of Directors has no immediate plans, arrangements or understandings to issue the additional shares of our common stock, other than in connection with the future automatic increases to the shares reserved for issuance under the 2013 Plans.

If this Proposal No. 3 is approved and the Reverse Stock Split is implemented, the authorized but unissued shares resulting from the effective increase to our authorized common shares may be used for various purposes without further stockholder approval. These purposes may include raising capital; providing equity incentives to employees, officers, directors, consultants and/or advisors; establishing strategic relationships with other companies; expanding our business through the acquisition of other businesses, products or technologies; and other purposes. For example, we will need to raise substantial additional capital to, among other things, fund our operations, conduct and/or complete clinical trials, continue our research and development activities, seek regulatory approval for our product candidates and commercialize our product candidates, if any such product candidates receive regulatory approval for commercial sale, and the additional shares may be used for a financing if we have an appropriate opportunity. In this regard, it is possible that financing alternatives for GTx may be limited should we have an insufficient amount of unissued and unreserved authorized shares of common stock to effect any such financings, and stockholder value may be harmed, perhaps severely, by this limitation. As an example, in 2014, we completed two private placements of units consisting of an aggregate of 76,287,160 shares of our common stock and warrants to purchase an additional 74,490,754 shares of our common stock for gross proceeds of approximately \$64.7 million. While those financings were significantly dilutive, if we did not have a sufficient amount of unissued and unreserved authorized shares of common stock to issue common stock to the investors at the closing of those private placements, we would have been unable to raise the funds that we needed and on the timing we needed them to continue as a going concern and to continue to execute on our business strategy and we could have been required to, among other things, make further reductions in our workforce, discontinue our development programs, liquidate all or a portion of our assets, and/or seek protection under the provisions of the U.S. Bankruptcy Code, all of which could have severely harmed our business and our prospects. In the future, we may be faced with funding needs similar to our funding needs in 2014 and we will otherwise still need to obtain substantial additional capital in the future; accordingly, we are seeking an effective increase to our authorized common stock in connection with the approval and implementation of the Reverse Stock Split to help ensure that we have sufficient unissued and unreserved authorized shares of common stock available in the future in order to pursue additional equity financings.

Criteria to be Used for Determining Whether to Implement the Reverse Stock Split

In determining whether to implement the Reverse Stock Split and which Reverse Stock Split ratio to implement, if any, following receipt of stockholder approval of Proposal No. 3, the Board of Directors may consider, among other things, various factors, such as:

- the historical trading price and trading volume of our common stock;
- the then-prevailing trading price and trading volume of our common stock and the expected impact of the Reverse Stock Split on the trading market for our common stock in the short- and long-term;
- our ability to continue our listing on The NASDAQ Capital Market;
- which Reverse Stock Split ratio would result in the least administrative cost to us; and
- prevailing general market and economic conditions.

The failure of our stockholders to approve this Proposal No. 3 could have serious, adverse effects on us and our stockholders. We could be delisted from The NASDAQ Capital Market because shares of our common stock may continue to trade below the requisite \$1.00 per share bid price needed to maintain our listing. If The NASDAQ Capital Market delists our common stock, our shares

may then trade on the OTC Bulletin Board or other small trading markets, such as the pink sheets. In that event, our common stock could trade thinly as a microcap or penny stock, adversely decrease to nominal levels of trading and be avoided by retail and institutional investors, resulting in the impaired liquidity of our shares.

Certain Risks and Potential Disadvantages Associated with the Reverse Stock Split

We cannot assure you that the proposed Reverse Stock Split will increase our stock price and have the desired effect of maintaining compliance with NASDAQ Marketplace Rules. The Board of Directors expects that the Reverse Stock Split will increase the market price of our common stock so that we may be able to regain and maintain compliance with the NASDAQ \$1.00 minimum bid price requirement. However, the effect of the Reverse Stock Split upon the market price of our common stock cannot be predicted with any certainty, and the history of similar reverse stock splits for companies in like circumstances is varied, particularly since some investors may view a reverse stock split negatively. It is possible that the per share price of our common stock after the Reverse Stock Split will not rise in proportion to the reduction in the number of shares of our common stock outstanding resulting from the Reverse Stock Split, and the market price per post-Reverse Stock Split share may not exceed or remain in excess of the \$1.00 minimum bid price for a sustained period of time, and the Reverse Stock Split may not result in a per share price that would attract brokers and investors who do not trade in lower priced stocks. In addition, although we believe the Reverse Stock Split may enhance the desirability of our common stock to certain potential investors, we cannot assure you that, if implemented, our common stock will be more attractive to institutional and other long term investors. Even if we implement the Reverse Stock Split, the market price of our common stock may decrease due to factors unrelated to the Reverse Stock Split. In any case, the market price of our common stock may also be based on other factors which may be unrelated to the number of shares outstanding, including our future performance. If the Reverse Stock Split is consummated and the trading price of the common stock declines, the percentage decline as an absolute number and as a percentage of our overall market capitalization may be greater than would occur in the absence of the Reverse Stock Split. Even if the market price per post-Reverse Stock Split share of our common stock remains in excess of \$1.00 per share, we may be delisted due to a failure to meet other continued listing requirements, including NASDAQ requirements related to the minimum number of shares that must be in the public float, the minimum market value of the public float and the minimum number of "round lot" holders.

The proposed Reverse Stock Split may decrease the liquidity of our common stock and result in higher transaction costs. The liquidity of our common stock may be harmed by the proposed Reverse Stock Split given the reduced number of shares that would be outstanding after the Reverse Stock Split, particularly if the stock price does not increase as a result of the Reverse Stock Split. In addition, if the proposed Reverse Stock Split is implemented, it will increase the number of our stockholders who own "odd lots" of fewer than 100 shares of common stock. Brokerage commission and other costs of transactions in odd lots are generally higher than the costs of transactions of more than 100 shares of common stock. Accordingly, the Reverse Stock Split may not achieve the desired results of increasing marketability and liquidity of our common stock that have been described above.

The effective increase in the authorized number of shares of our common stock as a result of the Reverse Stock Split could have anti-takeover implications. If the Reverse Stock Split is implemented, then, and assuming Proposal No. 4 is approved by our stockholders, the authorized number of shares of our common stock would be reduced according to the schedule set forth under "—Effects of the Reverse Stock Split." If Proposal No. 4 is not approved by our stockholders, then the authorized number of shares of our common stock would not be reduced *at all* if the Reverse Stock Split is implemented. Accordingly, in either case, the implementation of the Reverse Stock Split would result in

an effective increase in the authorized number of shares of our common stock. The implementation of the Reverse Stock Split and the resulting effective increase in the number of authorized shares of our common stock, could, under certain circumstances, have anti-takeover implications. The additional shares of common stock that would become available for issuance if this Proposal No. 3 is approved and the Reverse Stock Split is implemented could also be used by us to oppose a hostile takeover attempt or to delay or prevent changes in control or our management. For example, without further stockholder approval, the Board could adopt a "poison pill" which would, under certain circumstances related to an acquisition of GTX securities not approved by the Board, give certain holders the right to acquire additional shares of common stock at a low price, or the Board could strategically sell shares of common stock in a private transaction to purchasers who would oppose a takeover or favor the current Board. Although Proposals Nos. 3 and 4 have been prompted by business and financial considerations and not by the threat of any hostile takeover attempt (nor is the Board currently aware of any such attempts directed at us), nevertheless, stockholders should be aware that approval of this Proposals Nos. 3 and 4 could facilitate future efforts by us to deter or prevent changes in control, including transactions in which the stockholders might otherwise receive a premium for their shares over then current market prices.

Effects of the Reverse Stock Split

After the effective date of the proposed Reverse Stock Split, each stockholder will own a reduced number of shares of common stock. However, the Reverse Stock Split will affect all GTX stockholders uniformly and will not affect any stockholder's percentage ownership interests in GTX, except to the extent that the Reverse Stock Split results in any of our stockholders owning a fractional share as described below. Voting rights and other rights and preferences of the holders of our common stock will not be affected by the proposed Reverse Stock Split (other than as a result of the payment of cash in lieu of fractional shares). For example, a holder of 2% of the voting power of the outstanding shares of our common stock immediately prior to the Reverse Stock Split would continue to hold 2% of the voting power of the outstanding shares of our common stock immediately after the Reverse Stock Split. The number of stockholders of record will not be affected by the proposed Reverse Stock Split (except to the extent that any stockholder holds only a fractional share interest and receives cash for such interest after the proposed Reverse Stock Split).

The principal effects of the Reverse Stock Split will be that:

- depending on the Reverse Stock Split ratio selected by the Board of Directors, each five or fifteen shares of our common stock owned by a stockholder, or any whole number of shares of our common stock between five and fifteen as determined by the Board of Directors, will be combined and reclassified into one new share of our common stock;
- no fractional shares of common stock will be issued in connection with the proposed Reverse Stock Split; instead, holders of common stock who would otherwise receive a fractional share of common stock pursuant to the Reverse Stock Split will receive cash in lieu of the fractional share as explained more fully below;
- if Proposal No. 4 is approved by our stockholders and dependent on the Reverse Stock Split ratio selected by the Board of Directors, the total number of authorized shares of our common stock will be reduced from 400,000,000 to a range of 120,000,000 to 40,000,000, as shown in the table below (with any such reduction, as described above, resulting in an effective *increase* in the authorized number of shares of our common stock);

- if Proposal No. 4 is not approved by our stockholders, the total number of authorized shares of our common stock will remain at 400,000,000, resulting in an effective *increase* in the authorized number of shares of our common stock;
- based upon the Reverse Stock Split ratio selected by the Board of Directors, proportionate adjustments will be made to the per share exercise price and/or the number of shares issuable upon the exercise or vesting of all then outstanding GTX stock options, restricted stock units and warrants, which will result in a proportional decrease in the number of shares of our common stock reserved for issuance upon exercise or vesting of such stock options, restricted stock units and warrants, and, in the case of stock options and warrants, a proportional increase in the exercise price of all such stock options and warrants; and
- the number of shares then reserved for issuance under our equity compensation plans will be reduced proportionately based upon the Reverse Stock Split ratio selected by the Board of Directors.

The following table contains approximate information, based on share information as of March 7, 2016, relating to the common stock under the proposed Reverse Stock Split ratios assuming that Proposal No. 4 is approved and the corresponding Authorized Shares Reduction is implemented (without giving effect to the treatment of fractional shares):

<u>Status</u>	<u>Number of Shares of Common Stock Authorized</u>	<u>Number of Shares of Common Stock Issued and Outstanding</u>	<u>Number of Shares of Common Stock Reserved for Future Issuance</u>	<u>Number of Shares of Common Stock Authorized but Unissued and Unreserved</u>
Pre-Reverse Stock Split	400,000,000	141,749,150	88,990,654	169,260,196
Post-Reverse Stock Split 1:5	120,000,000	28,349,830	17,798,131	73,852,039
Post-Reverse Stock Split 1:6	100,000,000	23,624,858	14,831,776	61,543,366
Post-Reverse Stock Split 1:7	85,714,285	20,249,879	12,712,951	52,751,456
Post-Reverse Stock Split 1:8	75,000,000	17,718,644	11,123,832	46,157,525
Post-Reverse Stock Split 1:9	66,666,666	15,749,906	9,887,850	41,028,910
Post-Reverse Stock Split 1:10	60,000,000	14,174,915	8,899,065	36,926,020
Post-Reverse Stock Split 1:11	54,545,454	12,886,286	8,090,059	33,569,108
Post-Reverse Stock Split 1:12	50,000,000	11,812,429	7,415,888	30,771,683
Post-Reverse Stock Split 1:13	46,153,846	10,903,781	6,845,435	28,404,630
Post-Reverse Stock Split 1:14	42,857,142	10,124,939	6,356,475	26,375,727
Post-Reverse Stock Split 1:15	40,000,000	9,449,943	5,932,710	24,617,346

The following table contains approximate information, based on share information as of March 7, 2016, relating to the common stock under the proposed Reverse Stock Split ratios assuming that Proposal No. 4 is *not* approved (without giving effect to the treatment of fractional shares):

<u>Status</u>	<u>Number of Shares of Common Stock Authorized</u>	<u>Number of Shares of Common Stock Issued and Outstanding</u>	<u>Number of Shares of Common Stock Reserved for Future Issuance</u>	<u>Number of Shares of Common Stock Authorized but Unissued and Unreserved</u>
Pre-Reverse Stock Split	400,000,000	141,749,150	88,990,654	169,260,196
Post-Reverse Stock Split 1:5	400,000,000	28,349,830	17,798,131	353,852,039
Post-Reverse Stock Split 1:6	400,000,000	23,624,858	14,831,776	361,543,366
Post-Reverse Stock Split 1:7	400,000,000	20,249,879	12,712,951	367,037,170
Post-Reverse Stock Split 1:8	400,000,000	17,718,644	11,123,832	371,157,524
Post-Reverse Stock Split 1:9	400,000,000	15,749,906	9,887,850	374,362,244
Post-Reverse Stock Split 1:10	400,000,000	14,174,915	8,899,065	376,926,020
Post-Reverse Stock Split 1:11	400,000,000	12,886,286	8,090,059	379,023,655
Post-Reverse Stock Split 1:12	400,000,000	11,812,429	7,415,888	380,771,683
Post-Reverse Stock Split 1:13	400,000,000	10,903,781	6,845,435	382,250,784
Post-Reverse Stock Split 1:14	400,000,000	10,124,939	6,356,475	383,518,586
Post-Reverse Stock Split 1:15	400,000,000	9,449,943	5,932,710	384,617,347

In addition to the above effects, if the proposed Reverse Stock Split is implemented, it will increase the number of our stockholders who own "odd lots" of fewer than 100 shares of common stock. Brokerage commission and other costs of transactions in odd lots are generally higher than the costs of transactions of more than 100 shares of common stock. Accordingly, the Reverse Stock Split may not achieve the desired results of increasing marketability and liquidity of our common stock that have been described above.

After the effective date of the Reverse Stock Split, our common stock would have a new committee on uniform securities identification procedures, or CUSIP number, a number used to identify our common stock.

Our common stock is currently registered under Section 12(b) of the Securities Exchange Act, and we are subject to the periodic reporting and other requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The proposed Reverse Stock Split will not affect the registration of the common stock under the Exchange Act. Our common stock would continue to be listed on The NASDAQ Capital Market under the symbol "GTXI" immediately following the Reverse Stock Split, although it is likely that NASDAQ would add the letter "D" to the end of the trading symbol for a period of twenty trading days after the effective date of the Reverse Stock Split to indicate that the Reverse Stock Split had occurred.

Effective Date

The proposed Reverse Stock Split would become effective at 5:00 p.m., Eastern time, on the date of filing of a Certificate of Amendment to our Restated Certificate of Incorporation with the office of the Secretary of State of the State of Delaware, which date we refer to in this Proposal No. 3 as the Effective Date. Except as explained below with respect to fractional shares, effective as of 5:00 p.m., Eastern time, on the Effective Date, shares of common stock issued and outstanding immediately prior thereto will be combined and reclassified, automatically and without any action on the part of GTx or its stockholders, into a lesser number of new shares of our common stock in

accordance with the Reverse Stock Split ratio determined by our Board of Directors within the limits set forth in this Proposal No. 3.

Cash Payment In Lieu of Fractional Shares

No fractional shares of common stock will be issued as a result of the proposed Reverse Stock Split. Instead, in lieu of any fractional shares to which a holder of common stock would otherwise be entitled as a result of the proposed Reverse Stock Split, GTx will pay cash (without interest) equal to such fraction multiplied by the average of the closing sales prices of the common stock on The NASDAQ Capital Market during regular trading hours for the five consecutive trading days immediately preceding the Effective Date (with such average closing sales prices being adjusted to give effect to the Reverse Stock Split). After the Reverse Stock Split, a stockholder will have no further interest in GTx with respect to such stockholder's cashed-out fractional shares. A stockholder otherwise entitled to a fractional interest will not have any voting, dividend or other rights with respect to such fractional interest except to receive payment as described above.

As of March 7, 2016, there were approximately 173 stockholders of record of our common stock, which number of record holders includes those holders who are deemed record holders for purposes of the Securities Exchange Act of 1934, as amended. Upon stockholder approval of this Proposal No. 3, if the Board of Directors elects to implement the proposed reversed stock split, stockholders owning, prior to the Reverse Stock Split, less than the number of whole shares of common stock that will be combined and reclassified into one share of common stock in the reverse split would be eliminated. For example, if a stockholder held 10 shares of common stock immediately prior to the Reverse Stock Split and the Reverse Stock Split ratio selected by the Board of Directors was 1:15, then such stockholder would cease to be a stockholder of GTx following the Reverse Stock Split and would not have any voting, dividend or other rights except to receive payment for the fractional share as described above. Based on our stockholders of record as of March 7, 2016, and assuming a Reverse Stock Split ratio of 1:15, we expect that cashing out fractional stockholders would reduce the number of stockholders of record by only three holders. In addition, the Board of Directors does not intend for this transaction to be the first step in a series of plans or proposals of a "going private transaction" within the meaning of Rule 13e-3 of the Exchange Act.

Record and Beneficial Stockholders

If this Proposal No. 3 is approved by our stockholders and the Board of Directors elects to implement the Reverse Stock Split, stockholders of record holding all of their shares of our common stock electronically in book-entry form under the direct registration system for securities will be automatically exchanged by the exchange agent and will receive a transaction statement at their address of record indicating the number of new post-split shares of our common stock they hold after the Reverse Stock Split along with payment in lieu of any fractional shares. Non-registered stockholders holding common stock through a bank, broker or other nominee should note that such banks, brokers or other nominees may have different procedures for processing the Reverse Stock Split than those that would be put in place by us for registered stockholders. If you hold your shares with such a bank, broker or other nominee and if you have questions in this regard, you are encouraged to contact your nominee.

If this Proposal No. 3 is approved by our stockholders and the Board of Directors elects to implement the Reverse Stock Split, stockholders of record holding some or all of their shares in certificate form will receive a letter of transmittal from GTx or its exchange agent, as soon as practicable after the effective date of the Reverse Stock Split. Our transfer agent is expected to act as "exchange agent" for the purpose of implementing the exchange of stock certificates. Holders of pre-Reverse Stock Split shares will be asked to surrender to the exchange agent certificates

representing pre-Reverse Stock Split shares in exchange for post-Reverse Stock Split shares and payment in lieu of fractional shares (if any) in accordance with the procedures to be set forth in the letter of transmittal. No new post-Reverse Stock Split share certificates will be issued to a stockholder until such stockholder has surrendered such stockholder's outstanding certificate(s) together with the properly completed and executed letter of transmittal to the exchange agent.

STOCKHOLDERS SHOULD NOT DESTROY ANY PRE-SPLIT STOCK CERTIFICATE AND SHOULD NOT SUBMIT ANY CERTIFICATES UNTIL THEY ARE REQUESTED TO DO SO.

Accounting Consequences

The par value per share of common stock would remain unchanged at \$0.001 per share after the Reverse Stock Split. As a result, on the effective date of the Reverse Stock Split, the stated capital on our balance sheet attributable to the common stock would be reduced proportionally, based on the actual Reverse Stock Split ratio, from its present amount, and the additional paid-in capital account would be credited with the amount by which the stated capital would be reduced. The per share common stock net income or loss and net book value would be increased because there would be fewer shares of common stock outstanding. The Reverse Stock Split would be reflected retroactively in GTX's financial statements. We do not anticipate that any other accounting consequences would arise as a result of the Reverse Stock Split.

No Appraisal Rights

Our stockholders are not entitled to dissenters' or appraisal rights under the General Corporation Law of the State of Delaware with respect to the proposed alternate amendments to our Restated Certificate of Incorporation to allow for the Reverse Stock Split and, if Proposal No. 4 is approved, to effect the corresponding Authorized Shares Reduction, and we will not independently provide the stockholders with any such right if the proposed Reverse Stock Split and the corresponding Authorized Shares Reduction are implemented.

Material Federal Income Tax Consequences

The following is a summary of the material U.S. federal income tax consequences to our stockholders of the proposed Reverse Stock Split. The summary is based on the Internal Revenue Code of 1986, as amended, or the Code, applicable Treasury Regulations promulgated thereunder, judicial authority and current administrative rulings and practices as in effect on the date of this proxy statement. Changes to the laws could alter the tax consequences described below, possibly with retroactive effect. We have not sought and will not seek an opinion of counsel or a ruling from the Internal Revenue Service regarding the federal income tax consequences of the Reverse Stock Split. This discussion is for general information only and does not discuss the tax consequences which may apply to special classes of taxpayers (e.g., non-resident aliens, broker/dealers or insurance companies). The state and local tax consequences of the Reverse Stock Split may vary significantly as to each stockholder, depending upon the jurisdiction in which such stockholder resides. Stockholders are urged to consult their own tax advisors to determine the particular consequences to them.

In general, the federal income tax consequences of the Reverse Stock Split will vary among stockholders depending upon whether they receive cash for fractional shares or solely a reduced number of shares of common stock in exchange for their old shares of common stock. We believe that because the Reverse Stock Split is not part of a plan to increase periodically a stockholder's proportionate interest in our assets or earnings and profits, the Reverse Stock Split should have the following federal income tax effects. A stockholder who receives solely a reduced number of shares of common stock will not recognize gain or loss. In the aggregate, such a stockholder's basis in the

reduced number of shares of common stock will equal the stockholder's basis in its old shares of common stock and such stockholder's holding period in the reduced number of shares will include the holding period in its old shares exchanged. A stockholder who receives cash in lieu of a fractional share as a result of the Reverse Stock Split should generally be treated as having received the payment as a distribution in redemption of the fractional share, as provided in Section 302(a) of the Code. Generally, if redemption of the fractional shares of all stockholders reduces the percentage of the total voting power held by a particular redeemed stockholder (determined by including the voting power held by certain related persons), the particular stockholder should recognize gain or loss equal to the difference, if any, between the amount of cash received and the stockholder's basis in the fractional share. In the aggregate, such a stockholder's basis in the reduced number of shares of common stock will equal the stockholder's basis in its old shares of common stock decreased by the basis allocated to the fractional share for which such stockholder is entitled to receive cash, and the holding period of the reduced number of shares received will include the holding period of the old shares exchanged. If the redemption of the fractional shares of all stockholders leaves the particular redeemed stockholder with no reduction in the stockholder's percentage of total voting power (determined by including the voting power held by certain related persons), it is likely that cash received in lieu of a fractional share would be treated as a distribution under Section 301 of the Code. Stockholders should consult their own tax advisors regarding the tax consequences to them of a payment for fractional shares.

