

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

GTx, Inc.

(Exact name of registrant as specified in its charter)

DELAWARE
(State or other jurisdiction
of incorporation or organization)

62-1715807
(I.R.S. Employer Identification No.)

GTx, Inc.
3 N. Dunlap Street
3rd Floor, Van Fleet Building
Memphis, Tennessee
(Address of Principal
Executive Offices)

38163
(Zip Code)

GTx, Inc. Directors' Deferred Compensation Plan
(Full title of the plan)

Mitchell S. Steiner
Chief Executive Officer
GTx, Inc.

3 N. Dunlap Street
3rd Floor Van Fleet Building
Memphis, Tennessee 38163
(Name and address of agent for service)

(901) 523-9700
(Telephone number, including area code, of agent for service)

Copy to:

Robert J. DelPriore, Esq.
Bass, Berry & Sims PLC
100 Peabody Place, Suite 900
Memphis, TN 38103

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered	Proposed maximum offering price per share(2)	Proposed maximum aggregate offering price(2)	Amount of registration fee
Common Stock, par value \$0.001 per share	250,000 shares	\$11.28	\$2,820,000	\$357.29
Deferred Compensation Obligations	\$500,000(1)	100%	\$ 500,000	\$ 63.35
TOTAL				\$420.64

(1) The deferred compensation obligations are unsecured obligations of GTx, Inc. to pay deferred compensation in the future to eligible participants, in accordance with the terms of the GTx, Inc. Directors' Deferred Compensation Plan.

(2) The price is solely for the purpose of calculating the registration fee, based upon the average of the high and low prices per share of the Corporation's Common Stock on the Nasdaq National Market on September 3, 2004.

TABLE OF CONTENTS

PART II

Item 3. Incorporation of Documents by Reference.

Item 4. Description of Securities.

Item 5. Interests of Named Experts and Counsel.

Item 6. Indemnification of Directors and Officers.

Item 7. Exemption From Registration Claimed.

Item 8. Exhibits.

Item 9. Undertakings.

SIGNATURES

INDEX TO EXHIBITS

EX-4 DEFERRED COMPENSATION PLAN

EX-5 OPINION OF BASS, BERRY & SIMS PLC

EX-23.1 CONSENT OF ERNST & YOUNG LLP

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are hereby incorporated by reference as of their respective dates:

- a. The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2003;
- b. All other reports of the Registrant filed pursuant to Section 13(a) or 15(d) of the Exchange Act since December 31, 2003 (but excluding all information furnished to the Securities and Exchange Commission pursuant to Item 9 and Item 12 of any Current Report on Form 8-K); and
- c. The description of the Company's Common Stock, which is contained in a registration statement on Form 8-A filed on January 13, 2004 (File No. 000-50549) under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

Notwithstanding the foregoing, information furnished under Items 9 and 12 of any Current Report on Form 8-K, including the related exhibits, is not incorporated by reference in this prospectus or the accompanying registration statement.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act after the date hereof and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all shares of Common Stock offered hereby have been sold or which deregisters all shares of Common Stock then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents. Any statements contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or replaced for purposes hereof to the extent that a statement contained herein (or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein) modifies or replaces such statement. Any statement so modified or replaced shall not be deemed, except as so modified or replaced, to constitute a part hereof.

Item 4. Description of Securities.

Pursuant to the Directors' Deferred Compensation Plan (the "Plan"), a director may elect to receive part or all of his annual fee for service on the Board in cash (to be credited to a "cash account") or stock (to be credited to a "stock account"). In addition, a director may elect to defer his receipt of the balance of the cash account and/or stock account to a time set forth in the election which may not be earlier than (i) thirty days after the commencement of the calendar year following the director's separation from service on the Board, or (ii) six months after such separation, whichever is later. In addition, a director may elect to receive distributions from the cash account or stock account in a lump sum or over a period of years. The securities being registered hereby represent deferred compensation obligations (the "Obligations") of the registrant under the Plan. The securities represent contractual obligations of the registrant to pay or distribute to participants in the Plan compensation, the receipt of which the participants have elected to defer, in accordance with the terms of the Plan. There is no trading market for the Obligations.

