

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

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

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- 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:



3 North Dunlap Street
Memphis, Tennessee 38163
(901) 523-9700

March 14, 2007

Dear Stockholder:

I would like to extend a personal invitation for you to join us at our Annual Meeting of Stockholders on Wednesday, May 2, 2007, at 4:00 p.m. Central Daylight Time at GTx's headquarters located in Memphis, Tennessee.

At this year's meeting, in addition to the election of four directors, you will be asked to ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for 2007.

I urge you to vote, as the Board of Directors has recommended, for each of the director nominees. I also ask that you ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for 2007.

Attached you will find a notice of meeting and proxy statement that contains further information about these items as well as specific details of the meeting.

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

Sincerely,

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

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



3 North Dunlap Street
Memphis, Tennessee 38163
(901) 523-9700

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

You are invited to attend the 2007 GTx, Inc. Annual Meeting of Stockholders:

- WHEN** 4:00 p.m. (Central Daylight Time) on Wednesday, May 2, 2007.
- WHERE** Corporate Headquarters, 3 North Dunlap Street, Memphis, Tennessee 38163
- ITEMS OF BUSINESS**
- To elect four Class III directors to serve until the 2010 Annual Meeting of Stockholders and until their successors have been duly elected and qualified (Proposal 1);
 - To ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2007 (Proposal 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 6, 2007.
- 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.
- 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 nominee for director and **"FOR"** Proposal 2.
- 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,

A handwritten signature in black ink, appearing to read 'Henry P. Doggrell'.

Henry P. Doggrell
Vice President, General Counsel and Secretary

Memphis, Tennessee
March 14, 2007

TABLE OF CONTENTS

	<u>Page</u>
Information About the Meeting	1
Information About Voting	2
Additional Information	4
Proposal No. 1 - Election of Directors	7
Additional Information About the Board of Directors	8
Audit Committee Report	14
Proposal No. 2 - Ratification of Appointment of Independent Registered Public Accounting Firm	16
Security Ownership of Certain Beneficial Owners and Management	17
Compensation Discussion and Analysis	20
Compensation Committee Report	27
Executive Compensation	27
Potential Payments Upon Termination or Change of Control	31
Director Compensation	34
Compensation Committee Interlocks and Insider Participation	35
Certain Relationships and Related Party Transactions	36
Other Matters	36

GTx, Inc.
3 North Dunlap Street
Memphis, Tennessee 38163
(901) 523-9700

**PROXY STATEMENT FOR THE
2007 ANNUAL MEETING OF STOCKHOLDERS**

The enclosed proxy is solicited by the Board of Directors of GTx, Inc. for use at the 2007 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 2007 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 2006 Annual Report to all stockholders entitled to vote at the meeting beginning on or about March 14, 2007.

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 2, 2007.

Where will the Annual Meeting be held?

The Annual Meeting will be held at GTx’s headquarters, located at 3 North Dunlap Street, Memphis, Tennessee 38163.

What items will be voted on at the Annual Meeting?

There are two matters scheduled for a vote:

1. To elect four Class III directors to serve until the 2010 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, 2007.

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 four 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, 2007.

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 anticipates that all but one of its directors will attend the Annual Meeting.

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 6, 2007, are entitled to receive notice of the Annual Meeting and to vote the shares for which they are shareholders 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 6, 2007, GTX had 34,857,079 shares of common stock outstanding.

Stockholders of Record: Shares Registered in Your Name. If on March 6, 2007, 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 meeting or vote by proxy. Whether or not you plan to attend the 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 6, 2007, 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 meeting unless you request and obtain a valid proxy from your broker or other agent.

How do I vote?

You may either vote “FOR” all the nominees to the Board of Directors or you may withhold your vote for all nominees or for any nominee you specify. For each of the other matters to be voted on, 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 meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote in person if you have already voted by proxy.

Table of Contents

- 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 1-800-652-8683 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the enclosed proxy card. Your vote must be received by 1:00 a.m., Central Daylight Time on May 1, 2007 to be counted.
- To vote on the Internet, go to www.investorvote.com to complete an electronic proxy card. You will be asked to provide the company number and control number from the enclosed proxy card. Your vote must be received by 1:00 a.m., Central Daylight Time on May 1, 2007 to be counted.

Beneficial Owner: Shares Registered in the Name of 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 for which you are the shareholder of record as of March 6, 2007.

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 all four 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, 2007.

If any other matter is properly presented at the 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 I return my proxy card?

Yes. You can revoke your proxy at any time before the final vote at the 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 3 North Dunlap Street, Memphis, Tennessee 38163, Attention: Henry P. Doggrell, Corporate Secretary; or
- You may attend the Annual Meeting and notify the election officials at the meeting that you wish to revoke your proxy and vote in person. Simply attending the meeting will not, by itself, revoke your proxy.

[Table of Contents](#)

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 meeting, who will separately count “FOR” and withheld votes, and, with respect to proposals other than the election of the Class III directors, “AGAINST” and “ABSTAIN” votes. Abstentions and broker non-votes have no effect and will not be counted towards the vote total for any proposal.

If your shares are held by your broker as your nominee (that is, in “street name”), you will need to obtain a proxy form from the institution that holds your shares and follow the instructions included on that form regarding how to instruct your broker to vote your shares. 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 matter, then those shares will be treated as broker non-votes. Shares represented by such broker non-votes will, however, be counted in determining whether there is a quorum.

How many votes are needed to approve each proposal?

- For the election of the Class III directors, the four 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, 2007, the proposal must receive more votes in favor of ratification than votes cast against. However, the Audit Committee is not bound by a vote either for or against the proposal. The Audit Committee will consider a vote against the firm by the stockholders in selecting our independent registered public accounting firm in the future.

How many shares must be present to constitute a quorum for the 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 meeting or by proxy. On March 6, 2007, the record date, there were 34,857,079 shares outstanding and entitled to vote. Thus, 17,428,540 shares must be represented by stockholders present at the 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 counted towards the quorum requirement. 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 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 2007.

ADDITIONAL INFORMATION

How and when may I submit a stockholder proposal for GTx’s 2008 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 2008 Annual Meeting of Stockholders, stockholder proposals that are received at our executive offices no later than November 15, 2007 and that comply with all applicable requirements

Table of Contents

of Rule 14a-8 promulgated under the Securities Exchange Act of 1934. Proposals must be sent to our Corporate Secretary at GTx, Inc., 3 North Dunlap Street, Memphis, Tennessee 38163.

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 2008 Annual Meeting of Stockholders, you must notify our Corporate Secretary, in writing, not later than the close of business on November 15, 2007, nor earlier than the close of business on October 16, 2007. 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 2008 Annual Meeting of Stockholders between April 2, 2008 and June 1, 2008. The Chairman of the 2008 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 2008 Annual Meeting of Stockholders will confer discretionary voting authority with respect to any matter presented by a stockholder at that meeting for which GTx has not been provided with timely notice.

If a stockholder is recommending a candidate to serve on the Board of Directors, the recommendation must include the information specified in GTx's bylaws, 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 Securities and Exchange Commission, including the nominee's age, business experience for the past five years and any other directorships held by the nominee.

How can I obtain GTx's Annual Report on Form 10-K?

A stockholders' letter and a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2006, which together constitutes our 2006 Annual Report to Stockholders, is being mailed along with this proxy statement. Our 2006 Annual Report is not incorporated into this proxy statement and shall not be considered proxy solicitation material.

We will also mail to you without charge, upon written request, a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2006, as well as a copy of any exhibit specifically requested. Requests should be sent to: Corporate Secretary, GTx, Inc., 3 North Dunlap Street, Memphis, Tennessee 38163. 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).

Who is paying for this proxy solicitation?

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

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

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

[Table of Contents](#)

commonly referred to as “householding,” potentially provides extra convenience for stockholders and cost savings for companies.

GTx and some brokers may 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 or us that they or we 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, or if you are receiving multiple copies of the proxy statement and annual report and wish to receive only one, please notify your broker if your shares are held in a brokerage account or us if you are a stockholder of record. You can notify us by sending a written request to GTx, Inc., c/o Henry P. Doggrell, Corporate Secretary, 3 North Dunlap Street, Memphis, Tennessee 38163, or by calling (901) 523-9700. 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, these proxy materials or your ownership of our common stock, please contact McDavid Stilwell, Director, Corporate Communications, 3 North Dunlap Street, Memphis, Tennessee 38163, 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, and there are no vacancies. There are four directors in Class III, the class whose term of office expires in 2007 and who are standing for election. Michael G. Carter, M.D., Ch.B., F.R.C.P., J.R. Hyde, III, Timothy R. G. Sear and Mitchell S. Steiner, M.D., F.A.C.S., each of whom is a current director, was recommended for election to our Board of Directors by our Nominating and Corporate Governance Committee and was recommended for re-election by the Board of Directors. Dr. Carter, who joined the Board in May 2006, was recommended to the Nominating and Corporate Governance Committee as an additional Board member by our Chief Executive Officer, Dr. Steiner, and our Chief Operating Officer, Marc Hanover, and approved by the Board on the recommendation of the Nominating and Corporate Governance Committee. If elected at the Annual Meeting, Dr. Carter, Mr. Hyde, Mr. Sear and Dr. Steiner will serve until the 2010 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 Dr. Carter, Mr. Hyde, Mr. Sear and Dr. Steiner. 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. Dr. Carter, Mr. Hyde, Mr. Sear and Dr. Steiner 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 III Directors Nominees for Election for a Three-year Term Expiring at the 2010 Annual Meeting

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

Dr. Carter, age 69, 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 served as the non-executive chairman of Metris Therapeutics, Ltd., a biotechnology firm specializing in women's healthcare since 1999. He is a member of the Advisory Board of Paul Capital Royalty Fund and is a venture partner with SV Life Sciences Advisers, LLP. 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 64, 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. 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), and in March 2005, Mr. Hyde was appointed as the non-executive Chairman of the Board of Directors of AutoZone, Inc.

