

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

SCHEDULE 14A
INFORMATION REQUIRED IN PROXY STATEMENT

**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 Pursuant to Section 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:

- 5) Total fee paid:

- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

- 1) Amount Previously Paid:

- 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 20, 2009

Dear Stockholder:

I would like to extend a personal invitation for you to join us at our Annual Meeting of Stockholders on Wednesday, May 6, 2009, at 4:00 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 three 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 2009.

I urge you to vote, as the Board of Directors has recommended, for each of our director nominees and to ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for 2009.

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.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mitchell S. Steiner'.

Mitchell S. Steiner
*Chief Executive Officer and
Vice-Chairman of the Board of Directors*

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.



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

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

You are invited to attend the 2009 GTx, Inc. Annual Meeting of Stockholders:

- WHEN** 4:00 p.m. (Central Daylight Time) on Wednesday, May 6, 2009.
- WHERE** The Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103.
- ITEMS OF BUSINESS**
- To elect the three Class II directors named in the accompanying proxy statement to serve until the 2012 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, 2009 (Proposal No. 2); and
 - To 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 9, 2009.
- 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"** each of our nominees for director and **"FOR"** Proposal No. 2.
-

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be Held on May 6, 2009 at The Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103

The proxy statement and annual report to stockholders are available at www.proxydocs.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, General Counsel and Secretary

Memphis, Tennessee
March 20, 2009

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

**PROXY STATEMENT FOR THE
2009 ANNUAL MEETING OF STOCKHOLDERS**

The enclosed proxy is solicited by the Board of Directors of GTx, Inc. for use at the 2009 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 2009 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 2008 Annual Report to all stockholders entitled to vote at the Annual Meeting beginning on or about March 27, 2009.

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 4:00 p.m., Central Daylight Time, on Wednesday, May 6, 2009.

Where will the Annual Meeting be held?

The Annual Meeting will be held at the Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103.

What items will be voted on at the Annual Meeting?

There are two matters scheduled for a vote:

1. To elect the three Class II directors named herein to serve until the 2012 Annual Meeting of Stockholders and until their successors have been duly elected and qualified; and
2. To ratify the appointment of Ernst & Young LLP as GTx’s independent registered public accounting firm for the fiscal year ending December 31, 2009.

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 each of the three nominees named herein to serve on the Board of Directors; and
- “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, 2009.

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 of GTX's directors attended the 2008 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 9, 2009, 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 9, 2009, GTX had 36,408,209 shares of common stock outstanding.

Stockholders of Record: Shares Registered in Your Name. If on March 9, 2009, 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 9, 2009, 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 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. For Proposal No. 2, 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 if you have already voted by proxy.

- 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 vote over the telephone, dial toll-free 1-800-652-VOTE (8683) within the United States, Canada and Puerto Rico 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 5, 2009 to be counted.
- To vote on the Internet, go to www.investorvote.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 5, 2009 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 agent, 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 telephone or over 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 agent. 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 9, 2009.

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

If you return a signed and dated proxy card without marking any voting selections, your shares will be voted “FOR” the election of each of our three nominees for director, and “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, 2009.

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.

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” and withheld votes, and, with respect to Proposal No. 2, “AGAINST,” “ABSTAIN” 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 voting power 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. 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 each 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 will have the same effect as “AGAINST” votes on Proposal 2. Broker non-votes are not counted as votes “FOR” or “AGAINST” Proposal 2.

How many votes are needed to approve each proposal?

- For the election of the Class II directors, the three 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, 2009, must receive a “FOR” vote from at least a majority of the shares represented and voting either in person or by proxy at the Annual Meeting on Proposal No. 2.

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 9, 2009, the record date, there were 36,408,209 shares outstanding and entitled to vote. Thus, at least 18,204,105 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 will be published in GTx’s quarterly report on Form 10-Q for the second quarter of 2009.

ADDITIONAL MEETING-RELATED INFORMATION

How and when may I submit a stockholder proposal for GTx’s 2010 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 2010 Annual Meeting of Stockholders, stockholder proposals that are received at our executive offices no later than November 27, 2009 and that comply with all applicable requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended. However, if our 2010 Annual Meeting of Stockholders is not held between April 6, 2010 and June 5, 2010, 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 2010 Annual Meeting of Stockholders, you must notify our Corporate Secretary, in writing, not later than the close of business on November 27, 2009, nor earlier than the close of business on October 28, 2009. 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 2010 Annual Meeting of Stockholders between April 6, 2010 and June 5, 2010. 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 2010 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 2010 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 the GTx's bylaws, if the 2010 proxy statement briefly describes the matter and how management's 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.

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, 2008, 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 2008 Annual Report to Stockholders is being mailed along with this proxy statement. Our 2008 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 2008 Annual Report to Stockholders are available at www.proxydocs.com/GTXI.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. We are paying The Altman Group, Inc. their customary fee of \$1,025 plus out-of-pocket expenses to solicit 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 McDavid Stilwell, Director, Corporate Communications and Financial Analysis, 175 Toyota Plaza, 7th Floor, Memphis, Tennessee 38103, Telephone 901-523-9700 ext. 214 or by Fax: 901-844-8075.

PROPOSAL NO. 1
ELECTION OF DIRECTORS

GTx's Board of Directors is divided into three classes. Each class consists, as nearly as possible, of one-third of the total number of directors, and each class has a three-year term. Only persons elected by a majority of the remaining directors may fill vacancies on 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 number of directors.

The Board of Directors presently has ten members. There are currently three directors in Class II, the class whose term of office expires in 2009. J. Kenneth Glass, Marc S. Hanover and John H. Pontius, each of whom is a current director, was recommended for re-election to our Board of Directors by our Nominating and Corporate Governance Committee and was nominated for re-election by the Board of Directors. If elected at the Annual Meeting, Mr. Glass, Mr. Hanover and Mr. Pontius will serve until the 2012 Annual Meeting of Stockholders and until their successors are elected and qualified, or until their 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 Mr. Glass, Mr. Hanover and Mr. Pontius. In the event that any nominee should be unavailable for election as a result of an unexpected occurrence, such shares will be voted for the election of such substitute nominee as the Nominating and Corporate Governance Committee may propose. Mr. Glass, Mr. Hanover and Mr. Pontius have each agreed to serve if elected.

The following is a brief biography of each nominee standing for election to the Board of Directors at the Annual Meeting.

Class II Director Nominees for Election for a Three-Year Term Expiring at the 2012 Annual Meeting

J. Kenneth Glass

Mr. Glass, age 62, has served as a director since March 2004, and currently serves as the Chairman of the Audit Committee and also currently serves on the Compensation Committee. Mr. Glass retired as Chairman of the Board, President and CEO of First Horizon National Corporation, 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 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.

Marc S. Hanover

Mr. Hanover, age 46, a co-founder of GTx, has served as our President and Chief Operating Officer and a director since our inception in September 1997. 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.

John H. Pontius

Mr. Pontius, age 53, has served as a director since April 1998 and currently serves as Chairman of the Nominating and Corporate Governance Committee. Mr. Pontius has been the President of Pittco Management, LLC, an investment and business management firm, since 1991. From 1986 to 1991, Mr. Pontius served as the Chief Financial Officer of the City of Memphis, Tennessee. Mr. Pontius holds a B.S. in Accounting from the University of Tennessee. Mr. Pontius served as a member of the Board of Trustees of the University of Tennessee from 2002 to 2004.

The Board of Directors recommends a vote in favor of each of our nominees for Class II Director.

**ADDITIONAL INFORMATION
ABOUT THE BOARD OF DIRECTORS**

Continuing Directors

In addition to the three Class II director nominees, GTx has seven other directors who will continue in office after the Annual Meeting with terms expiring in 2010 and 2011. The following directors compose the remainder of the Board with terms expiring as shown.

Class III Directors Continuing in Office Until the 2010 Annual Meeting

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

Dr. Carter, age 71, was appointed as a director in May 2006 and currently serves on the Compensation Committee. Dr. Carter is a non-executive director of Micromet, Inc. (Nasdaq: MITI), Santarus, Inc. (Nasdaq: SNTS) and Fulcrum Pharma, PLC (AIM: FUL). Dr. Carter has been a member of the Advisory Board of Paul Capital Royalty Fund since 2005, and a venture partner with SV Life Sciences Advisers, LLP since 1998. Dr. Carter was the non-executive chairman of Metris Therapeutics, Ltd., a biotechnology firm specializing in women's healthcare from 1999 to 2008. Dr. Carter served on the Pharmaceutical Board of Zeneca Pharmaceuticals, a predecessor company of AstraZeneca, and held various positions with 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 bachelor's degree in pharmacy from London University (U.K.) and a medical degree from Sheffield University Medical School (U.K.).

J. R. Hyde, III

Mr. Hyde, age 66, has served as the Chairman of our Board of Directors since November 2000 and currently serves as Chairman of the Compensation Committee. 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. He was also Chairman and Chief Executive Officer of Malone & Hyde, Inc., AutoZone's former parent company, from 1972 until 1988. Mr. Hyde currently is a director of AutoZone, Inc. and FedEx Corporation (NYSE: FDX).

Timothy R. G. Sear

Mr. Sear, age 71, was appointed as a director in October 2004 and currently serves on the Audit Committee and the Compensation Committee. Mr. Sear serves as Chairman Emeritus of Alcon, Inc. (NYSE: ACL), having retired from the offices of President and Chief Executive Officer on September 30, 2004. Prior to serving as President and Chief Executive Officer of Alcon, Mr. Sear served as Executive Vice President for Alcon's U.S. Operations from 1996 through 1997 and also as Executive Vice President for Alcon's International Division from 1988 to 1996. Mr. Sear is a graduate of Manchester University in the U.K. and Copenhagen University, Denmark and received an MBA in International Business from Indiana University. He is also a graduate of Harvard Business School's Advanced Management Program. Mr. Sear is a director of Sigma-Aldrich, Inc. (Nasdaq: SIAL), and Mr. Sear currently serves as Chairman of the Board of Directors of Prometheus Laboratories Inc.

Mitchell S. Steiner, M.D., F.A.C.S.

Dr. Steiner, age 48, a co-founder of GTx, has served as our Chief Executive Officer and Vice-Chairman of our Board of Directors since GTx's inception in September 1997. From 1995 to 2003, Dr. Steiner held numerous academic appointments, including Chairman and Professor of Urology, Director of Urologic Oncology and

Research and the Chair of Excellence in Urologic Oncology at the University of Tennessee. Since 2003, Dr. Steiner has continued to serve on the faculty at the University of Tennessee. Dr. Steiner holds a B.A. in Molecular Biology from Vanderbilt University and an M.D. from the University of Tennessee, and performed his surgery and urologic training at The Johns Hopkins Hospital.

Class I Directors Continuing in Office Until the 2011 Annual Meeting

Robert W. Karr, M.D.

Dr. Karr, age 60, has served as a director since June 2005 and currently serves on the Nominating and Corporate Governance Committee. Dr. Karr served as President of Idera Pharmaceuticals, Inc. (Nasdaq: IDRA) from December 2005 until December 2007. He currently serves on its Board of Directors and as a consultant. Since January 2008, Dr. Karr has also served as a consultant for Karr Pharma Consulting, LLC and currently serves as a member of the boards of directors of and as a part-time executive for three private companies in the healthcare field. From 2000 to 2004, Dr. Karr was a senior executive for Global Research & Development for Pfizer, Inc. (NYSE: PFE), where he served as Senior Vice President, Strategic Management from 2002 to 2004. Prior to its merger with Pfizer, Dr. Karr served as Vice President, Research & Development Strategy for Warner-Lambert Company. Dr. Karr received his B.S. (with honors) from Southwestern University in 1971 and his M.D. from the University of Texas Medical Branch in 1975. Dr. Karr completed his internship and residency in internal medicine at Washington University School of Medicine and served as a faculty member at both the University of Iowa College of Medicine and Washington University School of Medicine.

Rosemary Mazanet, M.D., Ph.D.

Dr. Mazanet, age 53, has served as a director since October 2001 and currently serves on the Audit Committee. Since May 2007, Dr. Mazanet has served as a partner for Argenis Capital Advisors, LLC, a public equity fund. From 2004 to 2007, Dr. Mazanet served as the Chief Executive Officer of Breakthrough Therapeutics, LLC, a therapeutic development company. She also served as acting Chief Executive Officer of Access Pharmaceuticals (AMEX: AKC) from May 2005 until January 2007. From June 1998 to February 2004, Dr. Mazanet served as Chief Scientific Officer and a General Partner of Oracle Partners, L.P., a hedge fund. Prior to joining Oracle Partners, Dr. Mazanet served as Senior Director of Clinical Research at Amgen, Inc., a pharmaceutical company. Dr. Mazanet is a member of the Board of Trustees of the University of Pennsylvania School of Medicine. She trained in internal medicine at the Brigham and Women's Hospital and in oncology at the Dana Farber Cancer Institute, both part of the Harvard Medical system, where she was a staff physician prior to joining Amgen. Dr. Mazanet holds a B.A. in Biology from the University of Virginia and an M.D. and a Ph.D. from the University of Pennsylvania.

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

Dr. Robinson, age 54, has served as a director since May 2008 and currently serves as a member of the Nominating and Corporate Governance Committee. From 2003 through 2007, Dr. Robinson served in the cabinet of Tennessee Governor Phil Bredesen as Commissioner of Health. 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 1991, he has served as Pastor and Chief Executive of St. Andrew AME Church. 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.

