

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **February 9, 2018**

GTx, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State of other jurisdiction of
incorporation or organization)

000-50549
(Commission
File Number)

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

**175 Toyota Place
7th Floor
Memphis, Tennessee**
(Address of principal executive offices)

38103
(Zip Code)

Registrant's telephone number, including area code: **(901) 523-9700**

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2, below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14D-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13c-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01. Entry into a Material Definitive Agreement.

On February 9, 2018, GTx, Inc. (the "Company") entered into an At-the-Market Equity OfferingSM Sales Agreement (the "Sales Agreement") with Stifel, Nicolaus & Company, Incorporated, as sales agent ("Stifel"), pursuant to which the Company may offer and sell, from time to time, through Stifel, shares of the Company's common stock, par value \$0.001 per share, having an aggregate offering price of up to \$50.0 million (the "ATM Offering"). The shares will be offered and sold pursuant to the Company's shelf registration statement on Form S-3 (File No. 333-222268).

The Company is not obligated to sell any shares under the Sales Agreement. Subject to the terms and conditions of the Sales Agreement, Stifel will use commercially reasonable efforts, consistent with its normal trading and sales practices, applicable state and federal law, rules and regulations and the rules of the NASDAQ Capital Market, to sell shares from time to time based upon the Company's instructions, including any price, time or size limits specified by the Company. Under the Sales Agreement, Stifel may sell shares by any method deemed to be an "at-the-market" offering as defined in Rule 415 under the Securities Act of 1933, as amended, or any other method permitted by law, including in privately negotiated transactions. The Company will pay Stifel a commission of up to 3.0% of the aggregate gross proceeds from each sale of shares, reimburse certain legal fees and disbursements and provide Stifel with customary indemnification and contribution rights. The Sales Agreement may be terminated by Stifel or the Company at any time upon notice to the other party, or by Stifel at any time in certain circumstances, including the occurrence of a material and adverse change in the Company's business or financial condition that makes it impractical or inadvisable to market the shares or to enforce contracts for the sale of the shares.

The foregoing description of the Sales Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Sales Agreement, a copy of which is filed as Exhibit 10.1 to this Current Report on Form 8-K. The legal opinion of Cooley LLP relating to the shares of common stock being offered pursuant to the Sales Agreement is filed as Exhibit 5.1 to this Current Report on Form 8-K.

This Current Report on Form 8-K shall not constitute an offer to sell or the solicitation of an offer to buy any shares under the Sales Agreement nor shall there be any sale of such shares in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.

Item 2.02 Results of Operations and Financial Condition.

On February 9, 2018, the Company filed with the U.S. Securities and Exchange Commission (the “SEC”) a prospectus supplement (the “Prospectus”) pursuant to Rule 424(b) under the Securities Act of 1933, as amended, in connection with the ATM Offering. In the Prospectus, the Company disclosed that as of December 31, 2017, the Company expects to report that it had cash, cash equivalents and short-term investments of approximately \$43.9 million. This amount reflects the Company’s estimates based solely upon information available to it as of the date of this Current Report on Form 8-K, is not a comprehensive statement of its financial results or position as of or for the year ended December 31, 2017, and has not been audited, reviewed or compiled by the Company’s independent registered public accounting firm. The Company’s financial closing procedures for the three months and year ended December 31, 2017, are not yet complete and, as a result, the Company’s final results upon completion of its closing procedures may vary from the preliminary estimates, and any such differences may be material.

Forward-Looking Statements

This Item 2.02 of this report contains forward-looking statements, including, statements relating to the Company’s expected cash position as of December 31, 2017. These forward-looking statements are based upon the Company’s current expectations. Actual results could differ materially from these forward-looking statements as a result of certain factors, including, without limitation, risks related to changes in estimated cash position based on the completion of financial closing procedures and the audit of the Company’s financial statements, and other risks detailed in the Company’s filings with the SEC. You are cautioned not to place undue reliance on these forward-looking statements,

which speak only as of the date of this report. The Company does not undertake any obligation to update any forward-looking statements as a result of new information, future events, changed assumptions or otherwise.

The information in Item 2.02 of this report shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of Section 11 and 12(a)(2) of the Securities Act of 1933, as amended. The information contained in this Item 2.02 shall not be incorporated by reference into any filing with the SEC made by the Company, whether made before or after the date hereof, except as shall be expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
5.1	Opinion of Cooley LLP
10.1	At-the-Market Equity Offering Sales Agreement by and between GTx, Inc. and Stifel, Nicolaus & Company, Incorporated, dated February 9, 2018.
23.1	Consent of Cooley LLP (included in Exhibit 5.1).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

GTx, Inc.

Date: February 9, 2018

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

February 9, 2018

GTx, Inc.
175 Toyota Plaza, 7th Floor
Memphis, TN 38103

Re: GTx, Inc.

Ladies and Gentlemen:

We have acted as counsel to GTx, Inc., a Delaware corporation (the “**Company**”) with respect to certain matters in connection with the offering by the Company of \$50,000,000 of shares of the Company’s common stock par value \$0.001 per share (the “**Shares**”) pursuant to the Registration Statement on Form S-3 (File No. 333-222268) (the “**Registration Statement**”), filed with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Act**”), the related prospectus dated January 5, 2018 included within the Registration Statement (the “**Base Prospectus**”), and the prospectus supplement to be filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations of the Act (together with the Base Prospectus, the “**Prospectus**”). The Shares are to be sold by the Company in accordance with that certain At-the-Market Equity Offering Sales Agreement, dated February 9, 2018 between the Company and Stifel Nicolaus & Company, Incorporated (the “**Agreement**”), as described in the Prospectus.

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Agreement, the Company’s Restated Certificate of Incorporation, as amended, Amended and Restated Bylaws, each as currently in effect, and such other documents, records, certificates, memoranda and other instruments as in our judgement are necessary or appropriate to render the opinion expressed below. In rendering this opinion, we have assumed the genuineness and authenticity of all signatures on original documents, the genuineness and authenticity of all documents submitted to us as originals the conformity to originals of all documents submitted to us as copies, and the accuracy completeness and authenticity of certificates of public officials. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought independently to verify such matters.

We have assumed that each sale of the Shares will be duly authorized by the Board of Directors of the Company, a duly authorized committee thereof or a person or body pursuant to an authorization granted in accordance with Section 152 of the General Corporation Law of the State of Delaware (the “**DGCL**”) and that no more than 5,000,000 Shares will be sold under the Agreement. We express no opinion to the extent that future issuances of securities of the Company and/or anti-dilution adjustments to outstanding securities of the Company cause the number of shares of Common Stock outstanding or issuable upon conversion or exercise of outstanding securities of the Company to exceed the number of Shares then issuable under the Agreement.

Our opinion herein is expressed solely with respect to the DGCL. Our opinion is based on these laws as in effect on the date hereof, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. We express no opinion as to whether the laws of any particular jurisdiction other than those identified above are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing, and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that the Shares, when sold and issued against payment therefor in accordance with the

Agreement, the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable.

We consent to the reference to our firm under the caption “Legal Matters” in the Prospectus and to the filing of this opinion as an exhibit to a Current Report on Form 8-K to be filed with the Commission for incorporation by reference into the Registration Statement.

Sincerely,

COOLEY LLP

By: /s/ Karen E. Deschaine
Karen E. Deschaine

GTX, INC.

Common Stock
(\$0.001 par value per share)

AT-THE-MARKET EQUITY OFFERING SALES AGREEMENT

February 9, 2018

STIFEL, NICOLAUS & COMPANY, INCORPORATED
One South Street, 15th Floor
Baltimore, Maryland 21202

Ladies and Gentlemen:

GTX, Inc., a Delaware corporation (the "Company"), proposes, subject to the terms and conditions stated herein, to issue and sell from time to time to or through Stifel, Nicolaus & Company, Incorporated ("Stifel Nicolaus"), as sales agent and/or principal ("Agent"), shares (the "Shares") of the Company's common stock, \$0.001 par value per share (the "Common Stock"), having an aggregate offering price of up to \$50,000,000.00 on the terms set forth in Section 2 of this At-The-Market Equity Offering Sales Agreement (the "Agreement"). The Company agrees that whenever it determines to sell Shares directly to the Agent as principal, it will enter into a separate agreement (each, a "Terms Agreement") in substantially the form of Annex I hereto, relating to such sale in accordance with Section 3 of this Agreement.

The Company has prepared and filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-3 (File No. 333-222268), and such amendments to such registration statement as may have been required to the date of this Agreement, under the Securities Act of 1933, as amended (the "1933 Act") and the rules and regulations of the Commission under the 1933 Act (the "1933 Act Regulations"). Such registration statement, at any given time, including the amendments thereto to such time, the exhibits and schedules thereto at such time, the documents incorporated or deemed to be incorporated by reference therein pursuant to Item 12 of Form S-3 under the 1933 Act at such time and the documents and information otherwise deemed to be a part thereof or included therein by Rule 430B under the 1933 Act (the "Rule 430B Information") or otherwise pursuant to the 1933 Act Regulations at such time, is herein called the "Registration Statement." Any registration statement filed pursuant to Rule 462(b) of the 1933 Act Regulations is herein called the "Rule 462(b) Registration Statement" and, after such filing, the term "Registration Statement" shall include the Rule 462(b) Registration Statement. The Registration Statement at the time it originally became effective is herein called the "Initial Registration Statement". The prospectus in the form in which it appeared in the Initial Registration Statement is herein called the "Base Prospectus." Promptly after execution and delivery of this Agreement, the Company will prepare and file with the Commission a final prospectus supplement to the Base Prospectus relating to the Shares and the offering thereof in accordance with the provisions of Rule 430B ("Rule 430B") and Rule 424(b) ("Rule 424(b)") of the 1933 Act Regulations. Such final supplemental form of prospectus (including the Base Prospectus as so supplemented), in the form filed with the Commission pursuant to Rule 424(b) under the 1933 Act is herein called the "Prospectus." Any reference herein to the Base Prospectus, or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the 1933 Act as of the date of such prospectus.