Timothy R. G. Sear

Mr. Sear, age 69, 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 UK 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).

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

Dr. Steiner, age 46, 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.

The Board of Directors recommends a vote in favor of each of the nominees for Class III Director.

**ADDITIONAL INFORMATION
ABOUT THE BOARD OF DIRECTORS**

Continuing Directors

In addition to the four Class III director nominees, GTx has six other directors who will continue in office after the Annual Meeting with terms expiring in 2008 and 2009. The following directors compose the remainder of the Board with terms expiring as shown.

Class I Directors Continuing in Office Until the 2008 Annual Meeting

Andrew M. Clarkson

Mr. Clarkson, age 69, has served as a director since March 2004 and currently serves as Chairman of the Audit Committee. From 1996 to 2002, Mr. Clarkson was a part-time employee and strategic consultant with AutoZone, Inc. (NYSE: AZO) and from 1995 to 2001, he served as a director and Chairman of the Finance Committee of AutoZone, Inc. Mr. Clarkson was previously Chief Financial Officer and Director of Malone and Hyde, Inc. Prior to that time, Mr. Clarkson held senior financial positions at General Foods Corporation and as a Vice President and Treasurer of F. W. Woolworth. Mr. Clarkson graduated from Oxford University, attended McGill University and earned his MBA from The Harvard Business School. He served on the Board of Directors of Amphenol Corporation (NYSE: APH) from 1999 to December 2004.

Robert W. Karr, M.D.

Dr. Karr, age 58, has served as a director since June 2005 and currently serves on the Nominating and Corporate Governance Committee. Dr. Karr has served as President of Idera Pharmaceuticals, Inc. since December 2005, and he currently serves on its Board of Directors (AMEX: IDP). 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 2003 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

[Table of Contents](#)

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 51, has served as a director since October 2001 and currently serves on the Nominating and Corporate Governance Committee. Dr. Mazanet has served as the Chief Executive Officer of Breakthrough Therapeutics, LLC, a therapeutic development company since February 2004. She also served as acting Chief Executive Officer of Access Pharmaceuticals (AMEX: AKC) from May 2005 until January 2007 and remains a director. 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.

Class II Director Continuing in Office Until the 2009 Annual Meeting

J. Kenneth Glass

Mr. Glass, age 60, has served as a director since March 2004 and currently serves on the Audit Committee and the Compensation Committee. Mr. Glass currently serves as a director of First Horizon National Corporation, or First Horizon (NYSE: FHN) and First Tennessee Bank National Association, or First Tennessee Bank. Mr. Glass retired as Chairman of the Board, President and CEO of 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 recently announced his retirement from First Horizon and First Tennessee Bank effective in April 2007. Mr. Glass received his B.A. in Accounting from Harding University and graduated from Harvard Business School's Advanced Management Program. Mr. Glass is also a director of FedEx Corporation (NYSE: FDX).

Marc S. Hanover

Mr. Hanover, age 44, 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 51, 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, 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.

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, the 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

Table of Contents

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 and a Nominee), Dr. Carter (Nominee), Mr. Clarkson, Mr. Glass, Dr. Mazanet, Mr. Pontius, Mr. Sear (Nominee) and Dr. Karr. 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). Dr. Steiner, our Chief Executive Officer, and Mr. Hanover, our President and Chief Operating Officer, are not "independent" within the meaning of the Nasdaq listing standards.

In determining that each of the non-management directors is independent, the Board considered the following relationship which it determined was immaterial to the director's independence:

Mr. Glass, a member of our Board, was Chairman, President and Chief Executive Officer of First Horizon, the parent of First Tennessee Bank until January 29, 2007. GTx maintains investments in certificates of deposit at First Tennessee Bank and also has its primary operating checking account and a business credit card account with First Tennessee Bank. These transactions were entered into in the ordinary course of business on substantially the same terms as those prevailing at the time for comparable transactions between unrelated parties. Our Board of Directors has determined that the presence of the certificates of deposit, checking account and business credit card account are incident to First Tennessee Bank's ordinary business and do not affect Mr. Glass' independence. Because of the arm's-length nature of the transaction, the Board of Directors concluded that these relationships are not material and do not otherwise impair, or appear to impair, Mr. Glass' independent judgment, and therefore do not prevent him from being "independent" within the meaning of the Nasdaq listing standards.

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 each member 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 but one of our directors attended the 2006 Annual Meeting of Stockholders. For 2006, the average aggregate Board and committee meeting attendance for all current directors was approximately 96%, with each director attending at least 75% of the aggregate of (a) all meetings of the Board and (b) any committees on which he or she served. In 2006, the Board of Directors held four 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.

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.gtinc.com) under "About GTx" at "Corporate Governance." The current membership of and information about each of our Board committees are shown below.

Committee/Current Members

Audit Committee

Current Members

Mr. Clarkson (Chairman)

Mr. Glass

Mr. Sear

Number of Meetings held in

2006: Five

Compensation Committee

Current Members:

Mr. Hyde (Chairman)

Dr. Carter

Mr. Glass

Mr. Sear

Number of Meetings held in

2006: Four

Nominating and Corporate Governance Committee

Current Members:

Mr. Pontius (Chairman)

Dr. Karr

Dr. Mazanet

Number of Meetings held in

2006: Four

Committee Functions

- 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.
-
- 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.
-
- 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

Table of Contents

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 shall be 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 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. Mr. Glass discussed his plans to retire from First Horizon and First Tennessee Bank effective April 2007 with the Chairman of the Board of Directors and the Chair of the Nominating and Corporate Governance Committee.

Compensation Committee Matters

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 deferred compensation plans and the management 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. The Compensation Committee has the authority to engage outside advisors to assist the Compensation Committee in the performance of its duties, however, the Compensation Committee may not delegate its authority to others. The Compensation Committee's primary processes for establishing and overseeing executive compensation, including the role of executive officers in determining or recommending executive compensation and the role of GTx's compensation consultant, can be found under the caption "Compensation Discussion and Analysis" below.

The Board of Directors sets non-management directors' compensation at the recommendation of the Compensation Committee. On an annual basis, GTx's management provides the Compensation Committee with information relating to director compensation paid by comparable companies. The Compensation Committee uses this information in making its recommendations to the Board of Directors. Since GTx's initial public offering, GTx has paid each member of the Board of Directors \$20,000 per annum, except the Chairman of the Audit Committee, who received \$25,000 per annum. In 2006, the Board of Directors approved an increase in compensation for the

Table of Contents

Chairman of the Audit Committee from \$25,000 per year to \$30,000 per year. In 2006, GTx amended its 2004 Non-Employee Directors' Stock Option Plan. The material provisions of this plan are described below under the caption "Director Compensation – Stock Option." 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.

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, 3 North Dunlap Street, Memphis, Tennessee 38163. If you would like to recommend a director candidate, you must follow the procedures outlined above under the caption "Additional Information – How and when may I submit a stockholder proposal for GTx's 2008 Annual Meeting?"

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 were recently reviewed by our Nominating and Corporate Governance Committee and their recommended changes, clarifications and additions were accepted and approved by the Board. These documents are available on GTx's website (www.gtxinc.com) under "About GTx" at "Corporate Governance." GTx will provide a copy of these documents to any person, without charge, upon request, by writing to: GTx, Inc., Director, Corporate Communications, 3 North Dunlap Street, Memphis, Tennessee 38163. 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, 3 North Dunlap Street, Memphis, Tennessee 38163. 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 shall 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, 3 North Dunlap Street, Memphis, Tennessee 38163. 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, 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 "Corporate Governance." The Audit Committee's charter, recently revised by the Audit Committee and approved by the Board in October 31, 2006, specifies that the purpose of the Audit Committee is to assist the Board in its oversight of:

- the engagement and performance of the independent auditors;
- 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 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; and
- oversees management's implementation and maintenance of effective systems of internal and disclosure controls, including review of GTX's policies relating to legal and regulatory compliance, ethics and conflicts of interests 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, internal control over financial reporting. The 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 management's assessment of the effectiveness of 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 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 by Statement on Auditing Standards No. 61, as amended (Communication with Audit Committee). The Audit Committee also received written disclosures from the independent registered public accounting firm required by Independence Standards Board Standard No. 1 (Independence Discussion with Audit Committees), and the Audit Committee discussed with the independent registered public accounting firm that firm's independence.

Table of Contents

The Audit Committee has received both management's and the independent registered public accountant's reports on internal control over financial reporting. The Audit Committee has discussed the results of their audits including those items identified by management and the independent registered public accountant's which would have been classified as significant deficiencies, and discussed the remediation plans for those items which had not already been remediated. Management reported to the Audit Committee that no material weaknesses were identified by management during its assessment.

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, 2006, filed with the Securities and Exchange Commission.