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, Nasdaq and general corporate "best practices" proposals, our Board of Directors reviews all relevant transactions or relationships between each director, and GTx, its senior management and its independent auditors. 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 eight of our ten directors are independent members of the Board of Directors within the meaning of the applicable Nasdaq listing standards: Mr. Hyde (Chairman), Dr. Carter, Mr. Glass (Nominee), Dr. Karr, Dr. Mazanet, Mr. Pontius (Nominee), Dr. Robinson, and Mr. Sear. The Board also previously determined that Mr. Clarkson, who retired from the Board of Directors as of last year's annual meeting, was an independent member of the Board of Directors within the meaning of the applicable Nasdaq listing standards. As a result of Mr. Hyde's stock ownership in GTx and Mr. Pontius' affiliation with Mr. Hyde, neither Mr. Hyde nor Mr. Pontius are considered "independent" under applicable Nasdaq and SEC standards pertaining to membership of the Audit Committee (neither Mr. Hyde nor Mr. Pontius are members of the Audit Committee, however). Mr. Pontius is the President of Pittco Management, LLC, a limited liability company of which Mr. Hyde is the chief manager. Dr. Steiner, our Chief Executive Officer, and Mr. Hanover (Nominee), our President and Chief Operating Officer, are not "independent" within the meaning of the Nasdaq listing standards. In determining that Dr. Robinson and Mr. Hyde are independent within the meaning of the applicable Nasdaq listing standards, the Nominating and Corporate Governance Committee and the Board considered Dr. Robinson's service as a director of a charitable organization of which Mr. Hyde is chair, as well as Dr. Robinson's position as chief executive officer of a charitable organization that is a grantee of the J.R. Hyde Jr. Foundation and the J.R. Hyde III Family Foundation, and determined that such relationships would not interfere with either Dr. Robinson's or Mr. Hyde's exercise of independent judgment in carrying out the responsibilities of a director.

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 Chairman of the Audit Committee, qualifies as an "audit committee financial expert" within the meaning of the SEC rules.

Board and Committee Meetings; Attendance

GTx encourages, but does not require its directors to attend annual meetings of stockholders. All of our directors attended the 2008 Annual Meeting of Stockholders. For 2008, each director attended at least 75% of the aggregate of (a) all meetings of the Board and (b) any committees on which he or she served. In 2008, the Board of Directors held eight meetings, and the number of meetings held by the Board committees is set forth in the table below. In addition, our non-management directors hold executive sessions after the conclusion of each regularly scheduled Board meeting. Mr. Hyde presides as Chairman over each executive session of the Board.

Board Committees

The charters for the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee are available on GTx's website (www.gtxinc.com) under "About GTx" at "Governance." The current membership of and information about each of our Board committees are shown below.

<u>Committee/Current Members</u>	<u>Committee Functions</u>
Audit Committee <i>Current Members</i> Mr. Glass (Chairman) Dr. Mazanet Mr. Sear <i>Number of Meetings held in 2008: 5</i>	<ul style="list-style-type: none">• Oversees financial and operational matters involving accounting, corporate finance, internal and independent auditing, internal control over financial reporting, compliance, and business ethics.• Oversees other financial audit and compliance functions as assigned by the Board.• Reviews areas of potential significant financial risk to GTx.• Has the sole authority to select, evaluate, replace and oversee GTx's independent registered public accounting firm.• 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.• Determines whether "related party transactions" are permissible.• Has the specific responsibilities and authority necessary to comply with the Nasdaq listing standards applicable to audit committees.
Compensation Committee <i>Current Members:</i> Mr. Hyde (Chairman) Dr. Carter Mr. Glass Mr. Sear <i>Number of Meetings held in 2008: 5</i>	<ul style="list-style-type: none">• Reviews the performance of GTx officers and establishes overall executive compensation policies and programs.• Reviews and approves compensation elements such as base salary, bonus awards, stock option grants and other forms of long-term incentives for GTx officers (no member of the committee may be a member of management or eligible for compensation other than as a director).• Reviews Board compensation and stock ownership matters.• Reviews and discusses with management the information contained in the Compensation Discussion and Analysis section of the proxy statement.
Nominating and Corporate Governance Committee <i>Current Members:</i> Mr. Pontius (Chairman) Dr. Karr Dr. Robinson <i>Number of Meetings held in 2008: 4</i>	<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.• 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.• 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 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 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. 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 uses 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 has evaluated, and recommended the nomination of, each of the directors currently standing for re-election at the Annual Meeting.

The Board of Directors does not impose term limits or a mandatory retirement age for directors, except GTx's chief executive officer and chief operating officer are required to leave the Board if he or she ceases to serve as GTx's chief executive officer or chief operating officer, as the case may be. 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 shall be reviewed. Upon a director's change in employment status, he or she is required to notify the Chairman of the Board of Directors and the Chair of the Nominating and Corporate Governance Committee of such change and to offer his or her resignation for review.

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 day-to-day administration and interpretation of the plans. Our 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. The Compensation Committee has the authority to engage outside advisors to assist the Committee in the performance of its duties; however, the Compensation Committee may not delegate its authority to others.

Mr. Hyde, as Chairman 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 Chief Executive Officer and the other executive 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.

Compensation Consultants. Under its charter, the Compensation Committee has the power and authority to hire outside advisors or consultants to assist it in fulfilling its responsibilities upon terms and conditions established by the Compensation Committee. GTX is financially responsible for the fees of any advisor or consultant engaged by the Compensation Committee. In 2006, the Compensation Committee retained one compensation consultant, Mercer Human Resource Consulting, or Mercer, to assist with the Committee's analysis and determination of the 2007 compensation of our executive officers. The Committee was informed that Mercer also was retained by GTX to assist it in evaluating salary ranges for various employee levels within GTX, but since the Compensation Committee retained the sole power and authority to establish the nature and scope of Mercer's engagement, set the fee to be paid to Mercer and to terminate Mercer's engagement, the Compensation Committee determined that its relationship with Mercer was sufficiently independent of the services Mercer was rendering for GTX. The Compensation Committee directed Mercer to review GTX's executive compensation program and to recommend changes as deemed appropriate to ensure that GTX's compensation program provides reasonable and competitive pay opportunities that are aligned with key business objectives and best practices. Utilizing criteria initially suggested by Mercer for the Committee's evaluation of salaries for executive officers for 2007, including reviewing compensation data from a peer group of several other biotech or pharmaceutical companies of similar size or stage of development to GTX, the Compensation Committee retained Equilar, Inc., or Equilar, a web-based independent executive compensation firm, in 2007 and in 2008 to retrieve for the Committee executive compensation data from the industry peer group (which the Committee periodically revises to ensure the group, as a whole, is reflective of our industry) that the Committee reviewed prior to determining compensation for our executive officers. The Equilar data reviewed by the Committee includes base salary, bonus compensation and equity and/or stock option awards received by the chief executive officer, president and other executive officers of the peer group of companies selected by the Compensation Committee.

Roles of Executives in Establishing Compensation. Our Chief Executive Officer, Dr. Steiner, provides to the Compensation Committee an annual performance review of each of our other executive officers which is considered by the Compensation Committee in its determination of compensation for such officers. Dr. Steiner and our Chief Operating Officer, Mr. Hanover, also recommend to the Compensation Committee the number of stock options to be granted to new hires and existing employees, subject to guidance provided to them by the Chairman of the Compensation Committee and consistent with the data supplied by the Committee's compensation consultants regarding GTX's peer group. It is within the prerogative of the Compensation Committee to approve, modify or disapprove any recommendations for grants of options to GTX employees. Dr. Steiner and Mr. Hanover also provide recommendations to the Compensation Committee with respect to the specific performance goals to be achieved to receive executive bonus compensation under GTX's Executive Bonus Compensation Plan. Additional information on the role of our executive officers in establishing compensation can be found under the caption "Compensation Discussion and Analysis" below.

Director Compensation. The Board of Directors sets non-management directors' compensation at the recommendations of the Nominating and Corporate Governance Committee and the Compensation Committee. Periodically, at the request of the Nominating and Corporate Governance Committee, GTX's management provides the Nominating and Corporate Governance Committee and the Compensation Committee with information relating to director compensation paid by comparable companies, based on the peer group of biopharmaceutical companies initially established for the purpose of competitive compensation comparisons through the Mercer engagement in 2006. The Nominating and Corporate Governance Committee uses this information and similar information retained for the Committee by Equilar in making its recommendations to the Compensation Committee about

whether and to what extent director compensation should be modified. The Compensation Committee considers the information supplied by the Nominating and Corporate Governance Committee and that committee's recommendations and determines whether it will recommend to the Board of Directors that the Board of Directors consider approving any modifications or additions to the compensation paid to directors by GTx. The Compensation Committee and 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 2008, we paid our non-employee directors retainers in quarterly increments based on an annualized rate of \$20,000 a year, or \$30,000 a year for our Audit Committee Chair, plus an attendance fee of \$1,500 for every Board and committee meeting attended (and \$750 for any telephonic meeting attended). In 2008, under our Amended and Restated 2004 Non-Employee Directors' Stock Option Plan, or the Directors' Option Plan, non-employee directors were eligible to receive an initial stock option grant under the Directors' Option Plan to purchase 10,000 shares of GTx common stock upon their initial election to the Board, and each continuing non-employee director was eligible to receive an annual stock option grant to purchase 8,000 shares of GTx common stock. Based on the data and market information from the companies in our peer group received from Equilar, in the fall of 2008, the Board of Directors, with the recommendations of the Nominating and Corporate Committee and the Compensation Committee, approved an increase to the directors' annual retainer of \$5,000, to \$25,000 per year, or \$35,000 per year for the Audit Committee Chair, effective January 1, 2009. Additionally, the attendance fee for non-employee directors was increased from \$1,500 to \$2,000 per day for any Board and/or Board committee meetings attended that day (with the daily \$750 attendance fee for telephonic meetings remaining unchanged). Further, the number of shares subject to initial option grants under the Directors' Option Plan was increased from 10,000 shares to 15,000 shares, and the number of shares subject to each annual option grant under the Directors' Option Plan was increased from 8,000 shares to 10,000 shares. 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. 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 2010 Annual Meeting of Stockholders, the recommendation must be delivered to GTx's Corporate Secretary between April 6, 2010 and June 5, 2010, subject to the different notice submission date requirements provided for in GTx's bylaws in the event that GTx does not hold its 2010 Annual Meeting of Stockholders between April 6, 2010 and June 5, 2010. 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 which 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 other directorships held by the nominee.

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 “About GTX” at “Governance.” GTX will provide a copy of these documents to any person, without charge, upon request, by writing to: GTX, Inc., Director, Corporate Communications and Financial Analysis, 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, the 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: Corporate Secretary, 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 "About GTX" at "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;
- the performance of GTX's internal audit function;
- GTX's system of internal controls; and
- compliance with legal and regulatory requirements.

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 accountants, including:
 - having direct responsibility for their appointment, compensation and retention;
 - reviewing the scope of their audit services;
 - approving audit and non-audit services; and
 - confirming the independence of the independent registered public accountants;
- 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 and review of GTX's internal auditing program; and
- supervises the functions of our internal auditor, who is a GTX employee reporting to the Audit Committee, which include reviewing and testing the effectiveness of GTX's systems of internal and disclosure controls.

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. GTX's internal auditor is responsible for testing such internal controls and procedures. 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.

In connection with these responsibilities, the Audit Committee met with management, the internal auditor 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 Statement on Auditing Standards No. 61, as amended (AICPA, *Professional Standards*, Vol. 1. AU section 380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T. 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.

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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, 2008, filed with the Securities and Exchange Commission.

THE AUDIT COMMITTEE

J. Kenneth Glass, Chair
Rosemary Mazanet
Timothy R. G. Sear

(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.

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, 2009, 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. However, 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 interest of GTX and our stockholders.

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

On behalf of the Audit Committee, the Board of Directors 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, 2007 and 2008.

<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>
2007	\$ 361,554	—	\$ 16,640	—	\$378,194
2008	\$ 350,000	—	\$ 43,087	—	\$393,087

- (1) "Audit Fees" consist of fees for professional services provided in connection with the audit of our financial statements and review of our quarterly financial statements and audit services provided in connection with other statutory or regulatory filings.
- (2) "Audit-Related Fees" consist 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 to GTX for services rendered during fiscal 2007 and 2008.
- (3) "Tax Fees" consist of fees associated with tax compliance, including tax return preparation.

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. On March 18, 2004, our Audit Committee began pre-approving all services by Ernst & Young LLP and has pre-approved all new services since that time.

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 Chairman of the Audit Committee the authority to grant pre-approvals of audit services of up to \$25,000; 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.

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, 2008:

Name	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	2,673,976	\$ 13.01	1,859,699(1)
Equity compensation plans not approved by security holders	54,526(2)	—(2)	—(3)
Total	2,728,502	\$ 13.01	1,859,699(1)(3)

- (1) In 1999, 2000, 2001 and 2002, we adopted 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, respectively. On January 14, 2004, we adopted the GTx, Inc. 2004 Equity Incentive Plan, or the 2004 Plan, and the GTx, Inc. 2004 Non-Employee Directors' Stock Option Plan (which was subsequently amended and restated), or the Directors' Option Plan, both of which became effective upon the consummation of GTx's initial public offering of its common stock. As of December 31, 2008, an aggregate of 1,699,699 shares of GTx common stock remained available for issuance under the 2004 Plan; however, the shares remaining available for issuance under the 2004 Plan is automatically increased annually on January 1st of each year until 2013 by five percent of the number of shares of common stock outstanding on such date unless the Board of Directors acts to decrease or eliminate any such increase. On January 1, 2009, the number of shares available for issuance under the 2004 Plan increased by 1,819,622 shares. As of December 31, 2008, an aggregate of 160,000 shares of GTx common stock remained available for issuance under the Directors' Option Plan; however, the shares remaining available for issuance under the Directors' Option Plan is automatically increased annually on January 1st of each year until 2016 by the number of shares subject to options granted during the prior calendar year unless the Board of Directors acts to decrease or eliminate any such increase. On January 1, 2009, the number of shares available for issuance under the Directors' Option Plan increased by 58,000 shares.
- (2) Represents shares credited to individual director stock accounts as of December 31, 2008 under our Directors' Deferred Compensation Plan. There is no exercise price for these shares.
- (3) Does not include shares that may become issuable under our Directors' Deferred Compensation Plan. The number of shares that may become issuable under our Directors' Deferred Compensation Plan depend solely on future elections made by plan participants.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information as of March 1, 2009 (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 our directors and executive officers as a group.