We will not recognize any gain or loss as a result of the proposed Reverse Stock Split.

Required Vote

Stockholder approval of this Proposal No. 3 requires a "FOR" vote from at least a majority of the outstanding shares of our common stock.

The Board of Directors unanimously recommends a vote "FOR" Proposal No. 3.

PROPOSAL NO. 4

APPROVAL OF REDUCTION IN THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK

Our Board of Directors believes that approval of the alternate amendments to our Restated Certificate of Incorporation that would effect the corresponding Authorized Shares Reduction is in the best interests of GTx and our stockholders and has unanimously recommended that the proposed amendments be presented to our stockholders for approval. The implementation of this Proposal No. 4 is expressly conditioned upon the approval and implementation of Proposal No. 3; if Proposal No. 3 is not approved and implemented, then this Proposal No. 4 will not be implemented. Accordingly, should we not receive the required stockholder approval for Proposal No. 3 or the Reverse Stock Split is not otherwise implemented on or prior to the 2017 Annual Meeting of Stockholders, then we will not implement the Authorized Shares Reduction. If we receive the required stockholder approval for Proposal No. 3 but do not receive the required stockholder approval for Proposal No. 4, then the Board of Directors will retain the option to implement the Reverse Stock Split, and, if so effected, the total number of authorized shares of our common stock would remain unchanged.

Reasons for the Authorized Shares Reduction; Certain Risks

As a matter of Delaware law, the implementation of the Reverse Stock Split does not require a reduction in the total number of authorized shares of our common stock under our Restated Certificate of Incorporation. However, if Proposals Nos. 3 and 4 are approved by our stockholders and the Reverse Stock Split is implemented, the authorized number of shares of our common stock would be reduced according to the schedule set forth under "—Effects of the Authorized Shares Reduction" below in connection with the implementation of the Reverse Stock Split. This is designed so that the

authorized number of shares of our common stock would be effectively *increased* as a result of the Reverse Stock Split and corresponding Authorized Shares Reduction by a number of shares equal to approximately 50% of the number of authorized shares that would have resulted from a proportionate reduction in the authorized shares of common stock. As an example, if the Board determined to implement a one-for-ten Reverse Stock Split, the number of authorized shares of our common stock would be correspondingly reduced from 400,000,000 shares to 60,000,000 shares, or an effective 50% increase to the 40,000,000 authorized shares that would have resulted from a proportionate reduction in the authorized number of shares of our common stock. Please see "—Effects of the Authorized Shares Reduction" below and "—Effects of the Reverse Stock Split" in Proposal No. 3. Despite any such corresponding reduction, the practical effect of the Reverse Stock Split and the corresponding Authorized Shares Reduction would be to *increase* the number of authorized shares of our common stock.

As described in more detail under "—Reasons for the Reverse Stock Split" in Proposal No. 3, our Board of Directors desires to have a sufficient number of unissued and unreserved authorized shares of common stock following the implementation of a Reverse Stock Split to provide us with flexibility with respect to our authorized capital sufficient to execute our business strategy. At the same time, the corresponding Authorized Shares Reduction was designed in an effort to ensure that GTx does not have what some stockholders might view as an unreasonably high number of authorized shares of common stock that are unissued or reserved for issuance following the Reverse Stock Split. In this regard, if Proposal No. 3 is approved but this Proposal No. 4 is not approved, then the authorized number of shares of our common stock would not be reduced *at all* if the Reverse Stock Split is implemented; accordingly, our Board of Directors believes that this Proposal No. 4 is in the best interests of GTx and our stockholders and strikes the appropriate balance in the event a Reverse Stock Split is implemented. However, the implementation of the Reverse Stock Split and the resulting effective increase in the number of authorized shares of our common stock, could, under certain circumstances, have anti-takeover implications. The additional shares of common stock that would become available for issuance if Proposals Nos. 3 and 4 are approved and the Reverse Stock Split is implemented could also be used by us to oppose a hostile takeover attempt or to delay or prevent changes in control or our management. For example, without further stockholder approval, the Board could adopt a "poison pill" which would, under certain circumstances related to an acquisition of GTx securities not approved by the Board, give certain holders the right to acquire additional shares of common stock at a low price, or the Board could strategically sell shares of common stock in a private transaction to purchasers who would oppose a takeover or favor the current Board. Although Proposals Nos. 3 and 4 have been prompted by business and financial considerations and not by the threat of any hostile takeover attempt (nor is the Board currently aware of any such attempts directed at us), nevertheless, stockholders should be aware that approval of Proposals Nos. 3 and 4 could facilitate future efforts by us to deter or prevent changes in control, including transactions in which the stockholders might otherwise receive a premium for their shares over then current market prices.

Effects of the Authorized Shares Reduction

The principal effect of the Authorized Shares Reduction will be that the number of authorized shares our common stock will be reduced from 400,000,000 to a range of 120,000,000 to 40,000,000, depending on the exact Reverse Stock Split ratio selected by the Board of Directors, if and when the Reverse Stock Split is implemented. The Authorized Shares Reduction would not have any effect on the rights of existing stockholders, and the par value of the common stock would remain unchanged at \$0.001 per share. The table below shows how the Reverse Stock Split ratio selected by the Board will

determine the corresponding Authorized Shares Reduction if this Proposal No. 4 is approved and the Reverse Stock Split is implemented:

Relationship Between Reverse Stock Split and the Authorized Shares Reduction

<u>Reverse Split Ratio</u>	<u>Number of Shares of Common Stock Authorized</u>
None (current)	400,000,000
Post-Reverse Stock Split 1:5	120,000,000
Post-Reverse Stock Split 1:6	100,000,000
Post-Reverse Stock Split 1:7	85,714,285
Post-Reverse Stock Split 1:8	75,000,000
Post-Reverse Stock Split 1:9	66,666,666
Post-Reverse Stock Split 1:10	60,000,000
Post-Reverse Stock Split 1:11	54,545,454
Post-Reverse Stock Split 1:12	50,000,000
Post-Reverse Stock Split 1:13	46,153,846
Post-Reverse Stock Split 1:14	42,857,142
Post-Reverse Stock Split 1:15	40,000,000

If this Proposal No. 4 is not approved, but Proposal No. 3 is approved and the Reverse Stock Split is implemented, then the authorized number of shares of our common stock would remain unchanged at 400,000,000 following the Reverse Stock Split. For additional information regarding the effects of the Reverse Stock Split, see "—Effects of the Reverse Stock Split" in Proposal No. 3.

In addition to the above effects, because future annual franchise taxes to be paid to the Secretary of State of Delaware will be determined in part based on the number of authorized shares in our Restated Certificate of Incorporation, the Authorized Shares Reduction is expected to result in a decrease in our future Delaware franchise taxes.

Effective Date; Conditionality

The proposed Authorized Shares Reduction would become effective at 5:00 p.m., Eastern time, on the date of filing of a Certificate of Amendment to our Restated Certificate of Incorporation with the office of the Secretary of State of the State of Delaware. The text of the proposed form of Certificate of Amendment to our Restated Certificate of Incorporation is attached hereto as Annex A.

The Board of Directors intends to proceed with the Authorized Shares Reduction only if and when the Reverse Stock Split is implemented. Accordingly, should we not receive the required stockholder approval for Proposal No. 3 or the Reverse Stock Split is not otherwise implemented on or prior to the 2017 Annual Meeting of Stockholders, then we will not implement the Authorized Shares Reduction. In this regard, the implementation of Proposal No. 4 is expressly conditioned upon the approval and implementation of Proposal No. 3; if Proposal No. 3 is not approved and implemented, then Proposal No. 4 will not be implemented. If we receive the required stockholder approval for Proposal No. 3 but do not receive the required stockholder approval for Proposal No. 4, then the Board of Directors will retain the option to implement the Reverse Stock Split and if so effected, the total number of authorized shares of our common stock would remain unchanged.

Required Vote

Stockholder approval of this Proposal No. 4 requires a "FOR" vote from at least a majority of the outstanding shares of our common stock.

The Board of Directors unanimously recommends a vote "FOR" Proposal No. 4.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides certain information with respect to all of GTx's equity compensation plans in effect as of December 31, 2015:

<u>Name</u>	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Plan Category			
Equity compensation plans approved by security holders	16,183,168(1)\$	1.91(3)	3,013,965(2)
Equity compensation plans not approved by security holders	361,005(4)	—(4)	241,478(5)
Total	16,544,173 \$	1.91(3)	3,255,443

- (1) Represents shares of GTx common stock underlying stock options and restricted stock units, or RSUs, granted under, as applicable: (i) the Genotherapeutics, Inc. Stock Option Plan, the GTx, Inc. 2000 Stock Option Plan, the GTx, Inc. 2001 Stock Option Plan, the GTx, Inc. 2002 Stock Option Plan and the GTx, Inc. 2004 Equity Incentive Plan, which are collectively referred to as the Prior Employee Plans; (ii) the GTx, Inc. Amended and Restated 2004 Non-Employee Directors' Stock Option Plan, or the Prior Directors' Plan; (iii) the GTx, Inc. 2013 Equity Incentive Plan, or the 2013 Plan; and (iv) the GTx, Inc. 2013 Non-Employee Director Equity Incentive Plan, or the 2013 Directors' Plan. From and after the May 2, 2013 effective date of 2013 Plan and the 2013 Directors' Plan, no further awards may be made under the Prior Employee Plans and the Prior Directors' Plan. Stock options previously granted under the Prior Employee Plans and the Prior Directors' Plan continue to be governed by the terms of the applicable plan.
- (2) Represents shares of GTx common stock remaining available for future issuance under the 2013 Plan and the 2013 Directors' Plan. The total number of shares of GTx common stock available for future issuance under the 2013 Plan, upon its May 2, 2013 effective date, was initially 4,208,157 shares plus up to an additional 6,093,559 Returning Employee Shares (as defined below) as such shares become available from time to time as set forth in the 2013 Plan. "Returning Employee Shares" means the shares subject to outstanding awards granted under the Prior Employee Plans that, from and after the May 2, 2013 effective date of the 2013 Plan, expire or terminate for any reason prior to exercise or settlement, are forfeited because of the failure to vest in those shares or are otherwise returned to the 2013 Plan share reserve pursuant to the terms of the 2013 Plan. As of December 31, 2015, an aggregate of 1,992,631 shares of GTx common stock remained available for future issuance under the 2013 Plan, plus up to an additional 3,082,835 Returning Employee Shares as such shares become available from time to time thereafter as set forth in the 2013 Plan. In addition, the number of shares remaining available for future issuance under the 2013 Plan automatically increases on January 1st of each year, for ten years, commencing on January 1, 2014, in an amount equal to 4% of the total number of shares of GTx common stock outstanding on December 31 of the preceding calendar year, or such lesser (or no) amount as may be approved by our Board of Directors. On January 1, 2016, the number of shares available for issuance under the 2013 Plan automatically increased by 5,614,964 shares. The total number of shares of GTx common stock available for future issuance under the 2013 Directors' Plan, upon its May 2, 2013 effective date, was initially 404,000 shares plus up to an additional 449,667 Returning Director Shares (as defined below) as such shares become available from time to time as set forth in the 2013 Directors' Plan. "Returning Director Shares" means the shares subject to outstanding awards granted under the Prior Directors' Plan that, from and after the May 2, 2013 effective date of the 2013 Directors' Plan, expire or terminate for any reason prior to exercise or settlement, are forfeited because of the failure to vest in those shares or are otherwise returned to the 2013 Directors' Plan share reserve pursuant to the terms of the 2013 Directors' Plan. As of December 31, 2015, an aggregate of 1,021,334 shares of GTx common stock remained available for future issuance under the 2013 Directors' Plan, plus up to an additional 362,333 Returning Director Shares as such shares become available from time to time thereafter as set forth in the 2013 Directors' Plan. In addition, the number of shares remaining available for future issuance under the 2013 Directors' Plan automatically increases on January 1st of each year, for ten years, commencing on January 1, 2014, in an amount equal to the lesser of 1% of the total number of shares of GTx common stock outstanding on December 31 of the preceding calendar year and 500,000 shares, or such lesser (or no) amount as may be approved by Board of Directors. On January 1, 2016, the number of shares available for issuance under the 2013 Directors' Plan automatically increased by 500,000 shares.
- (3) The weighted-average exercise price takes into account 8,200,000 shares of common stock issuable upon vesting of outstanding RSUs, which have no exercise price. The weighted-average exercise price, excluding such outstanding RSUs, is \$3.88.

- (4) Represents shares credited to individual director stock accounts as of December 31, 2015 under our Directors' Deferred Compensation Plan. There is no exercise price for these shares.
- (5) As of December 31, 2015, we had reserved an aggregate of 750,000 shares of GTX common stock for issuance pursuant to our Directors' Deferred Compensation Plan. However, the number of shares that may become issuable under our Directors' Deferred Compensation Plan depends solely on future elections made by plan participants. As of December 31, 2015, 147,517 shares of common stock had been distributed to participants in our Directors' Deferred Compensation Plan, and 361,005 shares were then credited to individual director stock accounts under our Directors' Deferred Compensation Plan. In February 2016, the Board reserved an additional 500,000 shares of GTX common stock for issuance pursuant to our Directors' Deferred Compensation Plan.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information as of March 1, 2016 (except as noted) regarding the beneficial ownership of our common stock by:

- each person, or group of affiliated persons, who is known by us to own beneficially five percent or more of our common stock;
- each of our directors and nominees for director;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

The number of shares owned and percentage ownership in the following table is based on 141,415,816 shares of common stock outstanding on March 1, 2016. Except as otherwise indicated below, the address of each officer, director and five percent stockholder listed below is c/o GTx, Inc., 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, these rules require that we include shares of common stock issuable pursuant to the exercise of stock options and warrants that are either immediately exercisable or exercisable within 60 days of March 1, 2016, as well shares of common stock issuable upon the vesting of outstanding restricted stock units within 60 days of March 1, 2016. We have also included shares credited to individual non-employee director stock accounts under our Directors' Deferred Compensation Plan as of March 1, 2016. Amounts credited to individual non-employee director stock accounts under our Directors' Deferred Compensation Plan are payable solely in shares of GTx common stock, but such shares do not have current voting or investment power. Shares issuable pursuant to our Directors' Deferred Compensation Plan or the vesting of restricted stock units, as well as shares issuable pursuant to the exercise of stock options and warrants that are either immediately exercisable or exercisable within 60 days of March 1, 2016, are deemed to be outstanding and beneficially owned by the person to whom such shares are issuable for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, we believe that the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them.

<u>Name and Address of Beneficial Owner</u>	<u>Beneficial Ownership</u>	
	<u>Number of Shares</u>	<u>Percent of Total</u>
5% Stockholders:		
The Pyramid Peak Foundation 6410 Poplar Ave. Suite 710 Memphis, Tennessee 38119	55,078,934(1)	33.2%
Entities Affiliated with BVF Partners c/o BVF Partners One Sansome Street, 30 th Floor San Francisco, California 94104	14,471,136(2)	9.999%(2)
Jack W. Schuler 28161 North Keith Drive Lake Forest, Illinois 60045	12,246,208(3)	8.7%
Formanek Investment Trust and Affiliates 6075 Poplar Ave., Suite 726 Memphis, Tennessee 38119	7,896,505(4)	5.4%
Named Executive Officers and Directors:		
Marc S. Hanover	1,986,386(5)	1.4%
Jason T. Shackelford	287,463(6)	*
Robert J. Wills, Ph.D.	433,334(7)	*
Diane C. Young, M.D.	—(8)	*
Henry P. Doggrell	668,735(9)	*
Michael G. Carter, M.D., Ch.B., F.R.C.P.	131,987(10)	*
J. Kenneth Glass	342,819(11)	*
J. R. Hyde, III	57,821,193(12)	38.5%(12)
Kenneth S. Robinson, M.D., M.Div.	242,872(13)	*
All Directors and Executive Officers as a group	61,800,439(14)	40.6%

* Represents less than 1% of the outstanding shares of our common stock.

- (1) Based on information provided to GTx as of February 5, 2016. Includes 24,545,455 shares issuable upon exercise of an outstanding warrant. James R. Boyd, Lee B. Harper, O. Mason Hawkins and Andrew R. McCarroll are each a director of the Foundation. Each of such individuals may be deemed to share beneficial ownership of the shares beneficially owned by the Foundation, but disclaim beneficial ownership of such shares. The foregoing ownership information was provided to us as of February 5, 2016, and, consequently, the beneficial ownership of the reporting person may have changed between such date and March 1, 2016.
- (2) Based on information provided to GTx as of December 31, 2015. Consists of: (i) 5,146,271 shares of common stock and a warrant to purchase up to an additional 5,146,271 shares of common stock held by Biotechnology Value Fund, L.P., (ii) 2,666,747 shares of common stock and a warrant to purchase up to an additional 2,666,747 shares of common stock held by Biotechnology Value Fund II, L.P., (iii) 1,230,206 shares of common stock and a warrant to purchase up to an additional 1,430,041 shares of common stock held by Investment 10, L.L.C., (iv) 1,729,082 shares of common stock and a warrant to purchase up to an additional 1,868,052 shares of common stock held by MSI BVF SPV, LLC and (v) 390,830 shares of common stock held by Biotechnology Value Trading Fund OS, L.P. Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., Investment 10, LLC, MSI BVF SPV, LLC and Biotechnology Value Trading Fund OS, L.P. are affiliated entities. Certain shares of common stock underlying the warrants held by these entities are excluded in the total number of shares held and reported in the table above due to a blocker that prevents the exercise of these warrants if the number of shares of common stock to be issued pursuant to such exercise would, when aggregated with all other shares of common stock owned by such holder at such time, result in the holder beneficially owning more than 9.999% of all of the common stock of GTx outstanding at such time. This restriction can be waived by the holders upon 61 days' prior written notice to us. As a result of this restriction, we believe, based on the information provided to us as of December 31, 2015, that these warrants are exercisable for up to an aggregate of 3,308,000 shares of our common stock within 60 days of March 1, 2016, and the number and percentage of shares beneficially owned by these entities in the table above reflects this restriction. This number and related percentage will change depending upon changes in the outstanding shares or waiver of the restriction. BVF Partners OS, Ltd., as the general partner of Biotechnology Value Trading Fund OS, L.P., may be deemed to beneficially own the shares that are beneficially owned

by Biotechnology Value Trading Fund OS, L.P. BVF Partners L.P. as the general partner of Biotechnology Value Fund, L.P. and Biotechnology Value Fund II, L.P., the investment adviser of each of Investment 10, LLC and MSI BVF SPV, LLC, the investment manager of Biotechnology Value Trading Fund OS, L.P. and the sole member of BVF Partners OS, Ltd., may be deemed to beneficially own the shares listed above that are beneficially owned in the aggregate by Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., Investment 10, LLC, MSI BVF SPV, LLC and Biotechnology Value Trading Fund OS, L.P.. BVF Inc., as the general partner of BVF Partners L.P., may be deemed to beneficially own the shares that are beneficially owned by BVF Partners L.P. Mark Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the shares that are beneficially owned by BVF Inc. BVF Partners OS, Ltd. disclaims beneficial ownership of the shares beneficially owned by Biotechnology Value Trading Fund OS, L.P. and each of BVF Partners L.P., BVF Inc. and Mr. Lampert disclaims beneficial ownership of the shares beneficially owned by Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., Investment 10, LLC MSI BVF SPV, LLC and Biotechnology Value Trading Fund OS, L.P. and this filing shall not be construed as an admission that any such person or entity is the beneficial owner of any such securities. The foregoing ownership information was provided to us as of December 31, 2015, and, consequently, the beneficial ownership of the reporting persons may have changed between such date and March 1, 2016.

- (3) The indicated beneficial ownership is based solely on a Schedule 13D/A filed with the SEC by the reporting person on January 20, 2016, reporting beneficial ownership as of January 20, 2016. According to the Schedule 13D/A, Jack W. Schuler has sole voting and dispositive power over 5,979,254 of such shares. Mr. Schuler also reported shared voting and dispositive power over 6,266,954 of such shares, which shares are owned by the Schuler Family Foundation, of which Mr. Schuler serves as a director along with his wife and daughter. Mr. Schuler's wife also reported shared voting and dispositive power over the shares owned by the Schuler Family Foundation. Mr. Schuler and Mrs. Schuler each disclaims any beneficial interest in the shares that the Schuler Family Foundation owns. The indicated ownership does not include 279,368 shares of GTx common stock owned by three irrevocable trusts (the "Trusts") established for the benefit of Mr. Schuler's adult children, as reported in the Schedule 13D/A. Mr. Schuler reports that he is not a trustee of any of the Trusts. Mr. Schuler and Mrs. Schuler each disclaims any beneficial interest in the shares that the Trusts own. The Schedule 13D/A filed by the reporting person provides information as of January 20, 2016, and, consequently, the beneficial ownership of the reporting person may have changed between such date and March 1, 2016.
- (4) Based on information provided to GTx as of January 20, 2016. Includes 4,050,213 shares held by the Formanek Investment Trust and 3,700,000 shares issuable upon exercise of a warrant held by the Formanek Investment Trust. Peter R. Formanek is a trustee of the Formanek Investment Trust and has voting and investment control over the shares beneficially owned by the Formanek Investment Trust. Each of the other trustees of the Formanek Investment Trust, Jonathan P. Formanek and Walter Rothchild, may be deemed to share voting and investment control over the shares beneficially owned by the Formanek Investment Trust, but Walter Rothchild disclaims beneficial ownership of such shares. Peter R. Formanek also serves as a trustee of other trusts that hold, or he otherwise has investment authority over, an aggregate of 146,292 shares of GTx common stock, but each of Peter R. Formanek and the Formanek Investment Trust disclaims beneficial ownership of such shares. The business address for each of Peter R. Formanek and Walter Rothchild is 6075 Poplar Avenue, Suite 726, Memphis, TN 38119. Jonathan P. Formanek's business address is 3111 Welborn Street, Dallas TX 75219.
- (5) Includes 352,875 shares held by Equity Partners XII, LLC, an entity controlled by Mr. Hanover, 227,273 shares issuable upon exercise of a warrant, 124,014 shares held by trusts of which Mr. Hanover is the trustee, and 625,000 shares of common stock issuable upon the exercise of options held by Mr. Hanover.
- (6) Includes 182,200 shares of common stock issuable upon the exercise of options held by Mr. Shackelford.
- (7) Includes 333,334 shares of common stock issuable upon the vesting of restricted stock units held by Dr. Wills.
- (8) Dr. Young joined GTx as our Chief Medical Officer effective July 13, 2015.
- (9) Includes 4,354 shares held by trusts with respect to which Mr. Doggrell may be deemed to have beneficial ownership, 114,350 shares held by a trust of which Mr. Doggrell is the co-trustee, 306,000 shares of common stock issuable upon the exercise of options held by Mr. Doggrell, and 4,000 shares of common stock held by Mr. Doggrell through an individual retirement account. Also includes 6,641 shares held by Mr. Doggrell's wife, 25,477 shares of common stock held by Mr. Doggrell's wife through an individual retirement account, and 5,000 shares held in a joint account with Mr. Doggrell's adult child.
- (10) Consists of 95,668 shares of common stock issuable upon the exercise of options held by Dr. Carter, and 36,319 shares issuable to Dr. Carter pursuant to our Directors' Deferred Compensation Plan.
- (11) Includes 40,550 shares of common stock held by Mr. Glass through an individual retirement account, 94,001 shares of common stock issuable upon the exercise of options held by Mr. Glass, and 6,553 shares issuable to Mr. Glass pursuant to our Directors' Deferred Compensation Plan. Also includes 24,500 shares of common stock held by Mr. Glass' wife through an individual retirement account.