THE AUDIT COMMITTEE

Andrew M. Clarkson, Chair

J. Kenneth Glass

Timothy R. G. Sear

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- (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, 2007, and the Board of Directors has further directed that management should 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. 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.

For approval, the ratification of the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2007 must receive more votes in favor of ratification than votes cast against.

On behalf of the Audit Committee, the Board of Directors recommends a vote in favor of 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, 2005 and 2006.

<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>
2005	\$498,346	\$6,764	\$ 5,700	—	\$510,810
2006	\$447,092	\$ 0	\$28,541	—	\$475,633

- (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." During 2005 these services included SOX 404 consulting services and accounting research services.
- (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.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information as of January 31, 2007 (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 34,822,362 shares of common stock outstanding on January 31, 2007. Except as otherwise indicated below, the address of each officer, director and five percent stockholder listed below is c/o GTx, Inc., 3 North Dunlap Street, Memphis, Tennessee 38163.

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 January 31, 2007. These shares are deemed to be outstanding and beneficially owned by the person holding those options 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.

Name and Address of Beneficial Owner	Beneficial Ownership	
	Number of Shares	Percent of Total
5% Stockholders:		
Larry N. Feinberg 200 Greenwich Avenue Greenwich, CT 06830	2,413,700(1)	6.9%
Oracle Investment Management, Inc. 200 Greenwich Avenue Greenwich, CT 06830	1,790,797(1)	5.1%
Federated Investors, Inc. 1001 Liberty Avenue Pittsburgh, PA 15222-3779	2,200,300(2)	6.3%
FMR Corp. 82 Devonshire Street Boston, MA 02109	3,604,655(3)	10.4%
Visium Asset Management, LLC 950 Third Avenue, 29 th Floor New York, NY 10022	2,375,408(4)	6.8%
Directors and Executive Officers:		
J. R. Hyde, III	10,944,984(5)	31.4%
Mitchell S. Steiner, M.D., F.A.C.S.	5,062,147(6)	14.5%
Marc S. Hanover	1,811,638(7)	5.2%
Henry P. Doggrell	268,264(8)	*
Mark E. Mosteller	66,065(9)	*
K. Gary Barnette, Ph.D.	34,001(10)	*
James T. Dalton, Ph.D.	34,000(11)	*
Gregory A. Deener	26,500(12)	*
Michael G. Carter, M.D., Ch.B., F.R.C.P.	-0-	*
Andrew M. Clarkson	150,667(13)	*

Table of Contents

Name and Address of Beneficial Owner	Beneficial Ownership	
	Number of Shares	Percent of Total
J. Kenneth Glass	22,667(14)	*
Robert W. Karr, M.D.	3,334(15)	*
Rosemary Mazanet, M.D., Ph.D.	25,127(16)	*
John H. Pontius	3,823,630(17)	11.0%
Timothy R. G. Sear	96,667(18)	*
All Directors and Executive Officers as a group	18,036,536(19)	51.3%

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

- (1) The indicated ownership is based solely on information provided by the beneficial owner in writing on March 2, 2007, reporting beneficial ownership as of December 31, 2006. Mr. Feinberg has shared beneficial ownership with respect to 2,413,700 shares. Oracle Investment Management, Inc. (the "Investment Manager") has shared beneficial ownership with respect to 1,790,797 shares. Mr. Feinberg is sole shareholder and president of the Investment Manager and the shares of common stock beneficially owned by the Investment Manager are also beneficially owned by Mr. Feinberg. Consequently, Mr. Feinberg's share ownership includes the shares beneficially owned by the Investment Manager. Mr. Feinberg is also the senior managing member of Oracle Associates, LLC ("Oracle Associates"). Each of Oracle Associates and the Investment Manager may exercise investment discretion over holdings of other funds and/or accounts (collectively, the "Oracle Funds"). The beneficial ownership reported by the Investment Manager includes shares held directly by it and also by certain of the Oracle Funds. Mr. Feinberg may be deemed to indirectly beneficially own shares of common stock, by virtue of the foregoing relationships, which are directly owned by the Investment Manager and various of the Oracle Funds.
- (2) The indicated ownership is based solely on an amendment to Schedule 13G filed with the SEC by the beneficial owner on February 13, 2007, reporting beneficial ownership as of December 31, 2006. Federated Investors, Inc. ("Federated") is the parent holding company of Federated Equity Management Company of Pennsylvania and Federated Global Investment Management Corp. (the "Investment Advisers"), which act as investment advisers to registered investment companies and separate accounts that own shares of GTX's common stock. The Investment Advisers are wholly owned subsidiaries of FII Holdings, Inc., which is wholly owned subsidiary of Federated. All of Federated's outstanding voting stock is held in the Voting Shares Irrevocable Trust (the "Trust") for which John F. Donahue, Rhodora J. Donahue and J. Christopher Donahue act as trustees (collectively, the "Trustees") and may be deemed to be beneficial owners of the shares and, with respect to the Trustees, have shared voting and investment powers over the shares held by the Trust. Federated, the Trust, and each of the Trustees disclaim beneficial ownership of the shares.
- (3) The indicated ownership is based solely on a Schedule 13G filed with the SEC by the beneficial owners on January 10, 2007, reporting beneficial ownership as of December 31, 2006. According to the Schedule 13G, Fidelity Management & Research Company, or "Fidelity", a wholly-owned subsidiary of FMR Corp., was the beneficial owner of 3,604,655 shares of GTX's common stock in its capacity as investment advisor to various registered investment companies, referred to as the funds. Edward C. Johnson 3d and FMR Corp., through its control of Fidelity, and the funds each has sole power to dispose of the 3,604,655 shares beneficially owned by the funds.
- (4) The indicated ownership is based solely on an amendment to Schedule 13G filed with the SEC by the beneficial owner on February 14, 2007, reporting beneficial ownership as of January 31, 2007. According to the Schedule 13G, Visium Asset Management, LLC, or VAM, was the beneficial owner of 2,375,408 shares of GTX's common stock in its capacity as investment advisor to various registered investment companies. Jacob Gottlieb, by virtue of his position as the principal of VAM and the sole managing member of VCM, may be deemed to beneficially own these shares.
- (5) Includes 91,628 shares, 677,000 shares, 649 shares and 341 shares held by Pittco Associates, L.P., Pittco Investments, L.P., MB Venture Partners, LLC and Memphis Biomed Ventures I, L.P., respectively, entities controlled by Mr. Hyde, 873,765 shares held by trusts with respect to which Mr. Hyde may be deemed to have beneficial ownership, 3,039,856 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. Does not include 5,344 shares issuable pursuant to GTX's Directors' Deferred Compensation Plan.
- (6) Includes 4,475,263 shares held by LD, Jr., LLC, an entity owned by Dr. Steiner and his wife jointly, 533,884 shares held by trusts with respect to which Dr. Steiner may be deemed to have beneficial ownership, and 26,500 shares held by Dr. Steiner's wife, of which Dr. Steiner disclaims beneficial ownership. Dr. Steiner has 53,000 shares pledged to SunTrust Bank.
- (7) Includes 819,902 shares held by Equity Partners XII, LLC, an entity controlled by Mr. Hanover and 657,898 shares held by trusts of which Mr. Hanover is the trustee.
- (8) Includes 4,354 shares held by trusts with respect to which Mr. Doggrell may be deemed to have beneficial ownership, 114,350 shares held by a trust of which Mr. Doggrell is the co-trustee, 126,750 shares of common stock issuable upon the exercise of options held by Mr. Doggrell, 1,000 shares of common stock held by Mr. Doggrell through an individual retirement account, 5,141 shares held by Mr. Doggrell's wife, and 2,500 shares held in a joint account with Mr. Doggrell's adult child, both of which Mr. Doggrell disclaims beneficial ownership.
- (9) Includes 48,501 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) Includes 34,001 shares of common stock issuable upon the exercise of options held by Dr. Barnette.
- (11) Includes 34,000 shares of common stock issuable upon the exercise of options held by Dr. Dalton.
- (12) Includes 25,000 shares of common stock issuable upon the exercise of options held by Mr. Deener and 500 shares of common stock held by Mr. Deener through an individual retirement account.
- (13) Includes 10,667 shares of common stock issuable upon the exercise of options held by Mr. Clarkson. Does not include 7,111 shares issuable pursuant to GTX's Directors' Deferred Compensation Plan.
- (14) Includes 10,667 shares of common stock issuable upon the exercise of options held by Mr. Glass. Does not include 5,344 shares issuable pursuant to GTX's Directors' Deferred Compensation Plan.
- (15) Includes 3,334 shares of common stock issuable upon the exercise of options held by Dr. Karr. Does not include 1,385 shares issuable pursuant to GTX's Directors' Deferred Compensation Plan.
- (16) Includes 10,667 shares of common stock issuable upon the exercise of options held by Dr. Mazanet. Does not include 5,344 shares issuable pursuant to GTX's Directors' Deferred Compensation Plan.
- (17) Includes 10,667 shares of common stock issuable upon the exercise of options held by Mr. Pontius, 3,688,921 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. Does not include 5,344 shares issuable pursuant to GTX's Directors' Deferred Compensation Plan.
- (18) Includes 6,667 shares of common stock issuable upon the exercise of options held by Mr. Sear. Does not include 4,866 shares issuable pursuant to GTX's

Table of Contents

- (19) 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 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, 2006 through December 31, 2006, we are not aware of any required Section 16(a) reports that were not filed on a timely basis, with the exception that Mr. Clarkson, Mr. Glass, Mr. Hyde, Dr. Karr, Dr. Mazanet, Mr. Pontius and Mr. Sear each filed a late report on Form 4 with respect to transactions made pursuant to GTX's Director's Deferred Compensation Plan, but these transactions were reported on Form 4s filed on May 1, 2006. In addition, Mr. Hyde inadvertently failed to include a line item showing indirect holdings of GTX's common stock by an entity controlled by Mr. Hyde on his Form 4 filed on December 21, 2006, which was amended on January 5, 2007 to correct the omission.

