GTX INC /DE/
Form 10-Q
May 10, 2016
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2016

OR

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number: 000-50549

GTx, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**62-1715807**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
175 Toyota Plaza **7th Floor** **Memphis, Tennessee**	**38103**
(Address of principal executive offices)	(Zip Code)

(901) 523-9700

(Registrant s telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer o	Accelerated filer x
Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No x

As of May 5, 2016, 141,749,150 shares of the registrant s Common Stock were outstanding.

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GTx, INC.

FORM 10-Q FOR THE QUARTER ENDED MARCH 31, 2016

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PART I: FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

GTx, Inc.
CONDENSED BALANCE SHEETS

(in thousands, except share data)

	March 31, 2016 (unaudited)	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 12,063	$ 14,056
Short-term investments	12,200	15,200
Prepaid expenses and other current assets	2,295	2,633
Total current assets	26,558	31,889
Property and equipment, net	12	5
Intangible assets, net	134	137
Total assets	$ 26,704	$ 32,031
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Accounts payable	$ 903	$ 382
Warrant liability		27,349
Accrued expenses and other current liabilities	2,116	2,441
Total current liabilities	3,019	30,172
Commitments and contingencies		
Stockholders equity:		
Common stock, $0.001 par value: 400,000,000 shares authorized at March 31, 2016 and December 31, 2015; 141,749,150 and 140,374,112 shares issued and outstanding at March 31, 2016 and December 31, 2015, respectively	142	141
Additional paid-in capital	534,911	515,192
Accumulated deficit	(511,368)	(513,474)
Total stockholders equity	23,685	1,859
Total liabilities and stockholders equity	$ 26,704	$ 32,031

The accompanying notes are an integral part of these financial statements.

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GTx, Inc.
CONDENSED STATEMENTS OF OPERATIONS

(in thousands, except share and per share data)

(unaudited)

	Three Months Ended March 31,	
	2016	**2015**
Expenses:		
Research and development expenses	$ 3,971	$ 2,948
General and administrative expenses	2,114	2,111
Total expenses	6,085	5,059
Loss from operations	(6,085)	(5,059)
Other income, net	28	27
Gain on change in fair value of warrant liability	8,163	2,648
Net income (loss)	$ 2,106	$ (2,384)
Net income (loss) per share basic and diluted	$ 0.01	$ (0.02)
Weighted average shares outstanding:		
Basic	141,522,043	140,335,875
Diluted	143,448,168	140,335,875

The accompanying notes are an integral part of these financial statements.

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GTx, Inc.
CONDENSED STATEMENTS OF CASH FLOWS

(in thousands)

(unaudited)

	Three Months Ended March 31,	
	2016	**2015**
Cash flows from operating activities:		
Net income (loss)	$ 2,106	$ (2,384)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Gain on change in fair value of warrant liability	(8,163)	(2,648)
Depreciation and amortization	4	17
Share-based compensation	714	419
Directors deferred compensation	30	31
Changes in assets and liabilities:		
Prepaid expenses and other assets	338	157
Accounts payable	521	(74)
Accrued expenses and other liabilities	(325)	(213)
Net cash used in operating activities	(4,775)	(4,695)
Cash flows from investing activities:		
Purchase of property and equipment	(8)	
Purchase of short-term investments, held to maturity	(7,200)	(10,202)
Proceeds from maturities of short-term investments, held to maturity	10,200	11,180
Net cash provided by investing activities	2,992	978
Cash flows from financing activities:		
Tax payments related to shares withheld for vested restricted stock units	(210)	
Net cash used in financing activities	(210)	
Net decrease in cash and cash equivalents	(1,993)	(3,717)
Cash and cash equivalents, beginning of period	14,056	17,880
Cash and cash equivalents, end of period	$ 12,063	$ 14,163

The accompanying notes are an integral part of these financial statements.

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GTx, Inc.
NOTES TO THE CONDENSED FINANCIAL STATEMENTS

(in thousands, except share and per share data)

(unaudited)

1. Business and Basis of Presentation

Business

GTx, Inc. (GTx or the Company), a Delaware corporation incorporated on September 24, 1997 and headquartered in Memphis, Tennessee, is a biopharmaceutical company dedicated to the discovery, development and commercialization of small molecules for the treatment of cancer, including treatments for breast and prostate cancer, and other serious medical conditions.