For the purposes of this Agreement:

"Applicable Time" means, with respect to any Shares, the time of sale of such Shares pursuant to this Agreement.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 of the 1933 Act Regulations ("Rule 433"), including without limitation any "free writing prospectus" (as defined in Rule 405 of the 1933 Act Regulations ("Rule 405")) relating to the Shares that is (i) required to be filed with the Commission by the Company, (ii) a "road show that is a written communication" within the meaning of Rule

433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Shares or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

"Issuer General Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a "bona fide electronic road show," as defined in Rule 433).

"Issuer Limited Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

"Statutory Prospectus" means the Base Prospectus, as amended and supplemented immediately prior to the Applicable Time, including any document incorporated by reference therein and any prospectus supplement deemed to be a part thereof, including the final prospectus supplement dated the date hereof. For purposes of this definition, Rule 430B Information contained in a form of prospectus that is deemed retroactively to be a part of the Registration Statement shall be considered to be included in the Statutory Prospectus as of the actual time that form of prospectus is filed with the Commission pursuant to Rule 424(b) under the Securities Act.

All references in this Agreement to financial statements and schedules and other information which is "described," "contained," "included" or "stated" (or other references of like import) in the Registration Statement, the Base Prospectus, or the Prospectus shall be deemed to mean and include all such financial statements and schedules and other information incorporated or deemed incorporated by reference in the Registration Statement, the Base Prospectus, or the Prospectus, as the case may be, prior to the execution and delivery of this Agreement; and all references in this Agreement to amendments or supplements to the Registration Statement, the Base Prospectus, or the Prospectus shall be deemed to mean and include the filing of any document under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (collectively, the "1934 Act"), incorporated or deemed to be incorporated by reference in the Registration Statement, the Base Prospectus, or the Prospectus, as the case may be, at or after the execution and delivery of this Agreement.

Section 1. Representations and Warranties. The Company represents and warrants to the Agent that, except as described in the Registration Statement, the General Disclosure Package and the Prospectus, as of the date of this Agreement, any applicable Registration Statement Amendment Date (as defined in Section 3 below), and each Applicable Time, unless such representation, warranty or agreement specifies a different time:

(i) Registration Statement and Prospectuses. The Company meets the requirements for use of Form S-3 under the 1933 Act without reliance on General Instruction I.B.6 of Form S-3. Each of the Registration Statement and any amendment thereto has become effective under the 1933 Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no order preventing or suspending the use of the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated. The Company has complied with each request (if any) from the Commission for additional information.

Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. The Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, complied in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations.

The documents incorporated or deemed to be incorporated by reference in the Registration Statement and the Prospectus, when they became effective or at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the 1934 Act and the rules and regulations of the Commission under the 1934 Act (the "1934 Act Regulations").

(ii) Accurate Disclosure. Neither the Registration Statement nor any amendment thereto, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the

2

Applicable Time, none of (A) the General Disclosure Package and (B) any individual Issuer Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any amendment or supplement thereto (including any prospectus wrapper), as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b) and at each Applicable Time, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus, at the time the Registration Statement became effective or when such documents incorporated by reference were filed with the Commission, as the case may be, when read together with the other information in the Registration Statement, the General Disclosure Package or the Prospectus, as the case may be, did not and will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement (or any amendment thereto), the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) made in reliance upon and in conformity with written information furnished to the Company by the Agent expressly for use therein.

(iii) Issuer Free Writing Prospectuses. No Issuer Free Writing Prospectus conflicts or will conflict with the information contained in the Registration Statement, any Statutory Prospectus or the Prospectus, including any document incorporated by reference therein, and any preliminary or other prospectus deemed to be a part thereof that has not been superseded or modified.

(iv) Company Not Ineligible Issuer. At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) of the 1933 Act Regulations) of the Shares and at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

(v) Independent Accountants. The accountants who certified the financial statements and supporting schedules included in the Registration Statement are independent public accountants as required by the 1933 Act, the 1933 Act Regulations, the 1934 Act, the 1934 Act Regulations and the Public Accounting Oversight Board.

(vi) Financial Statements; Non-GAAP Financial Measures. The financial statements included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus, together with the related schedules and notes, present fairly, in all material respects, the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company and its consolidated subsidiaries for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved except as may be set forth in the notes included or incorporated by reference and except that unaudited financial statements may not contain footnotes required by GAAP. The supporting schedules, if any, present fairly, in all material respects, in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Prospectus present fairly, in all material respects, the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included or incorporated by reference in the Registration Statement. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus under the 1933 Act or the 1933 Act Regulations. Any disclosures contained in the Registration Statement, the General Disclosure Package or the Prospectus, or incorporated by reference therein, that constitute "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission) comply with Regulation G of the 1934 Act and Item 10 of Regulation S-K of the

3

1933 Act, to the extent applicable. The interactive data in eXtensible Business Reporting Language incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus fairly presents the information called for in all material respects and has been prepared in accordance with

the Commission's rules and guidelines applicable thereto.

(vii) No Material Adverse Change in Business. Except as otherwise stated therein, since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, (A) there has been no material adverse change in the condition, financial or otherwise, or in the business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company or any of its subsidiaries, other than those in the ordinary course of business, which are material with respect to the Company and its subsidiaries considered as one enterprise, and (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock.

(viii) Good Standing of the Company. The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Prospectus and to enter into and perform its obligations under this Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not result in a Material Adverse Effect.

(ix) Subsidiaries. As of the date of this Agreement, the Company does not own or control, directly or indirectly, any corporation, association or other entity.

(x) Capitalization. The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the General Disclosure Package and the Prospectus (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee benefit plans referred to in the Registration Statement, the General Disclosure Package and the Prospectus or pursuant to the exercise of warrants, convertible securities or options referred to in the Registration Statement, the General Disclosure Package and the Prospectus). The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company were issued in violation of the preemptive or other similar rights of any securityholder of the Company. There are no options, warrants, agreements, contracts or other rights in existence to purchase or acquire from the Company any shares of the capital stock of the Company.

(xi) Authorization of Agreement. This Agreement has been duly authorized, executed and delivered by the Company. All corporate actions (including those of stockholders) necessary for the Company to consummate the transactions contemplated in this Agreement have been obtained and are in effect. The approval of the Company's stockholders is not required under the rules and regulations of any trading market for the Company to issue and deliver the Shares as contemplated in this Agreement.

(xii) Authorization and Description of Shares. The Shares to be sold by the Company pursuant to this Agreement have been duly authorized for issuance and sale pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration, will be validly issued and fully paid and non-assessable; and the issuance of the Shares is not subject to the preemptive or other similar rights of any securityholder of the Company. The Common Stock conforms in all material respects to all statements relating thereto contained in the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same. No holder of Shares will be subject to personal liability solely by reason of being such a holder.

(xiii) Registration Rights. Except as have been waived or complied with, there are no persons with registration rights or other similar rights to have any securities registered for sale pursuant to the Registration Statement or otherwise registered for sale or sold by the Company under the 1933 Act pursuant to this Agreement.

(xiv) Absence of Violations, Defaults and Conflicts. Neither the Company nor any of its subsidiaries is (A) in violation of its charter, by-laws or similar organizational document, (B) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound or to which any of the properties or assets of the Company or any subsidiary is subject (collectively, "Agreements and Instruments"), except for such violations or defaults that would not, singly or in the aggregate, result in a Material Adverse Effect, or (C) in violation of any law, statute, rule, regulation, judgment, order, writ or decree of any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency having jurisdiction over the Company or any of its subsidiaries or any of their respective properties, assets or operations (each, a "Governmental Entity"), except for such violations that would not, singly or in the aggregate, result in a Material Adverse Effect. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein and in the Registration Statement (including the issuance and sale of the Shares and the use of the proceeds from the sale of the Shares as described in the Prospectus under the caption "Use of Proceeds") and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or any subsidiary pursuant to, the Agreements and Instruments (except for such conflicts, breaches, defaults or Repayment Events or liens, charges or encumbrances that would not, singly or in the aggregate, result in a Material Adverse Effect), nor will such action result in any violation of (i) the provisions of the charter, by-laws or similar organizational document of the Company or any of its subsidiaries or (ii) any law, statute, rule, regulation, judgment, order, writ or decree of any Governmental Entity, except for such violations described in (ii) that would not, singly or in the aggregate, result in a Material Adverse Effect. As used herein, a "Repayment Event" means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.

(xv) Absence of Labor Dispute. No labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or any subsidiary's principal suppliers, manufacturers, customers or contractors, which, in either case, would result in a Material Adverse Effect.

(xvi) Absence of Proceedings. There is no action, suit, proceeding, inquiry or investigation before or brought by any Governmental Entity now pending or, to the knowledge of the Company, threatened, against or affecting the Company or any of its subsidiaries, which could reasonably be expected to result in a Material Adverse Effect, or which could reasonably be expected to materially and adversely affect their respective properties or assets or the consummation of the transactions contemplated in this Agreement or the performance by the Company of its obligations hereunder; and the aggregate of all pending legal or governmental proceedings to which the Company or any such subsidiary is a party or of which any of their respective properties or

assets is the subject which are not described in the Registration Statement, the General Disclosure Package and the Prospectus, including ordinary routine litigation incidental to the business, could not result in a Material Adverse Effect.

(xvii) Accuracy of Exhibits. There are no contracts or documents which are required to be described in the Registration Statement or the Prospectus or the documents incorporated by reference therein or to be filed as exhibits to the Registration Statement which have not been so described and filed as required.