The Obligations are unsecured general obligations of the registrant and rank *pari passu* with other unsecured and unsubordinated indebtedness of the registrant. The Obligations are not subject in any manner, either voluntarily or involuntarily, to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment. Any attempt by any person to transfer or assign benefits under the Plan, other than a claim for benefits by a participant or his or her beneficiary(ies), will be null, void and of no effect.

[Table of Contents](#)

Item 5. Interests of Named Experts and Counsel.

The validity of the issuance of the common stock offered by this prospectus and certain other legal matters are being passed upon for us by our counsel, Bass, Berry & Sims PLC.

Item 6. Indemnification of Directors and Officers.

As permitted by Delaware law, we have adopted provisions in our certificate of incorporation and bylaws that limit or eliminate the personal liability of directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, a director exercise an informed business judgment based on all material information reasonably available to him or her. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any act related to unlawful stock repurchases, redemptions or other distributions or payments of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not limit or eliminate our rights or any stockholder's rights to seek non-monetary relief, such as injunctive relief or rescission. These provisions will not alter a director's liability under federal securities laws. Our certificate of incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Delaware law, our bylaws also provide that:

- we will indemnify our directors, officers, employees and other agents to the fullest extent permitted by law;
- we may advance expenses to our directors, officers, employees and other agents in connection with a legal proceeding to the fullest extent permitted by law; and
- the rights provided in our bylaws are not exclusive.

In addition to the indemnification provided for in our certificate of incorporation and bylaws, we have entered and intend to continue to enter, into separate indemnification agreements with each of our directors and executive officers which may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements may require us, among other things, to indemnify our directors and executive officers for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of his service as one of our directors or executive officers, that person's services provided to any other company or enterprise at our request. We believe that these provisions and agreement are necessary to attract and retain qualified individuals to serve as directors and executive officers. We also intend to maintain liability insurance for our officers and directors.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

See the Index to Exhibits following the signature pages hereof.

Item 9. Undertakings.

1. The undersigned registrant hereby undertakes:

(a) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) (§ 230.424(b) of this chapter) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(i) and (a)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the issuer pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference herein.

b) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

3. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Memphis, State of Tennessee, on this 9th day of September, 2004.

GTx, Inc.

By: /s/ Mitchell S. Steiner
Mitchell S. Steiner, M.D., F.A.C.S.,
Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Mitchell S. Steiner and Mark E. Mosteller and each of them acting alone, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Mitchell S. Steiner</u>	Chief Executive Officer, Vice Chairman and Director	September 9, 2004
<u>Mitchell S. Steiner /s/ Mark E. Mosteller</u>	Chief Financial Officer	September 9, 2004
<u>Mark E. Mosteller /s/ J. R. Hyde, III</u>	Chairman of the Board of Directors	September 9, 2004
<u>J.R. Hyde, III /s/ Marc S. Hanover</u>	President, Chief Operating Officer and Director	September 9, 2004
<u>Marc S. Hanover /s/ John H. Pontius</u>	Director	September 9, 2004
<u>John H. Pontius /s/ Rosemary Mazanet</u>	Director	September 9, 2004
<u>Rosemary Mazanet /s/ J. Kenneth Glass</u>	Director	September 9, 2004
<u>J. Kenneth Glass /s/ Andrew M. Clarkson</u>	Director	September 9, 2004
<u>Andrew M. Clarkson</u>		

INDEX TO EXHIBITS

Exhibit Number	Description
4	GTx, Inc. Directors' Deferred Compensation Plan
5	Opinion of Bass, Berry & Sims PLC
23.1	Consent of Ernst & Young LLP, independent registered public accounting firm
23.2	Consent of Bass, Berry & Sims PLC (contained in Exhibit 5)
24	Power of Attorney (included on signature page of this Registration Statement)

GTX, INC.

DIRECTORS' DEFERRED COMPENSATION PLAN

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GTX, INC.

DIRECTORS' DEFERRED COMPENSATION PLAN

Table of Contents

ARTICLE I
Definitions.....2

ARTICLE II
Election to Defer3

ARTICLE III
Deferred Compensation Accounts.....3

ARTICLE IV
Payment of Deferred Compensation.....4

ARTICLE V
Administration.....5

ARTICLE VI
Amendment of Plan.....5

ARTICLE I
DEFINITIONS

1.1 "Board" shall mean the Board of Directors of GTx, Inc.

1.2 "Cash Account" shall mean the account created by the Company pursuant to Article III of this Plan in accordance with an election by a Director to receive deferred cash compensation under Article II hereof.