The Company is developing selective androgen receptor modulators (SARMs), including its lead product candidate, enobosarm (GTx-024). SARMs are a class of drugs that the Company believes have the potential to be used as a novel hormonal therapy for the treatment of advanced breast cancer, as well as the potential to treat other serious medical conditions. The Company announced during the second quarter of 2014 positive results from a Phase 2 proof-of-concept, open-label clinical trial evaluating a 9 mg oral daily dose of enobosarm for the treatment of patients with estrogen receptor (ER) positive and androgen receptor (AR) positive metastatic breast cancer who have previously responded to hormonal therapy. Based on these results, the Company commenced enrollment in 2015 in a Phase 2 clinical trial evaluating enobosarm in patients whose advanced breast cancer is both ER positive and AR positive. During 2015, the Company also commenced enrollment in a Phase 2 proof-of-concept clinical trial designed to evaluate the efficacy and safety of enobosarm in patients with advanced AR positive triple-negative breast cancer.

The Company is also evaluating enobosarm and other compounds in its SARM portfolio for indications outside of oncology where unmet medical needs in muscle-related diseases may benefit from increasing muscle mass. In the first quarter of 2016, the Company initiated a Phase 2 proof-of-concept clinical trial of enobosarm to treat postmenopausal women with Stress Urinary Incontinence (SUI). The Company is also currently evaluating several SARM compounds, including enobosarm, in preclinical models of Duchenne Muscular Dystrophy (DMD) where a SARM s ability to increase muscle mass may prove beneficial to patients suffering from DMD. The Company s evaluation of SARMs as a potential treatment for DMD is at an early stage, and the Company s ability to meaningfully advance development of SARMs as a potential treatment for DMD is subject to the Company s ability to obtain additional funding.

In March 2015, the Company entered into an exclusive license agreement with the University of Tennessee Research Foundation (UTRF) to develop UTRF s proprietary selective androgen receptor degrader (SARD) technology which may have the potential to provide compounds that can degrade multiple forms of AR for those patients who do not respond or are resistant to current therapies to inhibit tumor growth in patients with progressive castration-resistant prostate cancer (CRPC). The Company s evaluation of the licensed SARD technology is at an early stage and to complete preclinical development of our SARD program through the requisite preclinical studies to support initial human clinical trials, the Company will require additional funding.

The Company estimates that its current cash, cash equivalents and short-term investments, together with interest thereon, will be sufficient to meet its projected operating requirements only through the end of 2016. Accordingly, the Company needs to raise substantial additional capital in the near term in order to fund its operations beyond the end of 2016 and to continue as a going concern thereafter. In addition, the Company has based its cash sufficiency estimates on its current business plan and its assumptions that may prove to be wrong. The Company could utilize its available capital resources sooner than it currently expects, and the Company could need additional funding to sustain its operations even sooner than currently anticipated. While the Company estimates that its current cash, cash equivalents and short-term investments, together with interest thereon, will be sufficient to meet its projected operating requirements through the end of 2016, during which time it expects to obtain results from the patients enrolled in the first stage of each of its ongoing open-label Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer and results from its recently initiated Phase 2 proof-of-concept clinical trial evaluating enobosarm to treat postmenopausal women with SUI, the Company will need to raise substantial additional capital in the near term in order to:

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GTx, Inc.
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(in thousands, except share and per share data)

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- initiate and complete the second stage of both of the Company s ongoing open-label Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer;

- meaningfully advance the preclinical development of the Company s licensed SARD program through the preclinical studies required to initiate human clinical studies;

- undertake any further development of the Company s SARMs beyond its ongoing Phase 2 clinical trials of enobosarm in breast cancer and SUI and its ongoing preclinical development activities related to the development of SARMs as a potential treatment for DMD; and

- fund the Company s operations and to continue as a going concern.

In addition, these condensed financial statements do not include any adjustments or charges that might be necessary should the Company be unable to continue as a going concern, such as charges related to impairment of its assets, the recoverability and classification of assets or the amounts and classification of liabilities or other similar adjustments.