(xviii) Absence of Further Requirements. Except where the absence thereof would not result in a Material Adverse Effect, no filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any Governmental Entity is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Shares hereunder or the consummation of the transactions contemplated by this Agreement, except such as have been already obtained or as may be required under the 1933 Act, the 1933 Act Regulations, the rules of the Nasdaq Stock Market LLC, state securities laws or the rules of Financial Industry Regulatory Authority, Inc. ("FINRA"). Neither the Company nor, to the Company's knowledge, the Company's officers, directors or any of its affiliates (within the meaning of

5

FINRA Conduct Rule 5121(f)(1)), directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I, Section 1(gg) of the By-laws of FINRA) of, any member firm of FINRA. The Company satisfies the eligibility requirements in existence immediately prior to October 21, 1992 for the use of a registration statement on Form S-3 for the offering of the Shares. To enable the Agent to rely on Rule 5110(b)(7)(C)(i) of FINRA, the Company represents that, (i) as of a date within 60 days of the date of this Agreement, the Company had (A) a non-affiliate, public common equity float of at least \$150 million or (B) a non-affiliate, public common equity float of at least \$100 million and annual trading volume of at least three million shares and (ii) as of the date of this Agreement, has been subject to the 1934 Act reporting requirements for a period of at least 36 months.

(xix) NASDAQ Listing. The Common Stock of the Company is registered pursuant to Section 12(b) of the 1934 Act and is listed on the NASDAQ Capital Market under the ticker symbol "GTXI." The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the 1934 Act or delisting the Common Stock from the NASDAQ Capital Market nor has the Company received any notice that it is currently not in compliance with the listing or maintenance requirements of the NASDAQ Capital Market. The Company believes that it is, and it will in the foreseeable future continue to be, in material compliance with all such listing and maintenance requirements. A registration statement relating to the Common Stock on Form 8-A or other applicable form under the 1934 Act has become effective.

(xx) Possession of Licenses and Permits. The Company and its subsidiaries possess such permits, licenses, approvals, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Governmental Entities necessary to conduct the business now operated by them, including without limitation the United States Food and Drug Administration ("FDA") or any other federal, state or foreign agencies or bodies engaged in the regulation of pharmaceuticals, animal or human clinical studies or biohazardous substances, except where the failure so to possess would not, singly or in the aggregate, result in a Material Adverse Effect. The Company and its subsidiaries are in compliance with the terms and conditions of all Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, result in a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect, except when the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not, singly or in the aggregate, result in a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to result in a Material Adverse Effect.

(xxi) FDA Regulations. The Company has operated and currently is in compliance with the United States Federal Food, Drug, and Cosmetic Act, as amended, and all applicable rules and regulations of the FDA and other federal, state, local and foreign governmental bodies exercising comparable authority, except where the failure to so operate or be in compliance would not reasonably be expected to have a Material Adverse Effect. The clinical studies conducted by or, to the Company's knowledge, on behalf of the Company that are described in the Registration Statement and the Prospectus were, and, if still pending, are being, conducted in all material respects in accordance with the protocols submitted to the FDA and all applicable laws and regulations; preclinical studies conducted by or, to the Company's knowledge, on behalf of the Company that are described in the Registration Statement and the Prospectus were, and, if still pending, are being, conducted in all material respects in accordance with experimental protocols, procedures and controls; the descriptions of the tests and preclinical and clinical studies, and results thereof, conducted by or, to the Company's knowledge, on behalf of the Company contained in the Registration Statement and the Prospectus are accurate and complete in all material respects; and the Company is not aware of any other trials or studies, the results of which reasonably call into question the results described or referred to in the Registration Statement and the Prospectus; and the Company has not received any written notice or correspondence from the FDA or any foreign, state or local governmental body exercising comparable authority requiring the termination, suspension, or clinical hold of any preclinical or clinical studies, or such written notice or correspondence from any Institutional Review Board or comparable authority requiring the termination or suspension of a clinical study, conducted by or on behalf of the Company, which termination, suspension, or clinical hold would reasonably be expected to have a Material Adverse Effect. None of the Company, its subsidiaries, or their respective business operations, except as would not reasonably be expected to result in a Material Adverse Effect, is in violation of the Health Insurance Portability and Accountability Act of

6

1996 (Pub. L. No. 104-191) and the Health Information Technology for Economic and Clinical Health Act of 2009, and the regulations promulgated thereunder and comparable state privacy and security laws. The Company has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority alleging that any product candidate, operation or activity is in material violation of any permit or Food, Drug and Cosmetic Act provision and has no knowledge that any such governmental authority is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; and the Company has not received notice, either verbally or in writing, that any governmental authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material permits and has no knowledge that any such governmental authority is considering such action.

(xxii) Title to Property. Except where the failure thereof would not result in a Material Adverse Effect, to the Company's knowledge, the Company and its subsidiaries have good and marketable title to all real property owned by them and good title to all other properties owned by them, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as do not, singly or

in the aggregate, materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or any of its subsidiaries; and all of the leases and subleases material to the business of the Company and its subsidiaries, considered as one enterprise, and under which the Company or any of its subsidiaries holds properties described in the Registration Statement, the General Disclosure Package or the Prospectus, are in full force and effect, and neither the Company nor any such subsidiary has any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company or any subsidiary under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or such subsidiary to the continued possession of the leased or subleased premises under any such lease or sublease.

(xxiii) Possession of Intellectual Property. The Company and its subsidiaries own or possess, or can acquire on reasonable terms, adequate patents, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names or other intellectual property (collectively, “Intellectual Property”) necessary to carry on the business now operated by them except as such failure to own, possess, or acquire such rights would not be reasonably expected to have a Material Adverse Effect, and neither the Company nor any of its subsidiaries has received any notice or is otherwise aware of any infringement of or conflict with asserted rights of others with respect to any Intellectual Property or of any facts or circumstances which would render any Intellectual Property invalid or inadequate to protect the interest of the Company or any of its subsidiaries therein, and which infringement or conflict (if the subject of any unfavorable decision, ruling or finding) or invalidity or inadequacy, singly or in the aggregate, would result in a Material Adverse Effect. To the Company’s knowledge, no employee of the Company is in or has ever been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee’s employment with the Company or actions undertaken by the employee while employed with the Company.

(xxiv) Environmental Laws. Except as would not, singly or in the aggregate, result in a Material Adverse Effect, (A) neither the Company nor any of its subsidiaries is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or mold (collectively, “Hazardous Materials”) or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, “Environmental Laws”), (B) the Company and its subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, (C) there are no pending or, to the Company’s knowledge, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company

7

or any of its subsidiaries and (D) there are no events or circumstances of which the Company is aware that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

(xxv) Occupational Safety Laws. The Company (i) is in compliance, in all material respects, with any and all applicable foreign, federal, state and local laws, rules, regulations, treaties, statutes and codes promulgated by any and all governmental authorities (including pursuant to the Occupational Health and Safety Act) relating to the protection of human health and safety in the workplace (“Occupational Laws”); (ii) has received all material Permits required of it under applicable Occupational Laws to conduct its business as currently conducted; and (iii) is in compliance, in all material respects, with all terms and conditions of such Permit. No action, proceeding, revocation proceeding, writ, injunction or claim is pending or, to the Company’s knowledge, threatened against the Company relating to Occupational Laws that would reasonably be expected to have a Material Adverse Effect.

(xxvi) Accounting Controls and Disclosure Controls. The Company and each of its subsidiaries maintain effective internal control over financial reporting (as defined under Rule 13a-15 and 15d-15 under the 1934 Act Regulations) and a system of internal accounting controls sufficient to provide reasonable assurances that (A) transactions are executed in accordance with management’s general or specific authorization; (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (C) access to assets is permitted only in accordance with management’s general or specific authorization; (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and (E) the interactive data in eXtensible Business Reporting Language incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus fairly presents the information called for in all material respects and is prepared in accordance with the Commission’s rules and guidelines applicable thereto. Since the end of the Company’s most recent audited fiscal year, the Company’s not aware of any (1) material weakness in the Company’s internal control over financial reporting (whether or not remediated) and (2) change in the Company’s internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting. The Company and each of its subsidiaries maintain an effective system of disclosure controls and procedures (as defined in Rule 13a-15 and Rule 15d-15 under the 1934 Act Regulations) that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rules and forms, and is accumulated and communicated to the Company’s management, including its principal executive officer or officers and principal financial officer or officers, as appropriate, to allow timely decisions regarding disclosure. Neither the Company’s board of directors nor the audit committee has been informed, nor is any director of the Company or the Company aware, of (i) during the past 36 months, any “significant deficiencies” or “material weaknesses” (each as defined by the Public Company Accounting Oversight Board) in the design or operation of the Company’s internal controls that could adversely affect the Company’s ability to record, process, summarize and report financial data, required to be disclosed by the Company in reports filed with the Commission that were not so disclosed; or (ii) any fraud, whether or not material, that involves management or other employees of the Company who have a significant role in the Company’s internal controls.

(xxvii) Compliance with the Sarbanes-Oxley Act. There is and has been no failure on the part of the Company or any of the Company’s directors or officers, in their capacities as such, to comply in all material respects with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith, including Section 402 related to loans and Sections 302 and 906 related to certifications. No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors or officers or, to the knowledge of the Company, stockholders, customers or suppliers of the Company, on the other hand, which is required to be described in the Registration Statement, the General Disclosure Package and the Prospectus and which is not so described.

which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided and except where the failure to do so would not reasonably be expected to have a Material Adverse Effect. The United States federal income tax returns of the Company for the past three tax years have been settled and no assessment in connection therewith has been made against the Company. The Company and its subsidiaries have filed all other tax returns that are required to have been filed by them pursuant to applicable foreign, state, local or other law except insofar as the failure to file such returns would not result in a Material Adverse Effect, and has paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company and its subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been established by the Company and except where the failure to do so would not reasonably be expected to have a Material Adverse Effect. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not result in a Material Adverse Effect.