- (12) Includes 145,352 shares held by Pittco Associates II, L.P. and 3,915,716 shares held by Pittco Investments, L.P., entities controlled by Mr. Hyde, 8,573,500 shares issuable upon exercise of a warrant issued to Mr. Hyde, and 196,106 shares issuable to Mr. Hyde pursuant to our Directors' Deferred Compensation Plan. With respect to the foregoing warrant, such warrant is exercisable for up to 24,545,455 shares of our common stock; however, number of shares of our common stock that may be acquired by Mr. Hyde upon the exercise of the warrant is generally limited to the extent necessary to ensure that, following such exercise, Mr. Hyde would not, together with his affiliates and any other persons or entities whose beneficial ownership of our common stock would be aggregated with Mr. Hyde for purposes of Section 13(d) of the Exchange Act, beneficially own in excess of 38.5% of (a) the total number of shares of our common stock then issued and outstanding or (b) the then combined voting power of all of our voting securities. As a result of this restriction, the warrant is exercisable for up to an aggregate of 8,573,500 shares of our common stock within 60 days of March 1, 2016, and the number and percentage of shares beneficially owned by Mr. Hyde in the table above reflects this restriction. This number and related percentage will change depending upon changes in the outstanding shares. Mr. Hyde also has shared voting and dispositive power over 216,462 shares held by Mr. Hyde's spouse, 1,844,851 shares held by trusts for the benefit of Mr. Hyde's children (the "Hyde Family Trusts") and 13,827,328 shares held in grantor retained annuity trusts on behalf of Mr. Hyde (the "Hyde GRATs"). As trustee of the Hyde Family Trusts and certain of the Hyde GRATs, John H. Pontius shares voting and dispositive power over all of the shares held by the Hyde Family Trusts. Lorie Jernigan, as trustee of certain of the Hyde GRATs, shares voting and dispositive power over 5,327,328 shares held in the Hyde GRATs, Wilson Sights, as trustee of certain of the Hyde GRATs, shares voting and dispositive power over 6,000,000 shares held in the Hyde GRATs and John H. Pontius, as trustee of certain of the Hyde GRATs, shares voting and dispositive power over 2,500,000 shares held in the Hyde GRATs. The business address for Ms. Jernigan and Mr. Sights is 17 West Pontotoc Ave., Suite 100 Memphis, TN 38103.
- (13) Consists of 80,001 shares of common stock issuable upon the exercise of options held by Dr. Robinson, and 162,871 shares issuable to Dr. Robinson pursuant to our Directors' Deferred Compensation Plan.
- (14) For purposes of determining the number of shares beneficially owned by directors and executive officers as a group, any shares beneficially owned by more than one director or executive officer are counted only once.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our executive officers and directors and the beneficial owners of greater than 10% of our common stock to file initial reports of ownership and reports of changes in ownership with the SEC. Executive officers and directors are required by SEC regulations to furnish us with copies of these reports.

To our knowledge, based solely on a review of the copies of these reports furnished to us and any written representations from such executive officers, directors and stockholders with respect to the period from January 1, 2015 through December 31, 2015, all Section 16(a) filing requirements applicable to our officers, directors and greater than ten percent beneficial owners were complied with.

Copies of the insider trading reports can be found at our corporate website at www.gtxinc.com, on our Investor Relations page, under the category "SEC Filings."

COMPENSATION DISCUSSION AND ANALYSIS

Our compensation discussion and analysis discusses the total compensation in 2015 for the following current executive officers of GTx:

- Marc S. Hanover, our Chief Executive Officer;
- Robert J. Wills, Ph.D., our Executive Chairman of the Board;
- Jason T. Shackelford, our principal financial and accounting officer;
- Henry P. Doggrell, our Vice President, Chief Legal Officer and Secretary; and
- Diane C. Young, our Vice President, Chief Medical Officer.

The individuals listed above are referred to in this compensation discussion and analysis as our "named executive officers."

This compensation discussion and analysis describes the material elements of our compensation program for our named executive officers during 2015 and, to the extent material, during 2016 and prior to the date of the filing of this proxy statement. It also provides an overview of our executive compensation philosophy, policies and practices.

Executive Summary

2015 was a year of significant leadership changes for GTx, with the appointment of Mr. Hanover as our permanent Chief Executive Officer and the hiring of Dr. Rob Wills as our Executive Chairman and Dr. Diane Young as our Chief Medical Officer. These individuals, along with the rest of our executive team and our broader employee population, were focused during 2015 on the need to execute on our strategy designed to increase stockholder value through the continued development of our core assets, with a focus on our preclinical and clinical development plans. In this regard, in 2015, we expanded our clinical development of enobosarm, our proprietary selective androgen receptor modulator, or SARM, by initiating two new clinical trials for the treatment of advanced breast cancer, and we announced plans to initiate a clinical study of enobosarm to treat postmenopausal women with stress urinary incontinence. We also initiated the evaluation of several SARM compounds in preclinical models of Duchenne muscular dystrophy, and we exclusively licensed new technology, called selective androgen receptor degraders, or SARDs, and have commenced preclinical development to identify potential lead clinical compounds.

Our compensation programs are intended to reward our named executive officers for successful performance and achievement of our corporate goals, and to retain these individuals in order to enable GTx to execute on its business objectives. The highlights of our Compensation Committee actions for fiscal year 2015 include:

- The continuation of the reduced base salary for our Chief Executive Officer, Mr. Hanover, whose salary was reduced by 20% in late 2013 following our disappointing enobosarm 3 mg Phase 3 clinical trial results, and the Compensation Committee's decision that there would be no other adjustment in base salaries for any of our executive officers during 2015.
- The determination not to provide any cash bonus award eligibility under our Executive Bonus Compensation Plan, or the Bonus Plan, for the named executive officers in 2015.

- The awarding of restricted stock units, or RSUs, in February 2015, in lieu of adjustments in base salaries and in lieu of any cash bonus award eligibility under the Bonus Plan for 2015, with the bulk of the RSUs vesting after three years to encourage our employees to remain with the company and provide oversight and management to the company's planned operations.

We held our second stockholder advisory vote on executive compensation in 2014, commonly referred to as a "say-on-pay vote," which was approved by over 99% of our stockholders voting on the advisory proposal. We take the views of our stockholders seriously, and view this vote result as an indication that our executive compensation program's principles are supported by our stockholders. Our stockholders had previously indicated in 2011 their preference that we solicit a say-on-pay vote once every three years. Our Board of Directors has adopted a policy that is consistent with that preference and accordingly, we are holding a say-on-pay vote, as well as our next "say-on-frequency" vote, at next year's annual meeting.

Named Executive Officer Transitions and Related Compensation Decisions

As noted above, 2015 was a year of significant leadership changes for GTx. In particular:

- Mr. Hanover transitioned from interim Chief Executive Officer to permanent Chief Executive Officer;
- Dr. Rob Wills was hired as our Executive Chairman; and
- Dr. Diane Young was hired as our Chief Medical Officer.

This section of our compensation discussion and analysis is intended to describe those transitions, along with some of the material compensation decisions that relate to these leadership changes.

Following the resignation of our previous Chief Executive Officer in April 2014, Mr. Hanover was elected to the Board and appointed interim Chief Executive Officer while retaining his positions as President and Chief Operating Officer. During the remainder of 2014, as the search committee of the Board considered possible applicants to become Chief Executive Officer of the company, Mr. Hanover and other members of the management team were successful in retaining key members of their teams as employees of the company and formulating strategies to continue development of GTx's core assets, including enobosarm, a SARM, as a potential treatment for advanced breast cancer.

Following the company's successful private placement of its common stock and warrants in a financing completed in November 2014 to fund our clinical development initiatives for enobosarm, the search committee began discussions with Dr. Wills about taking a senior leadership position with GTx. Dr. Wills announced his intention to retire from Johnson & Johnson during the first quarter of 2015 after more than 30 years in the pharmaceutical business. In our discussions with Dr. Wills, we learned that he was very familiar with GTx from previous business discussions with the company and indicated an interest in joining our Board in a leadership role. The Board search committee felt Mr. Hanover was doing an excellent job in positioning the company for a potential turnaround and determined that he should continue as our Chief Executive Officer if the Board could augment his leadership position by adding a seasoned executive with deep pharmaceutical experience.

It also was recognized that there was a need to add a medical doctor to the management team to serve as Chief Medical Officer since the company would be initiating additional clinical studies of enobosarm in 2015 for the treatment of advanced breast cancer. It was hoped that if the Board could

persuade Dr. Wills to join the Board as its Executive Chairman, his recognition within the industry and his experience could help attract another pharmaceutical executive to GTx to serve as Chief Medical Officer. After a series of discussions among Mr. Hanover, Dr. Wills, other members of management and the Board in early 2015, it was agreed that Mr. Hanover would become our permanent Chief Executive Officer, and Dr. Wills would join our Board and assume the role as our Executive Chairman following his retirement from Johnson & Johnson. Mr. Hyde would relinquish his role as Chairman of the Board and become the Board's Lead Director.

Following the Board's decision to appoint Mr. Hanover as our permanent Chief Executive Officer in February 2015, the Compensation Committee granted RSUs that month to Messrs. Hanover, Shackelford and Doggrell covering 750,000, 300,000 and 500,000 shares of GTx common stock, respectively, in lieu of adjusting salaries for 2015 and in lieu of any cash bonus award eligibility under the Bonus Plan for 2015. The Compensation Committee believed that granting RSUs was an appropriate means to incentivize the executives and other company employees to increase stockholder value while preserving cash for the company's operations and clinical studies. The RSUs are scheduled to vest 20% on both January 1, 2016 and January 1, 2017, but the remaining 60% of the RSU are not scheduled to vest until January 1, 2018, which vesting schedule was designed to retain these executives through the time when data from our two enobosarm Phase 2 advanced breast cancer studies are expected to be received.

In March 2015, Dr. Wills assumed the position of GTx's Executive Chairman. As a result of negotiations among management, the Board and Dr. Wills prior to his assuming this position, Dr. Wills agreed that he would work for GTx part-time for which he would receive a salary of \$200,000 per annum, but he would make himself available at all other reasonable times to Mr. Hanover, members of the Board and other executive officers and employees of GTx as may be necessary to help formulate the company's strategy and direct its operations. The Board agreed with Dr. Wills that the bulk of his compensation for assuming this key strategic leadership position would be in the form of an RSU award covering 1,000,000 shares of GTx common stock, which was granted to him following the commencement of his employment with the company.

Dr. Wills reached out to Dr. Diane Young, a prior medical officer at Johnson & Johnson who was retiring from Novartis in June 2015, about joining GTx as its Vice President, Chief Medical Officer. With more than 25 years of pharmaceutical industry clinical development experience, she was not interested in taking a full time position following her retirement from Novartis, but agreed with GTx management that she could assume the role of Chief Medical Officer and help oversee the company's clinical programs working part-time for the company. Following the format established with the hiring of Dr. Wills, the Compensation Committee agreed Dr. Young would be hired at a salary of \$175,000 per annum and would be granted an RSU award covering 500,000 shares of GTx common stock upon joining GTx in July 2015.

As part of the negotiations with Dr. Wills and Dr. Young and as an additional inducement for them to join the company, the Compensation Committee agreed that their respective awards of RSUs would vest equally over a three year period on the anniversary of their respective hire dates. Additionally, since they and all other GTx employees serve the company as employees "at will" allowing the company the right to terminate any employee at any time for any reason and since the equity they will receive over the three year period comprises the bulk of their negotiated compensation for joining the company, the Compensation Committee agreed that if either of them is terminated without "cause" or voluntarily resigns for "good reason", they would receive vesting of the RSUs that would have vested on the anniversary date next succeeding the date of termination, as well as any bonus payment accrued but unpaid as of the date of termination. Dr. Wills also would be entitled to receive up to 12 months of base salary and monthly premiums to continue his health insurance coverage as an additional severance benefit in the event of his termination for similar reasons. As is the

case with our other named executive officers, in the event of a "change of control" transaction, all RSUs would vest on or before the transaction closing date and any termination resulting from the change of control would result in 12 months of base salary payments and up to 12 months of health insurance premium payments (six months of each in the case of Mr. Shackelford) as additional severance benefits to the terminated employees.

Compensation Philosophy

Our Compensation Committee believes that the compensation program for our executive officers should enable us to attract and retain highly qualified executives who are essential to our company within a framework that rewards performance and aligns the interests of our executives with those of our stockholders. Our Compensation Committee also believes that our executive compensation program should reward our named executive officers for performance, but that when key performance objectives are not achieved, the compensation of our named executive officers should reflect this. This pay-for-performance philosophy underlies all components of our executive compensation program. In addition, in designing the components of our executive compensation program in 2015 and 2016, our Compensation Committee weighed heavily the need to retain the key company personnel necessary in order to enable GTx to execute on its business objectives.

Role of Our Compensation Committee, External Compensation Consultants and Management

Oversight and Authority of our Compensation Committee

Our Compensation Committee is responsible for designing and administering our executive compensation program. This includes reviewing and approving the compensation that may become payable to our executive officers. The Compensation Committee also provides strategic direction to management with respect to implementing the Compensation Committee's decisions. The Compensation Committee meets regularly in executive session, without management present.

The Compensation Committee made all relevant decisions for 2015 compensation for our named executive officers, including the decision to maintain base salaries for 2015 at 2014 levels and to award RSUs in lieu of adjusting salaries and in lieu of any cash bonus award eligibility under the Bonus Plan for 2015, with the bulk of the RSUs held by most recipients vesting three years from the date of the award in order to retain these award holders through the date when data from our two enobosarm Phase 2 advanced breast cancer studies are expected to be received.

Role of the Compensation Committee's Compensation Consultant

Under its charter, our Compensation Committee has the authority to retain its own compensation consultant at company expense. In early 2012, the Compensation Committee retained the services of Radford, an AonHewitt Company, for the limited purpose of reviewing the appropriate peer group to be used for compensation comparison purposes, for both Board and executive officer compensation. Based on recommendations from Radford, in February 2012, the Compensation Committee substantially revised the list of industry peers that it used for purposes of evaluating whether levels of both our Board and executive officer compensation were appropriate. Following the significant decrease in the price of our common stock after the announcement of disappointing results from our Phase 3 clinical trials of enobosarm in August 2013, the Compensation Committee again retained Radford in December 2014 to review and recommend revisions to the list of industry peers we use for evaluating Board and executive officer compensation. After reviewing Radford's recommendations in February 2015, the Compensation Committee, based on the recommendation from the Nominating & Corporate Governance Committee of the Board, recommended that the full Board approve a revised industry peer list and specific modifications to the cash and equity compensation to

be paid to the independent members of the Board and its committees. These Compensation Committee recommendations were accepted and approved by the full Board at its meeting in February 2015 and are described below in the section entitled, "Factors in Setting Compensation—Peer Group."

For 2015 executive officer compensation purposes, Radford's role with respect to executive officer compensation decisions was limited to advising the Compensation Committee on our peer group. Accordingly, for purposes of 2015 compensation determinations, neither Radford nor any other compensation consultant had any role in recommending or determining the levels or elements of our executive compensation, although the Compensation Committee did review and rely on data from Equilar, Inc., an independent executive compensation survey database, for 2016 compensation decisions regarding comparable cash and equity compensation payments made by its group of peers to their executive officers.

At its meetings in February 2015 and February 2016, and as required by SEC rules, the Compensation Committee reviewed whether the work of Radford as a compensation consultant raised any conflicts of interest, taking into consideration the following factors: (i) the provision of other services to our company by Radford; (ii) the amount of fees we paid to Radford as a percentage of the firm's total revenue; (iii) Radford's policies and procedures designed to prevent conflicts of interest; (iv) any business or personal relationship of Radford or any individual compensation advisors employed by the firm with an executive officer of our company; (v) any business or personal relationship of the individual compensation advisors with any member of the Compensation Committee; and (vi) any stock of our company owned by the individual compensation advisors employed by the firm. Based on its analysis of the above factors, the Compensation Committee determined that no conflicts of interest were present as to the work of Radford or any of the individual compensation advisors employed by Radford. Consistent with applicable NASDAQ listing standards, the Compensation Committee will continue to assess the independence of any of our compensation advisers by reference to the foregoing factors.

Role of Management and the Chief Executive Officer in Setting Executive Compensation

Historically, our human resource, finance and legal departments have worked with senior management to design and develop compensation programs for our named executive officers for recommendation to the Compensation Committee. In addition, these management groups worked together to recommend changes to existing compensation programs, to recommend financial and other performance targets to be achieved under those programs, to prepare analyses of financial data, and to prepare peer data comparisons and other briefing materials for the Compensation Committee. In his previous role as President and Chief Operating Officer, Mr. Hanover would review the results of these efforts with our then Chief Executive Officer. Following any additional review or revision of management's proposals, Mr. Hanover and our Chief Executive Officer would then present those proposals, along with any background information, to the Compensation Committee. Following our previous Chief Executive Officer's resignation and Mr. Hanover's appointment as our new Chief Executive Officer, Mr. Hanover now leads our human resource, finance and legal departments in designing and developing compensation programs for our executive officers, and presenting these proposals to the Compensation Committee. As Executive Chairman of the Board, Dr. Wills reviews and discusses all executive compensation proposals with Mr. Hanover and Mr. Doggrell to offer his input and advice about any such proposals before they are presented to the Compensation Committee for its consideration. The Compensation Committee may approve, modify, or reject those proposals, or may request additional information from management (or its own consultant, if it wishes to retain one) on those matters.

Previously, Mr. Hanover also would seek input from our Chief Executive Officer and then make recommendations to the Compensation Committee with respect to the specific performance goals to be

achieved under our Bonus Plan. Following our previous Chief Executive Officer's departure in 2014, Dr. Wills and Mr. Hanover now provide such recommendations to the Compensation Committee. Since the Compensation Committee decided not to adjust salaries or provide for any cash bonus award eligibility under the Bonus Plan for 2015 in order to conserve cash and to meet compensation goals through other measures, the Compensation Committee did not seek specific performance goal information from management until the fall of 2015, for purposes of agreeing upon the Bonus Plan for 2016, which the Compensation Committee approved in November 2015 and which is described in more detail below in the section entitled, "Compensation Decisions Effective in 2016."

Historically, our previous Chief Executive Officer provided, and now Dr. Wills and Mr. Hanover provide, annual reviews of the performance of each of our executive officers (other than themselves) to assist the Compensation Committee in its annual determination of each element of compensation for such officers. The performance of Dr. Wills and Mr. Hanover is evaluated by the Compensation Committee. In late 2014, following our Chief Executive Officer's departure earlier that year, Messrs. Hanover and Doggrell made recommendations to the Compensation Committee regarding the number of stock awards to be granted to our other executive officers in 2015, in lieu of any adjustment in base salaries and in lieu of any cash bonus award eligibility under the Bonus Plan for 2015, which the Compensation Committee adjusted and subsequently approved. In the fall of 2015, Dr. Wills and Messrs. Hanover and Doggrell made recommendations to the Compensation Committee regarding salary adjustments, Bonus Plan criteria and employee stock option grants which were subsequently discussed, adjusted and approved in November and December 2015, effective January 1, 2016.

Typically, the Compensation Committee meets in executive session to discuss and determine appropriate base salaries, bonus compensation target awards and goals (if applicable), and equity awards for each executive officer of GTx. No named executive officer was present or directly participated in the final deliberations of the Compensation Committee with respect to any component of his or her own fiscal year 2015 or 2016 compensation.

Factors in Setting Compensation

Our Compensation Committee considers a broad range of factors in setting executive compensation levels, including past practice, company results, internal equity, experience and individual performance. The weight given each factor may differ from year to year, and may differ among the named executive officers in any one year. For example, for 2015, a significant factor in determining compensation for 2015 was the need to conserve cash while retaining the key company personnel necessary to enable GTx to execute on its business objectives, which factors were significantly focused on by the Compensation Committee in deciding to award RSUs, in most cases significantly weighted to vest three years from the award date, in lieu of adjusting salaries and in lieu of any cash bonus award eligibility under the Bonus Plan for 2015 for our named executive officers.