Basis of Presentation

The accompanying unaudited condensed financial statements reflect, in the opinion of management, all adjustments (consisting of normal recurring adjustments) necessary for a fair presentation of GTx s financial position, results of operations and cash flows for each period presented in accordance with accounting principles generally accepted in the United States for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States have been condensed or omitted from the accompanying condensed financial statements. These interim condensed financial statements should be read in conjunction with the audited financial statements and related notes thereto, which are included in the Company s Annual Report on Form 10-K for the year ended December 31, 2015. Operating results for the three months ended March 31, 2016 are not necessarily indicative of the results that may be expected for the entire fiscal year ending December 31, 2016.

Use of Estimates

The preparation of condensed financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the condensed financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual amounts and results could differ from those estimates.

Warrant Liability

In November 2014, the Company issued warrants to purchase 64,311,112 shares of its common stock. The Company classified these warrants as a liability on its balance sheet since the warrants contained certain terms that could have required the Company (or its successor) to purchase the warrants for cash in an amount equal to the value (as calculated utilizing a contractually-agreed Black-Scholes-Merton option pricing valuation model (Black-Scholes Model)) of the unexercised portion of the warrants in connection with certain change of control transactions occurring on or prior to December 31, 2016, with such cash payment capped at an amount equal to $0.125 per unexercised share underlying each warrant. As a result of the provision of the warrants requiring cash settlement upon certain change of control transactions, the Company was required to account for these warrants as a liability at fair value and the estimated warrant liability was required to be revalued at each balance sheet date until the earlier of the exercise of the warrants, the modification to remove the provision that could require cash settlement upon certain change of control transactions or the expiration of such provision on December 31, 2016.

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Effective March 25, 2016, each of the warrants was amended by agreement of the warrant holders to remove the provision that could require cash settlement upon certain change of control transactions. These warrants were no longer accounted for as a liability at March 31, 2016. The Company recorded a non-cash reclassification of the warrant fair value to stockholders equity based on the warrants fair value as of the March 25, 2016 modification date. No further adjustments to the fair value of these warrants will be made in the future.

Fair Value of Financial Instruments and Warrant Liability

The carrying amounts of the Company s financial instruments (which include cash, cash equivalents, short-term investments, and accounts payable) and its prior warrant liability approximate their fair values. The fair value of the warrant liability was estimated using the Black-Scholes-Merton pricing valuation model. See Note 4, *Stockholders Equity*, for additional disclosure on the valuation methodology and significant assumptions. The Company s financial assets and liabilities are classified within a three-level fair value hierarchy that prioritizes the inputs used to measure fair value, which is defined as follows:

Level 1 Quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date

Level 2 Inputs other than quoted prices in active markets that are observable for the asset or liability, either directly or indirectly

Level 3 Inputs that are unobservable for the asset or liability

There were no assets or liabilities measured at fair value on a recurring basis as of March 31, 2016. Liabilities measured at fair value on a recurring basis as of December 31, 2015 included only the Company s warrant liability of $27,349, which was classified within Level 3 of the hierarchy. A non-cash gain of $8,163 related to the change in the fair value of the warrant liability was recognized during the three months ended March 31, 2016 in the Company s condensed statement of operations.

As the Company has the positive intent and ability to hold its certificates of deposit classified as short-term investments until maturity, these investments have been classified as held to maturity investments and are stated at cost, which approximates fair value. The Company considers these to be Level 2 investments as the fair values of these investments are determined using third-party pricing sources, which generally utilize

observable inputs, such as interest rates and maturities of similar assets.

Research and Development Expenses

Research and development expenses include, but are not limited to, the Company s expenses for personnel, supplies, and facilities associated with research activities, screening and identification of product candidates, formulation and synthesis activities, manufacturing, preclinical studies, toxicology studies, clinical trials, regulatory and medical affairs activities, quality assurance activities and license fees. The Company expenses these costs in the period in which they are incurred. The Company estimates its liabilities for research and development expenses in order to match the recognition of expenses to the period in which the actual services are received. As such, accrued liabilities related to third party research and development activities are recognized based upon the Company s estimate of services received and degree of completion of the services in accordance with the specific third party contract.