(xxix) ERISA. Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), that is maintained, administered or contributed to by the Company or any of its affiliates for employees or former employees of the Company has been maintained in material compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to, ERISA and the Internal Revenue Code of 1986, as amended (the “Code”). No prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any such plan excluding transactions effected pursuant to a statutory or administrative exemption, including, without limitation, pursuant to Section 408 of ERISA and the regulatory guidance thereunder; and for each such plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no “accumulated funding deficiency” as defined in Section 412 of the Code has been incurred, whether or not waived, and the fair market value of the assets of each such plan (excluding for these purposes accrued but unpaid contributions) exceeds the present value of all benefits accrued under such plan determined using reasonable actuarial assumptions.

(xxx) Insurance. The Company and its subsidiaries carry or are entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute engaged in the same or similar business, and all such insurance is in full force and effect. The Company has no reason to believe that it or any of its subsidiaries will not be able (A) to renew its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Effect.

(xxxi) Investment Company Act. The Company is not required, and upon the issuance and sale of the Shares as herein contemplated and the application of the net proceeds therefrom as described in the Registration Statement, the General Disclosure Package and the Prospectus will not be required, to register as an “investment company” within the meaning of the Investment Company Act of 1940, as amended (the “1940 Act”).

(xxxii) Absence of Manipulation. Neither the Company nor any affiliate of the Company has taken, nor will the Company or any affiliate take, directly or indirectly, any action which is designed, or would be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares or to result in a violation of Regulation M under the 1934 Act. The Company has not effected any sales of Common Stock which are required to be disclosed in response to Item 701 of Regulation S-K under the 1933 Act which have not been so disclosed in the Registration Statement.

(xxxiii) Rated Debt. The Company has no debt securities or preferred stock that is rated by any “nationally recognized statistical rating agency” (as that term is defined by the Commission for purposes of Section 3(a)(62) of the 1934 Act).

(xxxiv) Foreign Corrupt Practices Act. None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries is aware of or has taken any action, directly or indirectly, that would result in a

violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the “FCPA”), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any “foreign official” (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith. To the knowledge of the Company, no person associated or affiliated with or acting on behalf of the Company, including without limitation any director, officer, agent or employee of the Company has, directly or indirectly, while acting on behalf of the Company (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; or (ii) made any unlawful payment to domestic government officials or employees or to domestic political parties or campaigns from corporate funds.

(xxxv) Money Laundering Laws. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the applicable rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the “Money Laundering Laws”); and no action, suit or proceeding by or before any Governmental Entity involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(xxxvi) OFAC. None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its subsidiaries is an individual or entity (“Person”) currently the subject or target of any sanctions administered or enforced by the United States Government, including, without limitation, the U.S. Department of the Treasury’s Office of Foreign Assets

Control (“OFAC”), the United Nations Security Council (“UNSC”), the European Union, Her Majesty’s Treasury (“HMT”), or other relevant sanctions authority (collectively, “Sanctions”), nor is the Company located, organized or resident in a country or territory that is the subject of Sanctions; and the Company will not directly or indirectly use the proceeds of the sale of the Shares, or lend, contribute or otherwise make available such proceeds to any subsidiaries, joint venture partners or other Person, to fund any activities of or business with any Person, or in any country or territory, that, at the time of such funding, is the subject of Sanctions or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

(xxxvii) Lending Relationship. The Company (i) does not have any material lending or other relationship with any bank or lending affiliate of the Agent and (ii) does not intend to use any of the proceeds from the sale of the Shares to repay any outstanding debt owed to any affiliate of the Agent.

(xxxviii) Statistical and Market-Related Data. Any statistical and market-related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

(xxxix) Company Stock Plans. With respect to the stock options (the “Stock Options”) granted pursuant to the stock-based compensation plans of the Company and its subsidiaries (the “Company Stock Plans”) that are currently outstanding and not exercised, (i) each Stock Option intended to qualify as an “incentive stock option” under Section 422 of the Code so qualifies, (ii) each grant of a Stock Option was duly authorized no later than the date on which the grant of such Stock Option was by its terms to be effective (the “Grant Date”) by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto, (iii) each such grant was made in accordance with the terms of the Company Stock Plans, the

10

1934 Act and all other applicable laws and regulatory rules or requirements, including the rules of the Nasdaq Stock Market LLC and any other exchange on which Company securities are traded, and (iv) each such grant was properly accounted for in accordance with GAAP in the financial statements (including the related notes) of the Company and disclosed in the Company’s filings with the Commission in accordance with the 1934 Act and all other applicable laws. The Company has not knowingly granted, and there is no and has been no policy or practice of the Company of granting, Stock Options prior to, or otherwise coordinating the grant of Stock Options with, the release or other public announcement of material information regarding the Company or its subsidiaries or their results of operations or prospects.

(xl) Cuba. The Company does not do business with the government of Cuba or with any person located in Cuba within the meaning of Section 517.075, Florida Statutes.

(xli) Anti-Takeover. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company’s charter documents or the laws of its state of incorporation that is or could reasonably be expected to become applicable to the Agent as a result of the Agent and the Company fulfilling their respective obligations or exercising their respective rights under this Agreement, including, without limitation, the Company’s issuance of the Shares.

(xlii) Actively Traded Security. The Common Stock is an “actively-traded security” exempted from the requirements of Rule 101 of Regulation M under the Exchange Act by subsection (c)(1) of such rule.

(xliii) No Commissions. Neither the Company nor any of its subsidiaries is a party to any contract, agreement or understanding with any person (other than as contemplated by this Agreement or any Terms Agreement) that would give rise to a valid claim against the Company or any of its subsidiaries or the Agent for a brokerage commission, finder’s fee or like payment in connection with the offering and sale of the Shares.

(xliv) Deemed Representation. Any certificate signed by any officer of the Company delivered to the Agent or to counsel for the Agent pursuant to or in connection with this Agreement shall be deemed a representation and warranty by the Company to the Agent as to the matters covered thereby as of the date or dates indicated in such certificate.

Section 2. Sale and Delivery of Shares.

(a) Subject to the terms and conditions set forth herein, the Company agrees to issue and sell exclusively through the Agent acting as sales agent or directly to the Agent acting as principal from time to time, and the Agent agrees to use its commercially reasonable efforts to sell as sales agent for the Company, the Shares. Sales of the Shares, if any, through the Agent acting as sales agent or directly to the Agent acting as principal will be made by means of ordinary brokers’ transactions on the Nasdaq, in negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices. Anything to the contrary notwithstanding in this Agreement, without the Company’s prior written consent, the Agent may not place any shares by any method other than transactions that are deemed to be “at-the-market offerings” as defined in Rule 415 under the 1933 Act, including sales made directly on the NASDAQ Capital Market, or sales made to or through a market maker other than on an exchange or through an electronic communications network. The Agent shall effect any sales of shares in accordance with applicable state and federal rules and regulations and the rules of Nasdaq and otherwise in accordance with the instructions to sell shares delivered pursuant to Section 2(b). Nothing contained herein restricts, nor may be deemed to restrict, the Company from undertaking another offering of its securities pursuant to a separate registrations under the 1933 Act (or any exemption from such registration), or another offering under the Registration Statement, provided the Company complies with Section 3(p).

(b) Subject to instructions to sell shares delivered pursuant to this Section 2(b) or the applicable Terms Agreement, the Shares are to be sold on a daily basis or otherwise as shall be agreed to by the Company and the Agent on that trading day (other than a day on which the NASDAQ Capital Market is scheduled to close prior to its regular weekday closing time, each, a “Trading Day”) that the Company has satisfied its

obligations under Section 6 of this Agreement and that the Company has instructed the Agent to make such sales. For the avoidance of doubt, the foregoing limitation shall not apply to sales solely to employees or security holders of the Company or its subsidiaries, or to a trustee or other person acquiring such securities for the accounts of such persons in which Stifel Nicolaus is acting for the Company in a capacity other than as Agent under this Agreement. On any Trading Day, the Company may instruct the Agent by telephone (confirmed promptly by teletype or email, which confirmation will be promptly acknowledged by the Agent) as to the maximum aggregate dollar value or number of Shares to be sold by the Agent on such day (in any event not in excess of the number available for issuance under the Prospectus and the currently effective Registration Statement) and the minimum price per Share at which such Shares may be sold. Subject to the terms and conditions hereof, the Agent shall use its commercially reasonable efforts to sell as sales agent all of the Shares so designated by the Company and in the manner and on the terms so designated by the Company. The Company and the Agent each acknowledge and agree that (A) there can be no assurance that the Agent will be successful in selling the Shares, (B) the Agent will incur no liability or obligation to the Company or any other person or entity if they do not sell Shares for any reason other than a failure by the Agent to use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable law and regulations to sell such Shares as required by this Agreement, and (C) the Agent shall be under no obligation to purchase Shares on a principal basis except as otherwise specifically agreed by each of the Agent and the Company pursuant to a Terms Agreement. In the event of a conflict between the terms of this Agreement and the terms of a Terms Agreement, the terms of such Terms Agreement will control.

(c) Notwithstanding the foregoing, the Company shall not authorize the issuance and sale of, and the Agent as sales agent shall not be obligated to use its commercially reasonable efforts to sell, any Shares (i) at a price lower than the minimum price therefor authorized from time to time, or (ii) in a number in excess of the number or maximum aggregate dollar value of Shares authorized from time to time to be issued and sold under this Agreement, in each case, by the Company's board of directors, or a duly authorized committee thereof, and notified to the Agent in writing. In addition, the Company may, upon notice to the Agent, suspend the offering of the Shares or the Agent may, upon notice to the Company, suspend the offering of the Shares with respect to which the Agent is acting as sales agent for any reason and at any time; provided, however, that such suspension or termination shall not affect or impair the parties' respective obligations with respect to the Shares sold hereunder prior to the giving of such notice. Any notice given pursuant to the preceding sentence may be given by telephone (confirmed promptly by teletype or email, which confirmation will be promptly acknowledged).