Peer Group

The Compensation Committee periodically reviews and updates, if necessary, the peer group to be used for executive compensation comparison purposes. For purposes of the Compensation Committee reviewing compensation for our executive officers during the fall of 2014, it was determined that it was important to conserve company cash while providing our key employees incentives to remain with the company and execute on our strategy designed to increase stockholder value. Consequently, we determined not to adjust base salaries or provide for cash bonus award eligibility under the Bonus Plan for 2015 and thus did not need to make a peer group comparison. For decisions made in respect of the salary adjustments we made during fiscal year 2015 for our employees, with an effective date of January 1, 2016 (as discussed below in more detail in the section entitled, "Compensation Decisions Effective in 2016"), the Compensation Committee had available to it and considered compensation information for comparable executive positions of our peers compiled from the Equilar database, based on the peer group recommended by Radford and approved by the Compensation Committee in February 2015.

The peer group recommended by Radford in 2012, and subsequently approved by the Compensation Committee, was comparable to GTx in terms of company size, employee count and stage of development, as GTx moved towards completion of its two Phase 3 clinical studies of enobosarm to treat muscle wasting in non-small cell lung cancer patients, the success of which was necessary in order to obtain marketing approval of enobosarm. When those studies failed to demonstrate the required statistical benefits needed for marketing approval, our stock price and market capitalization precipitously declined and we reduced our workforce by approximately 60%. Recognizing that the peer group approved in 2012 no longer appropriately reflected the conditions of the company, the Compensation Committee again retained Radford to assess its peer group and to suggest revisions to assemble a group of peers similar to the company. Factors considered in our selection of the peer group in 2015 included comparability in size, stage of clinical development of its lead product candidate, and organizational complexity. Specifically, the peer group recommended by Radford included publicly-traded biopharmaceutical and specialty pharmaceutical companies with characteristics similar to those of GTx with regard to: product candidates in Phase 2 development; a market capitalization equal to 0.5 to 3.0 times that of GTx (in order to reflect potential future stock volatility); and an employee size of less than 75 employees to more accurately reflect the current number of company personnel. Using these factors, the peer group suggested by Radford and approved by the Compensation Committee in February 2015 consists of the following 19 companies:

Advaxis, Inc.	Cymabay Therapeutics, Inc.	Lpath, Inc.
ArQule, Inc.	Fate Therapeutics, Inc.	Neuralstem, Inc.
Athersys, Inc.	Fibrocell Science, Inc.	OncoGenex Pharmaceuticals, Inc.
AVEO Pharmaceuticals, Inc.	GlycoMimetics, Inc.	Rexahn Pharmaceuticals, Inc.
BIND Therapeutics, Inc.	ImmunoCellular Therapeutics, Ltd.	Targacept, Inc.
Concert Pharmaceuticals, Inc.	KaloBios Pharmaceuticals, Inc.	TetraLogic Pharmaceuticals Corporation
		Trevena, Inc.

Other Considerations

The Compensation Committee relied on its own assessment of fundamental fairness and equity, rather than on external data (including the peer company or the Equilar data), when it made other executive compensation decisions in 2015, including the determination of base salaries and the RSU awards made to Drs. Rob Wills and Diane Young when they joined to company. The decisions regarding base salaries for Drs. Wills and Young were determined, in part, by the Compensation Committee's understanding of what the company had paid in the past to its former Chief Executive Officer and previously departed Chief Medical Officer, as well as the salaries and equity compensation currently being paid to current executive officers, coupled with both Dr. Wills' and Dr. Young's desire not to have a commitment to the company to work as a full time employee. These decisions were reached through discussion and negotiation with the parties and without reference to external data.

The factors considered in determining the size and terms of the RSU grants in 2015 are discussed in more detail below in the section entitled, "2015 Equity Awards."

Elements of Compensation and 2015 Compensation Decisions

Our executive compensation program has historically consisted of base salary, an annual cash incentive opportunity under the Bonus Plan, equity incentive awards and potential benefits in connection with a change in control and/or involuntary termination. However, our executive compensation program for 2015 was modified from what we have provided to our executives in the past, in light of the need of the company to preserve cash and to properly incentivize employees to

remain with the company and execute on our strategy designed to increase stockholder value through the continued development of our core assets, by emphasizing RSU grants instead of salary increases and cash bonus opportunities.

Consistent with past practices, the Compensation Committee has not adopted any specific formulas for allocating total compensation between equity compensation and cash compensation, or between short-term and long-term compensation. Instead, the Compensation Committee continues to use its judgment to establish for each named executive officer a mix of current, short-term and long-term incentive compensation, and cash and non-cash compensation, that it believes appropriate to achieve our compensation objectives described above, which may differ from year to year.

To emphasize our pay-for-performance philosophy, as well as to preserve our cash resources, a significant portion of our named executive officers' total compensation in 2015 continued to be comprised of equity awards with some vesting in the short term and the majority vesting in the long term (with 20% each year of their RSU grants becoming vested one year and two years from the date of their award, but the remaining 60% becoming vested after three years when we expect to have received data from our ongoing Phase 2 clinical studies of enobosarm to treat advanced breast cancer). The Compensation Committee believes that our 2015 compensation program best served to achieve the goals of retaining the services of our executive officers and aligning the executive officers' incentives with the interests of our stockholders.

Base Salary

Our Compensation Committee recognizes the importance of base salary as an element of compensation that helps to attract and retain our executive officers. We provide base salary as a fixed source of income for our executives for the services they provide to us during the year, and allow us to maintain a stable executive team.

In determining base salaries for fiscal year 2015, the Compensation Committee determined that it was important to retain key employees following the substantial reduction in the workforce in October 2013, while signaling to our remaining employees and stockholders the concern of the Board regarding the past clinical trial failures the company has experienced and the resultant diminished price of our stock. Consequently, the Compensation Committee elected to forego any reassessment of executive salaries against those of our industry peers in late 2014 and to generally maintain existing base salary levels at the beginning of 2015 at the same levels that generally existed in 2013 (excluding, however, an increase in salary received by Mr. Shackelford in May 2014 when he assumed the dual roles of principal financial officer and principal accounting officer).

The following table shows the annual base salary rates for each of our named executive officers as of January 1, 2015:

<u>Named Executive Officer</u>	<u>2015 Annual Base Salary (\$)</u>
Marc S. Hanover	393,317
Robert J. Wills, Ph.D.	200,000 ⁽¹⁾
Jason T. Shackelford	210,000
Henry P. Doggrell	363,576
Diane C. Young, M.D.	175,000 ⁽²⁾

(1) As described above, Dr. Wills' base salary reflects his agreement with us to work part time but to make himself available at all other times as may be required, effective upon his hire date of March 2, 2015.

- (2) As described above, Dr. Young's base salary reflects her agreement with us to work part time but to make herself available at all other times as may be required, effective upon her hire date of July 13, 2015.

Annual Bonus Plan

Our Compensation Committee first established our Bonus Plan in 2007 as a means of rewarding executive officers for their role in achieving specified annual or short-term performance goals. The potential for payments under the Bonus Plan for any fiscal year is generally based on the attainment of pre-established, objective performance goals approved by the Compensation Committee at the beginning of the year. Each year, unless cash bonus award eligibility under the Bonus Plan is suspended or eliminated for the relevant year, the Compensation Committee approves the objective performance goals and specific criteria, including the weight attributable to each objective, and, if applicable, any weighting for specific categories of performance objectives, for each executive officer. Historically, the Compensation Committee solicits and considers the recommendations of our senior management officers in making these determinations.

The objective criteria for the Bonus Plan can vary each year and may include the achievement of the operating budget for GTx, personnel-related objectives, continued innovation in development and progress towards the clinical development of our product candidates, timely development of new product candidates or processes, implementation of financing strategies and the establishment of strategic alliances, partnerships or collaborations with third parties, as well as meeting preclinical, clinical, or regulatory objectives.

Although the Compensation Committee typically approves the objective performance goals and specific criteria prior to the start of or early in the applicable calendar year, it retains the discretion to modify or otherwise change the objectives during the applicable calendar year. In addition, under the Bonus Plan, the Compensation Committee has the discretion to make additional bonus awards, apart from those related to the achievement of specified performance objectives.

The Compensation Committee may suspend bonus eligibility under the Bonus Plan, which was the case in the fall of 2013 when we suspended cash bonus award eligibility under our Bonus Plan following the disappointing results from the enobosarm 3 mg Phase 3 clinical trials. The Compensation Committee also may determine that circumstances are such that there should be no cash bonus award eligibility at all under the Bonus Plan for a particular calendar year, as was the case in 2015 when the Compensation Committee decided that company cash should be preserved and an equity award should be utilized to retain employees and incentivize them to increase stockholder value.

Long-Term Incentive Awards

We use equity compensation, primarily in the form of awards of stock options and/or RSUs, to motivate and reward corporate performance and to attract and retain qualified executives. We believe that equity awards serve to align the interests of our named executive officers with those of our stockholders by rewarding them for stock price growth. Typically, we issue stock options annually to eligible employees to provide long term incentive awards from increases in stock price over time. Our stock options generally have a five-year time-based vesting requirement, which we believe encourages our executive officers to focus on driving stockholder value and stock-price appreciation over the long term. We believe the five-year vesting schedule also serves as an effective retention tool. We began granting RSUs in 2013 as part of our retention compensation package, with the RSUs vesting over the time period we felt necessary to retain and motivate our key personnel to reassess and position our clinical development programs for future development. While both stock options and RSUs enable employees to benefit like stockholders from any increases in the value of our stock, stock options deliver future value only if the value of our stock increases above the exercise price. In contrast, RSUs

deliver fully paid shares of our stock upon vesting, so they retain some value even if our stock price declines, stays flat or only increases marginally after the RSU is granted, and therefore have greater retention value than stock options and promote direct employee stock ownership. We believe that the combination of these two types of awards represents an appropriate equity compensation mix.

In determining the size of equity grants, the Compensation Committee may consider, in any given year, each officer's responsibilities, the strategic importance of his or her role within our company, budget constraints and internal equity. Our Compensation Committee may also consider the current value of shares owned, the current value of exercisable and unvested stock options, as well as the potential for dilution to stockholders. Finally, the Compensation Committee may consider the size and value of equity awards granted by our peer companies to officers in comparable positions, although the Compensation Committee does not aim to have equity award values fall within any specific range of the peer company data.

2015 Equity Awards

At a time when we were still finalizing our clinical development plans for enobosarm to treat advanced breast cancer and the Board's search committee was continuing its efforts to find and hire a full time Chief Executive Officer for the company, in the fall of 2014, the Compensation Committee decided that it would be best to preserve cash by maintaining employee base salaries at levels that had existed since 2013 and forego cash bonus award eligibility under the Bonus Plan for 2015 since the goals of the company that would most likely result in increased stockholder value would not occur until 2016 and 2017, if at all. As a means to reward executive officers and other employees for the efforts that would be required of them during 2015 in order for us to potentially attain these goals in 2016 and 2017 and as a means to retain employees during this time period, the Compensation Committee approved the award of RSUs as of January 1, 2015, with the provision that the RSUs would vest 20% on January 1, 2016, 20% on January 1, 2017, and 60% on January 1, 2018, when the fruits of employees' efforts would potentially be reflected in an increase in our stock price.

The size of the award for each employee was determined by the Compensation Committee by assessing the number of stock options previously granted each employee that were "underwater", and therefore then currently without value, and making the subjective decision about the number of RSUs that would be found to be meaningful by our employees should they stay in the employ of the company and help attain the clinical development goals that, if achieved, would potentially increase stockholder value. This assessment was undertaken without reference to external data (including the peer company or the Equilar data). As a means of providing some shorter term compensation to employees who would not be able to earn additional cash bonus compensation during 2015, the Compensation Committee agreed that 20% of the award would vest both on January 1, 2016 and January 1 2017, to provide employees with some additional compensation in the form of company stock, but the bulk of the award would not vest until January 1, 2018, at a time when there may potentially be an increase in the value of our stock, assuming our clinical development goals are realized. Under the plan for our equity awards, a recipient must remain in service with us at the time of vesting of the options or award or it will expire. The Compensation Committee believes that by having a large portion of the RSUs vest three years from the date of the award, our employees will remain with the company and stay focused on executing on our strategy designed to increase stockholder value.

As described above in the section entitled "Named Executive Officer Transitions and Related Compensation Decisions," in February 2015, the Compensation Committee approved an RSU award to Dr. Wills as part of a negotiated agreement for him to join the company as the Board's Executive Chairman. The size of the RSU award and the other elements of the offer to Dr. Wills were determined by the Compensation Committee based on factors that included input by the Board's search committee as to the nature of the offer that the search committee believed was necessary to

attract the services of a recognized industry expert like Dr. Wills. After negotiations with Dr. Wills, it was agreed that he would receive an RSU award covering 1,000,000 shares of GTx common stock upon his joining the company on March 2, 2015, which would vest equally over a three year period on the anniversary date of his hire, and that if he was terminated without "cause" or he left our employ for "good reason", he would be entitled to receive as severance payments equal to 12 months of his then base salary and, under certain circumstances health insurance premium payments up to 12 months, and shares of GTx stock equal in number to those unvested RSUs which were to vest on the next anniversary date of his hire.

As described above in the section entitled "Named Executive Officer Transitions and Related Compensation Decisions," in July 2015, the Compensation Committee approved a RSU award to Dr. Young as a part of a negotiated agreement with her to join the company as its Vice President, Chief Medical Officer. The amount of the award was consistent with what the Compensation Committee had earlier in the year awarded other Vice Presidents of the company. Similar to what the Compensation Committee had previously approved for Dr. Wills, her RSU award will vest equally over a three year period on the anniversary date of her hire and she will be afforded the same RSU vesting as Dr. Wills is entitled to receive in the event she is terminated without "cause" or voluntarily terminates her position with the company for "good reason".

All of the RSUs we have awarded provide for acceleration of vesting in the event of a "change of control" of the company. The Compensation Committee believes that RSU holders should be treated like all other stockholders of the company in the event a transaction occurs which results in a "change of control". If their actions result in our being acquired in whole or in large part by a third party entity, the Compensation Committee believes our employees should then realize some benefits from their respective efforts. Set forth in the table below is the number of shares subject to the RSUs we granted our named executive officers in 2015:

2015 Restricted Stock Unit Awards

<u>Name</u>	<u>RSUs Awarded</u> <u>(#)</u>
Marc S. Hanover	750,000
Robert J. Wills, Ph.D.	1,000,000
Henry P. Doggrell	500,000
Jason T. Shackelford	300,000
Diane C. Young, M.D.	500,000

Other Post-Employment Compensation and Change of Control Benefits

We have entered into a written employment agreement with each of our executive officers, providing for employment on an at-will basis; that is, employment that may be terminated by either the executive officer or us at any time. These employment agreements were amended and restated and executed between us and each of our then-current named executive officers, following approval of the agreements by our Board in February 2013. The employment agreements for Messrs. Hanover and Doggrell and Drs. Wills and Young provide for cash severance payments equal to one year's base salary and up to twelve months of health insurance through the payment of COBRA premiums in the event of an involuntary termination by the company without "cause" or a resignation by the executive officer for "good reason" within twelve months after a change of control. Additionally, under Dr. Wills' employment agreement he will be entitled to these same severance payments in the event he is terminated by the company at any time without "cause" or he resigns for "good reason," which additional benefit was specifically negotiated for by Dr. Wills. Mr. Shackelford's employment agreement

is similar to the agreements with Messrs. Hanover and Doggrell except that his severance payments and health insurance payments are for a period of six months in the event of termination without "cause" or resignation for "good reason" within 12 months after a change of control. As a component of the employment agreements, the executive officers have agreed not to compete with us (including by soliciting our employees for alternative employment) during the term of their employment and for a period of two years after their employment ends (or for a period of one year, if termination ends in connection with a change of control). The structure and amount of these severance benefits and health insurance premium payments were determined by the Compensation Committee as the appropriate incentives necessary to retain our key executives and ensure that their concerns about immediate future employment would not detract from their interest in or pursuit of reasonable acquisition propositions, if and when occurring, and the up to one year period for such payments were determined to be reasonably conservative based on general industry information known to the Compensation Committee.

In connection with Mr. Hanover's appointment as our interim Chief Executive Officer in April 2014, upon the recommendation of the Compensation Committee, the Board approved an amendment to Mr. Hanover's employment agreement to provide for certain severance benefits to Mr. Hanover should Mr. Hanover's employment be involuntarily terminated by us (excluding a termination for "cause", as defined in Mr. Hanover's current employment agreement with GTx) or should he voluntarily resign due to a "material demotion," in each case within six months of a new Chief Executive Officer becoming employed by GTx. Following the Board's appointment of Mr. Hanover as the permanent Chief Executive Officer of the company in February 2015, upon the recommendation of the Compensation Committee, Mr. Hanover's employment agreement was again amended to remove those additional severance benefits since the circumstances under which they would have applied had been removed.

The Compensation Committee believes that the employment agreements are necessary to attract and retain our key executives, and are consistent with market practices. We also believe these agreements motivate our named executive officers to act in the best interests of our stockholders by removing the distraction of post change of control uncertainties faced by each named executive officer with regard to his continued employment and compensation.

Equity Award Vesting

Under our broad-based employee stock option plans that we adopted prior to our initial public offering, upon a change of control, all then-outstanding and unvested stock options will automatically become fully vested. Under our 2004 and 2013 Equity Incentive Plans, a participant's outstanding equity awards will generally become fully vested only if the executive officer is involuntarily terminated without cause or experiences a constructive termination within twelve months following a change of control or is required to resign his or her position with us as a condition of the change of control, or if the surviving or acquiring entity refuses to assume or substitute for the options. The change of control provisions in our stock option plans are designed to reduce any personal disincentive an executive officer may have to work toward the successful completion of a change of control transaction which, if appropriately assessed on its merits, may prove beneficial to us and our stockholders. However, the Compensation Committee has the discretion under our 2013 Equity Incentive Plan to provide for full single-trigger vesting acceleration upon a change of control, which the Compensation Committee did provide for in making RSU grants to the named executive officers in 2015.

Compensation Decisions Effective in 2016

In November 2015, following the company's hiring of Drs. Wills and Young and the company's success in initiating its two enobosarm Phase 2 advanced breast cancer studies, the Compensation Committee determined to return to its more historical practice of reviewing executive compensation

annually and making appropriate adjustments in base salary and equity grants for the following year if adjustments were warranted. It received and reviewed data from Equilar on cash compensation and equity awards made by its peers to their respective executive officers, and members of the Compensation Committee noted that no executive officer of the company had received any adjustments in base salary since early 2013 (with the exception of Mr. Shackelford, whose salary was increased in May 2014 when he assumed the additional duties of principal financial officer and principal accounting officer). The Compensation Committee also recognized that Mr. Hanover's base salary was actually reduced by 20% in the fall of 2013 following our receipt of disappointing enobosarm Phase 3 clinical trial results in August of that year, and he had received no adjustment in salary since then, including upon his appointment by the Board as permanent Chief Executive Officer of the company earlier in the year. The Compensation Committee discussed the importance of retaining employees as the company undertakes and executes upon its clinical development strategies, including enrolling the company's two new Phase 2 clinical studies of enobosarm for the treatment of breast cancer, which it commenced in the fall of 2015. Finally, the Compensation Committee acknowledged the outstanding job Dr. Wills was doing in the short time he had been with the company, including prioritizing the development of the company's core assets and determining those other assets which should be potentially monetized.

Messrs. Hanover and Doggrell, with input from Dr. Wills, recommended to the Compensation Committee that, for the most part, the base salaries of its executive officers and other employees should be increased, on average, approximately 3.5% from their existing base salaries, effective January 1, 2016. Since Mr. Hanover's salary had been reduced 20% in 2013 and he had been elevated by the Board to Chief Executive Officer of the company earlier in the year, the Compensation Committee approved a 10% increase in salary for him, as well as Dr. Wills, as they believed his performance to date warranted the same 10% increase. After reviewing data from Equilar on executive compensation paid by the company's peers, it was apparent to the Compensation Committee that Mr. Shackelford was significantly underpaid for the duties he routinely performed for the company and the Compensation Committee approved that his salary also would be increased 10%. As a result of the decisions of the Compensation Committee in November 2015, the base salaries of our executive officers were increased, effective January 1, 2016, as follows:

<u>Named Executive Officer</u>	<u>2016 Annual Base Salary (\$)</u>
Marc S. Hanover	432,649
Robert J. Wills, Ph.D.	220,000
Jason T. Shackelford	231,000
Henry P. Doggrell	378,119
Diane C. Young, M.D.	178,500(1)

(1) Dr. Young's salary was increased 2% since she had been with the company for only 6 months.

The Compensation Committee also decided to reinstate for cash bonus award eligibility under the Bonus Plan for 2016 by approving in November 2015 the performance criteria to be achieved in order to be eligible to receive cash bonus awards under the Bonus Plan for the performance period from January 1, 2016 through December 31, 2016. As approved, an executive officer could receive (i) up to 100% of such executive officer's target bonus as a result of the achievement of certain clinical goals related to its two ongoing enobosarm Phase 2 advanced breast cancer studies (i.e., up to 50% of target bonus for each clinical trial); (ii) up to 25% of such executive officer's target bonus as a result of the achievement of certain clinical goals related to the company's Phase 2 proof-of-concept clinical trial of enobosarm to treat postmenopausal women with stress urinary incontinence; and (iii) up to 30% of such executive officer's target bonus related to certain partnering goals. Additionally, an executive

officer is eligible for a bonus award of up to 10% of his or her target bonus based on the Compensation Committee's assessment of the executive officer's personal performance. Accordingly, an executive officer's actual total bonus award could be awarded at a level above target. Consistent with its past practice for approving potential bonus targets for the company's two most senior officers and its other executive officers, the Compensation Committee established target bonus payments for Mr. Hanover and Dr. Wills at an amount equal to 65% of their base salaries, while Mr. Doggrell's and Dr. Young's target bonus payments were set at 35% of their respective base salaries. Mr. Shackelford's target bonus award is 25% of his base salary. Actual cash bonus awards under the Bonus Plan for 2016 generally will be paid upon the achievement of the applicable performance criteria. Although the Compensation Committee has approved the performance criteria to be achieved in order to be eligible to receive cash bonus awards under the Executive Bonus Plan for 2016, the Compensation Committee retains the discretion to modify or otherwise change the relevant performance criteria. In addition, under the Bonus Plan, the Compensation Committee has the discretion to make additional cash bonus awards, apart from those related to the achievement of specified performance criteria.