Cash, Cash Equivalents and Short-term Investments

The Company considers highly liquid investments with initial maturities of three months or less to be cash equivalents.

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At March 31, 2016 and December 31, 2015, short-term investments consisted of Federal Deposit Insurance Corporation insured certificates of deposit with original maturities of greater than three months and less than one year.

Income Taxes

The Company accounts for deferred taxes by recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is provided when it is more likely than not that some portion or all of the deferred tax assets will not be realized. Accordingly, at March 31, 2016 and December 31, 2015, net of the valuation allowance, the net deferred tax assets were reduced to zero. Income taxes are described more fully in Note 8 to the Company s financial statements included in the Company s Annual Report on Form 10-K for the year ended December 31, 2015.

Other Income, net

Other income (expense), net consists of foreign currency transaction gains and losses, interest earned on the Company s cash, cash equivalents and short-term investments, and other non-operating income or expense.

Recent Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board issued Accounting Standard Update 2014-15, *Disclosure of Uncertainties about an Entity s Ability to Continue as a Going Concern*. The new guidance is intended to define management s responsibility to evaluate whether there is substantial doubt about an organization s ability to continue as a going concern within one year of the date the financial statements are issued and to provide related footnote disclosure. This new guidance is effective for the first annual period ending after December 15, 2016 and interim periods thereafter.

In March 2016, the Financial Accounting Standards Board issued Accounting Standard Update 2016-09, *Improvements to Employee Share-Based Payment Accounting*. The new guidance will require all income tax effects of awards to be recognized in the income statement when the awards vest or are settled. It will also allow an employer to repurchase more of an employee s shares than it can today for tax

withholding purposes without triggering liability accounting and to make a policy election to account for forfeitures as they occur. This new guidance is effective for fiscal years beginning after December 15, 2016 and interim periods within those years. The Company does not expect the adoption of the standard update to have a significant impact on its financial position or results of operations.

Subsequent Events

The Company has evaluated all events or transactions that occurred after March 31, 2016 up through the date the condensed financial statements were issued. There were no material recognizable or nonrecognizable subsequent events during the period evaluated.

2. Share-Based Compensation

Share-based payments include stock option grants and restricted stock units (RSUs) under the Company s stock option and equity incentive plans and deferred compensation arrangements for the Company s non-employee directors. The Company recognizes compensation expense for its share-based payments based on the fair value of the awards over the period during which an employee or non-employee director is required to provide service in

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exchange for the award. The Company s share-based compensation plans are described more fully in Note 3 to the Company s financial statements included in the Company s Annual Report on Form 10-K for the year ended December 31, 2015.

The following table summarizes share-based compensation expense included within the condensed statements of operations for the three months ended March 31, 2016 and 2015:

	Three Months Ended March 31,	
	2016	2015
Research and development expenses	$ 294	$ 189
General and administrative expenses	450	261
Total share-based compensation	$ 744	$ 450

Share-based compensation expense recorded as general and administrative expense for the three months ended March 31, 2016 and 2015 included share-based compensation expense related to deferred compensation arrangements for the Company s non-employee directors of $30 and $31, respectively.

The Company uses the Black-Scholes Model to value stock options. The expected life of options is determined by calculating the average of the vesting term and the contractual term of the options. The expected price volatility is based on the Company s historical stock price volatility. The risk-free interest rate is determined using U.S. Treasury rates where the term is consistent with the expected life of the stock options. Expected dividend yield is not considered as the Company has not made any dividend payments and has no plans of doing so in the foreseeable future. The amount of share-based compensation expense recognized is reduced ratably over the vesting period by an estimate of the percentage of options granted that are expected to be forfeited or canceled before becoming fully vested.