(d) The gross sales price of any Shares sold pursuant to this Agreement by the Agent acting as sales agent of the Company shall be the market price prevailing at the time of sale for shares of the Company's Common Stock sold by the Agent on the NASDAQ Capital Market or otherwise, at prices relating to prevailing market prices or at negotiated prices. The compensation payable to the Agent for sales of Shares with respect to which the Agent acts as sales agent shall be up to 3.0% of the gross sales price of the Shares sold pursuant to this Agreement. The Company may sell Shares to the Agent, acting as principal, at a price agreed upon with the Agent at the relevant Applicable Time and pursuant to a separate Terms Agreement. The remaining proceeds, after further deduction for any transaction fees imposed by any governmental, regulatory or self-regulatory organization in respect of such sales, shall constitute the net proceeds to the Company for such Shares (the "Net Proceeds"). The Agent shall notify the Company as promptly as practicable if any deduction referenced in the preceding sentence will be required. Notwithstanding the foregoing, in the event the Company engages the Agent as sales agent for a sale of Shares that would constitute a "distribution" within the meaning of Rule 100 of Regulation M under the Exchange Act, the Company and the Agent will use reasonable commercial efforts to agree to compensation that is customary for the Agent with respect to such transactions.

(e) If acting as a sales agent hereunder, the Agent shall provide written confirmation to the Company following the close of trading on the NASDAQ Capital Market, each day in which Shares are sold under this Agreement setting forth the number of Shares sold on such day, the aggregate gross sales proceeds of the Shares, the Net Proceeds to the Company and the compensation payable by the Company to such Agent with respect to such sales.

(f) Under no circumstances shall the aggregate offering price or number, as the case may be, of Shares sold pursuant to this Agreement and any Terms Agreement exceed the aggregate offering price or number, as the case may be, of Shares of Common Stock (i) set forth in the preamble paragraph of this Agreement, (ii) available for issuance under the Prospectus and the then currently effective Registration Statement, (iii) authorized

from time to time to be issued and sold under this Agreement or any Terms Agreement by the Company's board of directors, or a duly authorized committee thereof, and notified to the Agent in writing or (iv) authorized but unissued pursuant to the Company's certificate of incorporation. In addition, under no circumstances shall any Shares with respect to which the Agent acts as sales agent be sold at a price lower than the minimum price therefor authorized from time to time by the Company's board of directors, or a duly authorized committee thereof, and notified to the Agent in writing.

(g) Settlement for sales of Shares pursuant to this Section 2 will occur on the second business day that is also a Trading Day following the trade date on which such sales are made, unless another date shall be agreed to by the Company and the Agent (each such day, a "Settlement Date"). On each Settlement Date, the Shares sold through the Agent for settlement on such date shall be delivered by the Company to the Agent against payment of the Net Proceeds from the sale of such Shares. Settlement for all Shares shall be effected by book-entry delivery of Shares to the Agent's account at The Depository Trust Company against payments by the Agent of the Net Proceeds from the sale of such Shares in same day funds delivered to an account designated by the Company. If the Company shall default on its obligation to deliver Shares on any Settlement Date, the Company shall (i) indemnify and hold the Agent harmless against any loss, claim or damage arising from or as a result of such default by the Company and (ii) pay the Agent any commission to which it would otherwise be entitled absent such default.

(h) Notwithstanding any other provision of this Agreement, the Company and the Agent agree that no sales of Shares shall take place, and the Company shall not request the sale of any Shares that would be sold, and the Agent shall not be obligated to sell, during any period in which the Company's insider trading policy, as it exists on the date of the Agreement, would prohibit the purchases or sales of the Company's Common Stock by its officers or directors, or during any other period in which the Company is, or could be deemed to be, in possession of material non-public information.

(i) Any obligation of the Agent to use its commercially reasonable efforts to sell the Shares on behalf of the Company as sales agent shall be subject to the continuing accuracy of the representations and warranties of the Company herein, to the performance by the Company of its obligations hereunder and to the continuing satisfaction of the additional conditions specified in Section 6 of this Agreement.

(j) If either party has reason to believe that the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are not satisfied with respect to the Shares, it shall promptly notify the other party and the Agent may, in its sole discretion, suspend sales of the Shares under this Agreement and any Terms Agreement until such date as it determines is reasonably necessary to ensure compliance with Regulation M and any other applicable legal or regulatory requirements.

(a) During any period when the delivery of a prospectus is required in connection with the offering or sale of Shares (whether physically or through compliance with Rule 153 or 172, or in lieu thereof, a notice referred to in Rule 173(a) under the 1933 Act), (i) to make no further amendment or any supplement to the Registration Statement or the Prospectus (other than an amendment or supplement relating to an offering of the Company's securities which is unrelated to the offering of Shares hereunder) prior to any Settlement Date which shall be disapproved by the Agent promptly after reasonable notice thereof and to advise the Agent, promptly after it receives notice thereof, of the time when any amendment to the Registration Statement has been filed or becomes effective or any amendment or supplement to the Prospectus (other than an amendment or supplement relating to an offering of the Company's securities which is unrelated to the offering of Shares hereunder) has been filed and to furnish the Agent with copies thereof, (ii) to file promptly all other material required to be filed by the Company with the Commission pursuant to Rule 433(d) under the 1933 Act, (iii) to file promptly all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the 1934 Act, (iv) to advise the Agent, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of the Prospectus or other prospectus in respect of the Shares, of the suspension of the qualification of the Shares for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the form of the Registration Statement or the Prospectus or for additional information, and (v) in the event of the issuance of any such stop order or of any such order preventing or

13

suspending the use of the Prospectus in respect of the Shares or suspending any such qualification, to promptly use its commercially reasonable efforts to obtain the withdrawal of such order; and in the event of any such issuance of a notice of objection, promptly to take such reasonable steps as may be necessary to permit offers and sales of the Shares by the Agent, which may include, without limitation, amending the Registration Statement or filing a new registration statement, at the Company's expense (references herein to the Registration Statement shall include any such amendment or new registration statement). Notwithstanding the foregoing, the Company shall not be obligated to furnish copies of any report or statement filed with the Commission to the extent it is available on the Commission's Electronic Data Gathering, Analysis, and Retrieval System ("EDGAR").

(b) Promptly from time to time to take such action as the Agent may reasonably request to qualify the Shares for offering and sale under the securities laws of such jurisdictions as the Agent may request and to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the sale of the Shares, provided that in connection therewith the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction; and to promptly advise the Agent of the receipt by the Company of any notification with respect to the suspension of the qualification of the Shares for offer or sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose.

(c) During any period when the delivery of a prospectus is required (whether physically or through compliance with Rules 153 or 172, or in lieu thereof, a notice referred to in Rule 173(a) under the 1933 Act) in connection with the offering or sale of Shares, the Company will make available to the Agent, as soon as practicable after the execution of this Agreement, and thereafter from time to time furnish to the Agent, copies of the most recent Prospectus in such quantities and at such locations as the Agent may reasonably request for the purposes contemplated by the 1933 Act. During any period when the delivery of a prospectus is required (whether physically or through compliance with Rules 153 or 172, or in lieu thereof, a notice referred to in Rule 173(a) under the 1933 Act) in connection with the offering or sale of Shares, and if at such time any event shall have occurred as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus is delivered, not misleading, or, if for any other reason it shall be necessary during such same period to amend or supplement the Prospectus or to file under the 1934 Act any document incorporated by reference in the Prospectus in order to comply with the 1933 Act or the 1934 Act, to notify the Agent and to file such document and to prepare and furnish without charge to the Agent as many written and electronic copies as the Agent may from time to time reasonably request of an amended Prospectus or a supplement to the Prospectus which will correct such statement or omission or effect such compliance. Notwithstanding the foregoing, the Company shall not be obligated to furnish copies of any report or statement filed with the Commission to the extent it is available on the Commission's Electronic Data Gathering, Analysis, and Retrieval System ("EDGAR").

(d) To make generally available to its securityholders as soon as practicable, but in any event not later than sixteen months after the effective date of the Registration Statement (as defined in Rule 158(c) under the 1933 Act), an earnings statement of the Company and its subsidiaries (which need not be audited) complying with Section 11(a) of the 1933 Act and the rules and regulations of the Commission thereunder (including, at the option of the Company, Rule 158).

(e) [Reserved].

(f) To use the Net Proceeds received by it from the sale of the Shares pursuant to this Agreement and any Terms Agreement in the manner specified in the General Disclosure Package.

(g) In connection with the offering and sale of the Shares, the Company will file with the NASDAQ Capital Market all documents and notices, and make all certifications, required by the NASDAQ Capital Market of companies that have securities that are listed or quoted on the NASDAQ Capital Market and will maintain such listings or quotations.

(h) To not take, directly or indirectly, and to use commercially reasonable efforts to cause its affiliates to refrain from taking, any action designed to cause or result in, or that has constituted or might reasonably be

14

expected to constitute, under the 1934 Act or otherwise, the stabilization or manipulation of the price of any securities of the Company to facilitate the sale or resale of the Shares.

(i) At each Applicable Time, each Settlement Date, each Registration Statement Amendment Date (as defined below), each Company Periodic Report Date (as defined below) and each date on which Shares are delivered to the Agent pursuant to a Terms Agreement, the Company shall be deemed to have affirmed each representation, warranty, covenant and other agreement contained in this Agreement or any Terms Agreement. In each Annual Report on

Form 10-K or Quarterly Report on Form 10-Q filed by the Company in respect of any quarter in which sales of Shares were made by or through the Agent under this Agreement or any Terms Agreement (each date on which any such document is filed, and any date on which an amendment to any such document is filed, a "Company Periodic Report Date"), the Company shall set forth with regard to such quarter the number of Shares sold through the Agent under this Agreement or any Terms Agreement and the Net Proceeds received by the Company with respect to sales of Shares pursuant to this Agreement or any Terms Agreement.