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 and Corporate Governance

General Compensation Committee Matters

The Compensation Committee of our Board of Directors is composed of Mr. Hyde (Chairman), Mr. Glass, Mr. Sear and Dr. Carter. Our Board of Directors has affirmatively determined, in consultation with outside counsel, that each member of the Compensation Committee is an independent director. Each member of our Compensation Committee has served, or currently serves, as either a Chief Executive Officer or a senior executive officer of a publicly-traded company and possesses first hand knowledge of various executive compensation policies, procedures and programs. Pursuant to its charter, our Compensation Committee:

- 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 Compensation Committee may be a member of management or eligible for compensation other than as a director)
- Reviews compensation for members of GTx's Board of Directors and recommends to the Board of Directors any changes in director compensation

A copy of the Compensation Committee's charter can be found on our corporate website at www.gtxinc.com in the "About GTx — Corporate Governance" section. Our Compensation Committee reviews its charter on an annual basis and, if necessary, recommends changes to the Board of Directors for its approval. 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, including budget, established by the Compensation Committee. GTx is financially responsible for the fees of any advisor or consultant engaged by the Compensation Committee.

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 based upon a review of each of their individual performances by the Compensation Committee. The Compensation Committee also compares the salaries of each GTx executive officer with a select group of other pharmaceutical companies to assess how their total compensation package compares to industry averages.

Our Chief Executive Officer and Chief Operating Officer have the authority and responsibility to establish and approve compensation for all GTx employees, other than GTx executive officers, which we consider to be employees at the Vice-President level or above. Our Compensation Committee retains the authority for establishing all matters with respect to the compensation of our executive officers. Our Chief Executive Officer provides to the Compensation Committee an annual performance review of each executive officer which is considered by the Compensation Committee in its determination of compensation for such individuals. Our Chief Executive Officer and Chief Operating Officer also recommend to the Compensation Committee options to be granted to new hires and existing employees, subject to specific criteria previously established by the Compensation Committee. It is within the prerogative of the Compensation Committee to approve, modify or disapprove any recommendations for grants of options to GTx employees.

Compensation Consultant

In 2006, the Compensation Committee retained one compensation consultant, Mercer Human Resource Consulting, or Mercer. The Compensation Committee had the sole power and authority to establish the nature and scope of Mercer's engagement, set the fee to be paid to Mercer and terminate Mercer's engagement. The Compensation Committee directed Mercer to review GTx's executive compensation program and to recommend changes as deemed appropriate to ensure that GTx's program provides reasonable and competitive pay opportunities that are aligned with key business objectives and best practices. The 2006 review was an update of the review conducted by Mercer and recommendations provided in May 2005. While Mercer conducted additional consultation services to GTx in 2006 by providing industry acceptable salary ranges for various employee grades and job

[Table of Contents](#)

descriptions within GTx, the Compensation Committee determined that these services did not negatively impact the independence of the executive compensation consulting services Mercer was to perform for the Compensation Committee. The Compensation Committee determined that Mercer was independent and fully capable of providing relevant and reliable information concerning executive compensation to the Compensation Committee.

Roles of Executives in Establishing Compensation

At the direction of the Compensation Committee, our Chief Financial Officer and our Vice President and General Counsel discussed with Mercer the duties of each executive officer of GTx and provided Mercer with full and complete access to 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. Our Chief Executive Officer and our Chief Operating Officer met with the Chairman of the Compensation Committee, Mr. Hyde, to review their performance and the performance of the other executive officers during the year. During these meetings, our Chief Executive Officer and our Chief Operating Officer discussed with Mr. Hyde recommendations regarding the salaries to be paid to the other executive officers of GTx for fiscal 2007 as well as proposed stock option grants.

After receipt of the recommendations of Dr. Steiner and Mr. Hanover and Mercer's evaluation, the Compensation Committee met in executive session with no members of management present. During this meeting, the Compensation Committee reviewed Mercer's evaluation of executive compensation and Dr. Steiner's and Mr. Hanover's recommendations and determined the base salaries for each executive officer of GTx for 2007, established an executive incentive bonus compensation plan for 2007 and subsequent years, and determined the amount of stock options to be awarded to certain executive officers and other GTx employees.

Compensation Committee Activity

The Compensation Committee held four meetings during 2006. During its four meetings in 2006, the Compensation Committee, among other matters:

- approved amendments to GTx's 401(k) plan to benefit all GTx employees;
- approved a plan to increase life insurance coverage for its executive officers to an amount equal to two times their respective base salaries;
- approved the purchase of supplemental long term disability insurance for the executive officers to increase their long term disability insurance to approximately 75% of their base salary compensation, or 71% of base salary compensation in the case of Dr. Steiner;
- after significant discussion, adopted a performance-based annual bonus compensation plan for executive officers, effective January 1, 2007, for GTx to remain competitive in attracting; motivating and retaining executive officers;
- reviewed, considered and approved all stock options granted during 2006;
- engaged Mercer to review GTx's executive compensation policies and programs and deliver a report benchmarking GTx's executive compensation against a peer group selected by Mercer and approved by the Compensation Committee;
- recommended to the Board that the amount of options automatically added to GTx's 2004 Equity Incentive Plan pursuant to the evergreen provisions of the plan be limited to 2% of the amount of GTx's outstanding shares of stock at the year's end;
- approved special bonuses for four GTx executive officers for 2006; and
- established the base salaries for GTx's executive officers for 2007.

Objectives of Compensation Program

Compensation Philosophy

The objective of our executive compensation program is to align the interests of management with the interests of stockholders through a system that relates compensation to the attainment of business objectives and appropriately rewards individual performance. The Compensation Committee attempts to provide appropriate levels of risk and reward, assessed on a relative basis at all levels within GTx and in proportion to individual contribution and performance. Key elements of the Compensation Committee's executive compensation philosophy are:

- *Competitive and Fair Compensation.* The Compensation Committee is committed to providing executive compensation that enables GTx to attract, motivate and retain highly qualified and industrious executive officers. The Compensation Committee's policy is to provide total compensation that is competitive for comparable work and comparable corporate performance. To this end, the Compensation Committee compares GTx's compensation packages with those of comparable companies with whom GTx competes for talent and sets our compensation parameters based on this review. The Compensation Committee also strives to achieve equitable balance among the compensation of individual executive officers and the compensation of other employees throughout GTx.
- *Sustained Performance.* Consistent with the long-term focus inherent within GTx's research and development-based pharmaceutical business, it is our policy to make a significant portion of executive officer compensation dependent on GTx's long-term performance and on enhancing stockholder value. Executive officers are granted stock options based upon corporate performance and individual performance, although to date neither our Chief Executive Officer nor our Chief Operating Officer has received option grants due to their significant holdings of GTx stock.

The Compensation Committee evaluates corporate performance by reviewing the extent to which strategic, scientific and business goals are met, which includes factors such as meeting our stated financial and operating objectives, timely achievement of clinical and pre-clinical results, establishment of strategic development alliances with third parties, timely development of new processes and product candidates and performance relative to competitors.

Individual performance criteria consist of both objective and subjective criteria and may vary for each executive officer based on his business group or area of responsibility. Objective criteria may include achievement of the operating budget for GTx as a whole or of a business group of GTx, 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 establishment of strategic development alliances with third parties, and meeting pre-clinical or clinical milestone objectives. Subjective performance criteria may include an executive officer's ability to motivate others, develop the skills necessary to grow as GTx matures, recognize and pursue new business opportunities and initiate programs to enhance GTx's growth and success. The Compensation Committee also considers GTx's overall long-term and short-term performance when establishing compensation parameters.

Benchmarking

As part of Mercer's 2006 engagement, it provided an independent analysis of GTx's executive compensation program and practices. Based on industry peer group data available to Mercer, including data from the most recent proxy filings by representative companies, Mercer selected a peer group of twenty-three biopharmaceutical companies as a representative industry group most similar to GTx based on their size (e.g., number of employees and/or recent equity market capitalization) and stage of development (most have one or more product candidates in Phase II or Phase III clinical trials). The following companies comprised the peer group: Altus Pharmaceuticals; Antigenics; Ariad Pharmaceuticals; Biocryst Pharmaceuticals; Cell Genesys; Coley Pharmaceutical Group; Combinatorx; Cytokinetics; Dendreon; Dov Pharmaceutical; Hollis-Eden Pharmaceuticals; Icagen; Idenix Pharmaceuticals; Inhibitix; Keryx Biopharmaceuticals; Myogen; Neopharm; Neurogen; Nuvelo; Onyx Pharmaceuticals; Progenics Pharmaceutical; Renovis; and Rigel Pharmaceuticals. Most peer group companies

[Table of Contents](#)

(16 of 23) were included in the peer group from Mercer's 2005 review of GTX. Approximately one-third (8 of 21) of the peer group companies became public companies during the three-year period prior to the survey.