1.3 "Code" means the Internal Revenue Code of 1986, as amended.

1.4 "Common Stock" shall mean the Common Stock of the Company.

1.5 "Company" means GTx, Inc.

1.6 "Director" shall mean a member of the Board of Directors of the Company that is not an employee of the Company or any of its subsidiaries.

1.7 "Fees" shall mean amounts earned for serving as a member of the Board, including any committees of the Board.

1.8 "He", "Him" or "His" shall apply equally to male and female members of the Board.

1.9 "Plan" shall mean this Deferred Compensation Plan for Directors as it may be amended from time to time.

1.10 "Regulations" means those certain Treasury Regulations promulgated pursuant to the Code.

1.11 "Stock Account" shall mean the account created by the Company pursuant to Article III of this Plan in accordance with an election by a Director to receive stock compensation under Article II hereof.

1.12 "Stock Value" shall mean, for any given day, the closing price of the Company's Common Stock as reported on the Nasdaq Stock Market ("Nasdaq") on such day. If the closing price is not available from Nasdaq for the Common stock on a date in question, then the next preceding practicable date for which such closing price is available shall be used.

1.13 "Year" shall mean calendar year.

ARTICLE II
ELECTION TO DEFER

2.1 A Director may elect, on or before December 31 of any Year, to defer payment of all or a specified part of all Fees earned during the Year following such election and succeeding Years (until the Director ceases to be a Director or changes his election pursuant to Paragraph 2.3); provided, however, that with respect to Year 2004, a Director may elect, on or before July 1, 2004, to defer all or a specified part of all Fees earned on or after July 1, 2004. Any person who shall become a Director during any Year, and who was not a Director of the Company on the preceding December 31, may elect, before the Director's term begins, to defer payment of all or a specified part of such Fees earned during the remainder of such Year and for succeeding Years.

2.2 The election to participate in the plan and manner of payment shall be designated by submitting a letter in the form attached hereto as Appendix A to the Secretary of the Company.

2.3 The election shall continue from Year to Year unless the Director terminates it by written request delivered to the Secretary of the Company prior to the commencement of the Year for which the termination is first effective.

ARTICLE III
DEFERRED COMPENSATION ACCOUNTS

3.1 The Company shall maintain separate memorandum accounts for the Fees deferred by each Director.

3.2 The Company shall credit, on the date Fees become payable, to the Cash Account of each Director the deferred portion of any Fees due the Director as to which an election to receive cash has been made. Fees deferred in the form of cash (and interest thereon) shall be held in the general funds of the Company.

3.3 On the first day of each quarter, the Company shall credit the Cash Account of each Director with interest calculated on the basis of the Balance in such account on the first day of each month of the preceding quarter at the prime rate of interest then in effect at First Horizon National Bank, Memphis, Tennessee, or if no such rate shall be available, then such rate of interest as is then published in the Wall Street Journal as the prevailing prime rate of interest.

3.4 The Company shall credit, on the date Fees become payable, the Stock Account of each Director with the number of shares of Common Stock which is equal to the deferred portion of any Fees due the Director as to which an election to receive the Company Common Stock has been made, divided by the Stock Value on the date such Fees would otherwise have been paid. For purposes of this Section 3.4, the Stock Value shall be determined on the date Fees would otherwise have been paid.

3.5 The Company shall credit the Stock Account of each Director who has elected to receive deferred compensation in the form of Common Stock with the number of shares of Common Stock equal to any cash dividends (or the fair market value of dividends paid in property other than dividends payable in Common Stock) payable on the number of shares of Common Stock represented in each Director's Stock Account in the form of the right to receive Common Stock. If adjustments are made to the outstanding shares of Common Stock as a result of stock-splits, recapitalizations, mergers, consolidations and the like, an appropriate adjustment also will be made in the number of shares of Common Stock credited to the Director's Stock Account.

3.6 Common Stock shall be computed to three decimal places.

3.7 The right to receive Common Stock at a later date shall not entitle any person to rights of a stockholder with respect to such Common Stock unless and until shares of Common Stock have been issued to such person pursuant to Article IV hereof.