(j) Upon commencement of the offering of Shares under this Agreement and each time the Shares are delivered to the Agent as principal on a Settlement Date and promptly after each (i) date the Registration Statement or the Prospectus shall be amended or supplemented (other than (1) by an amendment or supplement providing solely for the determination of the terms of the Shares, (2) in connection with the filing of a prospectus supplement that contains solely the information set forth in Section 3(i), (3) in connection with the filing of any current reports on Form 8-K (other than any current reports on Form 8-K which contain financial statements, supporting schedules or other financial data, including any current report on Form 8-K under Item 2.02 of such form that is considered "filed" under the 1934 Act) or (4) by a prospectus supplement relating to the offering of other securities (including, without limitation, other shares of Common Stock)) (each such date, a "Registration Statement Amendment Date") and (ii) Company Periodic Report Date, the Company will furnish or cause to be furnished forthwith to the Agent a certificate dated the date of effectiveness of such amendment or the date of filing with the Commission of such supplement or other document, as the case may be, in a form reasonably satisfactory to the Agent to the effect that the statements contained in the certificate referred to in Section 6(e) of this Agreement which were last furnished to the Agent are true and correct at the time of such amendment, supplement or filing, as the case may be, as though made at and as of such time (except that such statements shall be deemed to relate to the Registration Statement, the General Disclosure Package and the Prospectus as amended and supplemented to such time) or, in lieu of such certificate, a certificate of the same tenor as the certificate referred to in said Section 6(e), but modified as necessary to relate to the Registration Statement and the Prospectus as amended and supplemented, or to the document incorporated by reference into the Prospectus, to the time of delivery of such certificate. As used in this paragraph, to the extent there shall be an Applicable Time on or following the date referred to in clause (i) or (ii) above, promptly shall be deemed to be on or prior to the next succeeding Applicable Time. Notwithstanding the foregoing, the Company shall not be required to deliver any such certificate at any time there is no instruction to sell shares delivered pursuant to Section 2(b) then in effect; provided however, that such a certificate shall then be required to be delivered to the Agent prior to any further sales of Shares under this Agreement covering the period which would most recently have been required but for this sentence.

(k) Upon commencement of the offering of Shares under this Agreement and promptly after each (i) Registration Statement Amendment Date and (ii) Company Periodic Report Date, the Company will furnish or cause to be furnished to the Agent the written opinion and written negative assurance statement of Cooley LLP, counsel to the Company, or other counsel reasonably satisfactory to the Agent, dated the date of effectiveness of such amendment or the date of filing with the Commission of such supplement or other document, as the case may be, in a form and substance reasonably satisfactory to the Agent and its counsel, of the same tenor as the opinions and letters referred to in Section 6(c) of this Agreement, but modified as necessary to relate to the Registration Statement, the General Disclosure Package and the Prospectus as amended and supplemented, or to the document incorporated by reference into the Prospectus, to the time of delivery of such opinion and letter or, in lieu of such opinion and letter, counsel last furnishing such letter to the Agent shall furnish such Agent with a letter substantially to the effect that the Agent may rely on such last opinion and letter to the same extent as though each were dated the date of such letter authorizing reliance (except that statements in such last letter shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented to the time of delivery of such letter authorizing reliance). As used in this paragraph, to the extent there shall be an Applicable Time on or following the date referred to in clause (i) or (ii) above, promptly shall be deemed to be on or prior to the next succeeding Applicable Time. Notwithstanding the foregoing, (y) the Company shall not be required to furnish or cause to be

15

furnished any such opinion or statement at any time there are no instructions to sell shares delivered pursuant to Section 2(b) or a Terms Agreement then in effect; provided, however, that such an opinion or letter shall then be required to be furnished to the Agent prior to any further sales of Shares under this Agreement covering the period which would most recently have been required but for this sentence, and (z) following the Agent being furnished with the first opinion(s) pursuant this Section 3(k), subsequent opinions or letters furnished pursuant to this Section 3(k) shall only consist of customary written negative assurance statements.

(l) Promptly after each (i) Registration Statement Amendment Date and (ii) Company Periodic Report Date, the Company will cause Ernst & Young LLP, or other independent accountants reasonably satisfactory to the Agent, to furnish to the Agent a letter, dated the date of effectiveness of such amendment or the date of filing of such supplement or other document with the Commission, as the case may be, in form reasonably satisfactory to the Agent and its counsel, of the same tenor as the letter referred to in Section 6(d) hereof, but modified as necessary to relate to the Registration Statement, the General Disclosure Package and the Prospectus, as amended and supplemented, or to the document incorporated by reference into the Prospectus, to the date of such letter. As used in this paragraph, to the extent there shall be an Applicable Time on or following the date referred to in clause (i) or (ii) above, promptly shall be deemed to be on or prior to the next succeeding Applicable Time. Notwithstanding the foregoing, (A) upon commencement of the offering of Shares under this Agreement, (B) after a Company Periodic Report Date that relates to the filing of a Quarterly Report on Form 10-Q, and (C) after each Registration Statement Amendment Date (other than as the result of filing an Annual Report on Form 10-K), the Agent hereby agrees to receive a certificate of the Principal Financial Officer of the Company, in a form and substance reasonably satisfactory to the Agent and its counsel, in lieu of a letter from Ernst & Young LLP. Further, notwithstanding the foregoing, the Company shall not be required to furnish or cause to be furnished any such letter or certificate at any time there are no instructions to sell shares delivered pursuant to Section 2(b) or a Terms Agreement then in effect; provided, however, that such a letter or certificate, as the case may be, shall then be required to be furnished to the Agent prior to any further sales of Shares under this Agreement covering the period which would most recently have been required but for this sentence.

(m) The Company consents to the Agent trading in the Company's Common Stock for the Agent's own account and for the account of its clients at the same time as sales of Shares occur pursuant to this Agreement or any Terms Agreement, provided that, at all times, the Agent is in compliance with Regulation M under the 1934 Act with respect to the Common Stock and provided that in no event shall the Agent trade the Common Stock for its or its affiliates' proprietary accounts.

(n) [Reserved].

(o) The Company will cooperate timely with any reasonable due diligence review conducted by the Agent or its counsel from time to time in connection with the transactions contemplated hereby or in any Terms Agreement, including, without limitation, and upon reasonable notice providing information and making available documents and appropriate corporate officers, during regular business hours and at the Company's principal offices, as the Agent may reasonably request.

(p) During each period commencing on the date on which the Company has given an instruction pursuant to Section 2(b) and ending on the close of business of the Settlement Date of the last Shares sold pursuant to such instruction, the Company will not, without giving the Agent at least three business days' prior written notice of a proposed sale or other transaction (which notice shall not be required to specify the nature of such proposed transaction), (A) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant for the sale of, lend or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or securities convertible into or exchangeable or exercisable for or repayable with Common Stock, or file any registration statement under the 1933 Act with respect to any of the foregoing (other than a shelf registration statement under Rule 415 under the 1933 Act, a registration statement on Form S-8 or post-effective amendment to the Registration Statement) or (B) enter into any swap or other agreement or any transaction that transfers in whole or in part, directly or indirectly, any of the economic consequence of ownership of the Common Stock, or any securities convertible into or exchangeable or exercisable for or repayable with Common Stock, whether any such swap or transaction described in clause (A) or (B) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise. The foregoing sentence shall not apply to (w) the Shares to be offered and sold through the Agent pursuant to this Agreement or

any Terms Agreement, (x) equity incentive awards approved by the board of directors of the Company or the compensation committee thereof or the issuance of Common Stock upon exercise thereof, (y) Shares or securities convertible into or exchangeable for Shares as consideration for mergers, acquisitions, other business combinations, joint ventures or strategic alliances occurring after the date of this Agreement which are not used for capital raising purposes and (z) Shares issuable upon exercise or conversion of outstanding warrants, options or other derivative securities.

(q) If immediately prior to the third anniversary (the "Renewal Deadline") of the initial effective date of the Registration Statement, any of the Shares remain unsold, the Company will, prior to the Renewal Deadline file, if it has not already done so and is eligible to do so, an "automatic shelf registration statement" (as defined in Rule 405 under the 1933 Act) relating to the Shares, in a form reasonably satisfactory to the Agent. If the Company is not eligible to file an automatic shelf registration statement, the Company will, prior to the Renewal Deadline, if it has not already done so, file a new shelf registration statement relating to the Shares, in a form reasonably satisfactory to the Agent, and will use its commercially reasonable efforts to cause such registration statement to be declared effective within 60 days after the Renewal Deadline. The Company will use commercially reasonable efforts to take all other action necessary or appropriate to permit the issuance and sale of the Shares to continue as contemplated in the expired registration statement relating to the Shares. References herein to the Registration Statement shall include such new automatic shelf registration statement or such new shelf registration statement, as the case may be.

Section 4. Free Writing Prospectus.

(a) (i) The Company represents and agrees that without the prior consent of the Agent (which consent may not be unreasonably withheld, delayed or conditioned), it has not made and will not make any offer relating to the Shares that would constitute a "free writing prospectus" as defined in Rule 405 under the 1933 Act; and

(ii) the Agent represents and agrees that, without the prior consent of the Company (which consent may not be unreasonably withheld, delayed or conditioned), it has not made and will not make any offer relating to the Shares that would constitute a free writing prospectus required to be filed with the Commission.

(b) The Company has complied and will comply with the requirements of Rule 433 under the 1933 Act applicable to any Issuer Free Writing Prospectus (including any free writing prospectus identified in Section 4(a) hereof), including timely filing with the Commission or retention where required and legending.

Section 5. Payment and Reimbursement of Expenses.