Again, consistent with the Compensation Committee's historical practice for granting long term incentive equity awards, in December 2015, the Compensation Committee approved stock option grants, effective January 1, 2016, for all company employees, including its executive officers, at exercise prices equal to the closing price of the company's stock on the last day of trading of the calendar year 2015 (\$0.70 per share). Designed as a means to ensure retention while offering potential long term rewards to employees through the success of the company's clinical development initiatives, the stock option grants will vest in equal installments on the third, fourth and fifth anniversaries of the grant date, subject to possible full vesting acceleration if the executive officer is involuntarily terminated without cause or experiences a constructive termination within twelve months following a change of control or is required to resign his or her position with us as a condition of the change of control (or if the surviving or acquiring entity refuses to assume or substitute for the options). Our named executive officers received the following stock option grants:

<u>Name</u>	<u>Stock Options Granted (#)</u>
Marc S. Hanover	400,000
Robert J. Wills, Ph.D.	400,000
Henry P. Doggrell	250,000
Jason T. Shackelford	175,000
Diane C. Young, M.D.	150,000(1)

(1) Dr. Young's stock option grant was prorated on account of her joining the company in mid-2015.

Retirement Benefits

We do not provide our employees, including our named executive officers, with a defined benefit pension plan, any supplemental executive retirement plans or retiree health benefits. Our named executive officers may participate on the same basis as other employees in our 401(k) retirement savings plan. Our 401(k) retirement savings plan provides an employer matching contribution of 100% of the first 4% of the employee's eligible compensation, subject to the annual Internal Revenue Service limits in effect from time to time. We believe this matching contribution is consistent with market practice and helps in attracting and retaining key executives.

Employee Benefits

We offer a comprehensive employee benefit program, including health, life and disability insurance, to all of our regular employees, including certain of our named executive officers who are full time employees. This program provides a safety net of protection against the financial catastrophes that can result from illness, disability or death. Company-funded life insurance of up to \$50,000 is provided to employees generally, and company-funded long-term disability insurance provides a 60% income-replacement benefit, up to \$10,000 per month.

The Compensation Committee has approved supplemental life and long-term disability insurance for our executive officers. The total life insurance benefit for Mr. Hanover and certain eligible Vice Presidents is equal to twice the executive officer's annual salary, not to exceed \$1 million in coverage for any officer, although Mr. Doggrell's total coverage amount was reduced 65% following his 65th birthday. Mr. Shackelford generally receives the same benefits as our non-executive employees, although as a Senior Director of the company, he receives \$50,000 in life insurance. Dr. Wills and Dr. Young, as part time employees, do not qualify for health, life or disability insurance and other similar benefits pursuant to the requirements of the insurers' programs. However, should they in the future be deemed to be "full time" employees by the insurers, they would also receive the same benefits as are presently provided to Mr. Hanover and our eligible Vice Presidents.

The Compensation Committee believes that the cost of providing this supplemental insurance coverage is minimal in comparison to the value of such benefits in attracting and retaining executive employees and that providing these supplemental benefits is consistent with the practices of other public companies.

Except for the additional benefits provided to its executive officers described above, GTx does not generally provide its executive officers with any other perquisites and benefits that differ from what are provided to GTx employees generally. To date, the Compensation Committee has not generally considered the provision of such additional perquisites and benefits to be a necessary element of GTx's executive compensation program. However, GTx may, from time to time, offer certain perquisites and benefits to its executive officers not offered to the general employee population, such as commuting, relocation and temporary housing benefits. In this regard, we reimbursed travel-related expenses for Drs. Wills and Young in 2015 for travel between their out-of-state permanent residences and GTx's headquarters in Memphis, Tennessee. Upon the recommendation of the Compensation Committee, the Board also approved tax gross-up payments to Drs. Wills and Young in 2015, related to these expense reimbursements, as the reimbursements were taxable to Drs. Wills and Young as imputed income. The Compensation Committee believes that the provision of tax gross-up payments to Drs. Wills and Young to offset the tax obligation associated with these imputed income amounts was appropriate and necessary for retaining these highly-qualified executive officers.

Equity Granting Practices

As was the case in December 2015, our Compensation Committee historically has granted stock options to our named executive officers at the same time that it makes awards to the broader employee population, that is, at a meeting late in the calendar year, with the grants effective on January 1 of the following year. When so granted, the options have an exercise price equal to the closing price of GTx's common stock on the last trading day of the prior year.

Our Compensation Committee generally approves grants at other times only for new employees, employees who are promoted or granted additional responsibilities or, more rarely, employees who have performed at a level that warrants special recognition. However, the Compensation Committee may decide to grant other equity awards at times determined appropriate based on the circumstances,

as it did for example, at the beginning of 2015 in lieu of considering base salary adjustments or a Bonus Plan for 2015. Equity award grants are generally made only on the date of a scheduled meeting of the Compensation Committee, and stock options are granted with an exercise price equal to the closing price of our common stock on the NASDAQ Global Market on the date of grant.

Deductibility of Executive Compensation under Code Section 162(m)

Section 162(m) of the Code limits the amount that a public company may deduct from federal income taxes for remuneration paid to the chief executive officer and the three other most highly paid executive officers, other than the chief financial officer, to \$1.0 million per executive per year, unless certain requirements are met. Section 162(m) provides an exception from this deduction limitation for certain forms of "performance-based compensation," including the gain recognized by executive officers upon the exercise of qualifying compensatory stock options. While our Compensation Committee is mindful of the benefit to us of the full deductibility of compensation, the Compensation Committee believes that it should not be constrained by the requirements of Section 162(m) where those requirements would impair flexibility in compensating our executive officers in a manner that can best promote our corporate objectives. We intend to continue to compensate our executive officers in a manner consistent with the best interests of GTX and our stockholders.

Accounting Considerations

We account for equity compensation paid to our employees under accounting rules that require us to estimate and record an expense over the service period of the award. Our cash compensation, on the other hand, is recorded as an expense at the time the obligation is accrued. The accounting impact of our executive compensation program is one of many factors that the Compensation Committee considers in determining the size and structure of that program.

Compensation Recovery Policy

As a public company subject to the provisions of Section 304 of the Sarbanes-Oxley Act of 2002, if we are required as a result of misconduct to restate our financial results due to our material noncompliance with any financial reporting requirements under the federal securities laws, our Chief Executive Officer and Principal Financial Officer may be legally required to reimburse us for any bonus or other incentive-based or equity-based compensation they receive. In addition, we will comply with the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act and will adopt a compensation recovery policy with terms that are compliant with that legislation once the SEC adopts final regulations on the subject.

COMPENSATION COMMITTEE REPORT⁽¹⁾

The Compensation Committee of the Board of Directors of GTx, Inc. has reviewed and discussed with management the information contained in the Compensation Discussion and Analysis section of this Proxy Statement and based on such review and discussion, has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement and incorporated into our Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

COMPENSATION COMMITTEE:

Michael G. Carter, M.D. (Chair)

J. Kenneth Glass

J. R. Hyde, III

(1) This Section is not "soliciting material," is not deemed filed with the SEC and is not to be incorporated by reference in any filing of GTx under the Securities Act of 1933 or the Securities Exchange Act of 1934, other than GTx's Annual Report on Form 10-K where it shall be deemed to be furnished, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table sets forth certain summary information for the year indicated with respect to the compensation earned by our principal executive officer, principal financial officer and each of our other executive officers, who are referred to in this proxy statement as our "named executive officers."

SUMMARY COMPENSATION TABLE—FISCAL 2013, 2014 AND 2015

Name and Principal Position	Year	Salary (\$) ⁽⁵⁾	Bonus (\$) ⁽⁷⁾	Stock Awards (\$) ⁽⁸⁾	Option Awards (\$) ⁽⁹⁾	Non-Equity Incentive Plan Compensation (\$) ⁽¹⁰⁾	All Other Compensation (\$) ⁽¹¹⁾	Total (\$)
Marc S. Hanover ⁽¹⁾	2015	393,317	—	495,000	—	—	17,758	906,075
<i>Chief Executive Officer</i>	2014	393,317	—	—	844,775	127,828	19,380	1,385,300
	2013	466,685	—	—	252,882	—	21,442	741,009
Jason T. Shackelford ⁽²⁾	2015	210,000	—	198,000	—	—	9,450	417,450
<i>Senior Director, Accounting and Corporate Controller and Principal Financial and Accounting Officer</i>	2014	199,365 ⁽⁶⁾	89,005	—	190,958	26,250	10,400	515,978
	2013	178,010	—	94,000	157,939	—	7,115	437,064
Robert J. Wills ⁽³⁾	2015	169,231	—	750,000	—	—	28,571	947,802
<i>Executive Chairman</i>								
Diane C. Young, M.D. ⁽⁴⁾	2015	84,135	—	705,000	—	—	11,798	800,933
<i>Chief Medical Officer</i>								
Henry P. Doggrell	2015	363,576	—	330,000	—	—	21,205	714,781
<i>Vice President, Chief Legal Officer and Secretary</i>	2014	363,576	181,788	—	203,380	63,626	21,005	833,375
	2013	363,576	—	188,000	290,589	—	23,469	865,634

- (1) Mr. Hanover was appointed as our interim Chief Executive Officer on April 3, 2014 and as our permanent Chief Executive Officer on February 12, 2015.
- (2) Mr. Shackelford was appointed as our acting principal financial officer on April 3, 2014. Mr. Shackelford has served as our Corporate Controller since July 2007 and has served as our acting principal accounting officer since December 31, 2013.
- (3) Dr. Wills was appointed as our Executive Chairman effective March 2, 2015.
- (4) Dr. Young was appointed as our Chief Medical Officer effective July 13, 2015.
- (5) The amounts in this column represent base salary earned during the indicated fiscal year.
- (6) Mr. Shackelford's annual base salary was increased from \$178,010 to \$210,000, effective May 12, 2014.
- (7) Amounts reported in 2014 represent amounts awarded as cash retention bonuses in 2014. Mr. Hanover was not eligible for a cash retention bonus in 2014. For more information on these cash retention bonuses, please see "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Retention Bonus Program—Cash Retention Bonuses."
- (8) The amounts in this column represent the full grant date fair value of restricted stock units granted during the indicated fiscal year as computed in accordance with FASB ASC Topic 718. For more information on these restricted stock units granted in 2015, see "—Grants of Plan-Based Awards" and "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Stock Awards" below. No restricted stock units were granted to the named executive officers in 2014. For information regarding the restricted stock units granted to Messrs. Shackelford and Doggrell in 2013, see "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Retention Bonus Program—Retention Stock Awards."
- (9) The amounts in the column represent the aggregate grant date fair value of all option awards granted during the indicated fiscal year and the incremental fair value resulting from the modification of all option awards during the indicated fiscal year, as applicable, in each case as determined in accordance with FASB ASC Topic 718. Assumptions used in computing the grant date fair values of the stock options in accordance with FASB ASC Topic 718 are set forth in Note 3—Share-Based Compensation to our audited financial statements included in our Annual Report on Form 10-K

for the year ended December 31, 2015. With respect to stock option modifications that occurred in 2013 and 2014, there was no incremental fair value, as determined in accordance with FASB ASC Topic 718, associated with the modifications of stock options held by Messrs. Hanover, Shackelford and Doggrell during 2013 and the modification of stock options held by Mr. Hanover in 2014. For more information on the modification of stock options held by the named executive officers in 2013 and 2014, see "—Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Retention Bonus Program—Stock Option Modifications" as well as "—Potential Payments upon Termination or Change of Control—Employment Agreements—Amended Employment Agreement with Mr. Hanover" below.

- (10) Represents amounts earned by the named executive officers pursuant to and paid under our Executive Bonus Compensation Plan. There were no cash bonus awards under our Executive Bonus Compensation Plan for 2013 and 2015. For more information on our Executive Bonus Compensation Plan, please see "Compensation Discussion and Analysis—Elements of Compensation and 2015 Compensation Decisions—Annual Bonus Plan" above.
- (11) The amounts in this column consisted of (a) employer matching contributions to our defined contribution 401(k) Plan, (b) with respect to Mr. Hanover and Mr. Doggrell only, the incremental cost of life insurance premiums to provide additional term life insurance benefits equal to up to two times each such named executive officer's base salary along with supplemental long-term disability insurance premiums, and (c) with respect to Dr. Wills and Dr. Young only, the following items of compensation:

Name	Year	Commuting Expenses Paid (\$)	Tax Gross-Up Payment (\$)
Dr. Wills	2015	13,147	9,270
Dr. Young	2015	5,076	3,760

Grants of Plan-Based Awards

The following table shows for the fiscal year ended December 31, 2015, certain information regarding grants of plan-based awards to the named executive officers. For the fiscal year ended December 31, 2015, the only grants of plan-based awards to the named executive officers were grants of restricted stock units, or RSUs, under our 2013 Equity Incentive Plan.

GRANTS OF PLAN-BASED AWARDS TABLE—FISCAL 2015

Name	Award Type⁽¹⁾	Grant Date	Approval Date	All Other Stock Awards: Number of Shares of Stock or Units (#)	Grant Date Fair Value of Stock and Option Awards (\$)⁽⁵⁾
Marc S. Hanover	RSU ⁽²⁾	02/18/2015	2/18/15	750,000	495,000
Jason T. Shackelford	RSU ⁽²⁾	02/18/2015	2/18/15	300,000	198,000
Robert J. Wills	RSU ⁽³⁾	03/02/2015	2/18/15	1,000,000	750,000
Diane C. Young	RSU ⁽⁴⁾	07/13/2015	6/29/15	500,000	705,000
Henry P. Doggrell	RSU ⁽²⁾	02/18/2015	2/18/15	500,000	330,000

- (1) The RSUs were granted pursuant to our 2013 Equity Incentive Plan and represent a contingent right to receive shares of our common stock upon the vesting of the RSUs. RSUs have no exercise price.
- (2) The shares subject to this RSU award vested as to 20% of the shares subject to the RSU award on January 1, 2016, and vest as to an additional 20% of the shares subject to the RSU award on January 1, 2017 and the final 60% of the shares subject to the RSU award on January 1, 2018, subject to vesting acceleration under certain circumstances as described under "—Potential Payments upon Termination or Change of Control—Stock Option, RSU and Equity Plan Provisions—Stock Award Vesting Acceleration".
- (3) The shares subject to this RSU award vested as to 1/3rd of the shares subject to the RSU award on March 2, 2016, with the remaining shares vesting as to one-third of the shares on each of March 2, 2017 and March 2, 2018, subject to vesting acceleration under certain circumstances as described under "—Potential Payments upon Termination or Change of Control—Stock Option, RSU and Equity Plan Provisions—Stock Award Vesting Acceleration" and "—Potential Payments upon Termination or Change of Control—Employment Agreements."
- (4) The shares subject to this RSU award vest as to 1/3rd of the shares subject to the RSU award on each of July 13, 2016, July 13, 2017 and July 13, 2018, subject to vesting acceleration under certain circumstances as described under "—Potential Payments upon Termination or Change of Control—Stock Option, RSU and Equity Plan Provisions—Stock Award Vesting Acceleration" and "—Potential Payments upon Termination or Change of Control—Employment Agreements."
- (5) Represents the grant date fair value of each RSU award as determined in accordance with FASB ASC Topic 718. The grant date fair value of each RSU award is measured based on the closing price of our common stock on the date of grant.

Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table

Employment Agreements. Each of our named executive officers has entered into a written employment agreement with GTx. Descriptions of our employment agreements with our named executive officers are included under the captions "Compensation Discussion and Analysis—Other Post-Employment Compensation and Change of Control Benefits" above, as well as "—Potential Payments upon Termination or Change of Control—Employment Agreements" below.

Stock Awards. In February 2015, we granted RSU awards to each of Messrs. Hanover, Shackelford and Doggrell. The RSU awards were granted to these named executive officers in lieu of any adjustment in base salaries for 2015 and in lieu of any cash bonus award eligibility under our

Executive Bonus Compensation Plan for 2015. Each of the RSU awards granted to Messrs. Hanover, Shackelford and Doggrell vested as to 20% of the shares subject to the RSU award on January 1, 2016, and vest as to an additional 20% of the shares subject to the RSU award on January 1, 2017 and the final 60% of the shares subject to the RSU award on January 1, 2018. In connection with Dr. Wills and Dr. Young joining GTX in March 2015 and July 2015, respectively, we granted RSU awards to Dr. Wills and Dr. Young that vest in three equal annual installments commencing one year after the applicable grant date. The vesting of the RSU awards granted to our named executive officers in 2015 is subject to acceleration under certain circumstances as described under "—Potential Payments upon Termination or Change of Control—Stock Option, RSU and Equity Plan Provisions—Stock Award Vesting Acceleration" and "—Potential Payments upon Termination or Change of Control—Employment Agreements."

We did not grant any stock options to our named executive officers in 2015. In December 2015, the Compensation Committee approved the grant of stock options to purchase 400,000 shares of GTX common stock to each of Mr. Hanover and Dr. Wills, a stock option to purchase 175,000 shares of GTX common stock to Mr. Shackelford, a stock option to purchase 150,000 shares of GTX common stock to Dr. Young, and a stock option to purchase 250,000 shares of GTX common stock to Mr. Doggrell, all of which grants were effective on January 1, 2016. The exercise price for these stock options is \$0.70 per share, the closing price of GTX's common stock on the last trading day of 2015. The options vest in three equal annual installments beginning January 1, 2019. The options expire on December 31, 2025, unless they are forfeited or expire earlier in accordance with their terms. All options granted to our named executive officers may be exercised with cash, provided that the Board or the Compensation Committee may provide that the exercise price may also be paid by delivery to us of other unencumbered shares of our common stock with a value equal to the aggregate option exercise price, pursuant to a cashless exercise program, or in any other form of legal consideration that may be acceptable to the Board or the Compensation Committee (which may include a "net exercise" of the option). As a general matter, the vested portion of the stock options granted to our named executive officers in 2016 will expire three months after the named executive officer's last day of service with us, subject to extension in certain termination situations as described under and "—Potential Payments upon Termination or Change of Control—Stock Option, RSU and Equity Plan Provisions—Extended Post-Termination Option Exercise Period" below. Events that can accelerate the vesting of GTX's stock options are described below under "—Potential Payments upon Termination or Change of Control—Stock Option, RSU and Equity Plan Provisions—Stock Award Vesting Acceleration" below.

Cash Performance Awards. In connection with the adoption of the retention bonus program discussed below, the Compensation Committee suspended cash bonus award eligibility under our Executive Bonus Compensation Plan until such time as the Compensation Committee determined to re-instate such eligibility. Accordingly, no executive officers of GTX received a performance bonus award under our Executive Bonus Compensation Plan for 2013. On June 3, 2014, the Compensation Committee Board determined to re-instate bonus eligibility under our Executive Bonus Compensation Plan for the remainder of 2014 and in connection therewith, approved target bonuses and the performance criteria to be achieved in order to be eligible to receive a cash bonus award under our Executive Bonus Compensation Plan for 2014 performance. For 2015, the Compensation Committee determined to grant RSU awards to our named executive officers in lieu of any adjustment in base salaries for 2015 and in lieu of any cash bonus award eligibility under our Executive Bonus Compensation Plan for 2015. Accordingly, no named executive officer was eligible for a cash bonus award for 2015 performance. In November 2015, the Compensation Committee reinstated cash bonus award eligibility under our Executive Bonus Compensation Plan for the 2016 performance period. For more information regarding our Executive Bonus Compensation Plan, please see "Compensation Discussion and Analysis—Elements of Compensation and 2015 Compensation Decisions—Annual

Bonus Plan" and "Compensation Discussion and Analysis—Compensation Decisions Effective in 2016" above.

Retention Bonus Program. As part of our efforts to retain the essential employees who continued with GTx following our October 1, 2013 workforce reduction, the Compensation Committee approved a retention bonus program for our then continuing employees. The retention bonus program included the following retention benefits and arrangements:

- *Cash Retention Bonuses.* Under the retention bonus program, each of Messrs. Shackelford and Doggrell were awarded a cash retention bonus equal to 50% of the then current base salary of the applicable named executive officer for remaining an employee of GTx through the end of business on May 31, 2014. Mr. Hanover was not eligible for a cash retention bonus.
- *Retention Stock Awards.* As part of the retention bonus program, the Compensation Committee approved the grant of retention stock options to purchase 100,000 shares of GTx common stock and RSUs covering 100,000 shares of GTx common stock to Mr. Doggrell. Mr. Shackelford received a retention stock option to purchase 50,000 shares of GTx common stock and RSUs covering 50,000 shares of GTx common stock as part of the retention bonus program. Each of the retention stock options and the RSUs were granted in October 2013 and vested in full on June 1, 2014. Mr. Hanover did not receive any retention stock awards.
- *Stock Option Modifications.* As part of the retention bonus program, the Compensation Committee also approved the modification of all then outstanding stock options held by all of our then continuing employees, including Messrs. Hanover, Shackelford and Doggrell. As approved by the Compensation Committee, each outstanding stock option held by each such named executive officer on or prior to September 27, 2013 was modified to provide that if the applicable named executive officer's service continues through the earlier to occur of the end of business on May 31, 2014 and an involuntary termination of employment by GTx (excluding a termination for cause or a voluntary resignation), then, as of the applicable date: (i) an additional number of shares subject to such option vested immediately as if the applicable named executive officer's service had continued to be employed through January 1, 2015 and (ii) the period during which the vested portion of such options would have generally expired was extended from three months to six months following the applicable named executive officer's termination of service, if any (subject to further extension under certain circumstances per the original terms of the stock option awards), subject in each case to the earlier expiration of the original term of the applicable stock option award. Each of Messrs. Hanover, Shackelford and Doggrell met the conditions for these partial vesting acceleration and extended post-termination exercise period benefits although none of the executives terminated their employment with us.

Other Compensatory Arrangements. For a description of the other elements of our executive compensation program, see "Compensation Discussion and Analysis—Retirement Benefits" and "Compensation Discussion and Analysis—Employee Benefits" above.