The number of shares owned and percentage ownership in the following table is based on 36,408,209 shares of common stock outstanding on March 1, 2009. 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, the rules include shares of common stock issuable pursuant to the exercise of stock options that are either immediately exercisable or exercisable within 60 days of March 1, 2009. We have also included shares credited to individual stock accounts under our Directors' Deferred Compensation Plan as of March 1, 2009. Amounts credited to individual 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 and shares issuable pursuant to the exercise of stock options that are either immediately exercisable or exercisable within 60 days of March 1, 2009 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:		
FMR LLC 82 Devonshire Street Boston, MA 02109	5,351,202(1)	14.7%
Larry N. Feinberg 200 Greenwich Avenue Greenwich, CT 06830	2,813,951(2)	7.7%
BVF Inc. and Affiliated Entities 900 North Michigan Avenue, Suite 1100 Chicago, IL 60611	2,390,000(3)	6.6%
Jack W. Schuler 28161 North Keith Drive Lake Forest, Illinois 60045	2,014,682(4)	5.5%
Directors and Named Executive Officers:		
J. R. Hyde, III	11,187,015(5)	30.7%
Mitchell S. Steiner, M.D., F.A.C.S.	4,867,247(6)	13.4%
Marc S. Hanover	1,318,911(7)	3.6%
Ronald A. Morton, Jr., M.D., F.A.C.S.	—	—
James T. Dalton, Ph.D.	42,668(8)	*
Mark E. Mosteller, CPA	104,783(9)	*
Michael G. Carter, M.D., Ch.B., F.R.C.P.	9,594(10)	*
J. Kenneth Glass	71,220(11)	*
Robert W. Karr, M.D.	25,225(12)	*

Name and Address of Beneficial Owner	Beneficial Ownership	
	Number of Shares	Percent of Total
Rosemary Mazanet, M.D., Ph.D.	45,449(13)	*
John H. Pontius	2,163,744(14)	5.9%
Kenneth S. Robinson, M.D., M.Div.	1,190(15)	*
Timothy R. G. Sear	188,973(16)	*
All Directors and Executive Officers as a group	17,525,158(17)	47.5%

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

- (1) The indicated ownership is based solely on a Schedule 13G/A filed with the SEC by the reporting persons on February 17, 2009, reporting beneficial ownership as of December 31, 2008. According to the Schedule 13G/A, Fidelity Management & Research Company (“Fidelity”), a wholly-owned subsidiary of FMR LLC, was the beneficial owner of 5,351,202 shares in its capacity as investment advisor to various registered investment companies (the “Fidelity Funds”). The ownership of one of the Funds, Fidelity Growth Company Fund, amounted to 2,536,335 shares. Edward C. Johnson 3d and FMR LLC, through its control of Fidelity, and the Fidelity Funds each has sole power to dispose of the 5,351,202 shares beneficially owned by the Fidelity Funds. The Schedule 13G/A filed by the reporting persons provides information only as of December 31, 2008 and, consequently, the beneficial ownership of above-mentioned reporting persons may have changed between December 31, 2008 and March 1, 2009.
- (2) The indicated ownership is based solely on information provided to us by Oracle Investment Management, Inc. (the “Investment Manager”) as of March 1, 2009. Based on the information provided to us by the Investment Manager, Larry N. Feinberg is the sole shareholder and president of the Investment Manager, and serves as the senior managing member of Oracle Associates, LLC (“Oracle Associates”). The shares reported in the above table include shares directly owned by the Investment Manager as well as shares directly owned by certain investment funds and/or accounts (collectively, the “Oracle Funds”) controlled by or under common control with the Investment Manager and Oracle Associates, or for which the Investment Manager exercises investment discretion. By virtue of his control relationship with the Investment Manager and Oracle Associates, Mr. Feinberg may be deemed to have shared voting and dispositive power over the shares directly owned by the Investment Manager and the Oracle Funds.
- (3) The indicated ownership is based solely on a Schedule 13G filed with the SEC by the reporting persons on March 2, 2009, reporting beneficial ownership as of February 27, 2009. According to Schedule 13G, BVF Inc. (“BVF Inc.”) is the general partner of BVF Partners L.P. (“BVF Partners”), which is the general partner of Biotechnology Value Fund, L.P. (“BVF”) and Biotechnology Value Fund II, L.P. (“BVF2”). BVF Partners is also the Manager of BVF Investments L.L.C. (“BVF Investments”) and investment advisor to Investment 10, L.L.C (“ILL10”). According to the Schedule 13G filed by the reporting persons, BVF has shared voting and dispositive power over 540,000 of such shares, BVF2 has shared voting and dispositive power over 375,000 of such shares, BVF Investments has shared voting and dispositive power over 1,340,000 of such shares, ILL10 has shared voting and dispositive power over 135,000 of such shares, and each of BVF Inc. and BVF Partners has shared voting and dispositive power over all of the 2,390,000 shares. The Schedule 13G filed by the reporting persons provides information only as of February 27, 2009 and, consequently, the beneficial ownership of above-mentioned reporting person may have changed between February 27, 2009 and March 1, 2009.
- (4) The indicated ownership is based solely on a Schedule 13G filed with the SEC by the reporting person on February 2, 2009, reporting beneficial ownership as of January 22, 2009. According to the Schedule 13G, the reporting person has sole voting and dispositive power over such shares, of which 144,993 shares are owned by an individual retirement account for the reporting person’s benefit, and 1,869,689 shares are owned by a revocable grantor-type trust that the reporting person established and of which the reporting person serves as the sole trustee. The Schedule 13G filed by the reporting person provides information only as of January 22, 2009 and, consequently, the beneficial ownership of above-mentioned reporting person may have changed between January 22, 2009 and March 1, 2009.
- (5) Includes 91,628 shares and 715,716 shares held by Pittco Associates, L.P. and Pittco Investments, L.P., respectively, entities controlled by Mr. Hyde, 1,459,673 shares held by trusts with respect to which Mr. Hyde

may be deemed to have shared voting or dispositive power or otherwise have beneficial ownership, 1,073,409 shares held by Mr. Hyde's grantor retained annuity trusts and 216,462 shares held by Mr. Hyde's wife, of which Mr. Hyde disclaims beneficial ownership, and 8,737 shares issuable to Mr. Hyde pursuant to our Directors' Deferred Compensation Plan. Mr. Hyde has pledged 750,000 of the shares of stock owned by him to SunTrust Bank to secure personal loans.

- (6) Includes 533,884 shares held by trusts with respect to which Dr. Steiner may be deemed to have shared voting or dispositive power or otherwise have beneficial ownership, 200,000 shares held by Dr. Steiner's grantor retained annuity trust, 2,064,131 shares held by Dr. Steiner's wife, of which Dr. Steiner disclaims beneficial ownership and 5,100 shares held in a joint account. Dr. Steiner has pledged 1,000,000 shares of stock held by him to Citibank to secure personal loans.
- (7) Includes 352,875 shares held by Equity Partners XII, LLC, an entity controlled by Mr. Hanover, and 857,898 shares held by trusts of which Mr. Hanover is the trustee.
- (8) Consists of shares of common stock issuable upon the exercise of options held by Dr. Dalton.
- (9) Consists of 97,501 shares of common stock issuable upon the exercise of options held by Mr. Mosteller and 7,282 shares held by Mr. Mosteller's wife.
- (10) Consists of 9,223 shares of common stock issuable upon the exercise of options held by Dr. Carter and 371 shares issuable to Dr. Carter pursuant to our Directors' Deferred Compensation Plan.
- (11) Includes 22,667 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. Mr. Glass has pledged 32,000 of the shares of stock owned by him to Deutsche Bank to secure personal loans.
- (12) Includes 20,001 shares of common stock issuable upon the exercise of options held by Dr. Karr and 4,224 shares issuable to Dr. Karr pursuant to our Directors' Deferred Compensation Plan.
- (13) Includes 22,667 shares of common stock issuable upon the exercise of options held by Dr. Mazanet and 8,322 shares issuable to Dr. Mazanet pursuant to our Directors' Deferred Compensation Plan.
- (14) Includes 22,667 shares of common stock issuable upon the exercise of options held by Mr. Pontius, 8,653 shares issuable to Mr. Pontius pursuant to our Directors' Deferred Compensation Plan, 2,008,382 shares held by trusts of which Mr. Pontius is the trustee, 21,520 shares held by trusts of which Mr. Pontius' wife is the trustee and 46,261 shares beneficially owned by Mr. Pontius' wife. Mr. Pontius disclaims beneficial ownership of the shares held by trusts of which his wife is trustee and shares beneficially owned by her.
- (15) Consists of shares issuable to Dr. Robinson pursuant to our Directors' Deferred Compensation Plan.
- (16) Includes 5,333 shares of common stock issuable upon the exercise of options held by Mr. Sear and 8,306 shares issuable to Mr. Sear pursuant to our Directors' Deferred Compensation Plan.
- (17) Includes 351,755 shares of common stock beneficially owned by executive officers that are not named executive officers, of which 203,585 shares were issuable upon the exercise of options held by these executive officers. 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 Securities Exchange Act of 1934, as amended, or the Exchange Act, requires our executive officers and directors and the holders 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. Based solely on a review of the copies of these reports furnished to us and written representations from such executive officers, directors and stockholders with respect to the period from January 1, 2008 through December 31, 2008, we are not aware of any required Section 16(a) reports that were not filed on a timely basis.

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

COMPENSATION DISCUSSION AND ANALYSIS

Introduction

Our compensation discussion and analysis discusses the total compensation for our Chief Executive Officer, Chief Financial Officer and the other three most highly compensated executive officers at December 31, 2008, or our “named executive officers.” The compensation program for our named executive officers also applies to our other executive officers. Our compensation discussion and analysis describes our overall executive compensation philosophy, objectives and practices, as well as our decisions regarding executive compensation during 2008.

What are the objectives of our executive compensation program?

The Compensation Committee believes that the compensation program for our executive officers should be designed to attract, motivate and retain highly qualified executive officers responsible for the success of GTx and should be determined within a framework that rewards performance and aligns the interests of our executives with the interests of our stockholders. Within this overall philosophy, our Compensation Committee’s objectives are to:

- Offer a total compensation program that enables GTx to attract, motivate and retain highly qualified and industrious executive officers. Since we and our competitors recruit from a limited pool of resources for individuals who are highly experienced, successful and well rewarded, the Compensation Committee’s policy is to provide total compensation that is competitive with our peer companies within the biotech and pharmaceutical industry.
- Achieve an equitable balance in the compensation offered to each member of our executive team.
- Provide annual variable cash incentive awards that take into account the satisfaction of designated individual performance criteria based on our company performance goals.
- Make a significant portion of executive officer compensation dependent on GTx’s long-term performance and on enhancing stockholder value by providing appropriate long-term, equity-based incentives and encouraging stock ownership.

What is our executive compensation program designed to reward?

Our compensation program rewards our executive officers for achieving specified performance goals, building stockholder value and maintaining long-term careers with GTx. We reward these three aspects so that our executive team will make balanced annual and long-term decisions that we expect will result in consistent financial performance, scientific and product development innovations and the achievement of our strategic business objectives.

What are the elements of our executive compensation program and why do we provide each element?

We have a straightforward compensation program. The three main elements are salary, annual bonuses and long-term equity incentives. We also provide our executive officers (as well as our other employees) with a 401(k) retirement savings plan that matches employee contributions up to 4% of base salaries, subject, however, to the annual Internal Revenue Service (IRS) limits then in effect. We may also, from time to time, offer certain additional benefits, such as transition or housing benefits for executive officers consisting of commuting expenses and temporary living expenses. Each of these elements helps us attract and retain executive officers.

Our Compensation Committee has not adopted any formal guidelines for allocating total compensation between equity compensation and cash compensation, but generally seeks to provide an overall executive compensation package designed to attract, motivate and retain highly qualified executive officers, to reward them for performance over time, and to align the interests of our executive officers with the interests of stockholders. Although equity compensation is an important component of our compensation program, particularly with respect to creating long-term stockholder value, the Compensation Committee has focused on adjusting executive officer base salaries to be in line with the median average salaries for comparable positions in our peer company group and offering cash bonus compensation pay incentives as the primary means to reward our named executive officers for the achievement of our larger company objective of moving product candidates through development and towards

commercialization. Accordingly, we generally grant options to our executive officers at a level lower than our peer company group average for comparable companies, but seek to attain total cash compensation in line with peer group medians.

Elements of Executive Compensation

Base Salary. We provide an annual salary to each executive officer as economic consideration for each person's level of responsibility, expertise, skills, knowledge and experience, which we compare to other comparable companies within the biotech and pharmaceutical industry and adjust, as appropriate, to ensure that we will retain this expertise, skill and knowledge at our company.

Bonus. Cash incentive bonus compensation pay is part of our executive officers' annual compensation and one component of variable compensation. We may or may not award an annual bonus, and the amount of any award will vary, depending on each of the executive officer's successful fulfillment of individual performance criteria (which are largely based on our overall annual company goals) established by the Compensation Committee.

Long-term Incentives. We currently provide long-term incentives solely in the form of stock options. Long-term incentives are a form of variable compensation in that the number of options granted is discretionary and the amount of any income earned is completely dependent upon, and varies with, our stock price over the option term. We offer stock options as an incentive to build long-term stockholder value, to align the interests of executive officers and stockholders, and to retain executive officers through what we hope will be long-term wealth creation in the value of their stock options, which have vesting provisions that encourage continued employment. Our executive officers are motivated by the potential appreciation in our stock price above the exercise price of the stock options. With respect to encouraging continued employment, stock option grants to our executive officers typically require the executive to remain a GTx employee for a three year period before the options even begin vesting (subject to vesting acceleration in certain termination and change of control events). In other words, the Compensation Committee believes it is important to tie the long-term benefit potentially realizable by the executive to a long-term commitment to GTx. We also encourage stock ownership which we regard as important for commitment, engagement and motivation. We may refine our long-term incentive strategy should it be in the interests of stockholders so that we can continue to attract and retain the highly-skilled talent required to execute our business strategy.

Benefits. Benefits offered to GTx's executive officers serve a different purpose than do the elements of total compensation. In general, benefits provide a safety net of protection against the financial catastrophes that can result from illness, disability or death. In addition to the benefits offered to the general employee population, our executive officers receive life insurance coverage equal to two times the executive officer's annual salary (compared to the \$50,000 of life insurance coverage offered to the general employee population of GTx). The Compensation Committee evaluated the cost of providing such additional life insurance coverage and found it to be minimal in relation to the incremental benefit to be offered to our executive officers. In addition, we provide an Executive Supplemental Long Term Disability Plan to increase the income replacement insurance for executive officers in the case of disability. The Executive Supplemental Long Term Disability Plan targets income replacement equal to 75% of base salary to Mr. Hanover, our Chief Operating Officer, and all Vice Presidents, and income replacement equal to 70% of base salary to Dr. Steiner, our Chief Executive Officer, compared to income replacement of 60% of base salary, not to exceed \$10,000 per month, offered to the general employee population of GTx.