The fair value of options granted was estimated using the following assumptions for the periods presented:

	Three Months Ended March 31,	
	2016	2015
Expected price volatility	91.4%	88.5%
Risk-free interest rate	2.1%	2.0%
Weighted average expected life in years	7 years	7 years

The following is a summary of stock option transactions for all of the Company s stock option and equity incentive plans since the Company s most recent fiscal year end:

	Number of Shares	Weighted Average Exercise Price Per Share
Options outstanding at December 31, 2015	7,983,168	$ 3.88
Options granted	3,385,000	0.70
Options forfeited or expired	(290,166)	2.65
Options exercised		
Options outstanding at March 31, 2016	11,078,002	2.94

During the year ended December 31, 2015, the Company granted 8,200,000 RSUs to employees of which a portion of each award vests annually over a three year period from the date of grant. The Company estimates the

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fair value of RSUs using the closing price of its stock on the grant date. The fair value of RSUs is amortized on a straight-line basis over the requisite service period of the awards. The non-vested RSUs had a weighted average grant date fair value per share of $0.72. During the three months ended March 31, 2016, 360,000 of these RSUs were forfeited and 1,673,334 RSUs vested. As of March 31, 2016, there were 6,166,666 RSUs outstanding.

3. Basic and Diluted Net Income (Loss) Per Share

Basic and diluted net income (loss) per share attributable to common stockholders is calculated based on the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share gives effect to the dilutive potential of common stock consisting of stock options, unvested RSUs and common stock warrants.

	Three months ended March 31,	
	2016	2015
Basic and diluted net income (loss) per share		
Numerator:		
Net income (loss) basic and diluted	$ 2,106	$ (2,384)
Denominator:		
Weighted average shares outstanding basic	141,522,043	140,335,875
Dilutive restricted stock units	1,926,125	
Weighted average shares outstanding diluted	143,448,168	140,335,875
Net income (loss) per share:		
Basic	$ 0.01	$ (0.02)
Diluted	$ 0.01	$ (0.02)
Weighted average shares outstanding:		
Basic	141,522,043	140,335,875
Diluted	143,448,168	140,335,875

Weighted average potential shares of common stock of 75,917,987 and 83,097,046 for the three months ended March 31, 2016 and 2015, respectively, were excluded from the calculations of diluted income (loss) per share as inclusion of the potential shares would have had an anti-dilutive effect on the net income (loss) per share for the periods.

4. ***Stockholders Equity***

Common Stock and Associated Warrant Liability

On November 14, 2014, the Company completed a private placement of units consisting of an aggregate of 64,311,112 shares of common stock and warrants to purchase an aggregate of 64,311,112 shares of its common stock for net proceeds of $42,814, after deducting offering expenses. The purchasers in the private placement included certain existing GTx stockholders and certain members of the GTx management team and board of directors. The net proceeds from the private placement were allocated to the common stock and warrants based upon the fair value method. Similarly, the offering expenses were allocated between the common stock and warrants with the portion allocated to common stock offset against the proceeds allocated to stockholders equity,

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(unaudited)

whereas the portion allocated to the warrants was expensed immediately. The warrants have a per share exercise price of $0.85, became exercisable on May 6, 2015 and will continue to be exercisable for four years thereafter. Prior to May 6, 2015, each warrant was subject to net cash settlement if, at the time of any exercise, there was then an insufficient number of authorized and reserved shares of common stock to effect a share settlement of the warrant. Under the terms of the warrants, as of May 6, 2015, the net cash settlement feature of the warrants automatically became inoperative; accordingly, the warrants are exercisable only for shares of the Company s common stock. The warrants, however, also contained certain terms that could have required the Company (or its successor) to purchase the warrants for cash in an amount equal to the value (as calculated utilizing a contractually-agreed Black-Scholes Model) of the unexercised portion of the warrants in connection with certain change of control transactions occurring on or prior to December 31, 2016, with the cash payment capped at an amount equal to $0.125 per unexercised share underlying each warrant. Due to the provision of the warrants that could have required cash settlement upon certain change of control transactions, the Company was required to account for these warrants as a liability at fair value using the Black-Scholes Model and the estimated warrant liability was required to be revalued at each balance sheet date until the earlier of the exercise of the warrants, the modification to remove the provision that could require cash settlement upon certain change of control transactions or the expiration of such provision on December 31, 2016. Effective March 25, 2016, each of the warrants was amended by agreement of the warrant holders to remove the provision that could require cash settlement upon certain change of control transactions. These warrants were no longer accounted for as a liability at March 31, 2016. The Company recorded a non-cash reclassification of the warrant fair value to stockholders equity based on the warrants fair value as of the March 25, 2016 modification date. No further adjustments to the fair value of these warrants will be made in the future.