Outstanding Equity Awards at Fiscal-Year End

The following table summarizes the number of outstanding equity awards held by each of our named executive officers as of December 31, 2015.

OUTSTANDING EQUITY AWARDS AT 2015 FISCAL-YEAR END TABLE

Name	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#) ⁽¹⁾	Market Value of Shares or Units of Stock That Have Not Vested(\$) ⁽¹¹⁾
	Exercisable	Unexercisable ⁽¹⁾				
Marc S. Hanover	125,000	—	14.35	12/31/17	750,000 ⁽⁸⁾	525,000
	50,000	—	16.84	12/31/18		
	70,000	—	4.20	12/31/19		
	56,000	14,000 ⁽²⁾	2.65	12/31/20		
	42,000	28,000 ⁽³⁾	3.36	12/31/21		
	36,000	54,000 ⁽⁴⁾	4.20	12/31/22		
	100,000	400,000 ⁽⁵⁾	1.56	04/02/24		
	—	250,000 ⁽⁶⁾	1.33	06/04/24		
Jason T. Shackelford	15,000	—	15.59	07/23/17	300,000 ⁽⁸⁾	210,000
	10,000	—	14.35	12/31/17		
	15,000	—	16.84	12/31/18		
	25,000	—	4.20	12/31/19		
	20,000	5,000 ⁽²⁾	2.65	12/31/20		
	15,000	10,000 ⁽³⁾	3.36	12/31/21		
	12,800	19,200 ⁽⁴⁾	4.20	12/31/22		
	50,000	—	1.88	09/30/23		
	7,000	28,000 ⁽⁷⁾	1.45	05/04/24		
	—	150,000 ⁽⁶⁾	1.33	06/04/24		
Robert J. Wills	—	—	—	—	1,000,000 ⁽⁹⁾	700,000
Diane C. Young	—	—	—	—	500,000 ⁽¹⁰⁾	350,000
Henry P. Doggrell	25,000	—	17.84	12/31/16	500,000 ⁽⁸⁾	350,000
	25,000	—	14.35	12/31/17		
	25,000	—	16.84	12/31/18		
	35,000	—	4.20	12/31/19		
	28,000	7,000 ⁽²⁾	2.65	12/31/20		
	21,000	14,000 ⁽³⁾	3.36	12/31/21		
	22,000	33,000 ⁽⁴⁾	4.20	12/31/22		
	100,000	—	1.88	09/30/23		
	—	200,000 ⁽⁶⁾	1.33	06/04/24		

- (1) In addition to the specific vesting schedule for each stock option and RSU award, each unvested stock option and RSU award is subject potential future vesting acceleration as described under the heading "—Potential Payments upon Termination or Change of Control" below.
- (2) One-fifth of the shares subject to the option vested on each of January 1, 2012, January 1, 2013, January 1, 2014, June 1, 2014 and January 1, 2016.
- (3) One-fifth of the shares subject to the option vested on each of January 1, 2013, January 1, 2014, June 1, 2014 and January 1, 2016, with the remaining shares vesting on January 1, 2017.
- (4) One-fifth of the shares subject to the option vested on each of January 1, 2014, June 1, 2014 and January 1, 2016, with the remaining shares vesting as to one-fifth of the shares on each of January 1, 2017 and January 1, 2018.
- (5) One-fifth of the shares subject to the option vested April 3, 2015, with the remaining shares vesting as to one-fifth of the shares on each of April 3, 2016, April 3, 2017, April 3, 2018 and April 3, 2019.
- (6) One-third of the shares subject to the option will vest on each of June 5, 2017, June 5, 2018 and June 5, 2019.
- (7) One-fifth of the shares subject to the option vested on May 5, 2015, with the remaining shares vesting as to one-fifth of the shares on each of May 5, 2016, May 5, 2017, May 5, 2018 and May 5, 2019.
- (8) 20% of the shares subject to the RSU award vested on January 1, 2016, and vest as to an additional 20% of the shares on January 1, 2017 and the final 60% of the shares on January 1, 2018.

- (9) One-third of the shares subject to the RSU award vested on March 2, 2016, with the remaining shares vesting as to one-third of the shares on each of March 2, 2017 and March 2, 2018.
- (10) One-third of the shares subject to the RSU award will vest on each of July 13, 2016, July 13, 2017 and July 13, 2018.
- (11) The market values of the RSU awards that have not vested are calculated by multiplying the number of RSUs shown in the table by the closing price of our common stock on December 31, 2015, which was \$0.70.

Option Exercises and Stock Vested During 2015

None of GTX's named executive officers exercised any options during the fiscal year ended December 31, 2015, and no RSUs held by our named executive officers vested during the year ended December 31, 2015.

Potential Payments upon Termination or Change of Control

We have entered into employment agreements with each of our named executive officers. Described below are the circumstances that would trigger our obligation to make cash payments pursuant to these employment agreements following the termination of a named executive officer's employment with us and the cash payments that we would be required to provide. We also describe below the termination and change of control events that would trigger the accelerated vesting of stock options and RSUs held by our named executive officers and the extension of the post-termination exercise period with respect to those stock options.

Employment Agreements

Termination Without "Cause" or For "Good Reason" after a Change of Control

The employment agreements with our named executive officers, other than Mr. Shackelford, provide for cash post-termination change of control payments equal to one year's base salary and monthly premium payments to continue the named executive officer's health insurance coverage for up to twelve months following his or her termination. In the case of Mr. Shackelford, we entered into an employment agreement with Mr. Shackelford in October 2013 on substantially the same terms as the employment agreements with Mr. Hanover and Mr. Doggrell, except that the post-termination change of control payments for Mr. Shackelford are equal to six months' base salary and monthly premium payments to continue his health insurance coverage for up to six months following his termination. These change of control salary continuation and health insurance coverage benefits are structured on a "double-trigger" basis, meaning that before a named executive officer is eligible to receive such benefits, (1) a change of control must occur and (2) within twelve months after such change of control, the named executive officer's employment must be terminated without "cause" or the named executive officer must resign for "good reason." GTX's obligation to make the salary continuation payments and health insurance premium payments under the employment agreements is conditioned upon the former named executive officer's compliance with the confidentiality provisions of the employment agreement and the provisions of the non-competition provisions of the employment agreement for a period of one year following termination. In addition, GTX's obligation to make the salary continuation payments and health insurance premium payments is conditioned upon GTX's receipt of an effective general release of claims executed by the named executive officer. The post-termination salary continuation payments will be generally made over the one-year period following termination on our regular payroll dates rather than in a lump sum, except that the timing of these payments may be deferred for up to six months if these payments would constitute deferred compensation under Section 409A of the Internal Revenue Code (in which case, the deferred payment would be made in a lump sum following the end of the deferral period, with the balance being paid thereafter on our regular payroll dates).

A change of control generally means the following:

- the sale or other disposition of all or substantially all of GTX's assets (including a liquidation or dissolution of GTX);
- if any person or group acquires beneficial ownership of 50% or more of GTX's voting securities (subject to certain exceptions);
- a merger or consolidation of GTX with or into any other entity, if immediately after the transaction more than 50% of the voting stock of the surviving entity is held by persons who were not holders of at least 50% of GTX's voting stock as of the effective date of the named executive officer's employment agreement; or
- a majority of our Board becomes comprised of individuals whose nomination, appointment, or election was not approved by a majority of the Board members or their approved successors.

"Cause" is generally defined as the named executive officer's:

- conviction for a felony;
- theft, embezzlement, misappropriation of or intentional infliction of material damage to GTX's property or business opportunities;
- breach of his or her confidentiality or non-competition obligations, as applicable, under his or her employment agreement; or
- ongoing willful neglect of or failure to perform his or her duties, or his or her ongoing willful failure or refusal to follow any reasonable, unambiguous duly adopted written direction that is not inconsistent with the description of such named executive officer's duties, provided that such willful neglect or failure is materially damaging or materially detrimental to the business and operations of GTX, and after 30 days notice and the opportunity to cure.

"Good reason" is generally defined as the following actions taken without the consent of the named executive officer after a change of control (in each case where the named executive officer has provided written notice within 30 days of the action, such action is not remedied by GTX within 30 days following such notice, and the named executive officer's resignation is effective not later than 60 days after the expiration of such 30-day cure):

- an adverse change in the named executive officer's authority, duties or responsibilities (including reporting responsibilities) which, without the named executive officer's consent, represents a material reduction in or a material demotion of the named executive officer's authority, duties or responsibilities as in effect immediately prior to the change of control, or the assignment to the named executive officer of any duties or responsibilities that are materially inconsistent with and materially adverse to such authority, duties or responsibilities;
- a material reduction in the then current base salary of the named executive officer;
- the relocation of the named executive officer's principal office to a location that increases his or her one-way commute by more than 20 miles (or, in the case of Drs. Young and Wills, a relocation outside of New Jersey);

- the failure of GTx to obtain an agreement reasonably satisfactory to the named executive officer from any successor entity upon the change of control to assume and agree to perform his or her employment agreement in all material respects; or
- a material breach by GTx of any provision of the named executive officer's employment agreement or any other then-effective agreement with the named executive officer.

Termination Without "Cause" or For "Good Reason" Prior to or Not in Connection with a Change of Control

Our employment agreement with Dr. Wills provides for cash post-termination payments equal to one year's base salary (generally to be made over the one-year period following termination on our regular payroll dates) and monthly premium payments to continue his health insurance coverage for up to twelve months following his termination, should his employment be terminated without "cause" or should he resign for "good reason", in each case irrespective of whether such termination is within twelve months after (or otherwise in connection with) a change of control. In addition, under the terms of our employment agreements with both of Dr. Wills and Dr. Young, if their employment is terminated without "cause" or they resign for "good reason" prior to a change of control, then any unvested portion of the initial RSU awards that we granted to Dr. Wills and Dr. Young in connection with the commencement of their employment with GTx that is scheduled to vest on the next scheduled vesting date will become fully vested upon such termination.

Other Termination Scenarios

If we terminate a named executive officer's employment for "cause," or if a named executive officer voluntarily terminates his or her employment without "good reason," or upon the death of a named executive officer, the named executive officer would generally have no right to receive any compensation or benefits under his or her employment agreement on or after the effective date of termination, other than any accrued and unpaid salary and expense reimbursement. However, under our employment agreements with Dr. Wills and Dr. Young, each of Dr. Wills and Dr. Young would nonetheless be entitled to any earned but unpaid annual bonus with respect to any completed calendar year immediately preceding their termination date. Likewise, except as described above under "—Termination Without "Cause" or For "Good Reason" Prior to or Not in Connection with a Change of Control" with respect to Dr. Wills and Dr. Young, if we terminate a named executive officer's employment without "cause," or if a named executive officer voluntarily terminates his or her employment with "good reason," in each case not within twelve months following a change of control, the named executive officer would have no right to receive any compensation or benefits under his or her employment agreement on or after the effective date of termination, other than any accrued and unpaid salary and expense reimbursement and, solely in the case of Dr. Wills and Dr. Young, subject to our obligation under their employment agreements to pay any accrued but unpaid annual bonus with respect to any completed calendar year immediately preceding their termination date.

Amended Employment Agreement with Mr. Hanover

In connection with Mr. Hanover's appointment as our interim Chief Executive Officer in 2014, we entered into an amendment to Mr. Hanover's employment agreement with us to provide Mr. Hanover with certain severance benefits if Mr. Hanover's employment had been involuntarily terminated by us (excluding a termination for cause, as defined above) or had he voluntarily resigned due to a "material demotion," in each case within 181 days of a new Chief Executive Officer becoming employed by GTx. "Material demotion" for these purposes meant a material reduction in Mr. Hanover's authority, duties or responsibilities as our then President and Chief Operating Officer undertaken without Mr. Hanover's consent, including any reassignment of Mr. Hanover to a position

other than President and Chief Operating Officer. In such event, Mr. Hanover would have been entitled to the following severance benefits:

- twelve months of base salary continuation payments based on his base salary then in effect;
- the vesting and exercisability of all stock options granted to Mr. Hanover by us prior to April 3, 2014 would be accelerated in full;
- a number of shares subject to the stock option we granted to Mr. Hanover on April 3, 2014 would immediately vest and become exercisable as if Mr. Hanover's service had continued for a period of two years following his termination date; and
- the post-termination exercise period applicable to all of Mr. Hanover's outstanding vested stock options would be extended until the date five years from his termination date, subject in each case to the earlier expiration of the original term of the applicable stock option.

Under the terms of the employment agreement amendment, these severance benefits were subject to the same conditions as set forth in Mr. Hanover's employment agreement as discussed above, including an effective general release of claims. In connection with Mr. Hanover's appointment as our permanent Chief Executive Officer in February 2015, these special severance benefits described above ceased to be effective; accordingly, Mr. Hanover is no longer entitled to these special severance benefits.

Other Benefits

Except as set forth above, under the employment agreements with our named executive officers, our named executive officers would not be entitled to any other benefits following termination of service, including the continuation of general employee benefits, life insurance coverage and long term disability coverage, except as otherwise required by applicable law.

Stock Option, RSU and Equity Plan Provisions

Stock Award Vesting Acceleration

Pre-IPO Plans. The Genotherapeutics, Inc. Stock Option Plan, or the 1999 Plan, the GTx, Inc. 2000 Stock Option Plan, or the 2000 Plan, the GTx, Inc. 2001 Stock Option Plan, or the 2001 Plan, and the GTx, Inc. 2002 Stock Option Plan, or the 2002 Plan, each provide that in the event of a specified change of control transaction, all shares subject to option awards granted under these plans will immediately vest and be converted into cash, options or stock of equivalent value in the surviving organization under terms and conditions that substantially preserve the economic status of plan participants. Certain of the options granted to our executive officers to date have been granted pursuant to these plans. For purposes of our 1999 Plan, 2000 Plan, 2001 Plan and 2002 Plan, the definition of change of control is substantially similar to the definition of change of control under the employment agreements with our named executive officers. As a result of the adoption of our 2013 Equity Incentive Plan, or the 2013 Plan, we no longer grant any options under any of these plans.

2004 Plan. Our 2004 Equity Incentive Plan, or the 2004 Plan, provides that in the event of a specified corporate transaction such as a merger, consolidation or similar transaction, all outstanding options under the 2004 Plan may be assumed, continued or substituted for by any surviving or acquiring entity. If the surviving or acquiring entity elects not to assume, continue or substitute for such options, such options then held by individuals whose service has not terminated prior to the effective date of the corporate transaction would become fully vested, and, if applicable, exercisable and such options would be terminated if not exercised prior to the effective date of the corporate transaction. A

recipient's award agreement may provide for acceleration upon other events. In this regard, the standard form of stock option agreement under the 2004 Plan provides for each stock option to become fully vested and exercisable if (i) the optionholder's service with GTx or its successor terminates within twelve months after a change of control and the termination of service is a result of an involuntary termination without cause or a constructive termination or (ii) the optionholder is required to resign his or her position with GTx as a condition of the change of control. For purposes of our 2004 Plan, the definition of change of control is similar to the definition of change of control under the employment agreements with our named executive officers. As a result of the adoption of the 2013 Plan, we no longer grant any equity awards under the 2004 Plan, and stock options were the only form of stock awards granted to our named executive officers under the 2004 Plan.

The standard form of stock option agreement under the 2004 Plan generally defines "cause" as the grant recipient:

- committing an act that materially injures the business of GTx;
- refusing or failing to follow the lawful and reasonable directions of the Board or the appropriate individual to whom he or she reports, after 15 days notice and the opportunity to cure;
- willfully or habitually neglecting his or her duties with GTx, after 15 days notice and the opportunity to cure;
- being convicted of a felony that is likely to inflict or has inflicted material injury on the business of GTx; or
- committing a material fraud, misappropriation, embezzlement or other act of gross dishonesty that resulted in material loss, damage or injury to GTx.

The standard form of stock option agreement under the 2004 Plan generally defines a "constructive termination" as a voluntary termination within 12 months after a change of control after any of the following actions are taken without the consent of the grant recipient:

- the assignment to the grant recipient of any duties or responsibilities which results in a significant reduction in his or her function as in effect immediately prior to the change of control;
- a material reduction in the grant recipient's salary, as in effect on the effective date of the change of control;
- the failure to continue in effect any benefit plan or program in which the grant recipient was participating immediately prior to the effective date of the change of control, or the taking of any action that would adversely affect his or her participation in (or reduce his or her benefits under) any such benefit plan or program (but either circumstance will only be grounds for a "constructive termination" if the range of benefit plans and programs offered by the acquirer is not comparable to the benefit plans previously offered by GTx, when considered as a whole);
- a relocation of the grant recipient's principal office to a location more than 50 miles from the location at which he or she performed his or her duties as of the effective date of the change of control; or

- a material breach by GTx of any provision of the grant recipient's stock option agreement under the 2004 Plan.

2013 Plan. Our 2013 Plan provides that in the event of a specified corporate transaction such as a merger, consolidation or similar transaction, all outstanding stock awards under the 2013 Plan may be assumed, continued or substituted for by any surviving or acquiring entity, and any reacquisition or repurchase rights held by GTx in respect of common stock issued pursuant to outstanding stock awards may be assigned by GTx to its successor (or the successor's parent company). If the surviving or acquiring corporation does not assume, continue or substitute any or all such outstanding stock awards, then with respect to stock awards that have not been assumed, continued or substituted and that are held by participants whose continuous service has not terminated prior to the effective time of the corporate transaction, the vesting (and, if applicable, the exercisability) of such stock awards will (contingent upon the effectiveness of the corporate transaction) be accelerated in full to a date prior to the effective time of the corporate transaction as the Board determines (or, if the Board does not determine such a date, to the date that is five days prior to the effective time of the corporate transaction), such stock awards will terminate if not exercised (if applicable) at or prior to the effective time of the corporate transaction, and any reacquisition or repurchase rights held by GTx with respect to such stock awards will (contingent upon the effectiveness of the corporate transaction) lapse. Unless otherwise provided in a written agreement between GTx or an affiliate and a participant, the vesting (and, if applicable, the exercisability) of any other outstanding stock awards that are not assumed, continued or substituted in connection with the corporate transaction will not be accelerated and such stock awards will terminate if not exercised (if applicable) prior to the effective time of the corporate transaction. A recipient's award agreement may provide for acceleration upon other events. In this regard, the standard form of stock option agreement under the 2013 Plan provides for each stock option to become fully vested and exercisable if the optionholder's service with GTx or its successor terminates on or within twelve months after a change of control and the termination of service is a result of an involuntary termination without cause or a constructive termination.

For purposes of our 2013 Plan, the definition of change of control is similar to the definition of change of control under the employment agreements with our named executive officers.

For purposes of our 2013 Plan, "cause" has the meaning ascribed to such term in any written agreement between the grant recipient and GTx, and in the absence of such an agreement, "cause" means the occurrence of any of the following:

- the grant recipient's willful failure substantially to perform his or her duties and responsibilities or deliberate violation of a company policy;
- the grant recipient's commission of any act of fraud, embezzlement, dishonesty or any other willful misconduct that has caused or is reasonably expected to result in material injury to GTx;
- unauthorized use or disclosure by the grant recipient of any proprietary information or trade secrets of GTx or any affiliate or any other party to whom the grant recipient owes an obligation of nondisclosure as a result of the grant recipient's relationship with GTx or any affiliate; or
- the grant recipient's willful breach of any of his or her obligations under any written agreement or covenant with GTx or any affiliate.

The definition of a "constructive termination" in the standard form of stock option agreement under the 2013 Plan is similar to the definition of a "constructive termination" in the standard form of

stock option agreement under the 2004 Plan, except that a constructive termination would also be deemed to occur if the board of GTx's successor requires the participant to resign from GTx in a manner that terminates the participant's continuous service, as a condition of the change in control. In addition, in order to have a basis for constructive termination under the 2013 Plan, a participant must provide written notice of the event giving rise to constructive termination to the board of GTx's successor within 30 days following such event, provide the successor with 30 days to cure such event, and, if not cured, the participant must resign from all positions then held with GTx and its successor not later than six months after the date of the participant's written notice to the board of the successor (or such earlier date as may be requested by the Board).

Under the terms of the RSU awards granted to our named executive officers in 2015, which were granted under our 2013 Plan, if a change of control occurs and the named executive officer's service has not terminated prior to that change of control, then any outstanding and unvested RSUs award will vest in full immediately prior to that change of control. In addition, as described above under "—Employment Agreements—Termination Without "Cause" or For "Good Reason" Prior to a Change of Control," each of Dr. Wills and Dr. Young are entitled to a partial vesting acceleration benefit with respect to the initial RSU awards that we granted to Dr. Wills and Dr. Young if their employment is terminated without "cause" or they resign for "good reason" prior to a change of control (each as defined in their employment agreements).

Extended Post-Termination Option Exercise Period

As a general matter, the terms of the options we have granted to our named executive officers provided that the vested portion of these options will expire three months after the named executive officer's termination of service. We refer to the period following the named executive officer's termination during which he or she can continue to exercise his or her vested stock options as the post-termination exercise period. However, in connection with the adoption of the retention bonus program by the Compensation Committee in September 2013 as described under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table," the options held by our named executive officers and outstanding on or prior to September 27, 2013 were modified to generally provide for a six month post-termination exercise period. In addition, the retention stock options granted to Messrs. Shackelford and Doggrell described under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table—Retention Bonus Program—Retention Stock Awards" generally provides for a six month post-termination exercise period. All such post-termination exercise periods are limited by, and will not exceed, the original expiration date of the option. However, in termination situations involving the death or disability of the named executive officer, or the named executive officer's voluntary retirement, the post-termination exercise period is generally extended beyond three months or six months, as applicable, following the named executive officer's termination of service. Under our 2004 Plan and the form of stock option agreement under our 2004 Plan, the post-termination exercise period will generally be one year following termination if the termination of service is a result of an involuntary termination without cause or a constructive termination within twelve months after a change of control. Under our 2013 Plan and the form of stock option agreement under our 2013 Plan, the post-termination exercise period will generally be one year following termination if the termination of service occurs either as a condition of a change of control or upon the effectiveness of a change of control, unless the stock option is not assumed, continued or replaced by the successor or acquiring entity. With respect to all of our stock option plans and the forms of stock option agreements under such stock option plans, if the termination is due to the named executive officer's death, the post-termination exercise period will generally be 18 months following termination, and if the termination is due to the named executive officer's disability, the post-termination exercise period will generally be one year following termination. With respect to our 2013 Plan and the form of stock option agreement under our 2013 Plan, if the termination is for cause,

the option will terminate upon the date on which the event giving rise to the termination for cause first occurred (or, if required by law, the date of the termination). With respect to our 1999 Plan, 2000 Plan, 2001 Plan and 2002 Plan and the forms of stock option agreements under those plans, if a named executive officer voluntarily retires his or her employment (which generally means a retirement after age 65 or after age 55 following a specified period of service), the post-termination exercise period will generally be five years following termination. However, our 1999 and 2000 Plans provide that the Compensation Committee in its discretion can provide for any post-termination exercise period for a vested option in the event of the disability, death or involuntary termination of an option grant recipient of up to, but not exceeding, the initial ten-year term of the option. Under our 2004 Plan and 2013 Plan and the forms of stock option agreements under those plans, if a named executive officer voluntarily retires his or her employment (which generally means a retirement after age 65 following a specified period of service or after age 55 following a specified period of service and with the authorization of our Chief Executive Officer or the Board), the post-termination exercise period will generally be two years following termination. In no event, however, will the post-termination exercise period be extended beyond the initial ten-year term of the option.