Perquisites. 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 considered such additional perquisites and benefits as 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 relocation and temporary housing benefits. In this regard, in 2008 and in prior years, we have paid the temporary living expenses of Dr. Morton and Dr. Dalton and reimbursed their travel-related expenses for travel between their out-of-state permanent residences and GTx's headquarters in Memphis, Tennessee. In 2008, the Board, upon the recommendation of the Compensation Committee, also approved tax gross-up payments to Dr. Morton and Dr. Dalton related to these temporary living and travel-related expenses paid by us during 2008 that

are taxable to Dr. Morton and Dr. Dalton as imputed income. The Compensation Committee believes that the provision of tax gross-up payments to Dr. Morton and Dr. Dalton to offset the tax obligation associated with these imputed income amounts is appropriate and necessary for retaining these highly-qualified executive officers while they retain their out-of-state permanent residences.

Employment Agreements. Each of our executive officers has entered into a written employment agreement with GTx. These employment agreements provide for base salary and the other customary benefits as described above, as well as “double trigger” post-termination change of control payments equal to one year’s base salary as described under “— Post-Employment Compensation” below. Each employment agreement is terminable by either the executive officer or us at any time. Our employment agreements with Dr. Steiner, Mr. Hanover and Mr. Mosteller were approved by our Board of Directors and entered into immediately prior to our initial public offering in February 2004. We entered into substantially similar employment agreements with Dr. Morton in April 2007 when he began his employment with GTx, and with Dr. Dalton in April 2007 when he began his employment with GTx on a full-time basis. Our employment agreements with our named executive officers all have substantially similar terms except for salary and certain non-competition obligations. In this regard, each of Dr. Steiner, Mr. Hanover, Dr. Dalton and Dr. Morton has 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 (if we undergo a change of control, these two-year periods will be shortened to one year). These provisions help protect GTx from the resignations of these named executive officers from GTx and their using the essential scientific knowledge gained while working for GTx to compete against us. In November 2008, the employment agreements for our executive officers and other company officers were amended in certain particulars to clarify each agreement’s exemption from or compliance with Section 409A of the Internal Revenue Code of 1986, as amended, to clarify the time for, form of and conditions to salary, severance payments and certain expense reimbursements, and to implement certain other administrative changes.

Post-Employment Compensation. The employment agreements with our named executive officers contain cash change of control payments that are structured on a “double-trigger” basis, meaning that before a named executive officer can receive cash change of control payments: (1) a change of control must occur and (2) within six months of such change of control, the named executive officer’s employment must be terminated for good reason or without cause. These provisions were included to 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 the named executive officers with regard to his continued employment and compensation. Our Compensation Committee believes that a “double-trigger” change of control provision providing for payments equal to one year’s base salary is attractive to maintain continuity and retention of key management personnel and is consistent with GTx’s compensation philosophy. In addition, under our stock option plans that were adopted prior to our initial public offering and pursuant to which we may grant stock options to executives from time to time, a change of control will automatically trigger the full vesting of all options granted under these plans. Our 2004 Equity Incentive Plan, which became effective in connection with our initial public offering and pursuant to which we primarily grant options to our executive officers, provides for accelerated vesting of unvested options only if the executive officer is involuntary terminated without cause or experiences a constructive termination within twelve months following a change of control, or if the surviving or acquiring entity refuses to assume or substitute for the options. These provisions are intended to remove any personal disincentive an executive officer may have to a change of control transaction which, if appropriately assessed on its merits, may prove beneficial to GTx and its stockholders.

How do we determine the amount for each element of executive officer compensation?

Process. In its process for deciding the levels at which to compensate our named executive officers, the Compensation Committee receives and reviews competitive compensation data to determine the 25th percentile, median, and 75th percentile of (1) average salary, (2) target annual cash compensation (i.e., salary + target bonus), (3) long-term incentive compensation, and (4) target total direct compensation (i.e., salary + target bonus + long-term incentives) for executive officer positions among a group of peer companies and to assess how similar compensation arrangements for GTx executive officers compare to its peers. A base salary range between the 25th percentile and the 75th percentile of our peer group is consistent with what the Compensation Committee believes is competitively reasonable and appropriate for the named executive officers, although the Compensation

Committee's current objective is to establish base salary and provide incentive bonus compensation targets for GTx's executive officers that are generally consistent with the median compensation levels among our peer industry group. Long-term incentive compensation is provided in the form of stock options with annual grants typically below average grants provided to comparable executives by our peer group, reflecting the Compensation Committee's belief in the growth potential of our common stock warranting the grant of fewer numbers of options. However, the Committee does not tie cash compensation to potential values realizable from option grants to measure total target direct compensation as a means to determine the option grants it authorizes, and looks at this data from our peers only as another guideline for assessing how our executive compensation program compares to our peer group in an effort to ensure that our compensation program remains competitive. In determining executive compensation, the Compensation Committee may also consider other relevant factors in determining appropriate compensation levels for each executive officer in order to ensure that base salaries, bonus compensation targets and stock option awards are fair and equitable among the executive team members and to appropriately reflect the expected contributions to GTx by each executive officer. For example, in late 2007, when the Compensation Committee established base salaries and bonus compensation targets for its named executive officers for 2008 (and again in late 2008, when it similarly established base salaries and bonus compensation target awards for 2009), although the Compensation Committee relied primarily on its review of competitive compensation data from our peer group companies in setting base salaries and bonus compensation targets, the Compensation Committee adjusted base salaries and bonus compensation target awards to retain an element of fundamental fairness among the executive officer team members. In this regard, recognizing that it was necessary to pay a base salary in excess of the peer group median to attract the services of a skilled physician of Dr. Morton's caliber as our then new Chief Medical Officer, the Compensation Committee decided to also adjust the base salary to be paid to Mr. Hanover for 2008 to an amount in excess of the median salaries for a comparable position in our peer group, reflecting the Compensation Committee's view that Mr. Hanover's services to GTx warrant his being paid a base salary in excess of Dr. Morton. Similarly, in late 2008, the Compensation Committee adjusted the base salary of Dr. Dalton to an amount in excess of the median salaries for a comparable position in our peer group, reflecting the Compensation Committee's view that Dr. Dalton's services to GTx warrant his being paid a base salary similar to the base salary of Dr. Morton.

Use of compensation consultants. In 2006, the Compensation Committee retained Mercer Human Resource Consulting, or Mercer, to assist with the Committee's analysis and determination of the 2007 compensation of our executive officers. The Committee was informed that Mercer also was retained by GTx to assist it in evaluating salary ranges for various employee levels within GTx, but since the Compensation Committee retained the sole power and authority to establish the nature and scope of Mercer's engagement, set the fee to be paid to Mercer and to terminate Mercer's engagement, the Compensation Committee determined that its relationship with Mercer was sufficiently independent of the services Mercer was rendering for GTx. The Compensation Committee directed Mercer to review GTx's executive compensation program and to recommend changes as deemed appropriate to ensure that GTx's executive compensation program provides reasonable and competitive pay opportunities that are aligned with key business objectives and best practices. At the direction of the Compensation Committee, Mr. Mosteller, GTx's Vice President and Chief Financial Officer, and Mr. Doggrell, GTx's Vice President, General Counsel, discussed with Mercer the duties of each executive officer of GTx and provided Mercer with information requested by Mercer as part of its evaluation of GTx's executive compensation programs and policies. The information included each executive officer's title, direct and indirect reports, salary, bonus (if any), option grants and benefits for the preceding three-year period. The Compensation Committee has since supplemented this information with similar more current compensation data obtained from Equilar, Inc., or Equilar, a web-based independent executive compensation firm, which data the Committee utilized for the purpose of determining base salaries, bonus compensation targets and stock option awards for our named executive officers for 2008 and 2009.

Comparison of GTx executive compensation to peer group and Mercer recommendations. In 2006, Mercer reviewed base salaries, bonus compensation and equity incentives provided by each company within a peer group of 23 biopharmaceutical companies Mercer selected as a representative industry group most similar to GTx based on

their number of employees, market capitalization and stage of development, and then ranked the compensation provided to GTx executive officers. The results of Mercer's review are summarized below:

- the base salaries for GTx executive officers were found to be below the peer group 50th percentile (median) levels for our then executive officers but, according to Mercer, fell within a competitive range of the peer group median;
- the total cash compensation, consisting of salary plus cash bonuses, was well below the peer group 25th percentile for our then executive officers, reflecting the then existing historic lack of annual cash incentive award opportunities for GTx executive officers; and
- total direct compensation (total cash compensation plus annualized grant date value of long-term equity incentives) was below the peer group 25th percentile for our then executive officers and approximately 91% of the peer group 25th percentile when Dr. Steiner and Mr. Hanover were excluded from the comparison (Dr. Steiner and Mr. Hanover were excluded from the comparison due to the Compensation Committee's determination in 2006 that, as co-founders of GTx with substantial stock holdings, no additional option grants were at that time warranted).

Mercer suggested that the Compensation Committee continue to manage base salaries for GTx's executive officers within a competitive range of market median levels for GTx's peer group, and consider implementing an annual cash bonus plan for executive officers and other key employees to strengthen the link between pay and performance and to reward the attainment of annual company goals in support of long-term stockholder value creation. Mercer also suggested that the Compensation Committee continue to utilize long-term incentive awards through grants of stock options or other equity awards to align the interests of GTx's executive officers, including, if desired, the co-founders, with those of its stockholders. Based on Mercer's recommendations and the Compensation Committee's desire to offer competitive and fair compensation, the Compensation Committee adopted in 2006 the GTx Executive Bonus Compensation Plan, commencing as of the calendar year 2007, as described in more detail below.

Identification of peer group for 2008 compensation. The peer group initially selected by Mercer was refined by the Compensation Committee in 2007 and 2008 to reflect corporate reorganizations, mergers and acquisitions among some of the initial peer group members selected by Mercer, and, with respect to establishing the peer group for purposes of 2009 compensation, the need to add other biopharmaceutical companies to the peer group to make our peer group more reflective of our industry. For purposes of 2008 compensation, the Compensation Committee selected 18 companies from the 2006 Mercer list to comprise our peer group. The companies comprising our peer group for purposes of 2008 compensation were as follows:

Antigenics, Inc.	Dov Pharmaceutical, Inc.	Neurogen Corp.
Cell Genesys, Inc.	Hollis-Eden Pharmaceuticals, Inc.	Nuvelo, Inc.
Coley Pharmaceutical Group, Inc.	Icagen, Inc.	Onyx Pharmaceuticals, Inc.
CombinatoRx, Inc.	Idenix Pharmaceuticals, Inc.	Progenics Pharmaceuticals, Inc.
Cytokinetics, Inc.	Inhibitix, Inc.	Renovis, Inc.
Dendreon Corp.	Keryx Biopharmaceuticals, Inc.	Rigel Pharmaceuticals, Inc.

How compensation or amounts realizable from prior compensation are considered. The Compensation Committee reviews the current value of shares owned and the current value of exercisable and unvested stock options as part of its annual review of executive officer stock option awards, and determines the amount of the annual stock options awards for each group of executives at GTx based, in part, on this historical information and the Compensation Committee's determination of the potential dilution caused by such awards and the incentives provided by such awards for the executive officers to create long-term value. Recognizing that there is a tradeoff between utilizing option grants as long-term incentive awards for our executive officers and increasing the prospect of stockholder dilution, the Committee strives to strike a balance between providing meaningful and potentially valuable incentives without creating a potential for excessive stockholder dilution. The Compensation Committee looks at data from its peers to measure the percentage relationship of all vested and unvested options issued to GTx employees to total GTx shares outstanding, to make certain that this percentage relationship is at or below the average median percentages based on similar information regarding its peers. The amount of past cash

compensation realized, including annual bonus awards and amounts realized from prior stock option awards, is generally not a significant factor in the Compensation Committee's consideration of current stock option awards since the Compensation Committee believes that annual stock option awards continue to keep the executives focused on our long-term performance.

Chief Executive Officer and Chief Operating Officer involvement in executive compensation decisions. Our 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). Dr. Steiner, however, provides to the Compensation Committee an annual performance review of each of our other executive officers which is considered by the Compensation Committee in its determination of compensation for such officers. Dr. Steiner and Mr. Hanover also recommend to the Compensation Committee the number of stock options to be granted to our other executive officers, subject to guidance provided to them by the Chairman of the Compensation Committee and consistent with the data supplied by the Committee's compensation consultants regarding GTX's peer group. It is within the prerogative of the Compensation Committee to approve, modify or disapprove any recommendations for grants of options to our executive officers. Dr. Steiner and Mr. Hanover also provide recommendations to the Compensation Committee with respect to the specific performance goals to be achieved to receive executive bonus compensation under our Executive Bonus Compensation Plan. After receipt of the recommendations of Dr. Steiner and Mr. Hanover and the Committee's review of information obtained from our peer group compensation data and other relevant factors, the Compensation Committee meets in executive session with no members of management present to discuss and determine appropriate base salaries, bonus compensation target awards and stock option grants for each executive officer of GTX.

What is our analysis of the compensation for our named executive officers in 2008?