3.8 The Company shall not be required to acquire, reserve, segregate, or otherwise set aside shares of its Common Stock for the payment of its obligations under the Plan, but shall make available as and when required a sufficient number of shares of its Common Stock to meet the needs of the Plan, provided that the Company shall not be required to issue any fractional shares of Common Stock, and any fractional share amounts shall be paid in cash to the Director, at the time the shares of Common Stock are issued to such Director, based on the Stock Value of such Common Stock as of the close of trading on the business day immediately preceding such payment date.

3.9 Nothing contained herein shall be deemed to create a trust of any kind or any fiduciary relationship. To the extent that any person acquires a right to receive payments from the Company under the Plan, such right shall be no greater than the right of any unsecured general creditor of the Company.

ARTICLE IV PAYMENT OF DEFERRED COMPENSATION

4.1 Subject to the second succeeding sentence, amounts contained in a Director's Cash Account and/or Stock Account shall be distributed as the Director's election (made pursuant to Paragraph 2.2 of Article II hereof) shall provide. Distributions from the Director's Cash Account or Stock Account shall begin (i) within thirty (30) days after commencement of the Year following the Director's retirement or separation from the Board or (ii) six months after such event, whichever is later. Amounts credited to a Director's Cash Account shall be paid in cash. Amounts credited to a Director's Stock Account shall be paid in shares of Common Stock, subject to Paragraph 3.8 hereof. Notwithstanding the foregoing, no distributions shall be made under the Plan for a period of one year following any Change of Control of the Company (as determined in accordance with the Code and the Regulations).

4.2 Each Director shall have the right to designate a beneficiary who is to succeed to his right to receive payments hereunder in the event of death. Any designated beneficiary shall

receive payments in the same manner as the Director if he had lived. In case of a failure of designation or the death of a designated beneficiary without a designated successor, the balance of the amounts contained in the Director's Cash Account and/or Stock Account shall be payable in accordance with Section 4.1 to the Director's or former Directors' estate in full within thirty (30) days after commencement of the Year following the Year in which he dies. No designation of beneficiary or change in beneficiary shall be valid unless in writing signed by the Director and filed with the Secretary of the Company.

ARTICLE V
ADMINISTRATION

5.1 The Company shall administer the Plan at its expense. All decisions made by the Company with respect to issues hereunder shall be final and binding on all parties.

5.2 Except to the extent required by law, the right of any Director or any beneficiary to any benefit or to any payment hereunder shall not be subject in any manner to attachment or other legal process for the debts of such Director or beneficiary; and any such benefit or payment shall not be subject to alienation, sale, transfer, assignment or encumbrance.

ARTICLE VI
AMENDMENT OF PLAN

6.1 The plan may be amended, suspended or terminated in whole or in part from time to time by the Board except that no amendment, suspension, or termination shall apply to the payment to any Director or beneficiary of a deceased Director of any amounts previously credited to a Director's Cash Account or Stock Account.

APPENDIX A

Date: _____

Corporate Secretary
GTx, Inc.

Dear Mr. _____:

Pursuant to the GTx, Inc. Directors' Deferred Compensation Plan, as amended to date (the "Plan"), I hereby elect to defer receipt of all or a portion of my Director's fees commencing _____ and for succeeding calendar years commencing January 1, _____ in accordance with the percentages indicated below.

I elect to have my Director's fees (and committee fees, if any) credited as follows (fill in appropriate percentages for options a, b and c, below).

(a) _____% of the aggregate Director's fees shall be credited to my Cash Account as defined in the Plan;

(b) _____% of the aggregate Director's fees shall be credited to my Stock Account as defined in the Plan;

(c) _____% of the aggregate Director's fees shall not be deferred, but shall be paid to me directly as they accrue.

Further, I elect to receive the payment's pursuant to the Plan (check method desired, below):

_____ in one lump sum
_____ in _____ equal annual installments

Further, I understand that my Cash Account and Stock Account will become payable (i) within thirty (30) days after commencement of the Year following my retirement or separation from the Board or (ii) six months after such event, whichever is later. Notwithstanding the foregoing, no distributions shall be made under the Plan for a period of one year following any Change of Control of the Company (as determined in accordance with the Code and the Regulations).

In the event of my death prior to receipt of all or any balance of my Cash Account and/or Stock Account, I designate _____ as my beneficiary to receive the funds so accumulated.