Mercer reviewed base salaries, bonus compensation and equity incentives provided by each company within the peer group and then ranked the compensation provided to GTX executive officers. The results of Mercer's review are summarized below:

- The current base salaries are below the peer group 50th percentile (median) levels for all seven executive officers but fall within a competitive range of the peer group median.
- The total cash compensation, consisting of salary plus cash bonuses, is well below the peer group 25th percentile for all seven executive officers, reflecting the historic lack of annual cash incentive award opportunities for GTX executive officers.
- Total direct compensation (total cash compensation plus annualized grant date value of long-term incentives) is below the peer group 25th percentile for GTX's executive officers and is approximately 91% of the peer group 25th percentile, when you exclude the Chief Executive Officer and Chief Operating Officer from the comparison due to the Compensation Committee's determination that as co-founders of GTX, no additional option grants are necessary to align their interests with those of the stockholders.

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 incentive plan for executive officers and other key employees to strengthen the link between pay and performance and to reward the attainment of annual financial and/or operational goals and key milestones 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.

Historically, the Compensation Committee determined that it would not award annual incentive bonuses to executive officers until GTX's product candidates were closer to commercialization. As described below, because GTX entered into a significant corporate alliance in 2006, the Compensation Committee elected to pay special, one-time bonuses to four of GTX's executive officers. In addition, based on Mercer's recommendations and the Compensation Committee's desire to offer competitive and fair compensation, the Compensation Committee adopted an Executive Bonus Compensation Plan, which is described in more detail below.

Elements of Compensation

Elements of In-Service Compensation

The Compensation Committee's policies with respect to executive officers are to provide compensation sufficient to attract, motivate and retain executives of outstanding ability and potential and to establish an appropriate relationship between executive compensation and the creation of long-term stockholder value. The primary components of executive compensation are base salary, incentive bonus compensation and equity-based, long-term incentive compensation.

Base Salary. In determining base salaries, the Compensation Committee considers individual and corporate performance, levels of responsibility, prior experience, breadth of knowledge and competitive pay practices in the pharmaceutical and biotechnology industries. The Compensation Committee seeks to compare the base salaries paid by companies in GTX's peer group, as described under the heading "Objectives of Compensation Program — Benchmarking" above. Within this comparison group, the Compensation Committee makes comparisons to executive officers at a comparable level of experience, who have a comparable level of responsibility and expected level of contribution to our performance. In setting base salaries, the Compensation Committee also takes into account the level of competition among companies in GTX's industry to attract and retain talented personnel.

Annual Bonus/Short-Term Incentive. On October 31, 2006, the Compensation Committee recommended, and the Board of Directors approved, a special one-time cash bonus to four of GTX's executive officers. The Compensation Committee awarded the bonuses to recognize and reward the long hours and efforts of the executive

Table of Contents

officers which resulted in the successful licensing of GTx's product candidate, Acapodeneâ, to Ipsen Limited in Europe. As a result of the executive officers' efforts, GTx gained greater financial flexibility and established a significant relationship with a premier European-based pharmaceutical partner. These bonuses were entirely discretionary and not pursuant to a pre-established plan or pre-established individual targets. In addition, the Compensation Committee approved the adoption of an Executive Bonus Compensation Plan, which will be effective for the 2007 and subsequent fiscal years. The one-time annual bonus in 2006 and the Executive Bonus Compensation Plan are intended to reward executive officers for achieving individual and corporate or scientific goals for a specific year which are beneficial to GTx. All executive officers, subject to certain exceptions, are eligible to participate in the Executive Bonus Compensation Plan. Payments of bonus awards shall be based solely on the attainment of one or more pre-established, objective performance goals that are established by the Compensation Committee. The Compensation Committee will approve objective performance goals and criteria for each executive officer after reviewing recommendations and other information supplied to the Compensation Committee by GTx. The performance goals and criteria approved by the Compensation Committee will be communicated to the eligible executive officers in writing annually not later than March 31 of each year. Executive officers will be eligible under the plan to receive bonuses equal to the following percentage of base salary depending on attainment of their specific goals: Chief Executive Officer 0-40%; Chief Operating Officer 0-35% and Vice Presidents 0-30%. The bonus compensation awards, if earned, will be paid during the first quarter of the next succeeding fiscal 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 believes that establishing bonus compensation as a percentage of base salary is an appropriate means to reward an executive officer for achieving specific goals. 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.

Long-term Incentive Compensation. Long-term incentive compensation, in the form of stock options, allows the executive officers to share in any appreciation in the value of GTx's common stock. The Compensation Committee believes that equity participation aligns executive officers' interests with those of the stockholders. The amounts of the awards are designed to reward past performance and create incentives to meet long-term objectives. The Compensation Committee makes the awards at a level calculated to be competitive within GTx's industry. In determining the amount of each grant, the Compensation Committee 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 established by Mercer. GTx provides significant equity-based incentives for executive officers and other key employees to ensure that they are motivated over the long term to respond to GTx's business challenges and opportunities as owners and not just as employees. Because of the significant share ownership of GTx's Chief Executive Officer and Chief Operating Officer, the Compensation Committee currently has elected not to award stock options or other equity-based compensation to these individuals and relies solely on salary, bonus, if any, and their own stock holdings in GTx to adequately compensate and motivate them.

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. Generally, the benefits offered to executive officers are the same as those offered to the general employee population, except that

- GTx provided Dr. Dalton with \$1,667 per month through December 31, 2006, to offset a portion of his temporary living expenses in Memphis, Tennessee, while he and his family continue to maintain their permanent residence in Ohio;
- In 2006, the Compensation Committee examined the benefits offered to GTx's executive officers. After considering GTx's compensation philosophy and the level of benefits offered, the Compensation Committee:
 - o determined that the \$50,000 of life insurance coverage offered to the general employee population of GTx should be increased for executive officers to an amount equal to two times such executive officer's annual base salary. The Compensation Committee considered the immaterial supplemental cost of such life insurance in relation to the incremental benefit to be offered to the executive officers as part of its decision making process; and

Table of Contents

- o recommended, and the Board of Directors approved, 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 provides income replacement equal to 75% of base salary to the Chief Operating Officer and all Vice Presidents and income replacement equal to 71% of base salary to the CEO, compared to income replacement of 60% of base salary, not to exceed \$10,000 per month, offered to the GTx general employee population.

GTx provides executive officers with perquisites and benefits that GTx and the Compensation Committee believe are reasonable and consistent with what GTx's peer group offers its executive officers and the Compensation Committee's overall compensation philosophy to better enable GTx to attract and retain superior employees for key positions. The Compensation Committee periodically reviews the levels of perquisites and other benefits provided to executive officers to ensure they remain reasonable and consistent with its compensation philosophy.

Elements of Post-Termination Compensation

Each of our executive officers has entered into a written employment agreement with GTx. These employment agreements provide for salary as well as other customary benefits and terms as described above. Each employment agreement is terminable by either the executive officer or us at any time, except that Dr. Dalton's employment agreement expired December 31, 2006 by its terms, and has been extended month-to-month by agreement of Dr. Dalton and GTx until a new agreement is finalized and approved.

Our employment agreements with Dr. Steiner, Mr. Mosteller, Mr. Hanover and Mr. Doggrell were approved by our Board of Directors and entered into immediately prior to our initial public offering in February 2004. Similar employment agreements were entered into with Dr. Barnette and Mr. Deener after they became officers of GTx, and we entered into an employment agreement with Dr. Dalton when he became an employee of GTx. Our employment agreements with Dr. Steiner, Mr. Hanover, Mr. Mosteller, Mr. Doggrell, Dr. Dalton, Mr. Deener and Dr. Barnette all have substantially identical terms except for salary and, with respect to Dr. Dalton, a more expansive severance provision.

Our Board of Directors and its Compensation Committee determined that employment agreements with key officers and scientists are necessary and desirable to accomplish a variety of objectives. The employment agreements, other than Dr. Dalton's, also contain change of control benefits that are structured on a "double-trigger" basis, meaning that before an executive officer can receive a change of control payment: (1) a change of control must occur and (2) within six months of such change of control, the executive officer's employment must be terminated for good reason or without cause. These provisions were included to motivate our executive officers to act in the best interests of the stockholders by removing the distraction of post change in control uncertainties faced by the executive officers with regard to his continued employment and compensation. We believe that a "double-trigger" change of control provision with a payment 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.

Dr. Dalton's employment agreement differs slightly from our employment agreements with our other executive officers. If Dr. Dalton is terminated without cause by GTx or Dr. Dalton terminates his employment with GTx for good reason, whether or not a change of control has occurred, GTx will pay to Dr. Dalton his then base salary for a period of one year following the date of termination. This more expansive severance provision in Dr. Dalton's employment agreement was a negotiated benefit deemed necessary to attract Dr. Dalton to join GTx.

Each of Dr. Steiner, Mr. Hanover, Dr. Dalton and Dr. Barnette have agreed not to compete with us during the term of their employment and for a period of two years after their employment ends, and Mr. Deener has agreed not to compete with us during the term of his employment and for specified periods of time thereafter, not to exceed two years, which are tied to our marketed products. If we undergo a change in control, these two-year periods will be shortened to one year. These provisions protect GTx from the executive officer resigning from GTx and using the essential scientific knowledge gained while working for GTx to compete against us.