Salary. As stated above, in determining base salaries, the Compensation Committee seeks to compare the base salaries of our executive officers against the salaries for comparable positions paid by companies in GTX's peer group. Within this comparison group, the Compensation Committee makes comparisons to executive officers at comparable levels of experience, who have a comparable levels of responsibility and expected levels of contribution to our performance. In setting base salaries for 2008, the Compensation Committee relied primarily on the compensation data made available to it by Equilar, and it approved increases from 2007 base salaries for the executive officers (other than Mr. Hanover and Dr. Dalton) for 2008 to amounts it believed would result in salaries being at or near the median base salaries for comparable executive positions at our peer group companies and reasonably consistent with the average percentage increase in salaries by its peers. The salary increases from 2007 also reflect the Compensation Committee's belief that GTX should retain an equitable balance in the compensation of its executive officers. Accordingly, each named executive officer (other than Mr. Hanover and Dr. Dalton) received a salary increase from 2007 to adjust their salaries for 2008 to levels at or near to median base salaries for comparable executive positions at our peer group. Mr. Hanover received a 42% increase in salary for 2008 and Dr. Dalton received a 20% increase from his 2007 base salary, reflecting the Committee's decision that Mr. Hanover's role as Chief Operating Officer and Dr. Dalton's role as Vice President, Preclinical warrant a salary level more in line with the salary being received by comparable executives in the top quartile of our peer group. A table reflecting the increase from 2007 base salaries is set forth below:

<u>Name</u>	<u>2007 Base Salary</u>	<u>2008 Base Salary</u>	<u>Percentage Increase</u>
Mitchell S. Steiner	\$446,250	\$500,000	12%
Mark E. Mosteller	\$246,750	\$283,889	15%
Marc S. Hanover	\$306,600	\$435,000	42%
Ronald A. Morton, Jr.	\$410,000	\$430,500	5%
James T. Dalton	\$260,000	\$311,875	20%

Annual Bonus Awards. Based on Mercer's recommendation in 2006, the Compensation Committee established the Executive Bonus Compensation Plan to reward executive officers for their role in achieving specified performance goals. All of our named executive officers are eligible to participate in the Executive Bonus Compensation Plan. Payments of bonus awards are based solely on the attainment of pre-established, objective

performance goals that are established by the Compensation Committee. Bonus compensation payments are calculated as a percentage of base salary based on information supplied by Mercer that chief executive officers are typically paid bonuses ranging from 45% to 55% of their salaries and other executives received bonuses in the range of 30% to 40% of base salaries. For 2008, the Committee determined that it would set target bonus payments at 50% of base salary for our Chief Executive Officer, Dr. Steiner, 45% of base salary for Mr. Hanover, our Chief Operating Officer, and 30% of base salaries for all Vice Presidents. Although the Compensation Committee retains the discretion to award a bonus under the Executive Bonus Compensation Plan that is higher than target for exemplary performance with respect to the established performance goals, the target bonuses generally reflect the maximum bonus opportunity for our executive officers under the Executive Bonus Compensation Plan. To date, the Compensation Committee has not awarded a bonus higher than target to any of our executive officers, although the Compensation Committee has in the past awarded discretionary bonuses outside of our Executive Bonus Compensation Plan to certain of our executive officers.

The performance goals under the Executive Bonus Compensation Plan are based on approved corporate objectives for the year and form the basis for the bonus compensation targets of Dr. Steiner and Mr. Hanover. These performance goals are then tailored to the specific performance criteria to be achieved by each other executive officer in support of attaining the designated corporate objectives. The Compensation Committee approves the objective performance goals and specific criteria, including the weight attributable to each objective, for each executive officer after reviewing recommendations supplied to the Compensation Committee by Dr. Steiner and Mr. Hanover, who present the Committee with stretch goals for the coming year. The objective criteria may include achievement of the operating budget for GTx as a whole or of a business unit of GTx, satisfactory audit results and timely filings of annual and quarterly reports with the SEC, personnel-related objectives, continued innovation in development and progress towards commercialization of our product candidates, timely development of new product candidates or processes, development and implementation of successful marketing and commercialization strategies for our product candidates, implementation of financing strategies and the establishment of strategic alliances, partnerships or collaborations with third parties, as well as meeting pre-clinical, clinical, or regulatory objectives. The Compensation Committee then evaluates after the end of the calendar year the attainment of the corporate objectives and the extent to which each such executive officer met his or her specified performance criteria to support the corporate objectives. While in some cases the performance objectives for the executive officers can overlap, the Compensation Committee grades each executive officer's performance individually and considers factors that may justify awarding different amounts for the same criteria, if, for example, one executive has more direct control over a particular matter than another.

In 2008, our company performance goals included:

- successfully obtaining and finalizing data from our pivotal Phase III clinical trial of toremifene 80 mg for the prevention of bone fractures and treatment of other estrogen deficiency side effects of androgen deprivation therapy, or ADT, in men with prostate cancer, and filing a New Drug Application, or NDA, with the FDA for marketing approval for our toremifene 80 mg product candidate;
- obtaining data in a manner to allow us to conduct an interim efficacy analysis from our pivotal Phase III clinical trial of toremifene 20 mg for the prevention of prostate cancer in high risk men with precancerous prostate lesions called high grade prostatic intraepithelial neoplasia, or high grade PIN, and obtaining positive results from the analysis;
- Ipsen filing its election to pay for a portion of our toremifene 20 mg development costs for high grade PIN in order to retain all rights to the product candidate in its licensed territory;
- completing enrollment in our Phase II clinical trial of Ostarine™ for cancer cachexia and obtaining positive results from the trial;
- initiating a Phase II clinical trial of selective androgen receptor modulators, or SARMS, for sarcopenia and/or another indication led by our collaboration partner, Merck & Co., Inc., or Merck;
- completing preclinical studies for our GTx-758 compound to support Phase I clinical studies in man;

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- obtaining unqualified audit opinions from Ernst & Young LLP, our independent registered public accounting firm, on our financial statements and the effectiveness of our internal control over financial reporting, and having timely and accurate filings for the year of our annual report on Form 10-K and quarterly reports on Form 10-Q; and
- not exceeding the high end of our publicly-disclosed net loss guidance for fiscal 2008.

Under the Executive Bonus Compensation Plan, the Compensation Committee established specific performance criteria for each executive officer that were aligned with the goals set forth above. At the Compensation Committee meetings held in late July and early November 2008, Dr. Steiner and Mr. Hanover reviewed with the Compensation Committee the status of the objective performance goals established under our Executive Bonus Compensation Plan for each of our executive officers and the likelihood that the performance goals would be fulfilled by year end 2008 so the Committee members could monitor the progress of the executives in fulfilling their specific performance goals, which helps Committee members better understand the likelihood of whether various corporate objectives would be attained during the year. The bonus compensation awards, if earned, are paid during the first quarter of the next succeeding year (and in any case before March 15 of the next succeeding year), after the Compensation Committee has reviewed and approved year-end data and other information necessary to establish the awarding of the bonuses. The Compensation Committee establishes performance goals intended to reflect tasks beyond what should be reasonably expected of an executive officer during the particular calendar year, which, if attained, justify the payment of additional compensation.

The performance goals and the relative weighting of each such goal for Dr. Steiner and our other named executive officers is set forth in the table below. Each of our executive officers had some of the same specific performance goals as Dr. Steiner that they were required to achieve to be eligible for bonus compensation payments for 2008, although the weightings were in some cases different, reflecting the impact each executive officer was expected to have on the specified targets, and in some instances, other specific goals were substituted for one or more of Dr. Steiner's goals in line with the particular executive's duties and responsibilities. For example, the performance goals for Mr. Mosteller, our Chief Financial Officer, are not as heavily weighted towards success in our clinical trial objectives as are the goals for Dr. Steiner and Mr. Hanover, but do reflect greater weighting for financial and budgeting related matters that are more within his control. Likewise, the performance goals for Dr. Dalton, our Vice President, Preclinical Research and Development, are not as heavily weighted towards success in our clinical trial objectives, but do reflect greater weighting for our preclinical objectives.

Performance Goal Category	Weighting for Each Named Executive Officer				
	Dr. Steiner	Mr. Mosteller	Mr. Hanover	Dr. Morton	Dr. Dalton
ADT(1)	20%	20%	20%	20%	10%
PIN(2)	20%	10%	20%	20%	10%
SARMs(3)	20%	5%	20%	20%	5%
LH inhibitor(4)	5%	2.5%	5%	5%	*
Financial/Budget and IT(5)	20%	50%	20%	10%	5%
Audit/Sarbanes-Oxley requirements(6)	10%	*(7)	10%	*	*
Satisfactory team participation	*	10%	*	10%	10%
Key position hiring(8)	*	*	*	10%	*
Preclinical development and responsibilities(9)	5%	2.5%	5%	5%	60%

- (1) This goal category relates to clinical and regulatory goals with respect to the development of toremifene 80 mg for the prevention of bone fractures and treatment of other estrogen deficiency side effects of ADT in men with prostate cancer, including achieving positive Phase III clinical trial results, the submission of an NDA to the FDA, partnering goals with respect to the development and commercialization of toremifene 80 mg, and certain other objectives pertaining to FDA-related initiatives. With respect to Dr. Morton, this goal category also includes specific objectives related to disease state awareness and managing regional medical scientists.
- (2) This goal category relates to clinical and regulatory goals with respect to the development of toremifene 20 mg for the prevention of prostate cancer in high risk men with high grade PIN, including obtaining data for interim

efficacy analysis from our Phase III clinical trial of toremifene 20 mg, obtaining positive interim efficacy analysis results from the clinical trial, and securing Ipsen's election to pay for a portion of our toremifene 20 mg development costs for high grade PIN in order to retain all rights to the product candidate in its licensed territory. With respect to Dr. Morton, this goal category also includes specific objectives related to disease state awareness.

- (3) This goal category relates to clinical and development goals with respect to the development of SARMS, including clinical activities related to and completing enrollment for our Phase II clinical trial of Ostarine™ for cancer cachexia and obtaining positive results from the trial, and initiating a Phase II clinical trial of a SARM candidate for sarcopenia and/or another indication led by Merck. With respect to Dr. Morton, this goal category also includes specific objectives related to our collaboration with Merck.
- (4) This goal category relates to preclinical development goals with respect to the development of oral luteinizing hormone, or LH, inhibitors.
- (5) This goal category relates to, in the case of each of Dr. Steiner, Mr. Hanover and Dr. Dalton, not exceeding the high end of our publicly-disclosed net loss guidance for fiscal 2008. With respect to Dr. Steiner and Mr. Hanover, this goal category also relates to specified investor relations activities. With respect to Mr. Mosteller, this goal category relates to, in addition to not exceeding the high end of our publicly-disclosed net loss guidance for fiscal 2008, obtaining unqualified audit opinions from our independent registered public accounting firm on our financial statements and the effectiveness of our internal control over financial reporting, the timely filing of required annual and quarterly reports, satisfying Sarbanes-Oxley compliance requirements, satisfactorily managing our investments, overseeing the production of our fiscal 2008 operating and capital expenditure budget, managing our insurable financial risks and maintaining our information technology systems at a designated high level of efficiency and overseeing our contingency planning and recovery efforts to adequately safeguard our data. With respect to Dr. Morton, this goal category relates to satisfactorily overseeing the budget process for Dr. Morton's direct reports.
- (6) This goal category relates to obtaining unqualified audit opinions from our independent registered public accounting firm on our financial statements and the effectiveness of our internal control over financial reporting, the timely filing of required annual and quarterly reports, and satisfying Sarbanes-Oxley compliance requirements.
- (7) With respect to Mr. Mosteller, this goal category was subsumed within Mr. Mosteller's Financial/Budget and IT goal category (see footnote (5) above).
- (8) This goal category relates to specified objectives for Dr. Morton with respect to key hires.
- (9) This goal category relates to specified objectives for successfully completing certain preclinical testing for preclinical compounds to fulfill specified criteria.

In February 2009, the Compensation Committee conducted a final review of each executive officer's target bonus compensation criteria for 2008, and, based on their review, made the following determinations:

- Dr. Steiner had satisfied approximately 81% of his personal performance goals, resulting in incentive bonus compensation of \$202,500, or approximately 41% of his 2008 base salary;
- Mr. Mosteller had satisfied approximately 82.5% of his personal performance goals, resulting in incentive bonus compensation of \$70,263, or approximately 25% of his 2008 base salary;
- Mr. Hanover had satisfied approximately 81% of his personal performance goals, resulting in incentive bonus compensation of \$158,558, or approximately 36% of his 2008 base salary;
- Dr. Morton had satisfied approximately 82% of his personal performance goals, resulting in incentive bonus compensation of \$105,903, or approximately 25% of his 2008 base salary; and
- Dr. Dalton had satisfied approximately 82.5% of his personal performance goals, resulting in incentive bonus compensation of \$77,189, or approximately 25% of his 2008 base salary.

Discretionary Bonus Award to Dr. Morton. In February 2008, the Compensation Committee awarded Dr. Morton a discretionary bonus outside of the Executive Bonus Compensation Plan equal to \$28,000 to reward

Dr. Morton for his efforts in undertaking specific roles and tasks since the beginning of 2008 that proved instrumental in allowing us to achieve our goals for our clinical trial operations.

Long-term Incentive Compensation. As stated above, in determining the amount of each stock option grant, the Compensation Committee reviews the current value of shares owned and the current value of exercisable and unvested stock options as part of its annual review of executive officer stock option awards, and determines the amount of the annual stock option awards for each group of executives at GTx based, in part, on this historical information and the Compensation Committee's determination of the potential dilution caused by such awards and the incentives provided by such awards for the executive officers to create long-term value. The Compensation Committee also takes into account the number of options to be granted to an executive officer relative to grants to other executive officers and grants to similar officers within the GTx peer group. The Compensation Committee has continued to follow a conservative approach to issuing stock option awards to our executive officers, issuing annual option grants which are lower than peer average equity based awards during the same period. In late 2007, the Compensation Committee approved option grants covering 25,000 shares of GTx common stock for each of Mr. Mosteller and Drs. Morton and Dalton, and a grant of 125,000 shares of GTx common stock for Mr. Hanover, which grants were effective on January 1, 2008. The Committee believed that a significant award of options to Mr. Hanover was warranted since it was the first option award Mr. Hanover has received from GTx and recognized the primary management role Mr. Hanover serves in overseeing the potential commercialization of our product candidates. Because of Dr. Steiner's significant share ownership, the Compensation Committee elected not to award stock options or other equity-based compensation to him for 2008, relying solely on his salary, potential bonus, and his own stock holdings in GTx to adequately compensate and motivate him. However, the Compensation Committee noted that they intended to revisit in the following year whether stock options should be granted to Dr. Steiner, given the Compensation Committee's assessment of the success GTx has achieved under his direction.

2009 Compensation

In November 2008, the Compensation Committee evaluated executive compensation for the current fiscal year. The Compensation Committee reviewed compensation data developed by Equilar, which compensation data included base salary, bonus compensation and equity and/or stock option awards received by the chief executive officer, president and other executive officers of many of the same peer group companies selected by the Compensation Committee for its review of comparable industry data in 2007 for purposes of establishing 2008 compensation.