The fair value of the warrants on the March 25, 2016 modification date of $19,186 was estimated using the Black-Scholes Model with the following assumptions: expected volatility of 101%, risk-free interest rate of 1.1%, expected life of approximately 3.1 years and no dividends. The fair value of the warrants at December 31, 2015 of $27,349 was estimated using the Black-Scholes Model with the following assumptions: expected volatility of 98%, risk-free interest rate of 1.4%, expected life of approximately 3.4 years and no dividends. The decrease in fair value from December 31, 2015 to March 25, 2016 of $8,163 was recorded as a non-cash gain on the change in fair value of warrant liability in the Company s statement of operations.

On March 6, 2014, the Company completed a private placement of units consisting of an aggregate of 11,976,048 shares of common stock and warrants to purchase an aggregate of 10,179,642 shares of its common stock for net proceeds of $21,135, after deducting offering expenses. The net proceeds from the private placement were allocated to the common stock and warrants based upon their relative fair values. The warrants, which had a one year term, expired unexercised on March 6, 2015.

5. University of Tennessee Research Foundation License Agreements

The Company and the University of Tennessee Research Foundation (UTRF) are parties to a consolidated, amended and restated license agreement (the SARM License Agreement) pursuant to which the Company was granted exclusive worldwide rights in all existing SARM technologies owned or controlled by UTRF, including all improvements thereto, and exclusive rights to future SARM technology that may be developed by certain scientists at the University of Tennessee or subsequently licensed to UTRF under certain existing inter-institutional agreements with The Ohio State University. Under the SARM License Agreement, the Company is obligated to pay UTRF annual license maintenance fees, low single-digit royalties on net sales of products and mid-single-digit royalties on sublicense revenues.

The Company and UTRF also entered into a license agreement (the SARD License Agreement) in March 2015 pursuant to which the Company was granted exclusive worldwide rights in all existing SARD technologies owned or controlled by UTRF, including all improvements thereto. Under the SARD License Agreement, the Company is obligated to employ active, diligent efforts to conduct preclinical research and development activities

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(in thousands, except share and per share data)

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for the SARD program to advance one or more lead compounds into clinical development. The Company is also obligated to pay UTRF annual license maintenance fees, low single-digit royalties on net sales of products and additional royalties on sublicense revenues, depending on the state of development of a clinical product candidate at the time it is sublicensed.

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ITEM 2. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the condensed financial statements and the notes thereto included in Part 1, Item 1 of this Quarterly Report on Form 10-Q.

Forward-Looking Information

This Quarterly Report on Form 10-Q contains forward-looking statements. The forward-looking statements are contained principally in the sections entitled Management s Discussion and Analysis of Financial Condition and Results of Operations and Risk Factors. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements include statements about:

- the implementation of our business strategies, including our ability to preserve or realize any significant value from our SARM, SARD and GTx-758 (Capesaris®) programs;

- the therapeutic and commercial potential of, and our ability to advance the development of, enobosarm and our SARD development program;

- the timing of regulatory discussions and submissions, and the anticipated timing, scope and outcome of related regulatory actions or guidance;

- our ability to establish and maintain potential new collaborative, partnering or other strategic arrangements for the development and commercialization of our product candidates;

- the anticipated progress of our preclinical and clinical programs, including whether our ongoing clinical trials will achieve clinically relevant results;

- the timing, scope and anticipated initiation, enrollment and completion of our ongoing clinical trials and any other future clinical trials that we may conduct;

- our ability to obtain and maintain regulatory approvals of our product candidates and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;

- our ability to market, commercialize and achieve market acceptance for our product candidates;

- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others; and

- our estimates regarding the sufficiency of our cash resources, expenses, capital requirements and needs for additional financing, and our ability to obtain additional financing.