(a) The Company covenants and agrees with the Agent that the Company will pay or cause to be paid the following: (i) the fees, disbursements and expenses of the Company's counsel and accountants in connection with the registration of the Shares under the 1933 Act and all other expenses in connection with the preparation, printing and filing of the Registration Statement, the Base Prospectus, Prospectus Supplement, any Issuer Free Writing Prospectus and the Prospectus and amendments and supplements thereto and the mailing and delivering of copies thereof to the Agent; (ii) the cost of printing or producing this Agreement or any Terms Agreement, any Blue Sky and Legal Investment Memoranda, closing documents (including any compilations thereof) and any other documents in connection with the offering, purchase, sale and delivery of the Shares; (iii) all expenses in connection with the qualification of the Shares for offering and sale under state securities laws as provided in Section 3(b) hereof, including the reasonable fees and disbursements of counsel for the Agent in connection with such qualification and in connection with the Blue Sky and Legal Investment Surveys; (iv) any filing fees incident to, and the reasonable fees and disbursements of counsel for the Agent in connection with, any required review by the Financial Industry Regulatory Authority, Inc. ("FINRA") of the terms of the sale of the Shares; (v) all fees and expenses in connection with listing or quoting the Shares on the NASDAQ Capital Market; (vi) the cost of preparing the Shares; (vii) the costs and charges of any transfer agent or registrar or any dividend distribution agent; (viii) the reasonable fees and disbursements of counsel to the Agent in an aggregate amount not to exceed \$25,000 (which amount shall include all fees and disbursements of such counsel described in clauses (iii) and (iv) above); and (ix) all other costs and expenses incident to the performance of its obligations hereunder which are not otherwise

specifically provided for in this Section. It is understood, however, that, except as provided in this Section, and Section 7 hereof, the Agent will pay all of its own costs and expenses, including the fees of its counsel, transfer taxes on resale of any of the Shares by it, and any advertising expenses connected with any offers it may make.

(b) The parties agree that if counsel to the Company is required, by the terms hereof, to provide more than two written opinions and/or written negative assurance statements pursuant to Section 3(k) hereof or pursuant to Section 6(c) hereof in any calendar year, then the amount of the reasonable legal fees incurred by the Company in connection with such opinion or statement shall be deducted from the compensation amount next due Agent hereunder; *provided* that the maximum amount to be so deducted shall be \$5,000 per such additional opinion or statement.

Section 6. Conditions of Agent's Obligation. The obligations of the Agent hereunder shall be subject, in its discretion, to the condition that all representations and warranties and other statements of the Company herein or in certificates of any officer of the Company delivered pursuant to the provisions hereof are true and correct as of the time of the execution of this Agreement, the date of any executed Terms Agreement and as of each Registration Statement Amendment Date, Company Periodic Report Date, Applicable Time and Settlement Date, to the condition that the Company shall have performed all of its obligations hereunder theretofore to be performed, and the following additional conditions:

(a) The Prospectus Supplement shall have been filed with the Commission pursuant to Rule 424(b) under the 1933 Act on or prior to the date hereof and in accordance with Section 3(a) hereof, any other material required to be filed by the Company pursuant to Rule 433(d) under the 1933 Act shall have been filed with the Commission within the applicable time periods prescribed for such filings by Rule 433; no stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose shall have been initiated or threatened by the Commission and no notice of objection of the Commission to the use of the form of the Registration Statement or any post-effective amendment thereto pursuant to Rule 401(g)(2) under the 1933 Act shall have been received; no stop order suspending or preventing the use of the Prospectus or any Issuer Free Writing Prospectus shall have been initiated or threatened by the Commission; and all requests for additional information on the part of the Commission shall have been complied with to the reasonable satisfaction of the Agent.

(b) On every date specified in Section 3(k) hereof and on such other dates as reasonably requested by Agent, Goodwin Procter LLP, counsel for the Agent, shall have furnished to the Agent such written opinion or opinions, dated as of such date, with respect to such matters as the Agent may reasonably request, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters.

(c) On every date specified in Section 3(k) hereof, Cooley LLP, counsel for the Company, shall have furnished to the Agent a written opinion or opinions, and a written negative assurance statement, each dated as of such date, in form and substance reasonably satisfactory to the Agent (it being understood and agreed that, other than the first such opinion furnished to the Agent, such opinions and statements shall consist of a customary written negative assurance statement only). Upon commencement of the offering of Shares under this Agreement and promptly after each Company Periodic Report Date that relates to the filing of an Annual Report on Form 10-K, Pearl Cohen Zedek Latzer Baratz LLP, intellectual property counsel for the Company, shall have furnished to the Agent a written opinion or opinions, dated as of such date, in form and substance reasonably satisfactory to the Agent (it being understood and agreed that, other than the first such opinion furnished to the Agent, such opinions shall consist of a customary written negative assurance statement only).

(d) At the dates specified in Section 3(l) hereof, the independent accountants of the Company who have certified the financial statements of the Company and its subsidiaries included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus shall have furnished to the Agent a letter dated as of the date of delivery thereof and addressed to the Agent in form and substance reasonably satisfactory to the Agent and its counsel, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements of the Company and its subsidiaries included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus. Notwithstanding the foregoing, (A) upon commencement of the offering of Shares under this

18

Agreement, (B) after a Company Periodic Report Date that relates to the filing of a Quarterly Report on Form 10-Q, and (C) after each Registration Statement Amendment Date (other than as the result of filing an Annual Report on Form 10-K), the Agent hereby agrees to receive a certificate of the Principal Financial Officer of the Company, in a form and substance reasonably satisfactory to the Agent and its counsel, in lieu of a letter from the independent accountants of the Company.

(e) Prior to commencement of the offering of Shares under this Agreement, the Agent shall have received a certificate, signed on behalf of the Company by its corporate Secretary, in form and substance satisfactory to the Agent and its counsel.

(e) (i) Upon commencement of the offering of Shares under this Agreement and on such other dates as reasonably requested by Agent, the Company will furnish or cause to be furnished promptly to the Agent a certificate of an officer in a form satisfactory to the Agent stating the minimum price for the sale of such Shares pursuant to this Agreement and the maximum number of Shares that may be issued and sold pursuant to this Agreement or, alternatively, maximum gross proceeds from such sales, as authorized from time to time by the Company's board of directors or a duly authorized committee thereof or, in connection with any amendment, revision or modification of such minimum price or maximum Share number or amount, a new certificate with respect thereto and (ii) on each date specified in Section 3(j) and on such other dates as reasonably requested by Agent, the Agent shall have received a certificate of two executive officers of the Company, one of whom shall be the Chief Financial Officer, Chief Accounting Officer, Treasurer, Principal Financial Officer or Executive Vice President in the area of capital markets and investments, dated as of the date thereof, to the effect that (A) there has been no Material Adverse Effect since the date as of which information is given in the General Disclosure Package and the Prospectus as then amended or supplemented, (B) the representations and warranties in Section 1 hereof are true and correct as of such date and (C) the Company has complied with all of the agreements entered into in connection with the transaction contemplated herein and satisfied all conditions on its part to be performed or satisfied.

(f) Since the date of the latest audited financial statements then included or incorporated by reference in the General Disclosure Package and the Prospectus, no Material Adverse Effect shall have occurred.

(g) The Company shall have complied with the provisions of Section 3(c) hereof with respect to the timely furnishing of prospectuses.

(h) On such dates as reasonably requested by the Agent, the Company shall have conducted due diligence sessions, in form and substance reasonably satisfactory to the Agent.

(i) All filings with the Commission required by Rule 424 under the 1933 Act to have been filed by each Applicable Time or related Settlement Date shall have been made within the applicable time period prescribed for such filing by Rule 424 (without reliance on Rule 424(b)(8)).

(j) The Shares shall have received approval for listing or quotation on the NASDAQ Capital Market prior to the first Settlement Date.

(k) Prior to any Settlement Date, the Company shall have furnished to the Agent such further information, documents or certificates as the Agent may reasonably request.

Section 7. Indemnification.

(a) The Company will indemnify and hold harmless the Agent against any losses, claims, damages or liabilities, joint or several, to which the Agent may become subject, under the 1933 Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, the Base Prospectus, the Prospectus Supplement or the Prospectus or any amendment or supplement thereto, any Issuer Free Writing Prospectus or any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the 1933 Act, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse the Agent for any legal or

other expenses reasonably incurred by the Agent in connection with investigating or defending any such action or claim as such expenses are incurred; provided, however, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, the Base Prospectus, the Prospectus Supplement or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, in reliance upon and in strict conformity with written information furnished to the Company by the Agent expressly for use therein.

(b) The Agent will indemnify and hold harmless the Company against any losses, claims, damages or liabilities to which the Company may become subject, under the 1933 Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, the Base Prospectus, the Prospectus Supplement or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, the Base Prospectus, the Prospectus Supplement or the Prospectus, or any such amendment or supplement thereto, or any Issuer Free Writing Prospectus, in reliance upon and in strict conformity with written information furnished to the Company by the Agent expressly for use therein; and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending any such action or claim as such expenses are incurred.

(c) Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve it from any liability which it may have to any indemnified party otherwise than under such subsection except and then only to the extent such indemnifying party is materially prejudiced thereby. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under this Section 7 for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

(d) If the indemnification provided for in this Section 7 is unavailable to hold harmless an indemnified party under subsection (a) or (b) above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Agent on the other from the offering of the Shares to which such loss, claim, damage or liability (or action in respect thereof) relates. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Agent on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Agent on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received

by the Company bear to the total commissions received by the Agent. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Agent on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Agent agree that it would not be just and equitable if contribution pursuant to this subsection (d) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above in this subsection (d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (d), the Agent shall not be required to contribute any amount in excess of the amount by which the total compensation received by the Agent with respect to sales of the Shares sold by it to the public exceeds the amount of any damages which the Agent has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(e) The obligations of the Company under this Section 7 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to the directors, officers, employees, attorneys and agents of the Agent and to each person, if any, who controls the Agent within the meaning of the 1933 Act and each broker dealer affiliate of the Agent; and the obligations of the Agent under this Section 7 shall be in

addition to any liability which the Agent may otherwise have and shall extend, upon the same terms and conditions, to each director, officer, employee, attorney and agent of the Company and to each person, if any, who controls the Company within the meaning of the 1933 Act.