The compensation data developed by Equilar for the Compensation Committee was derived from certain of the original peer group companies established through the Mercer engagement in 2006. As in 2007, the Compensation Committee refined the original Mercer peer group list to adjust for corporate reorganizations, mergers and acquisitions among some of the initial peer group members selected by Mercer, and, with respect to establishing the peer group for purposes of establishing 2009 executive officer compensation, the need to add other biopharmaceutical companies to the peer group to make our peer group more reflective of our industry. As a result of this refinement, the Compensation Committee selected the following 21 companies to request current compensation data from Equilar's database for purposes of establishing 2009 executive officer compensation:

Antigenics, Inc.	Exelixis, Inc.	Neurogen Corporation
Acorda Therapeutics Inc.	Hollis-Eden Pharmaceuticals, Inc.	Nuvelo, Inc.
Alnylam Pharmaceuticals, Inc.	Idenix Pharmaceuticals, Inc.	Onyx Pharmaceuticals, Inc.
Cell Genesys, Inc.	Imclone Systems Incorporated	Progenics Pharmaceuticals, Inc.
CombinatoRx, Incorporated	Inhibitex, Inc.	Savient Pharmaceuticals, Inc.
Cytokinetics, Inc.	Isis Pharmaceuticals, Inc.	Rigel Pharmaceuticals, Inc.
Dendreon Corp.	Keryx Biopharmaceuticals, Inc.	Telik, Inc.

During its meeting in late 2008, the Compensation Committee utilized the data from Equilar for the peer group companies listed above to evaluate the base salaries, target bonus levels and stock option awards for each of GTx's executive officers. The Compensation Committee adjusted the compensation amounts in Equilar's data by a reasonable inflation factor to project peer compensation levels for calendar year 2009, and then established compensation for GTx's executive officers for 2009 which are projected to fall within the median salary ranges

identified in our competitive analysis. Salaries in excess of the median peer group salary targets were approved by the Committee for Mr. Hanover and Drs. Morton and Dalton, reflecting the decision of the Committee to pay competitive compensation consistent with the important roles these individuals have at GTx.

At the Compensation Committee meeting in late 2008, bonus criteria under the Executive Bonus Compensation Plan were established and approved by the Compensation Committee for 2009, which, if achieved, will provide incentive bonus compensation pay of up to 65% of 2009 base salary for Dr. Steiner, 55% of 2009 base salary for Mr. Hanover, and 30% of 2009 base salary for the rest of our executive officers. The bonus compensation targets for 2009 were increased for Dr. Steiner and Mr. Hanover at the meeting of the Compensation Committee in late 2008 above the applicable bonus ranges identified by Mercer in 2006 as a result of the Compensation Committee's goal to minimize base salary increases while providing a potential for additional compensation based on achieving performance goals that the Compensation Committee believes will benefit GTx and its stockholders. At its meeting in late 2008, the Compensation Committee approved salary increases from their 2008 base salary levels of 5% each for Dr. Steiner and Mr. Hanover. The Compensation Committee also approved specific bonus targets for Dr. Steiner and the other executive officers, reflecting our corporate objectives for 2009, including receiving marketing approval for our toremifene 80 mg product candidate for the prevention of bone fractures in men with prostate cancer on ADT, achieving positive data from our Phase III clinical trial of toremifene 20 mg to prevent prostate cancer in high risk men with high grade PIN, initiating a Phase IIb or Phase III clinical trial of Ostarine™ for the treatment of cancer cachexia, initiating Phase I clinical testing of GTx-758, progressing our SARMs into other clinical trials through our collaboration with Merck, obtaining unqualified audit opinions from our independent registered public accounting firm on our financial statements and the effectiveness of our internal control over financial reporting, and maintaining our expenses within the budget approved by our Board of Directors.

The Compensation Committee has continued to follow its conservative approach to issuing stock option awards to GTx's executive officers, granting annual stock options which are lower than peer average equity based awards for the same period. In late 2008, the Compensation Committee approved stock option grants of 50,000 shares of GTx common stock to Mr. Hanover and 25,000 each for our Vice Presidents, which grants were effective as of January 1, 2009. The Compensation Committee also approved the grant of a stock option for 75,000 shares of GTx common stock for Dr. Steiner, which is the first stock option we have granted to Dr. Steiner, reflecting the Compensation Committee's assessment of the success GTx has achieved under his direction. As with the other executive officer grants, Dr. Steiner's stock option grant was effective as of January 1, 2009.

Based on the Compensation Committee's review of the industry data compiled by Equilar and consistent with the Compensation Committee's intent to adjust executive compensation to a level consistent with the mean average compensation for our peer industry group, our Board of Directors approved, based upon the recommendation of the Compensation Committee, annual base salaries for 2009 for our named executive officers, as set forth in the table below. For the reasons stated above, salaries in excess of the median peer group salary targets were approved by the Committee for Mr. Hanover and Drs. Morton and Dalton.

<u>Name</u>	<u>2009 Base Salary</u>	<u>Percentage Increase from 2008 Base Salary</u>
Mitchell S. Steiner	\$525,000	5%
Mark E. Mosteller	\$298,083	5%
Marc S. Hanover	\$456,750	5%
Ronald A. Morton, Jr.	\$452,025	5%
James A. Dalton	\$400,000	28%

Tax and Accounting Considerations

Section 162(m) of the Internal Revenue Code of 1986 limits our deduction for federal income tax purposes to not more than \$1 million of compensation paid to certain executive officers in a calendar year. Compensation above \$1 million may be deducted if it is "performance-based compensation." Our Compensation Committee has not yet established a policy for determining which forms of incentive compensation awarded to our executive officers should be designated to qualify as "performance-based compensation." To maintain flexibility in compensating our

executive officers in a manner designed to promote our objectives, the Compensation Committee has not adopted a policy that requires all compensation to be deductible and in fact, none of the named executive officers received compensation in 2008 that would exceed the \$1 million limit on deductibility. However, the Compensation Committee intends to evaluate the effects of the compensation limits of Section 162(m) on any compensation it proposes to grant, and the Compensation Committee intends to provide future compensation in a manner consistent with our best interests and those of our stockholders. For example, at our 2008 Annual Meeting of Stockholders, we sought and obtained stockholder approval of a proposal to maintain the tax deductible status of stock options that may be granted under our 2004 Equity Incentive Plan.

Effective January 1, 2006, we began accounting for share-based awards under the provisions of Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment*, or FAS 123(R). FAS 123(R) establishes accounting for stock-based awards exchanged for employee services. Accordingly, stock-based compensation cost is measured at grant date, based on the fair value of the awards, and is recognized as an expense ratably over the requisite employee service period. The Compensation Committee has determined to retain for the foreseeable future our stock option program as the sole component of its long-term compensation program, and, therefore, to record this expense on an ongoing basis according to FAS 123(R). Accounting rules also require us to record cash compensation as an expense at the time the obligation is incurred.

Timing, grant date and exercise price for stock option awards

The Compensation Committee has consistently maintained a practice to award stock options only at specific times during the year. At a meeting scheduled late in the year, the Compensation Committee grants stock options to a broad group of employees, including executive officers, in amounts determined by the Compensation Committee. These grants are effective on January 1 of the following year with an exercise price equal to the closing price of GTx's common stock on the NASDAQ Global Market on the last trading day of the prior year. Other than the annual grants described above, the Compensation Committee will only consider additional grants for new employees, employees who are promoted or granted additional responsibilities or, more rarely, employees who have performed at a level that warrants recognition. These grants, if any, are made only on the date of a scheduled meeting of the Compensation Committee, in amounts determined by the Compensation Committee, and with an exercise price equal to the closing price of GTx's common stock on the NASDAQ Global Market on the date of grant (or the closing price of GTx's common stock on the NASDAQ Global Market on the trading date immediately prior to the grant date if the grant date is not a trading date).

Conclusion

The Compensation Committee believes the executive leadership of GTx is a key element to its success and that the compensation package offered to the executive officers is a key element in attracting and retaining the appropriate personnel.

The Compensation Committee believes it has historically maintained compensation for its executive officers at levels that are reflective of the talent and success of the individuals being compensated given our current stage of development, and, with the inclusion of additional compensation directly tied to performance, the Compensation Committee believes executive compensation will be sufficiently comparable to its industry peers to allow GTx to retain its key personnel at costs which are appropriate for GTx.

The Compensation Committee will continue to develop, analyze and review its methods for aligning executive management's long-term compensation with the benefits generated for stockholders. The Compensation Committee believes the idea of creating ownership in GTx helps align management's interests with the interests of stockholders. The Compensation Committee has no pre-determined timeline for implementing new or ongoing long-term incentive plans. New plans are reviewed, discussed and implemented as the Compensation Committee feels it is necessary and/or appropriate as a measure to incentivize, retain and/or reward GTx's executive officers.

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, 2008.

COMPENSATION COMMITTEE:

J. R. Hyde, III (Chairman)
Michael G. Carter
J. Kenneth Glass
Timothy R.G. Sear

(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.

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 Chief Executive Officer, our Chief Financial Officer and each of the three other most highly compensated executive officers of GTx at December 31, 2008. We refer to these executive officers in this proxy statement as the “named executive officers.”

SUMMARY COMPENSATION TABLE — FISCAL 2006, 2007 AND 2008

Name and Principal Position	Year	Salary	Bonus	Option Awards	Non-Equity Incentive Plan Compensation	All Other Compensation	Total
		(\$)	(\$)	(\$)(2)	(\$)(3)	(\$)(4)	(\$)
Mitchell S. Steiner, M.D., F.A.C.S. <i>Chief Executive Officer and Vice-Chairman of the Board of Directors</i>	2008	500,000	—	—	202,500	8,467	710,967
	2007	446,250	—	—	128,520	5,024	579,794
	2006	427,055	44,625(1)	—	—	653	472,333
Mark E. Mosteller, CPA <i>Vice President, Chief Financial Officer and Treasurer</i>	2008	283,889	—	181,369(5)	70,263	11,891	574,412
	2007	246,750	—	168,284(6)	66,623	9,226	490,883
	2006	236,692	12,338(1)	129,499(7)	—	3,941	382,470
Marc S. Hanover <i>President and Chief Operating Officer</i>	2008	435,000	—	200,403(8)	158,558	12,893	806,854
	2007	306,600	—	—	77,263	10,344	394,207
	2006	293,891	30,660(1)	—	—	495	325,046
Ronald A. Morton, Jr., M.D., F.A.C.S. <i>Vice President, Chief Medical Officer</i>	2008	430,500	28,000(10)	207,595(11)	105,903	29,200	801,198
	2007	294,885(9)	—	111,676(12)	71,094	20,397	498,052
	2006	—	—	—	—	—	—
James T. Dalton, Ph.D. <i>Vice President, Preclinical Research and Development</i>	2008	311,875	—	162,196(13)	77,189	43,088	594,348
	2007	260,000	—	121,640(14)	59,280	8,839	449,759
	2006	241,772	—	81,547(15)	—	24,278	347,597

- (1) On October 31, 2006, the Compensation Committee recommended, and the Board of Directors approved, a special one-time discretionary cash bonus to Dr. Steiner, Mr. Mosteller and Mr. Hanover. The Compensation Committee awarded the bonuses to recognize and reward the efforts of these named executive officers that resulted in the successful licensing of toremifene to Ipsen Developments Limited in Europe.
- (2) Represents the dollar amount of share-based compensation expense recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with Financial Accounting Standards Board Statement 123(R), or FAS 123(R). To determine the dollar amount of share-based compensation expense for each fiscal year, we determine the grant date fair value of each option award in accordance with FAS 123(R) using the Black-Scholes-Merton option-pricing model and expense that amount in our financial statements over the vesting period of the option award. For a description of the assumptions made in determining the FAS 123(R) valuation, please refer to Note 3-Share-Based Compensation to our audited financial statements in our Annual Report on Form 10-K for the year ended December 31, 2008.
- (3) Represents amounts awarded to the named executive officers pursuant to our Executive Bonus Compensation Plan. For more information on our Executive Bonus Compensation Plan, please see “Compensation Discussion and Analysis — What is our analysis of the compensation for our named executive officers in 2008? — Annual Bonus Awards” above as well as “Executive Compensation — Grants of Plan-Based Awards” below.
- (4) For fiscal 2008 and 2007, the amounts indicated consisted of: (a) the incremental cost of life insurance premiums to provide additional term life insurance benefits equal to two times each such named executive’s base salary, (b) supplemental long-term disability insurance premiums, and (c) employer matching contributions to our defined contribution 401(k) Plan. For fiscal 2006, the amounts indicated consisted of the incremental cost of life insurance premiums to provide additional term life insurance benefits to the named executive officers equal to two times each executive’s base salary, and, with respect to Mr. Mosteller and

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Dr. Dalton, employer matching contributions to our defined contribution 401(k) Plan. For fiscal 2008, 2007 and 2006, the amounts indicated also included, with respect to Dr. Morton and Dr. Dalton, the following items of compensation:

<u>Name</u>	<u>Year</u>	<u>Payment of Travel and Temporary Housing Expenses (\$)</u>	<u>Tax Gross-Up Payment (\$)</u>
Dr. Morton	2008	8,601	3,946
	2007	12,355	—
	2006	—	—
Dr. Dalton	2008	21,313	9,778
	2007	—	—
	2006	20,000	—

- (5) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for: (a) 17,000 options granted on August 1, 2003 (\$16,359); (b) 25,500 options granted on September 1, 2003 (\$28,093); (c) 10,000 options granted on July 28, 2004 (\$10,627); (d) 25,000 options granted on July 27, 2005 (\$34,519); (e) 25,000 options granted on January 1, 2007 (\$51,690); and (f) 25,000 options granted on January 1, 2008 (\$40,081).
- (6) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for: (a) 17,000 options granted on April 11, 2002 (\$2,100); (b) 17,000 options granted on August 1, 2003 (\$27,901); (c) 25,500 options granted on September 1, 2003 (\$41,852); (d) 10,000 options granted on July 28, 2004 (\$10,598); (e) 25,000 options granted on July 27, 2005 (\$34,425); and (f) 25,000 options granted on January 1, 2007 (\$51,408).
- (7) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for: (a) 25,500 options granted on August 6, 2001 (\$7,134); (b) 17,000 options granted on April 11, 2002 (\$7,588); (c) 17,000 options granted on August 1, 2003 (\$27,901); (d) 25,500 options granted on September 1, 2003 (\$41,853); (e) 10,000 options granted on July 28, 2004 (\$10,598); and (f) 25,000 options granted on July 27, 2005 (\$34,425).
- (8) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for 125,000 options granted on January 1, 2008 (\$200,403).
- (9) Represents a partial year of base salary from Dr. Morton's date of hire on April 12, 2007 through December 31, 2007.
- (10) On February 13, 2008, the Compensation Committee awarded Dr. Morton a special one-time discretionary bonus to reward Dr. Morton for his efforts in undertaking specific roles and tasks since the beginning of 2008 that proved instrumental in allowing us to achieve our goals for our clinical trial operations.
- (11) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for: (a) 75,000 options granted on May 1, 2007 (\$167,514) and (b) 25,000 options granted on January 1, 2008 (\$40,081).
- (12) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for 75,000 options granted on May 1, 2007 (\$111,676).
- (13) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for: (a) 16,000 options granted on January 20, 2005 (\$23,655); (b) 25,000 options granted on May 19, 2005 (\$27,446); (c) 20,000 options granted on January 1, 2006 (\$19,324); (d) 25,000 options granted on January 1, 2007 (\$51,690); and (e) 25,000 options granted on January 1, 2008 (\$40,081).
- (14) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for: (a) 16,000 options granted on January 20, 2005 (\$23,591); (b) 25,000 options granted on May 19, 2005 (\$27,370); (c) 20,000 options granted on January 1, 2006 (\$19,271); and (d) 25,000 options granted on January 1, 2007 (\$51,408).