In some cases, you can identify forward-looking statements by terms such as anticipates, believes, could, envisions, estimates, expects, may, plans, potential, predicts, projects, should, will, would and similar expressions intended to identify forward-looking statement Forward-looking statements reflect our current views with respect to future events, are based on assumptions and are subject to risks, uncertainties and other important factors. We discuss many of these risks in this Quarterly Report on Form 10-Q in greater detail in the section entitled Risk Factors under Part II, Item 1A below. Given these risks, uncertainties and other important factors, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our estimates and assumptions only as of the date of this Quarterly Report on Form 10-Q. You should read this Quarterly Report on Form 10-Q and the documents that we incorporate by reference in and have filed as exhibits to this Quarterly Report on Form 10-Q, completely and with the understanding that our actual future results may be materially different from what we expect. Except as required by law, we assume no obligation to update any forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in any forward-looking statements, even if new information becomes available in the future.

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Overview

Business Overview

We are a biopharmaceutical company dedicated to the discovery, development and commercialization of small molecules for the treatment of cancer, including treatments for breast and prostate cancer, and other serious medical conditions. Our current strategy is focused on the further development of selective androgen receptor modulators, or SARMs, a class of drugs that we believe have the potential to be used as a hormonal therapy for the treatment of advanced breast cancer, as well as the potential to treat other serious medical conditions where unmet medical needs in muscle-related diseases may benefit from increasing muscle mass, such as stress urinary incontinence, or SUI, and Duchenne muscular dystrophy, or DMD. In 2015, we entered into an exclusive worldwide license agreement with the University of Tennessee Research Foundation, or UTRF, to develop its proprietary selective androgen receptor degrader, or SARD, technology, which has the potential to provide compounds that can degrade multiple forms of androgen receptor, or AR, to inhibit tumor growth in patients with progressive castration-resistant prostate cancer, or CRPC, including those patients who do not respond or are resistant to current therapies.

Business Highlights

Our lead SARM candidate, enobosarm (GTx-024), has to date been evaluated in 24 completed or ongoing clinical trials, including in six Phase 2 and two Phase 3 clinical trials, enrolling over 1,500 subjects, of which approximately 1,000 subjects were treated with enobosarm. Enobosarm is the generic name given to the compound by the USAN Council and the World Health Organization and is the first compound to receive the SARM stem in its name, recognizing enobosarm as the first in this new class of compounds. We announced during the second quarter of 2014 positive results from a Phase 2 proof-of-concept, open-label clinical trial evaluating enobosarm 9 mg oral daily for the treatment of patients with estrogen receptor, or ER, positive and AR positive metastatic breast cancer who have previously responded to hormonal therapy. Based on the positive results of the Phase 2 proof-of-concept clinical trial in patients with ER positive and AR positive metastatic breast cancer, as well as positive data reported in medical literature regarding the use of androgens for the treatment of breast cancer and our preclinical data demonstrating tumor growth inhibition with enobosarm in animal models of disease, we believe enobosarm has the potential to be an effective treatment alternative with a favorable side effect profile for women whose advanced breast cancer is both ER positive and AR positive, as well as for women with advanced AR positive triple-negative breast cancer, or TNBC.

In 2015, we commenced enrollment in a Phase 2 proof-of-concept clinical trial of enobosarm designed to evaluate the efficacy and safety of enobosarm in patients with advanced AR positive TNBC. This open-label, multinational clinical trial, which utilizes a Simon s two-stage clinical trial design, is expected to enroll up to approximately 55 patients to obtain 41 evaluable patients, who will be administered an 18 mg oral daily dose of enobosarm, and clinical benefit will be assessed at 16 weeks of treatment. There will be two stages of evaluation in the clinical trial, with the first stage assessment occurring following 16 weeks of treatment for the first 21 evaluable patients. If at least 2 of the 21 patients achieve clinical benefit, the trial will continue to enroll the second stage of the study. We also commenced enrollment in 2015 in a Phase 2 clinical trial evaluating enobosarm in patients whose metastatic or locally advanced breast cancer is both ER positive and AR positive. This open-label, multinational clinical trial, which is enrolling patients whose cancer treatment has shown prior response to hormonal therapy but has subsequently progressed, will also utilize a Simon s two-stage clinical trial design. The trial is expected to enroll up to approximately 118 patients to obtain 44 evaluable patients in each of two cohorts. One cohort will receive a daily dose of 9 mg of enobosarm and the other cohort a daily dose of 18 mg of enobosarm. There will be two stages of evaluation in the clinical trial, with the first stage assessment occurring following 24 weeks of treatment for the first 18 evaluable patients in each of the two cohorts. If at least 3 of the 18 patients achieve clinical benefit in one or both cohorts, the trial will continue through the second stage for that cohort. For each of these two Phase 2 clinical trials, clinical benefit is defined as a complete response, partial response or stable disease as measured by standardized response evaluation criteria. We currently estimate we have sufficient funding through the end of 2016 to allow us to obtain the results from the patients enrolled in the first stage of each clinical trial, but our ability to enroll patients to the second stage and complete both of these clinical trials will require us to seek sufficient