Other Benefits

For a description of certain other retirement, life insurance and disability benefits, please see "Compensation Discussion and Analysis—Retirement Benefits" and "Compensation Discussion and Analysis—Employee Benefits" above.

Calculation of Potential Termination and Change of Control Benefits

The following table includes an estimate of the potential compensation and benefits payable to our named executive officers in certain termination and change of control situations. In providing the estimated potential payments and benefits, we have made the following general assumptions in all circumstances where applicable:

- a change of control and/or an employment termination event has occurred, and the date of such event is December 31, 2015;
- the annual salary at the time of termination is as follows: Marc S. Hanover, \$393,317; Jason T. Shackelford, \$210,000; Robert J. Wills, \$200,000; Diane C. Young, \$175,000; and Henry P. Doggrell, \$363,576;
- there is no accrued and unpaid salary; and
- there is no unpaid reimbursement for expenses incurred prior to the date of termination.

As of December 31, 2015, all stock options held by the named executive officers were out-of-the-money, meaning that all of such stock options had exercise prices that were in excess of the closing price of our common stock on December 31, 2015 (\$0.70). As a result, the value of any stock option vesting acceleration benefits in connection with the termination or change of control events, for purposes of the table below, is \$0. This does not mean, however, that the named executive officers will not receive any value as a result of stock option vesting acceleration benefits in connection with an actual termination or change of control event occurring in the future; the actual value that the named executive officers would receive can be determined only at the time of such termination or change of control event.

Name and Form of Benefit/Payment	Termination/Change of Control Event					
	Change of Control Only (a) ⁽¹⁾	Change of Control with No Assumption or Replacement Equity (b) ⁽¹⁾	Termination w/o Cause or Constructive Termination in Connection with Change of Control (c) ⁽¹⁾	Termination w/o Cause or Constructive Termination Prior to or not in Connection with Change of Control (d) ⁽¹⁾	Death or Disability (e) ⁽¹⁾	Retirement or Voluntary (Non-Constructive) Termination (f) ⁽¹⁾
Marc S. Hanover						
Base Salary Continuation ⁽²⁾	\$ —	\$ —	\$ 393,317	\$ —	\$ —	\$ —
Life, Health & Other Benefits ⁽³⁾	—	—	26,117	—	1,081,622	—
Stock Options (full vesting acceleration) ⁽⁴⁾	—	—	—	—	—	—
RSU Awards (full vesting acceleration) ⁽⁵⁾	525,000	525,000	525,000	—	—	—
Mr. Hanover's Totals	\$ 525,000	\$ 525,000	\$ 944,434	\$ —	\$ 1,081,622	\$ —
Jason T. Shackelford						
Base Salary Continuation ⁽²⁾	\$ —	\$ —	\$ 105,000	\$ —	\$ —	\$ —
Life, Health & Other Benefits ⁽³⁾	—	—	855	—	176,000	—
Stock Options (full vesting acceleration) ⁽⁴⁾	—	—	—	—	—	—
RSU Awards (full vesting acceleration) ⁽⁵⁾	210,000	210,000	210,000	—	—	—
Mr. Shackelford's Totals	\$ 210,000	\$ 210,000	\$ 315,855	\$ —	\$ 176,000	\$ —
Robert J. Wills						
Base Salary Continuation ⁽²⁾	\$ —	\$ —	\$ 200,000	\$ 200,000	\$ —	\$ —
Life, Health & Other Benefits ⁽³⁾	—	—	—	—	—	—
Stock Options (full vesting acceleration) ⁽⁴⁾	—	—	—	—	—	—
RSU Awards (full vesting acceleration) ⁽⁵⁾	700,000	700,000	700,000	—	—	—
RSU Awards (partial vesting acceleration) ⁽⁶⁾	—	—	N/A	233,333	—	—
Earned but Unpaid Annual Bonus ⁽⁷⁾	—	—	—	—	—	—
Dr. Wills' Totals	\$ 700,000	\$ 700,000	\$ 900,000	\$ 433,333	\$ —	\$ —
Diane C. Young						
Base Salary Continuation ⁽²⁾	\$ —	\$ —	\$ 175,000	\$ —	\$ —	\$ —
Life, Health & Other Benefits ⁽³⁾	—	—	—	—	—	—
Stock Options (full vesting acceleration) ⁽⁴⁾	—	—	—	—	—	—
RSU Awards (full vesting acceleration) ⁽⁵⁾	350,000	350,000	350,000	—	—	—
RSU Awards (partial vesting acceleration) ⁽⁶⁾	—	—	N/A	116,667	—	—
Earned but Unpaid Annual Bonus ⁽⁷⁾	—	—	—	—	—	—
Dr. Young's Totals	\$ 350,000	\$ 350,000	\$ 525,000	\$ 116,667	\$ —	\$ —
Henry P. Doggrell						
Base Salary Continuation ⁽²⁾	\$ —	\$ —	\$ 363,576	\$ —	\$ —	\$ —
Life, Health & Other Benefits ⁽³⁾	—	—	46,314	—	745,331	—
Stock Options (full vesting acceleration) ⁽⁴⁾	—	—	—	—	—	—
RSU Awards (full vesting acceleration) ⁽⁵⁾	350,000	350,000	350,000	—	—	—
Mr. Doggrell's Totals	\$ 350,000	\$ 350,000	\$ 759,890	\$ —	\$ 745,331	\$ —

- (1) The amounts in these columns do not include any value associated with the extension, if any, of the post-termination exercise period applicable to the named executive officer's stock options. The situations under which the post-termination exercise period applicable to the named executive officer's stock options may be extended are described above under "— Stock Option, RSU and Equity Plan Provisions—Extended Post-Termination Option Exercise Period."
- (2) The amounts represent: (i) with respect to column (c), the value of base salary continuation payments (to be paid in installments) equal to one year's base salary (or six months' base salary in the case of Mr. Shackelford) under the named executive officer's employment agreement with GTX; and (ii) with respect to column (d) for Dr. Wills, the value of base salary continuation payments (to be paid in installments) equal to one year's base salary under Dr. Wills' employment agreement with GTX.
- (3) The amounts represent: (i) with respect to column (c), the value of the monthly premium payments to continue the named executive officer's health insurance coverage for twelve months following the termination (or six months in the case of Mr. Shackelford) under the

named executive officer's employment agreement with GTx; (ii) with respect to column (e) for Mr. Hanover, the value of term life insurance benefits equal to two times Mr. Hanover's base salary and the value of total target income replacement equal to 75% of Mr. Hanover's base salary under supplemental third party life and long term disability insurance benefits; (iii) with respect to column (e) for Mr. Shackelford, \$50,000 in life insurance benefits and the value of total target income replacement equal to 60% of Mr. Shackelford's base salary under long term disability insurance benefits; and (iv) with respect to column (e) for Mr. Doggrell, the value of term life insurance benefits equal to 130% of Mr. Doggrell's base salary and the value of total target income replacement equal to 75% of Mr. Doggrell's base salary under supplemental third party life and long term disability insurance benefits. Neither Dr. Wills nor Dr. Young are currently eligible for company health or life insurance coverage or disability benefits; accordingly, no amounts are shown for these benefits in columns (c) or (d) for either Dr. Wills or Dr. Young.

- (4) The amounts represent: (i) with respect to column (a), the value of the full accelerated vesting of all outstanding stock options held by the named executive officer and granted under the 1999 Plan, 2000 Plan, 2001 Plan and 2002 Plan, as applicable, on a single-trigger basis, or immediately upon the change of control event; (ii) with respect to column (b), the value of the full accelerated vesting of all outstanding stock options held by the named executive officer assuming the surviving or acquiring entity in the change of control transaction had elected not to assume, continue or substitute for such stock option awards; and (iii) with respect to column (c), the value of the full accelerated vesting of all outstanding stock options held by the named executive officer assuming that in connection with the change of control transaction, the named executive officer experiences an involuntary termination without cause or a constructive termination. On December 31, 2015, the last business day of our last fiscal year, the closing sale price of our common stock was \$0.70 per share. All of the stock options held by the named executive officers were out-of-the-money at that date, and accordingly, the value of these stock option vesting acceleration benefits is \$0 for all named executive officers for purposes of the table above. In addition, at December 31, 2015, neither Dr. Wills nor Dr. Young held any outstanding stock options.
- (5) The amounts represent, with respect to columns (a), (b) and (c), the value of the full accelerated vesting of all outstanding RSU awards held by the named executive officer on a single-trigger basis, or immediately prior to the change of control event. With respect to columns (b) and (c), the outstanding RSU awards held by the named executive officers will vest in full immediately prior to the change of control event; accordingly, it is not necessary for there to be a corresponding termination or a refusal to assume, continue or substitute for such RSU awards since such RSU awards would have already vested in full. The value of the vesting in full of the RSU Awards is based on the number of shares underlying the RSU awards and the closing sale price of our common stock on December 31, 2015 (\$0.70).
- (6) The amounts represent, with respect to column (d) for Dr. Wills and Dr. Young, the value of the partial vesting of the initial RSU awards granted to Dr. Wills and Dr. Young in connection with their involuntary termination without cause or resignation with good reason prior to a change of control. Under the terms of our employment agreements with Dr. Wills and Dr. Young, if their employment is involuntarily terminated without cause or they resign for good reason prior to a change of control, then any unvested portion of the initial RSU awards that we granted to Dr. Wills and Dr. Young in connection with the commencement of their employment with GTx that is scheduled to vest on the next scheduled vesting date will become fully vested upon such termination. In addition, we have indicated "N/A" in the table above with respect to this partial vesting acceleration benefit for Dr. Wills and Dr. Young as applied to the event covered by column (c) since such RSU Awards would become fully vested immediately prior to the change of control. The value of the partial vesting of such RSU Awards is based on the number of shares underlying the RSU awards scheduled to vest on the next scheduled vesting date following December 31, 2015 and the closing sale price of our common stock on December 31, 2015 (\$0.70).
- (7) The amounts represent, with respect to columns (c), (d), (e) and (f) for Dr. Wills and Dr. Young, any earned but unpaid annual bonus with respect to any completed calendar year immediately preceding the assumed December 31, 2015 termination date. In this regard, this benefit would also be payable in connection with an employment termination for cause. Each of Dr. Wills and Dr. Young joined GTx in 2015; accordingly, neither earned a bonus for any prior completed year so the value of this benefit is \$0 for both of Dr. Wills and Dr. Young.

Compensation and Risk

In February 2016, the Compensation Committee considered our compensation policies, practices and programs as generally applicable to our employees and determined that our policies, practices and programs do not encourage excessive or unnecessary risk-taking, and that the level of risk that they do encourage is not reasonably likely to have a material adverse effect on our company. The design of our compensation policies and programs encourage our employees to remain focused on our long-term goals of increasing shareholder value through the successful development of our clinical product candidates. For example, through our use of different types of equity compensation awards that provide long term incentives to increase our share price, as well as our use of multi-year vesting for stock option and restricted stock unit awards, we believe that our employee compensation programs promote a long-term stockholder perspective, encourage decisions that will result in sustainable performance over the longer term, and mitigate the risks associated with an undue short-term focus on results.

DIRECTOR COMPENSATION

Cash Retainers

In 2012, on the recommendation of the Nominating and Corporate Governance Committee and the Compensation Committee, which based their recommendations on information developed by Radford, a third party compensation consultant, the Board approved the following cash compensation payments to its Board and committee members, effective January 1, 2013, to be paid quarterly in advance as follows:

- a \$32,500 annual retainer for service as a member of our Board of Directors;
- a supplemental annual retainer for the Chairs of the Board and each Board committee in the following amounts: \$15,000 for Chair of the Board; \$12,000 for Chair of the Audit Committee; \$8,000 for Chair of the Compensation Committee; \$6,000 for Chair of the Nominating and Corporate Governance Committee; and \$10,000 for Chair of the Scientific and Development Committee; and
- a supplemental annual retainer for each member of the following committees other than the Chairs, in the following amounts: \$6,000 for members of the Audit Committee; \$4,000 for members of the Compensation Committee; \$3,000 for members of the Nominating and Corporate Governance Committee; and \$7,500 for members of the Scientific and Development Committee.

In February 2015, based on the recommendation of the Nominating and Corporate Governance Committee and the Compensation Committee, which based their recommendations on information developed by Radford, the Board substantially revised its list of industry peers which it uses to assess Board and executive compensation to better reflect the size, financial condition and developmental level of the company, and approved modifications to the compensation paid to non-employee directors by GTx to bring our non-employee director compensation more in line with the median compensation being received by the non-employee directors of our industry peers. Effective April 1, 2015, the following cash compensation payments were made on a quarterly basis to the Board and committee members:

- a \$35,000 annual retainer for service as a member of the Board of Directors;
- a supplemental annual retainer for the Lead Director of the Board and the Chairs of each Board committee in the following amounts: \$15,000 for the Lead Director of the Board; \$15,000 for Chair of the Audit Committee; \$10,000 for Chair of the Compensation Committee; and \$7,000 for Chair of the Nominating and Corporate Governance Committee; and
- a supplemental annual retainer for each member of the following committees other than the Chairs, in the following amounts: \$7,500 for members of the Audit Committee; \$5,000 for members of the Compensation Committee; \$3,500 for members of the Nominating and Corporate Governance Committee; and \$7,500 for members of the Scientific and Development Committee.

In November 2015, following the recommendations of Radford described above and a review of Equilar data made available to the Compensation Committee and other members of the Board regarding peer board compensation, the Board approved the recommendations of both the Nominating and Corporate Governance Committee and the Compensation Committee that the following cash

compensation payments be made quarterly to the Board and committee members, effective January 1, 2016:

- a \$35,000 annual retainer for service as a member of our Board of Directors;
- a supplemental annual retainer for the Lead Director of the Board and for the Chairs of each Board committee in the following amounts: \$17,500 for the Lead Director of the Board; \$17,500 for Chair of the Audit Committee; \$10,000 for Chair of the Compensation Committee; and \$8,500 for Chair of the Nominating and Corporate Governance Committee; and
- a supplemental annual retainer for each member of the following committees other than the Chairs, in the following amounts: \$10,000 for members of the Audit Committee; \$7,500 for members of the Compensation Committee; \$5,000 for members of the Nominating & Corporate Governance Committee; and \$10,000 for members of the Scientific and Development Committee.

No directors currently receive consulting fees from GTX. A director who is also an employee (currently Mr. Hanover and Dr. Wills) receives no additional compensation for service on the Board.

Directors' Deferred Compensation Plan

Since June 30, 2004, our non-employee directors have had the opportunity to defer all or a portion of their fees under our Directors' Deferred Compensation Plan. Deferrals can be made into a cash account, a stock account, or a combination of both. Deferrals into a cash account would accrue interest at the prime rate of interest announced from time to time by a local bank utilized by us, and deferrals into a stock account accrue to the deferring director rights in shares of GTX common stock equal to the cash compensation then payable to the director for his or her Board service divided by the then current fair market value of GTX common stock. Currently, all but two of our non-employee directors have elected to defer all or some of their Board compensation into stock accounts. No directors have deferred their Board compensation into cash accounts. Under the Directors' Deferred Compensation Plan, amounts credited to cash or stock accounts are distributed in a single lump sum on the date, if any, selected by the director pursuant to his or her election or, if no such election is made or if the selected distribution date is after his or her separation from service, then the distribution would be made on the date of his or her separation from service in the form of a single lump sum (subject to deferral under certain circumstances to the extent necessary to avoid the incurrence of adverse personal tax consequences under Section 409A of the Internal Revenue Code). Any fractional shares of GTX common stock will be distributed in cash valued at the then current fair market value of GTX common stock.

Equity Compensation

Pursuant to our Non-Employee Director Compensation Policy, or the Director Compensation Policy, each non-employee director of GTX (who does not own more than ten percent of the combined voting power of GTX's then outstanding securities) is eligible for certain initial and annual stock awards, which grants are currently made pursuant to GTX's 2013 Non-Employee Director Equity Incentive Plan, or the 2013 Directors' Plan, which is the successor to our Amended and Restated 2004 Non-Employee Directors' Stock Option Plan, or the Prior Directors' Plan. Accordingly, each of our non-employee directors, with the exception of Mr. Hyde, is eligible to receive these initial and annual non-statutory stock awards. Under the Director Compensation Policy, any individual who first becomes a non-employee director is eligible for a stock award in such form and in such amount that the Board deems necessary to attract such individual to join the Board. In 2015, there were no new non-employee

directors who joined our Board. In addition, under the Director Compensation Policy, any individual who is serving as a non-employee director on the day following an annual meeting of GTx's stockholders automatically will be granted an option to purchase shares of common stock on that date; provided, however, that if the individual has not been serving as a non-employee director for the entire period since the preceding annual meeting, the number of shares subject to such individual's annual grant will be reduced pro rata for each full month prior to the date of grant during which such individual did not serve as a non-employee director. Based on information made available by Radford to the Nominating and Corporate Governance Committee and the Compensation Committee, which information indicated that the equity grants previously received by our non-employee directors were below the 25th percentile of grants received by non-employee directors of our peers, the Board approved in February 2015, upon the recommendations of the Nominating and Corporate Governance Committee and the Compensation Committee, to award each eligible non-employee director a one-time grant of 100,000 stock options on the day following the 2015 Annual Meeting to increase their equity holdings to an amount closer to the median equity grants received by non-employee directors in our peer group, and to award future annual grants thereafter in amounts which approximate the median grants of our peers. In November 2015, the Board, upon the upon the recommendations of the Nominating and Corporate Governance Committee and the Compensation Committee, modified the Director Compensation Policy to provide that the number of shares subject to the automatic annual stock option grant will be based on approximately the 50th percentile of the equity value granted to non-employee directors of GTx's peers and will be considered by the Nominating and Corporate Governance Committee and the Compensation Committee and recommended to the Board for approval. In November, 2015, the Board, upon the upon the recommendations of the Nominating and Corporate Governance Committee and the Compensation Committee, determined that the number of shares subject to the automatic annual grants occurring on the date following the 2016 Annual Meeting will be 50,000 shares of GTx common stock. The shares subject to each initial grant and each annual grant vest in a series of three successive equal annual installments measured from the date of grant, so that each initial grant and each annual grant will be fully vested three years after the date of grant. The exercise price per share for the options granted under the 2013 Directors' Plan is not less than the fair market value of the stock on the date of grant. Prior to the adoption of the 2013 Directors' Plan at the 2013 Annual Meeting of Stockholders, initial and annual stock option grants were made pursuant to the Prior Directors' Plan.

In the event of a specified corporate transaction, as defined in the Prior Directors' Plan or the 2013 Directors' Plan, as applicable, all outstanding options granted under the Prior Directors' Plan and the 2013 Directors' Plan may be assumed or substituted for by any surviving or acquiring entity. If the surviving or acquiring entity elects not to assume or substitute for such options, then (a) with respect to any such options that are held by optionees then performing services for GTx or its affiliates, the vesting and exercisability of such options will be accelerated in full and such options will be terminated if not exercised prior to the effective date of the corporate transaction, and (b) all other outstanding options will terminate if not exercised prior to the effective date of the corporate transaction. If a specified change of control transaction occurs, as defined in the Prior Directors' Plan, then the vesting and exercisability of the optionee's options granted under the Prior Directors' Plan will be accelerated in full immediately prior to (and contingent upon) the effectiveness of the transaction. Under the Prior Directors' Plan, if an optionee is required to resign his or her position as a non-employee director as a condition of the change of control transaction, the vesting and exercisability of the optionee's options will be accelerated in full immediately prior to the effectiveness of such resignation. Under the 2013 Directors' Plan, if a specified change of control transaction occurs, as defined in the 2013 Directors' Plan, then all stock awards held by a participant whose continuous service has not terminated prior to such time will become fully vested and, if applicable, exercisable, immediately prior to the transaction. In addition, under the 2013 Directors' Plan, if a non-employee director is required to resign his or her position as a non-employee director as a condition of the change of control transaction, all outstanding

stock awards held by such individual will become fully vested and, if applicable, exercisable, as of immediately prior to such resignation. During 2008, the Board, upon the recommendation of the Compensation Committee, adopted a general policy regarding the retirement of non-employee directors that provides that the Board will act, on a case-by-case basis, to accelerate the vesting and exercisability of the retiring director's options in full provided such director retires from the Board in good standing. In addition, in connection with the passing of Barrington J.A. Furr in February 2015, the Board accelerated in full the vesting and exercisability of all of the then unvested stock option awards granted to Dr. Furr and also extended the post-termination exercise period of all of the stock option awards granted to Dr. Furr until the date that is two years following Dr. Furr's death (subject in each case to the earlier expiration of the original term of the applicable stock option award).

The table below represents the compensation earned by each non-employee director during 2015. Neither Mr. Hanover nor Dr. Wills are listed in the following table since they served as our employees during their respective term service on our Board of Directors and did not receive any additional compensation for serving as members of our Board of Directors. Each of Mr. Hanover's and Dr. Wills' compensation is described under "Executive Compensation" above.