- (15) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R) for: (a) 50,000 options granted on January 20, 2005 (\$34,958); (b) 25,000 options granted on May 19, 2005 (\$27,370); and (c) 20,000 options granted on January 1, 2006 (\$19,219).

Grants of Plan-Based Awards

The following table summarizes grants of plan-based awards made to our named executive officers in 2008.

GRANTS OF PLAN-BASED AWARDS TABLE — FISCAL 2008

Name	Award Type	Grant Date	Approval Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards(1) Target (\$)	All Other Option Awards: Number of Securities Underlying Options (#)(2)	Exercise or Base Price of Option Awards (\$/Sh)(3)	Grant Date Fair Value of Option Awards \$(4)
Mitchell S. Steiner	Annual Cash	—	—	250,000	—	—	—
Mark E. Mosteller	Annual Cash	—	—	85,167	—	—	—
	Annual Option	1/1/2008	12/11/2007	—	25,000	14.35	200,623
Marc S. Hanover	Annual Cash	—	—	195,750	—	—	—
	Annual Option	1/1/2008	12/11/2007	—	125,000	14.35	1,003,113
Ronald A. Morton, Jr.	Annual Cash	—	—	129,150	—	—	—
	Annual Option	1/1/2008	12/11/2007	—	25,000	14.35	200,623
James T. Dalton	Annual Cash	—	—	93,563	—	—	—
	Annual Option	1/1/2008	12/11/2007	—	25,000	14.35	200,623

- (1) This column sets forth the target amount of each named executive officer’s annual cash bonus award for the year ended December 31, 2008 under our Executive Bonus Compensation Plan. The actual cash bonus award earned for the year ended December 31, 2008 under our Executive Bonus Compensation Plan for each named executive officer is set forth in the Summary Compensation Table above. As such, the amounts set forth in this column do not represent additional compensation earned by the named executive officers for the year ended December 31, 2008. For more information regarding our Executive Bonus Compensation Plan and the cash bonus awards granted to the named executive officers for the year ended December 31, 2008 thereunder, please see “Compensation Discussion and Analysis — What is our analysis of the compensation for our named executive officers in 2008? — Annual Bonus Awards” above.
- (2) The option vests in three equal annual installments beginning on the third anniversary of the grant date. For more information on the terms of the stock options granted to our named executive officers in fiscal 2008, please see “Executive Compensation — Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table — Option Awards” below.
- (3) Options were granted with an exercise price equal to 100% of the fair market value on the date of grant, which was determined by reference to the closing sales price of our common stock on the trading date immediately prior to the grant date. These options carry an exercise price of \$14.35 per share, the closing price of GTX’s common stock on December 31, 2007, the last trading day immediately prior to the grant date.
- (4) Represents the grant date fair value of each award determined in accordance with FAS 123(R). The grant date fair value is generally the amount that we would expense in our financial statements over the vesting period of the option award.

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 — What are the elements of our executive officer

compensation program and why do we provide each element? — Elements of Executive Compensation — Employment Agreements” and “— Post-Employment Compensation” above, as well as “Executive Compensation — Potential Payments upon Termination or Change of Control” below.

Annual Cash Bonus Awards. Our Executive Bonus Compensation Plan provides for an annual cash bonus awards to reward executive officers for performance in the prior fiscal year. For more information regarding our Executive Bonus Compensation Plan, please see “Compensation Discussion and Analysis — What is our analysis of the compensation for our named executive officers in 2008? — Annual Bonus Awards” above.

Option Awards. Consistent with its practices for awarding stock options described in “Compensation Discussion and Analysis — Timing, grant date and exercise price for stock option awards,” the Compensation Committee approved the grant of stock options to our named executive officers, except Dr. Steiner, in the fall of 2007, all of which grants were effective on January 1, 2008. The exercise price for these stock options is \$14.35 per share, the closing price of GTx’s common stock on December 31, 2007, the last trading day of 2007. The options vest in equal annual installments on January 1, 2011, 2012 and 2013. The options expire on December 31, 2017, unless they are forfeited or expire earlier in accordance with their terms. During the fall of 2008, the Compensation Committee approved the grant of a stock option to purchase 75,000 shares of GTx common stock to Dr. Steiner, a stock option to purchase 50,000 shares of GTx common stock to Mr. Hanover, and stock options to purchase 25,000 shares of GTx common stock to each of the other named executive officers, all of which grants were effective on January 1, 2009. The exercise price for these stock options is \$16.84 per share, the closing price of GTx’s common stock on December 31, 2008, the last trading day of 2008. The options vest in equal annual installments on January 1, 2012, 2013 and 2014. The options expire on December 31, 2018, unless they are forfeited or expire earlier in accordance with their terms. 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 options granted to our named executive officers will expire three months after the named executive officer’s last day of employment with us, subject to extension in certain termination situations are described under “Executive Compensation — Potential Payments Upon Termination or Change of Control — Stock Option Plan Provisions — Extended Post-Termination Exercise Period” below. Events that can accelerate the vesting of GTx’s stock options are described below under “Executive Compensation — Potential Payments Upon Termination or Change of Control — Stock Option Plan Provisions — Stock Option Vesting Acceleration” below.

Other Compensatory Arrangements. For a description of the other elements of our executive compensation program, see “Compensation Discussion and Analysis — What are the elements of our executive compensation program and why do we provide each element?” 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, 2008.

OUTSTANDING EQUITY AWARDS AT 2008 FISCAL-YEAR END TABLE

Name	Option Awards			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Mitchell S. Steiner	—	—	—	—
Mark E. Mosteller	23,000	—	6.78	08/05/11
	17,000	—	6.78	04/10/12
	17,000	—	6.24	07/31/13
	25,500	—	6.24	08/31/13
	6,667	3,333(1)	8.90	07/27/14
	8,334	16,666(2)	10.86	07/26/15
	—	25,000(3)	17.84	12/31/16
	—	25,000(4)	14.35	12/31/17
Marc S. Hanover	—	125,000(5)	14.35	12/31/17
Ronald A. Morton, Jr.	—	75,000(6)	19.51	04/30/17
	—	25,000(7)	14.35	12/31/17
James T. Dalton	22,334	10,666(8)	13.07	01/19/15
	8,334	16,666(9)	9.71	05/18/15
	—	20,000(10)	7.56	12/31/15
	—	25,000(11)	17.84	12/31/16
	—	25,000(12)	14.35	12/31/17

- (1) The remaining shares will vest on July 28, 2009.
- (2) The remaining shares vest as follows: 8,333 shares on July 27, 2009 and 8,333 shares on July 27, 2010.
- (3) The shares vest in three equal annual installments beginning on January 1, 2010, the third anniversary of the grant date.
- (4) The shares vest in three equal annual installments beginning on January 1, 2011, the third anniversary of the grant date.
- (5) The shares vest in three equal annual installments beginning on January 1, 2011, the third anniversary of the grant date.
- (6) The shares vest in three equal annual installments beginning on May 1, 2010, the third anniversary of the grant date.
- (7) The shares vest in three equal annual installments beginning on January 1, 2011, the third anniversary of the grant date.
- (8) The shares remaining vest as follows: 5,333 shares vest on January 20, 2009 and 5,333 shares vest on January 20, 2010.
- (9) The shares remaining vest as follows: 8,333 shares vest on May 19, 2009 and 8,333 shares vest on May 19, 2010.
- (10) The shares vest in three equal annual installments beginning on January 1, 2009, the third anniversary of the grant date.
- (11) The shares vest in three equal annual installments beginning on January 1, 2010, the third anniversary of the grant date.
- (12) The shares vest in three equal annual installments beginning on January 1, 2011, the third anniversary of the grant date.

Option Exercises and Stock Vested During 2008

GTx's named executive officers did not exercise any stock options during the year ended December 31, 2008, nor was any GTx common stock held by GTx's named executive officers subject to vesting during the year ended December 31, 2008.

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 agreements following the termination of a named executive officer's employment and the cash payments that we would be required to provide. We also describe below the circumstances that would trigger the accelerated vesting of stock options held by our named executive officers, as well as those termination events that would result in an extension of the post-termination exercise period with respect to the stock options held by our named executive officers.

Employment Agreements

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

The employment agreements with our named executive officers contain cash post-termination change of control payments equal to one year's base salary. These change of control salary continuation benefits that are structured on a "double-trigger" basis, meaning that before a named executive officer is eligible to receive salary continuation benefits: (1) a change of control must occur and (2) within six months after such change of control, the named executive officer's employment must be terminated without "cause" or the named executive officer resigns for "good reason." GTx's obligation to make the salary continuation payments under the employment agreements is conditioned upon the former named executive officer's compliance with the confidentiality provisions of the employment agreement and, with respect to each of Dr. Steiner, Mr. Hanover, Dr. Dalton and Dr. Morton, compliance with the provisions of the non-competition provisions of their employment agreements for a period of one year following their termination. In addition, GTx's obligation to make the salary continuation 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 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;
- if any person or group acquires beneficial ownership of 50% or more of GTx's voting securities (subject to certain exceptions); or
- 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 20% of GTx's voting stock as of the effective date of the named executive officer's employment agreement.

"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 confidentiality or non-competition obligations, as applicable, under his employment agreement; or
- willful neglect of or failure to perform his duties or his ongoing willful failure or refusal to follow any reasonable, unambiguous duly adopted written direction of Dr. Steiner (or the Board in the case of

Dr. Steiner) that is not inconsistent with the description of such named executive officer's duties, 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 within six months after a change of control (in each case that are not remedied within 30 days following notice from the named executive officer):

- 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;
- 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 one-way commute by more than 20 miles;
- the failure of GTx to obtain an agreement reasonably satisfactory to the named executive officer from any successor entity to assume his employment agreement; 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.

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 have no right to receive any compensation or benefits under his employment agreement on or after the effective date of termination, other than any accrued and unpaid salary and expense reimbursement. Likewise, if we terminate a named executive officer's employment without "cause," or if a named executive officer voluntarily terminates his employment with "good reason," in each case not in connection with a change of control, the named executive officer would have no right to receive any compensation or benefits under his employment agreement on or after the effective date of termination, other than any accrued and unpaid salary and expense reimbursement.

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 Plan Provisions

Stock Option 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 transactions, 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.

2004 Plan. Our 2004 Equity Incentive Plan, or the 2004 Plan, provides that in the event of specified corporate transactions such as a change of control or similar transactions, all outstanding options and stock

appreciation rights under the 2004 Plan will 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 awards, such equity awards held by individuals whose service has not terminated prior to the effective date of the corporate transaction will become fully vested, and, if applicable, exercisable and such equity awards will be terminated if not exercised prior to the effective date of the corporate transaction. Other forms of equity awards that may be granted under the 2004 Plan, such as restricted stock awards, may have their repurchase or forfeiture rights assigned to the surviving or acquiring entity. If such repurchase or forfeiture rights are not assigned, then such equity awards will become fully vested prior to the effective date of the transaction. Following specified change of control transactions, the vesting and exercise of equity awards generally will be accelerated only if the recipient's award agreement so specifies. 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 the option holder'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.

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, except that under our 2004 Plan, a change of control would be deemed to have occurred if "incumbent directors" cease to constitute at least a majority of the members of our Board of Directors. For this purpose, "incumbent directors" means the directors in office on the date the 2004 Plan was adopted and any subsequent directors who were nominated by a majority of the incumbent directors (those directors nominated by a majority of the incumbent directors are themselves considered incumbent directors for these purposes).

The standard form of stock option agreement under the 2004 Plan generally defines "cause" as the named executive officer:

- committing an act that materially injures the business of GTx;
- refusing or failing to follow the reasonable directions of the Board or the appropriate individual to whom the named executive officer reports, after 15 days notice and the opportunity to cure;
- willfully or habitually neglecting the executive officer's 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 the following actions taken without the consent of the named executive officer within 12 months after a change of control:

- the assignment to the named executive officer of any duties or responsibilities which results in a significant reduction in his function as in effect immediately prior to the change of control;
- a material reduction in the named executive officer'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 named executive officer was participating immediately prior to the effective date of the change of control, or the taking of any action that would adversely affect his participation in (or reduce his benefits under) any such benefit plan or program;
- a relocation of the named executive officer's principal office to a location more than fifty (50) miles from the location at which he performed his duties as of the effective date of the change of control; or
- a material breach by GTx of any provision of the named executive officer's stock option agreement under the 2004 Plan.