Stock Ownership/Retention Guidelines

The Compensation Committee has adopted a management philosophy that all employees of GTx should be holders of GTx stock or holders of an appropriate amount of stock options to better align our employees with our

[Table of Contents](#)

stockholders' interest in having performance of GTx's stock improve over time. In this regard, the Compensation Committee has adopted a policy that provides generally for the granting of stock options to newly hired employees and to existing employees who are either promoted or given expanded responsibilities, employees who have demonstrated exceptional performance in their current position, or as a recognition that an employee has performed at a level that warrants the grant of additional option grants.

Stock Option Practices

The Compensation Committee has consistently maintained a practice to award stock options only at specific times in order to avoid any claim that grants to executive officers were initiated during periods potentially advantageous to them. During its fall meeting, 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 exercise price equal to the closing price of GTx's common stock on the NASDAQ Global Market on the last trading day of the year of the Compensation Committee's actions approving the grant. 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 regularly 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 trading day immediately preceding the meeting date (or if a new employee's initial date of employment follows the date of the Compensation Committee's meeting, the exercise price will equal the closing price of GTx stock on the trading date immediately preceding the initial date of employment).

Impact of Regulatory Requirements

The Compensation Committee considers the deductibility of the cost of executive compensation and the cost associated with the granting of stock options as part of its deliberative process.

Deductibility of Executive Compensation

Section 162(m) of the Internal Revenue Code, or the Code, limits GTx to a deduction for federal income tax purposes of no more than \$1 million of compensation paid to our executive officers in a taxable year. Compensation above \$1 million may be deducted if it is "performance-based compensation" within the meaning of the Code. The Compensation Committee believes it is appropriate to take into account the \$1 million limit on the deductibility of executive compensation and to seek to qualify executive compensation awards as performance-based compensation excluded from the \$1,000,000 limit. The Compensation Committee has determined that stock options granted under GTx's 2004 Equity Incentive Plan with an exercise price at least equal to the fair market value of GTx's common stock on the date of grant constitute "performance-based compensation." GTx's stockholders previously approved this plan, which exempts any compensation recognized by an executive officer as a result of the grant of such a stock option from the application of Section 162(m). None of the executive officers received compensation in 2006 that would exceed the \$1 million limit on deductibility.

Accounting for Stock-Based Compensation

Beginning on January 1, 2006, GTx began accounting for stock-based payments in accordance with the requirements of FASB Statement 123(R).

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 officer 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, 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.

[Table of Contents](#)

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

The Compensation Committee of the Board of Directors of GTx, Inc. has reviewed and discussed with management the information contained in the Compensation Discussion & Analysis section of this Proxy Statement and recommended to the Board of Directors that the Compensation Discussion & Analysis be included in this Proxy Statement.

COMPENSATION COMMITTEE:

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

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table sets forth certain summary information for the year indicated with respect to the compensation awarded to, earned by, or paid to our Chief Executive Officer, our Chief Financial Officer and each of the three other most highly compensated executive officers of GTx whose total annual compensation, exclusive of changes in pension value and nonqualified deferred compensation earnings, exceeded \$100,000. We refer to these executive officers in this proxy statement as the "named executive officers."

Name and Principal Position	Year	Salary	Bonus \$(1)	Option Awards \$(2)	All Other Compensation \$(3)	Total (\$)
Mitchell S. Steiner, M.D., F.A.C.S. <i>Chief Executive Officer and Vice-Chairman of the Board of Directors</i>	2006	\$427,055	\$44,625	—	\$ 653	\$472,333
Mark E. Mosteller, CPA <i>Vice President, Chief Financial Officer and Treasurer</i>	2006	\$236,692	\$12,338	\$129,499(4)	\$ 406	\$378,935
Marc S. Hanover <i>President and Chief Operating Officer</i>	2006	\$293,891	\$30,660	—	\$ 495	\$325,046
James T. Dalton, Ph.D. <i>Vice President, Preclinical Research and Development</i>	2006	\$241,772	—	\$ 81,547(5)	\$20,414(7)	\$343,733
Henry P. Doggrell <i>Vice President, General Counsel and Secretary</i>	2006	\$254,835	\$13,283	\$103,291(6)	\$ 423	\$371,832

(1) On October 31, 2006, the Compensation Committee recommended, and the Board of Directors approved, a special one-time cash bonus to four of the Company's named executive officers. The Compensation Committee awarded the bonuses to recognize and reward the long hours and efforts of the named executive officers that resulted in the successful licensing of the Company's product candidate, Acapodene, to Ipsen Limited in Europe.

(2) Represents the dollar amount recognized for financial statement reporting purposes with respect to the indicated fiscal year in accordance with FAS 123(R). For purposes of this calculation, we have disregarded the estimate of forfeitures related to service-based vesting conditions. There were no forfeitures made during the year. For a complete description

Table of Contents

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 indicated fiscal year.

- (3) The amounts indicated represent 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. The Board of Directors approved supplemental long-term disability insurance for the named executive officers, but no premiums for such disability insurance were paid in 2006.
- (4) 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).
- (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) 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).
- (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) 127,500 options granted on October 1, 2001 (\$37,342); (b) 12,750 options granted on September 1, 2003 (\$20,926); (c) 10,000 options granted on July 28, 2004 (\$10,598); and (d) 25,000 options granted on July 27, 2005 (\$34,425).
- (7) Includes the premium payments described in Note 3 above and the reimbursement of Dr. Dalton's temporary living expenses in Memphis, Tennessee. GTx agreed to provide Dr. Dalton with \$1,667 per month, through December 31, 2006, to offset a portion of his temporary living expenses in Memphis, Tennessee.

Grants of Plan-Based Awards

The following table summarizes grants of plan-based awards made to our named executive officers in 2006.

Name	Grant Date	Approval Date	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base price of Option Awards (\$/Sh)	Grant Date Fair Value of Stock and Option Awards (1)
Mitchell S. Steiner, M.D., F.A.C.S. <i>Chief Executive Officer and Vice-Chairman of the Board of Directors</i>	—	—	—	—	—
Mark E. Mosteller, CPA <i>Vice President, Chief Financial Officer and Treasurer</i>	—	—	—	—	—
Marc S. Hanover <i>President and Chief Operating Officer</i>	—	—	—	—	—
James T. Dalton, Ph.D. <i>Vice President, Preclinical Research and Development</i>	1/1/2006	11/02/2005	20,000(2)	\$7.56	\$96,410
Henry P. Doggrell <i>Vice President, General Counsel and Secretary</i>	—	—	—	—	—

(1) Represents the "grant date fair value" of each award determined in accordance with FAS 123(R). For a complete 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 indicated fiscal year.

(2) The option vests in three equal annual installments beginning on the third anniversary of the grant date.

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. Detailed descriptions of our employment agreements with our named executive officers are included in "Compensation Discussion and Analysis — Elements of Post Termination Compensation" above and "Potential Payments Upon Termination or Change of Control" below.

Option Awards. Consistent with its practices for awarding stock options described in "Compensation Discussion and Analysis — Stock Option Practices," the Compensation Committee approved the grant of stock

Table of Contents

options to our named executive officers, except Dr. Steiner and Mr. Hanover, in the fall of 2006 with a grant date of January 1, 2007. The exercise price for these stock options is \$17.84, the closing price of GTx's common stock on December 29, 2006, the last trading day of 2006. The options vest in equal annual installments on the January 1, 2010, 2011 and 2012. The options expire on December 31, 2016, unless they are forfeited or expire earlier in accordance with their terms. These option grants will be reported in the Grants of Plan Based Awards table for 2007. Events that can accelerate the vesting of GTx's stock options are described below under "Potential Payments Upon Termination or Change of Control."

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, 2006.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Mitchell S. Steiner, M.D., F.A.C.S. <i>Chief Executive Officer and Vice-Chairman of the Board of Directors</i>	—	—	—	—
Mark E. Mosteller, CPA <i>Vice President, Chief Financial Officer and Treasurer</i>	23,000 11,334 5,667 8,500 — — —	— 5,666(1) 11,333(2) 17,000(3) 10,000(4) 25,000(5) 25,000(6)	\$ 6.78 \$ 6.78 \$ 6.24 \$ 6.24 \$ 8.90 \$10.86 \$17.84	08/06/11 04/11/12 08/01/13 09/01/13 07/28/14 07/27/15 01/01/17
Marc S. Hanover <i>President and Chief Operating Officer</i>	—	—	—	—
James T. Dalton, Ph.D. <i>Vice President, Preclinical Research and Development</i>	34,000 — — —	16,000(7) 25,000(8) 20,000(9) 25,000(10)	\$13.07 \$ 9.71 \$ 7.56 \$17.84	01/20/15 05/19/15 01/01/16 01/01/17
Henry P. Doggrell <i>Vice President, General Counsel and Secretary</i>	122,500 4,250 — — —	— 8,500(11) 10,000(12) 25,000(13) 25,000(14)	\$ 6.78 \$ 6.24 \$ 8.90 \$10.86 \$17.84	10/01/11 09/01/13 07/28/14 07/27/15 01/01/17

- (1) The remaining shares will vest on April 11, 2007.
- (2) The remaining shares will vest as follows: 5,666 shares on August 1, 2007 and 5,667 shares on August 1, 2008.
- (3) The remaining shares will vest as follows: 8,500 shares on September 1, 2007 and 8,500 shares on September 1, 2008.
- (4) The remaining shares vest in three equal annual installments beginning on July 28, 2007, the third anniversary of the grant date.
- (5) The remaining shares vest in three equal annual installments beginning on July 27, 2008, the third anniversary of the grant date.
- (6) The remaining shares vest in three equal annual installments beginning on January 1, 2010, the third anniversary of the grant date.
- (7) The remaining shares will vest as follows: 5,334 shares on January 20, 2008; 5,333 shares on January 20, 2009; and 5,333 shares on January 20, 2010.
- (8) The remaining shares vest in three equal annual installments beginning on May 19, 2008, the third anniversary of the grant date.
- (9) The remaining shares vest in three equal annual installments beginning on January 1, 2009, the third anniversary of the grant date.
- (10) The remaining shares vest in three equal annual installments beginning on January 1, 2010, the third anniversary of the grant date.