Section 8. Representations, Warranties and Agreements to Survive Delivery. The respective indemnities, agreements, representations, warranties and other statements of the Company and the Agent, as set forth in this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of the Agent or any controlling person of the Agent, or the Company, or any officer or director or controlling person of the Company, and shall survive delivery of and payment for the Shares.

Section 9. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (i) the Agent is acting solely in the capacity of an arm's length contractual counterparty to the Company with respect to the offering of Shares contemplated hereby (including in connection with determining the terms of such offering) and (ii) the Agent has not assumed an advisory or fiduciary responsibility in favor of the Company with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether the Agent has advised or is currently advising the Company on other matters) or any other obligation to the Company except the obligations expressly set forth in this Agreement and (iii) the Company has consulted its own legal and financial advisors to the extent it deemed appropriate. The Company agrees that it will not claim that the Agent has rendered advisory services of any nature or respect, or owe a fiduciary or similar duty to the Company, in connection with such transaction or the process leading thereto.

Section 10. Termination.

(a) The Company shall have the right, by giving written notice as hereinafter specified, to terminate this Agreement in its sole discretion at any time. Any such termination shall be without liability of any party to any other party, except that (i) with respect to any pending sale through the Agent for the Company, the obligations of the Company, including in respect of compensation of the Agent, shall remain in full force and effect notwithstanding such termination; and (ii) the provisions of Section 1, Section 5(b), Section 7, Section 8, Section 14 and Section 15 of this Agreement shall remain in full force and effect notwithstanding such termination.

(b) The Agent shall have the right, by giving written notice as hereinafter specified, to terminate this Agreement in its sole discretion at any time. Any such termination shall be without liability of any party to any other party except that (i) with respect to any pending sale through the Agent for the Company, the obligations of the Agent shall remain in full force and effect through completion of the sale notwithstanding such termination; and (ii)

21

the provisions of Section 1, Section 5(b), Section 7, Section 8, Section 14 and Section 15 of this Agreement shall remain in full force and effect notwithstanding such termination.

(c) Unless earlier terminated pursuant to this Section 10, this Agreement shall automatically terminate upon the issuance and sale of all of the Shares by the Agent on the terms and subject to the conditions set forth herein except any termination pursuant to this clause (c) shall in all cases be deemed to provide that Section 1, Section 5(b), Section 7, Section 8, Section 14 and Section 15 of this Agreement shall remain in full force and effect.

(d) This Agreement shall remain in full force and effect until and unless terminated pursuant to Section 10(a), (b) or (c) above or otherwise by mutual agreement of the parties; provided that any such termination by mutual agreement or pursuant to this clause (c) shall in all cases be deemed to provide that Section 1, Section 5(b), Section 7, Section 8, Section 14 and Section 15 of this Agreement shall remain in full force and effect.

(e) Any termination of this Agreement shall be effective on the date specified in such notice of termination; provided that such termination shall not be effective until the close of business on the date of receipt of such notice by the Agent or the Company, as the case may be. If such termination shall occur prior to the Settlement Date for any sale of Shares, such sale shall settle in accordance with the provisions of Section 2(g) hereof.

(f) In the case of any purchase by the Agent pursuant to a Terms Agreement, the Agent may terminate this Agreement, at any time at or prior to the Settlement Date of such purchase (i) if there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the General Disclosure Package or the Prospectus, any Material Adverse Effect, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Agent, impracticable or inadvisable to market the Shares or to enforce contracts for the sale of Shares, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or the NASDAQ Capital Market, or if trading generally on the NYSE American or the New York Stock Exchange or the NASDAQ Stock Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by such system or by order of the Commission, FINRA or any other governmental authority, or (iv) a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States, or (v) if a banking moratorium has been declared by either Federal or New York authorities.

Section 11. Notices. All statements, requests, notices and agreements hereunder shall be in writing, and if to Stifel Nicolaus shall be delivered or sent by mail, telex or facsimile transmission to:

Stifel, Nicolaus & Company, Incorporated
One South Street, 15th Floor
Baltimore, Maryland 21202
Attention: Syndicate Department

and if to the Company to:

GTx, Inc.
175 Toyota Plaza
7th Floor
Memphis, Tennessee 38103
Attention: Chief Executive Officer
CC: VP, Chief Legal Officer

With a copy to:

Cooley LLP
ATTN: Chadwick Mills

22

101 California Street, 5th Floor
San Francisco, CA 94111-5800

Any such statements, requests, notices or agreements shall take effect upon receipt thereof.

Section 12. Parties. This Agreement shall be binding upon, and inure solely to the benefit of, the Agent and the Company and, to the extent provided in Sections 7 and 8 hereof, the officers, directors, employees, attorneys and agents of the Company and the Agent and each person who controls the Company or the Agent, and their respective heirs, executors, administrators, successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. No purchaser of Shares through the Agent shall be deemed a successor or assign by reason merely of such purchase.

Section 13. Time of the Essence. Time shall be of the essence of this Agreement. As used herein, the term "business day" shall mean any day when the Commission's office in Washington, D.C. is open for business.

Section 14. Waiver of Jury Trial. The Company and the Agent hereby irrevocably waive, to the fullest extent permitted by applicable law, any and all right to jury trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

Section 15. Governing Law. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REFERENCE TO ITS PRINCIPLES OF CONFLICTS OF LAW.

Section 16. Counterparts. This Agreement and any Terms Agreement may be executed by any one or more of the parties hereto and thereto in any number of counterparts, each of which shall be deemed to be an original, but all such respective counterparts shall together constitute one and the same instrument. This Agreement and any Terms Agreement may be delivered by any party by facsimile or other electronic transmission.

Section 17. Severability. The invalidity or unenforceability of any Section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other Section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

23

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement between the Agent and the Company in accordance with its terms.

Very truly yours,

GTX, Inc.

By: /s/ Jason T. Shackelford
Name: Jason T. Shackelford
Title: Vice President, Finance and Accounting, and Principal Financial and Accounting Officer

Accepted as of the date hereof:

STIFEL, NICOLAUS & COMPANY, INCORPORATED

By: /s/ Peter N. Reikes
Name: Peter N. Reikes
Title: Vice Chairman

24

TERMS AGREEMENT

STIFEL, NICOLAUS & COMPANY, INCORPORATED
One South Street, 15th Floor
Baltimore, MD 21202
Attn: Syndicate Department

Ladies and Gentlemen:

GTx, Inc., a Delaware corporation (the "Company"), proposes, subject to the terms and conditions stated herein and in the At-the-Market Equity Offering Sales Agreement, dated February 9, 2018 (the "Sales Agreement"), between the Company and Stifel, Nicolaus & Company, Incorporated (the "Agent"), to issue and sell to the Agent the securities specified in the Schedule hereto (the "Purchased Securities"), and solely for the purpose of covering over-allotments, to grant to the Agent the option to purchase the additional securities specified in the Schedule hereto (the "Additional Securities")*.

[The Agent shall have the right to purchase from the Company all or a portion of the Additional Securities as may be necessary to cover over-allotments made in connection with the offering of the Purchased Securities, at the same purchase price per share to be paid by the Agent to the Company for the Purchased Securities. This option may be exercised by the Agent at any time (but not more than once) on or before the thirtieth day following the date hereof, by written notice to the Company. Such notice shall set forth the aggregate number of shares of Additional Securities as to which the option is being exercised, and the date and time when the Additional Securities are to be delivered (such date and time being herein referred to as the "Option Closing Date"); provided, however, that the Option Closing Date shall not be earlier than the Time of Delivery (as set forth in the Schedule hereto) nor earlier than the second business day after the date on which the option shall have been exercised nor later than the fifth business day after the date on which the option shall have been exercised. Payment of the purchase price for the Additional Securities shall be made at the Option Closing Date in the same manner and at the same office as the payment for the Purchased Securities.]*

Each of the provisions of the Sales Agreement not specifically related to the solicitation by the Agent, as agent of the Company, of offers to purchase securities is incorporated herein by reference in its entirety, and shall be deemed to be part of this Terms Agreement to the same extent as if such provisions had been set forth in full herein. Each of the representations and warranties set forth therein shall be deemed to have been made at and as of the date of this Terms Agreement [and] [,] the Applicable Time [and any Option Closing Date]*, except that each representation and warranty in Section 1 of the Sales Agreement which makes reference to the Prospectus (as therein defined) shall be deemed to be a representation and warranty as of the date of the Sales Agreement in relation to the Prospectus, and also a representation and warranty as of the date of this Terms Agreement [and] [,] the Settlement Date [and any Option Closing Date]* in relation to the Prospectus as amended and supplemented to relate to the Purchased Securities.

An amendment to the Registration Statement (as defined in the Sales Agreement), or a supplement to the Prospectus, as the case may be, relating to the Purchased Securities [and the Additional Securities]*, in the form

25

heretofore delivered to the Agent is now proposed to be filed with the Securities and Exchange Commission.

Subject to the terms and conditions set forth herein and in the Sales Agreement which are incorporated herein by reference, the Company agrees to issue and sell to the Agent and the latter agrees to purchase from the Company the number of shares of the Purchased Securities at the time and place and at the purchase price set forth in the Schedule hereto.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement between the Agent and the Company in accordance with its terms.

Very truly yours,

GTx, Inc.

By: _____

Name: _____

Title: _____

Accepted as of the date hereof:

STIFEL, NICOLAUS & COMPANY, INCORPORATED

By: _____

Name: _____

Title: _____

* Include only if the Agent has an over-allotment option.