Very truly yours,

Appendix A

EXHIBIT 5

BASS, BERRY & SIMS PLC
A PROFESSIONAL LIMITED LIABILITY COMPANY
ATTORNEYS AT LAW

KNOXVILLE OFFICE
900 SOUTH GAY STREET, SUITE 1700
KNOXVILLE, TN 37902
(865) 521-6200

MEMPHIS OFFICE
THE TOWER AT PEABODY PLACE
100 PEABODY PLACE, SUITE 950
MEMPHIS, TN 38103-2625
(901) 543-5900

REPLY TO:
THE TOWER AT PEABODY PLACE
100 PEABODY PLACE, SUITE 950
MEMPHIS, TN 38103-2625
(901) 543-5900

WWW.BASSBERRY.COM

DOWNTOWN OFFICE:
AMSOUTH CENTER
315 DEADERICK STREET, SUITE 2700
NASHVILLE, TN 37238-3001
(615) 742-6200

MUSIC ROW OFFICE:
29 MUSIC SQUARE EAST
NASHVILLE, TN 37203-4322
(615) 255-6161

September 9, 2004

The Board of Directors of GTx, Inc.
3 North Dunlap, 3rd Floor
Van Vleet Building
Memphis TN 38103

RE: REGISTRATION STATEMENT ON FORM S-8 RELATING TO THE DIRECTORS'
DEFERRED COMPENSATION PLAN.

Ladies and Gentlemen:

We have acted as counsel to GTx, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing of a registration statement on Form S-8 (the "Registration Statement") relating to certain shares of common stock, par value \$.001 per share, of the Company (the "Common Stock") to be issued pursuant to the above referenced plan (the "Plan").

In our capacity as such counsel, we have examined originals or copies, certified or otherwise identified to our satisfaction, of such corporate records of the Company, such agreements and instruments, such certificates of public officials, officers of the Company and other persons, and such other documents as we have deemed necessary or appropriate as a basis for the opinions hereinafter expressed. In such examinations, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity and completeness of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed, photostatic or facsimile copies, and the authenticity of the originals of such copies, and we have assumed all certificates of public officials to have been properly given and to be accurate.

As to factual matters relevant to this opinion letter, we have relied upon the representations and warranties as to factual matters contained in certificates and statements of officers of the Company and certain public officials. Except to the extent expressly set forth herein, we have made no independent investigations with regard thereto, and, accordingly, we do not express any opinion as to matters that might have been disclosed by independent verification.

On the basis of the foregoing, and subject to the limitations set forth herein, we are of the opinion that the shares of Common Stock issuable in connection with the Plan have been duly authorized and, when issued, sold and paid for in accordance with the terms of the Plan, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited in all respects to the laws of the State of Tennessee, the General Corporation Law of the State of Delaware ("Delaware General Corporation Law") and the federal laws of the United States of America, and no opinion is expressed with respect to the laws of any other jurisdiction or any effect which such laws may have on the opinions expressed herein. We are not rendering any opinion or providing any assurance as to compliance with any antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof. We are not licensed to practice law in the State of Delaware, and our opinion as to the Delaware General Corporation Law are based solely on our review of standard compilations of the official statutes of Delaware and without reference to its conflicts of law rules.

We consent to the filing of this opinion letter as an exhibit to the Registration Statement and to any related registration statement subsequently filed by the Company pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended (the "Act"), and to the use of our name under the heading "Legal Opinions" in any prospectus constituting a part thereof. In giving such consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Securities and Exchange Commission (the "Commission") thereunder.

This opinion letter is being furnished by us to the Company and the Commission solely for the benefit of the Company and the Commission in connection with the Registration Statement and is not to be used, circulated, quoted or otherwise relied upon by any other person, or by the Company or the Commission for any other purpose, without our express written consent. The only opinion rendered by us consists of those matters set forth in the fourth paragraph hereof, and no opinion may be implied or inferred beyond those expressly stated. This opinion letter is rendered as of the date hereof, and we have no obligation to update this opinion letter.

Yours very truly,

/s/ Bass, Berry & Sims PLC

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-_____) pertaining to the Directors' Deferred Compensation Plan of GTX, Inc. of our report dated January 30, 2004, except for Note 13, as to which the date is March 16, 2004, with respect to the financial statements of GTX, Inc. included in the Annual Report (Form 10-K) for the year ended December 31, 2003, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Memphis, Tennessee
September 7, 2004