Table of Contents

- (11) The remaining shares will vest as follows: 4,250 shares on September 1, 2007 and 4,250 shares on September 1, 2008.
- (12) The remaining shares vest in three equal annual installments beginning on July 28, 2007, the third anniversary of the grant date.
- (13) The remaining shares vest in three equal annual installments beginning on July 27, 2008, the third anniversary of the grant date.
- (14) The remaining shares vest in three equal annual installments beginning on January 1, 2010, the third anniversary of the grant date.

Option Exercises and Stock Vested

The following table summarizes the number of options exercised and the value realized by our named executive officers as a result of such exercise during 2006.

Name	Option Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)
Mitchell S. Steiner, M.D., F.A.C.S. <i>Chief Executive Officer and Vice-Chairman of the Board of Directors</i>	—	—
Mark E. Mosteller, CPA <i>Vice President, Chief Financial Officer and Treasurer</i>	2,500	\$4,425
Marc S. Hanover <i>President and Chief Operating Officer</i>	—	—
James T. Dalton, Ph.D. <i>Vice President, Preclinical Research and Development</i>	—	—
Henry P. Doggrell <i>Vice President, General Counsel and Secretary</i>	5,000	\$8,850

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, 2006:

Plan Category	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)
Equity compensation plans approved by security holders	1,458,289	\$8.33	1,550,672(1)
Equity compensation plans not approved by security holders	—	—	—
Total	1,458,289	\$8.33	1,550,672(1)

- (1) In 1999, 2000, 2001 and 2002, GTx 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. On January 14, 2004, GTx adopted its 2004 Equity Incentive Plan and the Amended and Restated 2004 Non-Employee Directors' Stock Option Plan, or the Directors Plan, both of which became effective upon consummation of GTx's initial public offering of its common stock. GTx may issue awards for up to 1,500,000 shares of common stock under the 2004 Equity Incentive Plan, which amount is automatically increased annually on January 1st of each year from 2005 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. The Board of

[Table of Contents](#)

Directors elected not to increase the number of shares available under the 2004 Equity Incentive Plan as of January 1, 2005 and January 1, 2006. On October 31, 2006, the Board elected to increase the number of shares available under the 2004 Equity Incentive Plan as of January 1, 2007 by only two percent, or 696,447 shares, rather than the five percent set forth in the plan. GTx may issue options for up to 268,000 shares of common stock under the Directors Plan, which is automatically increased annually on January 1st of each year, from 2005 until 2013 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, 2007, the number of shares authorized under the Directors Plan increased by 57,334 shares.

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 payments pursuant to these agreements following the termination of an executive officer's employment, the payments and benefits that we would be required to provide, and how the determination of the payments and benefits to be provided is made in each circumstance.

Change of Control

Generally, under our employment agreements a change of control is defined as:

- the sale of all or substantially all of GTx's assets;
- if any person acquires 50% or more of the GTx's voting securities (other than securities acquired directly from GTx in a public offering); or
- upon the consummation of 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 prior to the transaction.

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

The employment agreements, other than Dr. Dalton's, also contain change of control benefits that are structured on a "double-trigger" basis, meaning that before an executive officer can receive a change of control payment: (1) a change of control must occur and (2) within six months of such change of control, the executive officer's employment must be terminated for good reason or without cause. GTx's obligation to make the post-termination payments under the employment agreements is conditioned upon the former executive officer's compliance with the provisions of the confidentiality and non-competition provisions of the employment agreement. The payment will be made over the 12 month-period following termination rather than in a lump sum.

Dr. Dalton's employment agreement differs slightly from our employment agreements with our other executive officers. If Dr. Dalton is terminated without cause by GTx or Dr. Dalton terminates his employment with GTx for good reason, whether or not a change of control has occurred, GTx will pay to Dr. Dalton his then base salary for a period of one year following the date of termination.

Each employment agreement defines "cause" as the 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 provisions; 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 the Board that is not inconsistent with the description of such executive officer's duties, after 30 days notice and the opportunity to cure.

Each employment agreement, other than Dr. Dalton's, defines "good reason" as following a change of control:

- a change in the executive officer's status, position or responsibilities which represents a reduction

Table of Contents

in or demotion of the executive officer's status, position or responsibilities in effect immediately prior to the change of control or the assignment to the executive officer of duties or responsibilities that are inconsistent with such status, position or responsibilities;

- a reduction in salary in effect immediately prior to the change of control or a change in any benefit that materially and adversely affects the executive officer;
- the relocation of the executive officer's principal office to a location outside a thirty-mile radius of Memphis, Tennessee; or
- the failure of GTx to obtain an agreement reasonably satisfactory to the executive officer from any successor or assignor of GTx to assume and agree to perform under the employment agreement.

Under Dr. Dalton's employment agreement, the occurrence of the events specified in either of the first two bullet points above constitutes "good reason" regardless of whether a change of control has occurred.

In addition, our 1999 Plan, 2000 Plan, 2001 Plan and 2002 Plan provide that in the event of a change in control of us, all shares subject to option awards under the 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. For this purpose, a change in control includes

- a sale or disposition of more than 50% of our issued and outstanding voting stock;
- a merger or consolidation in which our stockholders immediately before the transaction own less than 50% of the outstanding voting securities of the surviving entity immediately after the transaction; or
- a sale or disposition of all or substantially all of our assets.

Our 2004 Equity Incentive Plan provides that in the event of specified corporate transactions such as a change of control or similar transaction, all outstanding options and stock appreciation rights under the 2004 Equity Incentive 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 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, 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. Following specified change in control transactions, the vesting and exercise of specified equity awards generally will be accelerated only if the recipient's award agreement so specifies. The standard form of stock option agreement provides for the option to become fully vested and exercisable if the option holder's service with GTx or its successor terminates within 12 months after a change of control and the termination of service is a result of an involuntary termination without cause or a constructive termination.

Termination For "Cause," Without "Good Reason" or Upon Death

If we terminate an executive officer's employment for "cause," or if an executive officer voluntarily terminates his or her employment without "good reason," or upon the death of an executive officer, the executive officer would have no right to receive any compensation or benefits under the employment agreement on or after the effective date of termination, other than any accrued and unpaid salary and vacation.

Calculation of Benefits

The following table includes an estimate of the potential payments we would be required to make upon termination of employment of the named executive officers in each of the circumstances described above. In providing the estimated potential payments, we have made the following general assumptions in all circumstances where applicable:

- The date of termination is December 29, 2006, and the closing price of our common stock on that date is \$17.84;
- The annual salary at the time of termination is equal to the current base salaries for each executive as follows: Mitchell S. Steiner, \$427,055; Mark E. Mosteller, \$236,692; Marc S. Hanover \$293,891; James T. Dalton, \$241,772; and Henry P. Doggrell, \$254,835;

Table of Contents

- The value of stock options that vest upon termination is equal to the difference between the closing price of our common stock of \$17.84 on December 29, 2006 and the exercise price times the number of options that vest;
- There is no unpaid bonus for the prior year;
- There is no accrued and unpaid salary; and
- There is no unpaid reimbursement for expenses incurred prior to the date of termination.

Name	Before	After	Voluntary	Death	Disability	Change in
	Change in	Change in				
	Termination w/o	Termination w/o	Termination			Control
	Cause or for Good	Cause or for Good				
	Reason	Reason				
Mitchell S. Steiner, M.D., F.A.C.S. <i>Chief Executive Officer and Vice-Chairman of the Board of Directors</i>	-0-	\$427,055(1)	-0-	-0-	-0-	-0-
Mark E. Mosteller, CPA <i>Vice President, Chief Financial Officer and Treasurer</i>	-0-	\$891,921(2)	-0-	-0-	-0-	-0-
Marc S. Hanover <i>President and Chief Operating Officer</i>	-0-	\$293,891(3)	-0-	-0-	-0-	-0-
James T. Dalton, Ph.D. <i>Vice President, Preclinical Research and Development</i>	\$241,772(4)	\$726,942(5)	-0-	-0-	-0-	-0-
Henry P. Doggrell <i>Vice President, General Counsel and Secretary</i>	-0-	\$617,335(6)	-0-	-0-	-0-	-0-

(1) Represents one year's salary (\$427,055). Dr. Steiner does not hold any options for GTx common stock or any restricted stock that would vest upon any termination event.