Extended Post-Termination Exercise Period

As a general matter, the vested portion of options granted to our named executive officers 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 can continue to exercise his vested stock options as the post-termination exercise period. Although the post-termination exercise period generally ends three months after the named executive officer's termination of service, 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 following the named executive officer's termination of service. In addition, under our 2004 Plan and the form of stock option agreement under the 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. With respect to all of our stock option plans and the forms of option agreement under our 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 1999 Plan, 2000 Plan, 2001 Plan and 2002 Plan and the forms of option agreements under those plans, if a named executive officer voluntarily retires his 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. Under our 2004 Plan and the form of stock option agreement under the 2004 Plan, if a named executive officer voluntarily retires his 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), 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.

Calculation of 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. The actual compensation to be paid can be determined only at the time of a named executive officer's termination of employment. In providing the estimated potential payments and benefits, we have made the following general assumptions in all circumstances where applicable:

- a change of control event has occurred and the date of termination is December 31, 2008;
- the closing price of our common stock on that date is \$16.84;
- the annual salary at the time of termination is as follows: Mitchell S. Steiner, \$500,000; Mark E. Mosteller, \$283,889; Marc S. Hanover \$435,000; Ronald A. Morton, Jr., \$430,500; and James T. Dalton, \$311,875;
- the value of stock options that vest is equal to the difference between the closing price of our common stock of \$16.84 on December 31, 2008 and the exercise price times the number of options that vest;
- there is no accrued and unpaid salary; and
- there is no unpaid reimbursement for expenses incurred prior to the date of termination.

	Triggering Event	
	Termination w/o Cause or for Good Reason (or Constructive Termination) in Connection with Change of Control (\$)(1)	Change of Control (Single-Trigger) (\$)(2)
Benefits and Payments Upon Termination		
Mitchell S. Steiner		
Base Salary Continuation	500,000	—
Stock Option Vesting Acceleration(3)	—	—
Total	500,000	—
Mark E. Mosteller		
Base Salary Continuation	283,889	—
Stock Option Vesting Acceleration	62,250	126,127
Total	346,139	126,127
Marc S. Hanover		
Base Salary Continuation	435,000	—
Stock Option Vesting Acceleration	311,250	—
Total	746,250	—
Ronald A. Morton, Jr.		
Base Salary Continuation	430,500	—
Stock Option Vesting Acceleration	62,250	—
Total	492,750	—
James T. Dalton		
Base Salary Continuation	311,875	—
Stock Option Vesting Acceleration	62,250	344,639
Total	374,125	344,639

- (1) The amounts included under this column with respect to stock option vesting acceleration represent the value of the accelerated vesting of stock options granted under the 2004 Plan, and assume that such options have been assumed, continued or substituted for by the surviving or acquiring entity in the change of control transaction, and that in connection with the change of control transaction, the named executive officer experiences an involuntary termination without cause or a constructive termination.
- (2) The amounts included under this column represent the value of the accelerated vesting of stock options 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, which, for purposes of this column, has been assumed to have occurred on December 31, 2008.
- (3) As of December 31, 2008, Dr. Steiner did not hold any options for GTx common stock that would vest upon any termination or change of control event.

DIRECTOR COMPENSATION

Retainer and Fees. During 2008, we paid our non-employee directors retainers in quarterly increments based on an annualized rate of \$20,000 a year, or \$30,000 a year for our Audit Committee Chair. In addition, during 2008, we paid our non-employee directors a daily fee of \$1,500 for regularly scheduled (or special) meetings of the Board and its committees attended each day, and a daily \$750 telephonic meeting fee, payable quarterly in arrears. No directors currently receive consulting fees from GTx. Directors who are also our employees (currently Dr. Steiner and Mr. Hanover) receive no additional compensation for service on the Board. Effective January 1, 2009, the annual retainer paid to non-employee directors was increased from \$20,000 to \$25,000, with the Chairman of the Audit Committee continuing to receive an additional retainer of \$10,000 per year (for a total of \$35,000 per year). The daily meeting attendance fee was also increased from \$1,500 to \$2,000, and directors will continue to receive the daily \$750 attendance fee for telephonic meetings.

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 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 three non-employee directors have elected to defer their Board compensation into stock accounts, although all but two directors deferred their Board compensation under the Directors' Deferred Compensation Plan through December 31, 2008. No directors have deferred their Board compensation into cash accounts. Under the Directors' Deferred Compensation Plan, a director may elect to receive a distribution of amounts credited to such cash or stock accounts on a date selected by the director at the time of the election. As a general matter, if a director does not select a distribution date or if the distribution date selected by the director occurs after the date of such director's separation from service as a director, then the amounts credited to the director's cash account or stock account under the Directors' Deferred Compensation Plan will be distributed on the date of such director's separation from service as a director. All distributions under our Directors' Deferred Compensation Plan will be made in the form of a single lump sum in cash (for amounts credited to cash accounts) or in shares of GTx common stock (for amounts credited to stock accounts), except that any fractional shares of GTx common stock will be distributed in cash valued at the then current fair market value of GTx common stock.

Stock Options. Our Amended and Restated 2004 Non-Employee Directors' Stock Option Plan, or the Directors' Option Plan, provides for the automatic grant of initial and annual nonstatutory stock options to GTx's non-employee directors who do not own more than ten percent of the combined voting power of GTx's then outstanding securities. The exercise price per share for the options granted under the plan is not less than the fair market value of the stock on the date of grant. Pursuant to the Directors' Option Plan, any individual who first becomes a non-employee director automatically is granted an option to purchase shares of common stock. The number of shares subject to each of these initial grants is currently 15,000 shares, provided that the number of shares may be increased or decreased by our Board of Directors in its sole discretion. During 2008, the number of shares subject to each of these initial grants was 10,000 shares. Effective January 1, 2009, the Board of Directors increased the number of shares subject to these initial grants to 15,000 shares. 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. The number of shares subject to each annual grant is currently 10,000 shares, provided that the number of shares may be increased or decreased by our Board of Directors in its sole discretion. During 2008, the number of shares subject to each of these annual grants was 8,000 shares. Effective January 1, 2009, the Board of Directors increased the number of shares subject to these annual grants to 10,000 shares. 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. In the event of specified corporate transactions, as defined in the Directors' Option Plan, all outstanding options under the Directors' Option 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 exercise 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 Directors' Option Plan, then the vesting and exercise of the optionee's options will be accelerated in full immediately prior to (and contingent upon) the effectiveness of the transaction. If an optionee is required to resign his or her position as a non-employee director as a condition of the transaction, the vesting and exercisability of the optionee's options will be accelerated in full immediately prior to the effectiveness of such resignation. In addition, 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 connection with the adoption of this policy, the Board accelerated in full the vesting and exercisability of all outstanding options held by Mr. Clarkson in connection with his retirement from the Board in April 2008.

The table below represents the compensation earned by each non-employee director during 2008.

DIRECTOR COMPENSATION — FISCAL 2008

<u>Name</u>	<u>Fees Earned or Paid in Cash (\$)(1)</u>	<u>Option Awards (\$)(2)</u>	<u>Total (\$)</u>
J. R. Hyde, III	29,750	—	29,750
John H. Pontius	28,250	65,160	93,410
Rosemary Mazanet, M.D., Ph.D.	29,000	65,160	94,160
J. Kenneth Glass	34,750	65,160	99,910
Andrew M. Clarkson(3)	20,250	15,582	35,832
Timothy R. G. Sear	29,750	63,761	93,511
Robert W. Karr, M.D.	26,750	69,295	96,045
Michael G. Carter, M.D.	29,000	66,674	95,674
Kenneth S. Robinson, M.D., M.Div.	13,750	20,362	34,112

- (1) Represents fees earned in 2008. Each director in the table above, other than Dr. Carter and Mr. Glass, elected to defer his or her fees earned during 2008 pursuant to the Directors' Deferred Compensation Plan. The number of shares credited to individual stock accounts for our continuing non-employee directors under the Directors' Deferred Compensation Plan as of December 31, 2008 was as follows: 8,366 shares for Mr. Hyde; 8,282 shares for Mr. Pontius; 8,322 shares for Dr. Mazanet; 6,553 shares for Mr. Glass; 7,935 shares for Mr. Sear; 4,224 shares for Dr. Karr; no shares for Dr. Carter; and 819 shares for Dr. Robinson. In connection with the expiration of Mr. Clarkson's term of service as director, the 10,025 shares then credited to Mr. Clarkson's individual stock account under the Directors' Deferred Compensation Plan have since distributed to Mr. Clarkson in accordance with the terms of the Directors' Deferred Compensation Plan.
- (2) Represents the dollar amount of share-based compensation expense recognized for financial statement reporting purposes with respect to the year ended December 31, 2008 in accordance with FAS 123(R). To determine the dollar amount of share-based compensation expense for each fiscal year, we determine the grant date fair value of each option award in accordance with FAS 123(R) using the Black-Scholes-Merton option-pricing model and expense that amount in our financial statements over the vesting period of the option award. For a description of the assumptions made in determining the FAS 123(R) valuation, please refer to Note 3 — Share-Based Compensation to our audited financial statements in our Annual Report on Form 10-K for the year ended December 31, 2008. In connection with the termination of Mr. Clarkson's service as director, stock options to purchase a total of 10,025 shares were forfeited by Mr. Clarkson. Other than with respect to Mr. Clarkson, no stock options were forfeited by our non-employee directors during fiscal 2008.

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The following table indicates the grant date fair value for each stock option awarded to our non-employee directors during the year ended December 31, 2008, as determined in accordance with FAS 123(R), as well as the total number of shares subject to options outstanding as of December 31, 2008 for each non-employee director:

<u>Name</u>	<u>FAS 123(R) Grant Date Fair Value (\$)</u>	<u>Total Shares Subject to Options Outstanding at 12/31/2008 (#)</u>
John H. Pontius	73,104	36,000
Rosemary Mazanet, M.D., Ph.D.	73,104	36,000
J. Kenneth Glass	73,104	36,000
Andrew M. Clarkson	—	—
Timothy R. G. Sear	73,104	18,666
Robert W. Karr, M.D.	73,104	33,334
Michael G. Carter, M.D.	73,104	25,667
Kenneth S. Robinson, M.D., M.Div.	91,380	10,000

(3) Mr. Clarkson's term of service as director expired on April 30, 2008, the date of our 2008 Annual Meeting of Stockholders.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During the year ended December 31, 2008, the Compensation Committee consisted of Mr. Hyde, as Chairman, Dr. Carter, Mr. Glass and Mr. Sear. None of the current members of the Compensation Committee is or was an officer or employee of GTx. During 2008, 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 the GTx's Board of Directors or Compensation Committee.

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 General Counsel 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 "About GTx" at "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

Licensed SARM Technology. James T. Dalton, Ph.D., GTx's Vice President, Preclinical Research & Development, is a party to an agreement among the University of Tennessee, or UT, the University of Tennessee Research Foundation, or UTRF, and the inventors of many of the patents filed by UT and UTRF for selective androgen receptor modulator, or SARM, technology, which was entered while Dr. Dalton and the other inventors were employed by UT. Under this agreement, all rights in the SARM technology were assigned to UTRF with the commitment that payments received by UTRF from the licensing of the SARM technology would be shared between UT and the inventors, including Dr. Dalton. In 2002, subsequent to Dr. Dalton entering into this agreement, the SARM technology was licensed exclusively to GTx. In 2005, Dr. Dalton became one of GTx's employees. In July 2007, GTx and UTRF entered into a Consolidated, Amended, and Restated License Agreement, or the New SARM Agreement, to consolidate and replace GTx's previously existing SARM license agreements with UTRF and to modify and expand certain rights and obligations of each of the parties. GTx agreed to pay to UTRF a one-time, upfront fee of \$290,000 as consideration for entering into the New SARM Agreement. GTx also agreed to pay an annual license maintenance fee during the term of the New SARM Agreement, which fee is creditable against various royalties GTx agreed to pay to UTRF on sublicense revenues and net sales of products subject to the New SARM Agreement. In November 2007, we entered into a global exclusive license and collaboration agreement with Merck & Co., Inc., or Merck, pursuant to which we granted Merck an exclusive worldwide SARM sublicense in connection with which Merck paid us an upfront licensing fee of \$40,000,000. We are also eligible to receive under the collaboration agreement with Merck, up to \$422,000,000 in future milestone payments associated with the development and regulatory approval of a lead product candidate, as defined in our collaboration with Merck, if multiple indications are developed and receive required regulatory approvals, as well as additional milestone payments for the development and regulatory approval of other product candidates developed under our collaboration with Merck. Merck has also agreed to pay us tiered royalties on net sales of products that may be developed under our collaboration with Merck. In December 2008, GTx and UTRF entered into an amendment to the New SARM Agreement in connection with which GTx agreed to pay to UTRF one-time fee of \$494,000 as consideration for entering into the amendment to the New SARM Agreement. Since joining GTx in 2005, Dr. Dalton received from UT and UTRF a portion of the payments made by GTx to UTRF for the licensing and sublicensing of the SARM technology totaling approximately \$466,664. Dr. Dalton will continue to receive a portion of the payments GTx will make to UTRF under the New SARM Agreement in accordance with the agreement among the UT scientists, including Dr. Dalton, UT and UTRF. Since Dr. Dalton's interest in GTx's agreement with UTRF arose while Dr. Dalton was an employee of UTRF, not GTx, and GTx's initial arrangements with UTRF regarding the licensing of the SARM technology were created in 2002, our related party transactions policy did not require that the Audit Committee review and approve the transaction in advance. The members of the Audit Committee were, however, aware of Dr. Dalton's interest when the GTx Board of Directors approved the entering into of the New SARM Agreement with UTRF in July 2007 as well as when the GTx Board of Directors approved the entering into of the amendment to the New SARM Agreement in December 2008.

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 person 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 long horizontal stroke at the beginning.

Henry P. Doggrell
Vice President, General Counsel and Secretary

Memphis, Tennessee
March 20, 2009

▼ 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 6, 2009

The undersigned hereby appoints **Henry P. Doggrell** and **Mark E. Mosteller**, 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 6, 2009 at 4:00 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 ALL NOMINEES LISTED IN PROPOSAL NO. 1 AND FOR PROPOSAL NO. 2, AS MORE SPECIFICALLY DESCRIBED IN THE 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 6, 2009 at
The Toyota Center, 175 Toyota Plaza, Memphis, Tennessee 38103
The proxy statement and annual report to stockholders are available at www.proxydocs.com/GTXI.**

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