DIRECTOR COMPENSATION—FISCAL 2015

Name	Fees Earned or Paid in Cash (\$) ⁽¹⁾	Option Awards (\$) ⁽²⁾	Total (\$)
J. R. Hyde, III	57,500	—	57,500
Michael G. Carter, M.D.	57,000	56,250	113,250
Barrington J.A. Furr, Ph.D. ⁽³⁾	12,875	15,482 ⁽⁴⁾	28,357
J. Kenneth Glass	53,375	56,250	109,625
Kenneth S. Robinson, M.D., M.Div.	48,250	56,250	104,500

- (1) Represents fees earned in 2015 that were either paid, deferred or were payable at the end of 2015. Each director in the table above, other than Mr. Glass and Dr. Carter, elected to defer payment of all or a portion of his earned fees during 2015 pursuant to the Directors' Deferred Compensation Plan. The number of shares credited to individual stock accounts for our non-employee directors under the Directors' Deferred Compensation Plan as of December 31, 2015 was as follows: 174,099 shares for Mr. Hyde; 36,319 shares for Dr. Carter; 6,553 shares for Mr. Glass; and 144,033 shares for Dr. Robinson. The 48,469 shares then credited to Dr. Furr's stock account under the Directors' Deferred Compensation Plan were distributed to Dr. Furr's designated beneficiary following his death in February 2015.
- (2) Except as specified in footnote (4) below, the amounts in this column represent the aggregate grant date fair value of all option awards granted to our non-employee directors during the year ended December 31, 2015 as computed in accordance with FASB ASC Topic 718. Assumptions used in computing the aggregate grant date fair value in accordance with FASB ASC Topic 718 are set forth in Note 3—Share-Based Compensation to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015.

The following table indicates the grant date fair value for the annual option awarded to each non-employee director during the year ended December 31, 2015, as determined in accordance with FASB ASC Topic 718, as well as the total number of shares subject to options outstanding as of December 31, 2015 for each non-employee director listed in the table above:

Name	FASB ASC Topic 718 Grant Date Fair Value (\$)	Total Shares Subject to Options Outstanding at 12/31/2015 (#)
J. R. Hyde, III	—	—
J. Kenneth Glass	56,250	214,000
Michael G. Carter, M.D.	56,250	215,667
Kenneth S. Robinson, M.D., M.Div.	56,250	200,000
Barrington J.A. Furr, Ph.D. ⁽³⁾	—	75,000

- (3) Dr. Furr passed away in February 2015.
- (4) Represents the aggregate incremental fair value calculated in accordance with FASB ASC Topic 718 in connection with the modification of Dr. Furr's option awards as described above. Dr. Furr was not granted any stock option awards during 2015. The incremental fair value, as determined in accordance with FASB ASC Topic 718, for each of Dr. Furr's modified option awards was as follows:

Number of Shares Subject to Stock Option Award (#)	Exercise Price of Stock Option Award (\$/Sh)	FASB ASC Topic 718 Incremental Fair Value (\$)
15,000	2.65	2,576
5,000	5.40	591
15,000	3.02	2,702
20,000	4.85	2,788
20,000	1.42	6,825

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During the year ended December 31, 2015, the Compensation Committee consisted of Dr. Carter, Mr. Glass and Mr. Hyde. None of the current members of the Compensation Committee is or was an officer or employee of GTx. During 2015, none of GTx's executive officers served as a director or member of the compensation committee of any other entity whose executive officers served on GTx's Board of Directors or Compensation Committee. Please refer to the section of this proxy statement entitled "Certain Relationships and Related Party Transactions" for information concerning certain related party transactions involving Mr. Hyde.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Policies and Procedures for Review of Related Party Transactions

Upon recommendation of the Audit Committee, the Board adopted a related party transactions policy, which specifies GTX's policies and procedures regarding transactions between GTX and its employees, officers, directors or their family members. GTX's Chief Legal Officer is responsible for (a) ensuring that policy is distributed to all GTX officers, directors and other managers and (b) requiring that any proposed related party transaction be presented to the Audit Committee for consideration before GTX enters into any such transactions. This policy can be found on GTX's website (www.gtxinc.com) under "Investors" at "Corporate Governance."

It is the policy of GTX to prohibit all related party transactions unless the Audit Committee determines in advance of GTX entering into any such transaction that there is a compelling business reason to enter into such a transaction. There is a general presumption that the Audit Committee will not approve a related party transaction with GTX. However, the Audit Committee may approve a related party transaction if:

- the Audit Committee finds that there is a compelling business reason to approve the transaction, taking into account such factors as the absence of other unrelated parties to perform similar work for a similar price within a similar timeframe; and
- the Audit Committee finds that it has been fully apprised of all significant conflicts that may exist or otherwise arise on account of the transaction, and it believes, nonetheless, that GTX is warranted entering into the related party transaction and has developed an appropriate plan to manage the potential conflicts of interest.

Certain Transactions With or Involving Related Persons

November 2014 Private Placement and Related Registrations. In November 2014, we sold an aggregate of 64,311,112 immediately separable units in a private placement, or the Private Placement, which units consisted of an aggregate of 64,311,112 shares of our common stock and warrants to purchase up to 64,311,112 additional shares of our common stock for an aggregate purchase price of approximately \$43.4 million, or \$0.675 per unit. The warrants have a per share exercise price of \$0.85 and are exercisable at any time and from time to time through May 6, 2019. Pursuant to the securities purchase agreement under which we sold the above-referenced units to the investors, we filed two registration statements with the SEC, one in 2014 and one in 2015, to register the resale of the above-referenced shares and the shares underlying the above-referenced warrants, and agreed to keep such registration statements effective for up to two years following the closing of the Private Placement. In the event that such registration statements subsequently become unavailable, we would be required to pay liquidated damages equal to 1.0% of the aggregate unit purchase price per month for each default (up to a maximum of 10% of such aggregate unit purchase price). We agreed to bear all expenses of such registration of the resale of these shares, including the legal expenses of the investors of up to \$5,000 per investor per registration statement. Our total expenses in connection with the filing of these

two registration statements were approximately \$103,000. The investors in the Private Placement included the following "related parties":

<u>Investor</u>	<u>Shares Purchased</u>	<u>Warrants Purchased</u>	<u>Unit Purchase Price</u>
J.R. Hyde III ⁽¹⁾	24,545,455	24,545,455	\$ 16,568,182.13
The Pyramid Peak Foundation ⁽¹⁾	24,545,455	24,545,455	\$ 16,568,182.13
Entities affiliated with BVF Partners ⁽²⁾⁽³⁾	11,111,111	11,111,111	\$ 7,499,999.94
Formanek Investment Trust ⁽²⁾	3,700,000	3,700,000	\$ 2,497,500.00
Marc S. Hanover ⁽¹⁾	227,273	227,273	\$ 153,409.28

(1) Executive officer, director or greater than 5% stockholder (and a "related party") immediately prior to the Private Placement.

(2) Became a greater than 5% stockholder of GTX as a result of the Private Placement and, accordingly, became a "related party" of GTX.

(3) BVF Partners led the negotiation of the Private Placement and we agreed, pursuant to the securities purchase agreement, to reimburse BVF Partners for its reasonable legal fees (up to \$25,000). We subsequently reimbursed BVF Partners for its legal fees in the amount of \$20,399.

The Board of Directors appointed a Special Committee of the Board of Directors, consisting of Mr. Glass, and Drs. Carter, Robinson and Furr, who are (or were) disinterested and independent directors, to review and evaluate the Private Placement and any other alternative transaction to the Private Placement, and delegated to the Special Committee the exclusive power and authority to consider, negotiate, disapprove or approve the Private Placement, which Special Committee ultimately determined to approve. Likewise, as a result of the participation of related parties in the Private Placement, the Private Placement was reviewed and pre-approved by the Audit Committee in accordance with our related party transactions policy.

Indemnity Agreements. GTX has entered into indemnity agreements with each of its current directors and certain of its executive officers to give such directors and officers additional contractual assurances regarding the scope of the indemnification set forth in GTX's charter and bylaws and to provide additional procedural protections.

OTHER MATTERS

The Board of Directors, at the time of the preparation of this proxy statement, knows of no business to come before the meeting other than that referred to herein. If any other business should properly come before the meeting, the persons named in the enclosed proxy will have discretionary authority to vote all proxies in accordance with his best judgment.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read "Henry P. Doggrell". The signature is written in a cursive style with a prominent horizontal stroke at the beginning.

Henry P. Doggrell
Vice President, Chief Legal Officer and Secretary

Memphis, Tennessee
March 28, 2016

ANNEX A

CERTIFICATE OF AMENDMENT OF
RESTATED CERTIFICATE OF INCORPORATION OF
GTX, INC.

GTX, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, hereby certifies that:

FIRST: The name of the Corporation is GTX, Inc. (the "Corporation").

SECOND: The date of filing of the original Certificate of Incorporation of the Corporation with the Secretary of State of the State of Delaware was September 4, 2003, as restated on February 6, 2004.

THIRD: The Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware, adopted resolutions amending its Certificate of Incorporation as follows:

Section A of ARTICLE IV of the Corporation's Restated Certificate of Incorporation be, and it hereby is, amended and restated to read in its entirety as follows:⁽¹⁾

"A. Authorized Stock. The total number of shares which the Corporation shall have authority to issue is [] ()⁽²⁾, consisting of [] ()⁽²⁾ shares of Common Stock, par value \$0.001 per share (the "Common Stock"), and five million (5,000,000) shares of Preferred Stock, par value \$0.001 per share (the "Preferred Stock")."

Effective as of the effective time this Certificate of Amendment to the Restated Certificate of Incorporation is filed (the "Effective Time"), each ***five (5), six (6), seven (7), eight (8), nine (9), ten (10), eleven (11), twelve (12), thirteen (13), fourteen (14), fifteen***

-
- (1) These amendments approve the combination and reclassification of any whole number of shares of GTX common stock between and including five (5) and fifteen (15) into one (1) share of GTX common stock, and approve a corresponding reduction in the total number of shares of GTX common stock that GTX is authorized to issue (with respect to such corresponding authorized share reduction, see note 2 below). By these amendments, the stockholders would approve each of the twenty-two (22) alternate amendments proposed by the GTX Board of Directors. If the reverse stock split proposal is approved by stockholders, the Certificate of Amendment filed with the Secretary of State of the State of Delaware will include only that reverse stock split ratio determined by the GTX Board of Directors to be in the best interests of GTX and its stockholders (as well as the applicable corresponding reduction in the total number of shares of GTX common stock that GTX is authorized to issue, if such proposal is approved by stockholders). The other amendments will be abandoned pursuant to Section 242(c) of the General Corporation Law of the State of Delaware. The GTX Board of Directors may also elect not to effect any reverse stock split and corresponding reduction in the total number of shares of GTX common stock that GTX is authorized to issue, in which case all twenty-two (22) proposed amendments will be abandoned.
- (2) Assuming that Proposals Nos. 3 and 4 are approved by the required stockholder vote and the GTX Board of Directors elects to effect a reverse stock split, the number shares of GTX's total authorized common stock would be correspondingly reduced (thereby effecting a reduction in GTX's total authorized capital stock), which reduction will be based on the whole number of shares of GTX common stock between and including five (5) and fifteen (15) that will be combined and reclassified into one (1) share of GTX common stock in the reverse stock split, as illustrated in the tables under the caption "—Effects of the Reverse Stock Split" in the section of the accompanying proxy statement entitled "Proposal No. 3—Approval of Reverse Stock Split of our Common Stock," and "—Effects of the Authorized Shares Reduction" in the section of the accompanying proxy statement entitled "Proposal No. 4—Approval of Reduction in the Number of Authorized Shares of Common Stock." If Proposal No. 4 is not approved, but Proposal No. 3 is approved and the GTX Board of Directors elects to effect a reverse stock split, then the number shares of GTX's total authorized common stock would not be reduced and would remain at 400,000,000.

(15] shares of the Corporation's Common Stock, par value \$0.001 per share, issued and outstanding immediately prior to the Effective Time ("Old Common Stock") shall, automatically and without any action on the part of the Corporation or the respective holders thereof, be combined and reclassified into one (1) share of Common Stock, par value \$0.001 per share, of the Corporation ("New Common Stock"). Notwithstanding the immediately preceding sentence, no fractional shares of New Common Stock shall be issued in the reclassification and, in lieu thereof, upon receipt after the Effective Time by the exchange agent selected by the Corporation of a properly completed and duly executed transmittal letter and, where shares are held in certificated form, the surrender of the stock certificate(s) formerly representing shares of Old Common Stock, any stockholder who would otherwise be entitled to a fractional share of New Common Stock as a result of the foregoing combination and reclassification of the Old Common Stock (such combination and reclassification, the "Reverse Stock Split"), following the Effective Time (after taking into account all fractional shares of New Common Stock otherwise issuable to such stockholder), shall be entitled to receive a cash payment (without interest) equal to the fractional share of New Common Stock to which such stockholder would otherwise be entitled multiplied by the average of the closing sales prices of a share of the Corporation's Common Stock (as adjusted to give effect to the Reverse Stock Split) on The NASDAQ Capital Market during regular trading hours for the five (5) consecutive trading days immediately preceding the date this Certificate of Amendment to the Restated Certificate of Incorporation is filed with the Secretary of State of the State of Delaware. Each stock certificate that, immediately prior to the Effective Time, represented shares of Old Common Stock shall, from and after the Effective Time, automatically and without any action on the part of the Corporation or the respective holders thereof, represent that number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been combined and reclassified (as well as the right to receive cash in lieu of any fractional shares of New Common Stock as set forth above); *provided, however*, that each holder of record of a certificate that represented shares of Old Common Stock shall receive, upon surrender of such certificate, a new certificate representing the number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been combined and reclassified, as well as any cash in lieu of fractional shares of New Common Stock to which such holder may be entitled as set forth above."

FOURTH: The foregoing amendment was submitted to the stockholders of the Corporation for their approval, and was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware and shall be effective as of 5:00 p.m., Eastern time, on the date this Certificate of Amendment to Restated Certificate of Incorporation is filed with the Secretary of State of the State of Delaware.

IN WITNESS WHEREOF, GTX, INC. has caused this Certificate of Amendment to be signed by its [Title] this _____ day of _____, 20__.

GTX, INC.

By: _____

[Name]

[Title]

Electronic Voting Instructions

Available 24 hours a day, 7 days a week!

Instead of mailing your proxy, you may choose one of the voting methods outlined below to vote your proxy.

VALIDATION DETAILS ARE LOCATED BELOW IN THE TITLE BAR.

Proxies submitted by the Internet or telephone must be received by 1:00 a.m., Central Daylight Time, on May 3, 2016.

Vote by Internet

- Go to www.envisionreports.com/GTXI
- Or scan the QR code with your smartphone; and
- Follow the steps outlined on the secure website

Vote by telephone

- Call toll free 1-800-652-VOTE (8683) within the USA, US territories & Canada on a touch tone telephone.
- There is NO CHARGE to you for the call.
- Follow the instructions provided by the recorded message.

Using a **black ink** pen, mark your votes with an **X** as shown in this example. Please do not write outside the designated areas.



Annual Meeting Proxy Card

▼ IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

A Proposals — The Board of Directors recommends a vote **FOR** both of the nominees listed in Proposal No.1 and **FOR** Proposals Nos. 2, 3 and 4.

Proposal No. 1: To elect the two nominees for Class III director named below to serve until the 2019 Annual Meeting of Stockholders and until their successors have been duly elected and qualified.

	For	Withhold		For	Withhold
01 - Michael G. Carter	<input type="checkbox"/>	<input type="checkbox"/>	02 - J.R. Hyde, III	<input type="checkbox"/>	<input type="checkbox"/>

Proposal No. 2: To ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2016.

For Against Abstain

Proposal No. 4: To approve a series of alternate amendments to GTx's Restated Certificate of Incorporation to effect, if and only if Proposal No. 3 is both approved and implemented, a reduction in the total number of authorized shares of GTx's common stock, as more specifically described in the accompanying proxy statement.

For Against Abstain

Proposal No. 3: To approve a series of alternate amendments to GTx's Restated Certificate of Incorporation to effect, at the discretion of the Board of Directors, a reverse stock split at a reverse stock split ratio ranging from one-for-five (1:5) and one-for-fifteen (1:15), inclusive, as more specifically described in the accompanying proxy statement.

For Against Abstain

B Non-Voting Items

Change of Address — Please print your new address below.

Comments — Please print your comments below.

Meeting Attendance

Mark the box to the right if you plan to attend the Annual Meeting.

C Authorized Signatures — This section must be completed for your vote to be counted. — Date and Sign Below

Please sign exactly as name(s) appears hereon. Joint owners should each sign. When signing as attorney, executor, administrator, corporate officer, trustee, guardian, or custodian, please give full title.

Date (mm/dd/yyyy) — Please print date below.

/ /

Signature 1 — Please keep signature within the box.

Signature 2 — Please keep signature within the box.



1 U P X



▼ IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼



Proxy — GTx, Inc.

THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS OF GTX, INC. FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON MAY 4, 2016.

The undersigned hereby appoints **Henry P. Doggrell** and **Jason T. Shackelford**, and each of them, as attorneys and proxies of the undersigned, with full power of substitution, to vote all of the shares of stock of GTX, Inc. that the undersigned may be entitled to vote at the Annual Meeting of Stockholders of GTX, Inc. to be held at the Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103, on Wednesday, May 4, 2016 at 3:00 p.m. Central Daylight Time, and at any and all postponements, continuations and adjournments thereof, with all powers that the undersigned would possess if personally present, upon and in respect of the following matters and in accordance with the following instructions, with discretionary authority as to any and all other matters that may properly come before the meeting.

UNLESS A CONTRARY DIRECTION IS INDICATED, THIS PROXY WILL BE VOTED FOR BOTH OF THE NOMINEES LISTED IN PROPOSAL NO. 1 AND FOR PROPOSAL NOS. 2, 3 AND 4, AS MORE SPECIFICALLY DESCRIBED IN THE ACCOMPANYING PROXY STATEMENT. IF SPECIFIC INSTRUCTIONS ARE INDICATED, THIS PROXY WILL BE VOTED IN ACCORDANCE THEREWITH. IN THEIR DISCRETION, THE PROXIES OF THE UNDERSIGNED ARE AUTHORIZED TO VOTE UPON ANY AND ALL OTHER MATTERS THAT MAY PROPERLY COME BEFORE THE MEETING.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be Held on May 4, 2016 at the Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103.

The proxy statement and annual report to stockholders are available at www.edocumentview.com/GTXI.

THANK YOU FOR VOTING
(Items to be voted appear on reverse side.)



IMPORTANT ANNUAL MEETING INFORMATION

Using a black ink pen, mark your votes with an X as shown in this example. Please do not write outside the designated areas.



Annual Meeting Proxy Card

PLEASE FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE.

A Proposals — The Board of Directors recommends a vote FOR both of the nominees listed in Proposal No.1 and FOR Proposals Nos. 2, 3 and 4.

Proposal No. 1: To elect the two nominees for Class III director named below to serve until the 2019 Annual Meeting of Stockholders and until their successors have been duly elected and qualified.



	For	Withhold		For	Withhold
01 - Michael G. Carter	<input type="checkbox"/>	<input type="checkbox"/>	02 - J.R. Hyde, III	<input type="checkbox"/>	<input type="checkbox"/>

Proposal No. 2: To ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2016.

For	Against	Abstain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Proposal No. 4: To approve a series of alternate amendments to GTx's Restated Certificate of Incorporation to effect, if and only if Proposal No. 3 is both approved and implemented, a reduction in the total number of authorized shares of GTx's common stock, as more specifically described in the accompanying proxy statement.

For	Against	Abstain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Proposal No. 3: To approve a series of alternate amendments to GTx's Restated Certificate of Incorporation to effect, at the discretion of the Board of Directors, a reverse stock split at a reverse stock split ratio ranging from one-for-five (1:5) and one-for-fifteen (1:15), inclusive, as more specifically described in the accompanying proxy statement.

For	Against	Abstain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B Authorized Signatures — This section must be completed for your vote to be counted. — Date and Sign Below

Please sign exactly as name(s) appears hereon. Joint owners should each sign. When signing as attorney, executor, administrator, corporate officer, trustee, guardian, or custodian, please give full title.

Date (mm/dd/yyyy) — Please print date below.

Signature 1 — Please keep signature within the box.

Signature 2 — Please keep signature within the box.

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▼ PLEASE FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼



Proxy — GTx, Inc.

THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS OF GTX, INC. FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON MAY 4, 2016.

The undersigned hereby appoints **Henry P. Doggrell** and **Jason T. Shackelford**, and each of them, as attorneys and proxies of the undersigned, with full power of substitution, to vote all of the shares of stock of GTx, Inc. that the undersigned may be entitled to vote at the Annual Meeting of Stockholders of GTx, Inc. to be held at the Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103, on Wednesday, May 4, 2016 at 3:00 p.m. Central Daylight Time, and at any and all postponements, continuations and adjournments thereof, with all powers that the undersigned would possess if personally present, upon and in respect of the following matters and in accordance with the following instructions, with discretionary authority as to any and all other matters that may properly come before the meeting.

UNLESS A CONTRARY DIRECTION IS INDICATED, THIS PROXY WILL BE VOTED FOR BOTH OF THE NOMINEES LISTED IN PROPOSAL NO. 1 AND FOR PROPOSAL NOS. 2, 3 AND 4, AS MORE SPECIFICALLY DESCRIBED IN THE ACCOMPANYING PROXY STATEMENT. IF SPECIFIC INSTRUCTIONS ARE INDICATED, THIS PROXY WILL BE VOTED IN ACCORDANCE THEREWITH. IN THEIR DISCRETION, THE PROXIES OF THE UNDERSIGNED ARE AUTHORIZED TO VOTE UPON ANY AND ALL OTHER MATTERS THAT MAY PROPERLY COME BEFORE THE MEETING.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be Held on May 4, 2016 at the Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103.

The proxy statement and annual report to stockholders are available at www.edocumentview.com/GTXI.

THANK YOU FOR VOTING
(Items to be voted appear on reverse side.)