(2) Represents one year's salary (\$236,692) plus the amounts potentially realizable by Mr. Mosteller resulting from the immediate vesting of previously unvested options as indicated in the following table (\$655,229):

Number of Securities Underlying Options	Exercise Price	Closing Price on December 29, 2007	Amount Potentially Realizable
5,666	\$ 6.78	\$17.84	\$ 62,666
28,333	\$ 6.24	\$17.84	\$328,663
10,000	\$ 8.90	\$17.84	\$ 89,400
25,000	\$10.86	\$17.84	\$174,500
25,000	\$17.84	\$17.84	\$ 0

(3) Represents one year's salary (\$293,891). Mr. Hanover does not hold any options for GTx common stock or any restricted stock that would vest upon any termination event.

(4) Represents one year's salary (\$241,772). If a termination without cause or for good reason occurs without a change of control, Dr. Dalton's options would not vest.

(5) Represents one year's salary (\$241,772) plus the amounts potentially realizable by Dr. Dalton resulting from the immediate vesting of previously unvested options as indicated in the following table (\$485,170):

Number of Securities Underlying Options	Exercise Price	Closing Price on December 29, 2007	Amount Potentially Realizable
16,000	\$13.07	\$17.84	\$ 76,320
25,000	\$ 9.71	\$17.84	\$203,250
20,000	\$ 7.56	\$17.84	\$205,600
25,000	\$17.84	\$17.84	0

[Table of Contents](#)

- (6) Represents one year's salary (\$254,835) plus the amounts potentially realizable by Mr. Doggrell resulting from the immediate vesting of previously unvested options as indicated in the following table (\$362,500):

Number of Securities Underlying Options	Exercise Price	Closing Price on December 29, 2007	Amount Potentially Realizable
8,500	\$ 6.24	\$17.84	\$ 98,600
10,000	\$ 8.90	\$17.84	\$ 89,400
25,000	\$10.86	\$17.84	\$174,500
25,000	\$17.84	\$17.84	0

DIRECTOR COMPENSATION

Retainer and Fees. We pay 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. No directors currently receive consulting fees from GTX. Directors who are also employees of the Company (currently Dr. Steiner and Mr. Hanover) receive no additional compensation for service on the Board. Since June 30, 2004, non-employee directors have had the opportunity to defer all or a portion of their fees under the Directors' Deferred Compensation Plan until termination of their status as directors. Deferrals can be made into a cash account, a stock unit account, or a combination of both. Stock unit accounts will be paid out in the form of GTX stock, except that any fractional shares will be paid out in cash valued at the then current market price of the Company's common stock.

Stock Options. Our Directors 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 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 10,000 shares, provided that the number of shares may be increased or decreased by our Board of Directors in its sole discretion. 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 8,000 shares, provided that the number of shares may be increased or decreased by our Board of Directors in its sole discretion. 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 Plan, all outstanding options under the Directors Plan may be assumed or substituted for by any surviving or acquiring entity. If the surviving or acquiring entity elects not to assume or substitute for such options, then (a) with respect to any such options that are held by optionees then performing services for GTX or its affiliates, the vesting and 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 in control transaction occurs, as defined in the Directors 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 exercise of the optionee's options will be accelerated in full immediately prior to the effectiveness of such resignation.

Table of Contents

The table below represents the compensation earned by each non-employee director during 2006.

Name	Fees Earned or Paid in Cash \$(1)	Option Awards \$(2)	Total (\$)
J. R. Hyde, III	\$20,000	—	\$20,000
John H. Pontius	\$20,000	\$42,752	\$62,752
Rosemary Mazanet, M.D., Ph.D.	\$20,000	\$42,752	\$62,752
J. Kenneth Glass	\$20,000	\$42,752	\$62,752
Andrew M. Clarkson	\$30,000	\$42,752	\$72,752
Timothy R. G. Sear	\$20,000	\$35,782	\$55,782
Robert W. Karr, M.D.	\$20,000	\$28,803	\$48,803
Michael G. Carter, M.D.	\$12,889	\$14,912	\$27,801

- (1) Represents fees earned in 2006, some or all of which may be deferred pursuant to the Directors Deferred Compensation Plan.
- (2) This column represents the dollar amount recognized for financial statement reporting purposes with respect to the year ended December 31, 2006 in accordance with FAS 123(R). For a complete description of the assumptions made in determining the FAS 123(R) valuation and the FAS 123(R) grant date fair value set forth in the following table, 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, 2006. The following table indicates the components of FAS 123(R) expense and grant date fair value for each equity award computed in accordance with FAS 123(R) as well as the total options outstanding as of December 31, 2006 for each director:

Name	Date of Grant	Price of Grant	Number of Shares (1)	2006 FAS 123(R) Expense	FAS 123(R) Grant Date Fair Value	Total Options Outstanding at 12/31/2006
John H. Pontius	2/06/04	\$14.50	10,000	\$26,209	\$78,700	20,000
	5/19/05	\$ 9.71	2,000	\$ 3,648	\$10,954	
	4/27/06	\$10.08	8,000	\$12,895	\$56,987	
Rosemary Mazanet, M.D., Ph.D.	2/06/04	\$14.50	10,000	\$26,209	\$78,700	20,000
	5/19/05	\$ 9.71	2,000	\$ 3,648	\$10,954	
	4/27/06	\$10.08	8,000	\$12,895	\$56,987	
J. Kenneth Glass	2/18/04	\$14.50	10,000	\$26,209	\$78,700	20,000
	5/19/05	\$ 9.71	2,000	\$ 3,648	\$10,954	
	4/27/06	\$10.08	8,000	\$12,895	\$56,987	
Andrew M. Clarkson	2/18/04	\$14.50	10,000	\$26,209	\$78,700	20,000
	5/19/05	\$ 9.71	2,000	\$ 3,648	\$10,954	
	4/27/06	\$10.08	8,000	\$12,895	\$56,987	
Timothy R. G. Sear	10/07/04	\$12.26	10,000	\$22,887	\$68,661	18,000
	4/27/06	\$10.08	8,000	\$12,895	\$56,987	
Robert W. Karr, M.D.	6/01/05	\$ 9.04	10,000	\$16,982	\$50,992	17,334
	4/27/06	\$10.08	7,334	\$11,821	\$52,242	
Michael G. Carter, M.D.	5/09/06	\$ 9.80	10,000	\$14,912	\$69,254	10,000

- (1) Vests in three equal installments beginning on the first anniversary of the grant date.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

As of December 31, 2006, 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 2006, 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

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 "Corporate Governance."

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

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

There were no "related party" transactions arising during 2006 requiring disclosure under applicable Nasdaq listing standards, SEC rules and regulations or GTx policy and procedures. GTx has, however, 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,



Henry P. Doggrell
*Vice President, General Counsel and
Secretary*

Memphis, Tennessee
March 14, 2007



Electronic Voting Instructions

**You can vote by Internet or telephone!
Available 24 hours a day, 7 days a week!**

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

VALIDATION DETAILS ARE LOCATED BELOW IN THE TITLE BAR.

Proxies submitted by the Internet or telephone must be received by 1:00 a.m., Central Time, on May 1, 2007.

Vote by Internet

- Log on to the Internet and go to www.investorvote.com
- Follow the steps outlined on the secured website.

Vote by telephone

- Call toll free 1-800-652-VOTE (8683) within the United States, Canada & Puerto Rico any time on a touch tone telephone. There is **NO CHARGE** to you for the call.
- Follow the instructions provided by the recorded message.

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



Annual Meeting Proxy Card

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

A Proposals — The Board of Directors recommends a vote FOR the four nominees listed and FOR Proposals 2.

1. Election of Directors

	For	Withhold		For	Withhold		For	Withhold
01 - Michael G. Carter, M.D., Ch.B., F.R.C.P.	[]	[]	02 - J.R. Hyde, III	[]	[]	03 - Timothy R. G. Sear	[]	[]
04 — Mitchell S. Steiner, M.D., F.A.C.S.	For	Withhold						
	[]	[]						

To elect four Class III directors to serve until the 2010 Annual Meeting of Stockholders and until their successors have been duly elected and qualified.

2. To ratify the appointment of Ernst & Young LLP as GTx's independent registered public accounting firm for the fiscal year ending December 31, 2007.	For	Against	Abstain
	[]	[]	[]

B Non-Voting Items

Change of Address — Please print your new address below.

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

NOTE: Please sign your name(s) EXACTLY as your name(s) appear(s) on this proxy. All joint holders must sign. When signing as attorney, trustee, executor, administrator, guardian or corporate officer, please provide your FULL title.

Signature 1 - Please keep signature within the box	Signature 2 - Please keep signature within the box	Date (mm/dd/yyyy)

Proxy –GTx, Inc.

Meeting Details

2007 Annual Meeting of Stockholders of GTx, Inc. will be held at GTx's headquarters, 3 North Dunlap Street, Memphis, Tennessee 38163, on May 2, 2007, 4:00 p.m., Central Time

This Proxy is Solicited by the Board of Directors for the Annual Meeting on May 2, 2007

Henry P. Doggrell and Mark E. Mosteller, or any of them, each with the power of substitution, are hereby authorized to represent and vote the shares of the undersigned, with all the powers which the undersigned would possess if personally present, at the Annual Meeting of Stockholders of GTx, Inc. to be held on May 2, 2007, or at any postponement or adjournment thereof.

Shares represented by this proxy will be voted by the stockholder. If no such directions are indicated, the Proxies will have authority to vote FOR all of the Nominees listed in Proposal 1 and FOR Proposal 2 as more specifically described in the Proxy Statement. In their discretion, the Proxies are authorized to vote upon such other business as may properly come before the meeting.

THANK YOU FOR VOTING

(Continued and to be voted on reverse side.)