additional funding.

We are also evaluating enobosarm and other compounds in our SARM portfolio for indications outside of oncology where unmet medical needs in muscle-related diseases may benefit from increasing muscle mass. In the first quarter of 2016, we initiated and commenced enrollment of a Phase 2 proof-of-concept clinical trial of enobosarm to treat postmenopausal women with SUI. This is the first clinical trial to evaluate a SARM for the

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treatment of SUI. SUI refers to the unintentional leakage of urine during activities that increase abdominal pressure such as coughing, sneezing or physical exercise and is the most common type of incontinence suffered by women, affecting up to 35% of adult women. The rationale for evaluating enobosarm as a treatment for SUI in the proof-of-concept trial is supported by preclinical *in vivo* data demonstrating increases in pelvic floor muscle mass in animal models following treatment with our SARM compounds, including enobosarm, as well as safety data from enobosarm clinical trials involving more than 1,000 subjects treated with enobosarm. We anticipate top-line data from this Phase 2 clinical trial of enobosarm in SUI by the end of 2016. We are also currently evaluating several SARM compounds, including enobosarm, in preclinical models of DMD where a SARM s ability to increase muscle mass may prove beneficial to patients suffering from DMD, which is a rare disease characterized by progressive muscle degeneration and weakness. Based on the extensive SARM data from our preclinical and clinical development efforts, we are undertaking preclinical studies and have initiated discussions with experts to better understand the potential of SARMs as a treatment for DMD. Our evaluation of SARMs as a potential treatment for DMD is at an early stage, and our ability to meaningfully advance development of SARMs as a potential treatment for DMD is subject to our ability to obtain additional funding.

In March 2015, we entered into an exclusive worldwide license agreement with the UTRF to develop SARD compounds that may be capable of degrading multiple forms of AR. We believe SARDs may have the potential to treat prostate cancer, as well as other diseases such as benign prostatic hyperplasia and Kennedy s disease. We envision initially developing SARDs as a potentially novel treatment for men with CRPC, including those who do not respond or are resistant to currently approved therapies. Although current therapies have improved overall survival in men with CRPC, approximately one-third of the CRPC patients do not respond to these therapies, due in part to the presence of splice variants, including AR-V7. Splice variants of the androgen receptor have been identified in which the ligand binding domain, the binding site for androgens and necessary for the action of many of the current therapies, is lost. In addition, most patients who initially respond to available treatments eventually have disease progression due to the emergence of resistance to these therapies. It is believed that CRPC growth remains highly dependent on androgen receptor activity, although the mechanisms which underlie this resistance are not fully understood. We believe a therapeutic agent that would safely degrade multiple forms of the androgen receptor, including those without the ligand binding domain, would be uniquely positioned to address this patient population. Our evaluation of the licensed SARD program is at an early stage. We are currently implementing an appropriate development program for SARDs and have selected drug development candidates for the preclinical studies required to support first in human clinical trials. However, to complete preclinical development of our SARD program through the requisite preclinical studies to support initial human clinical trials, we will require additional funding.

We are in the process of concluding our Phase 2 clinical trial evaluating GTx-758 (Capesaris®), an oral nonsteroidal selective ER alpha agonist, as a secondary hormonal therapy in men with metastatic and high risk non-metastatic CRPC. Based on the significant resources that would be needed to advance GTx-758, we do not plan to further develop this program after the conclusion of this Phase 2 clinical trial.

Financial Highlights

Our net income for the three months ended March 31, 2016 was $2.1 million. Net income for the three months ended March 31, 2016 included a non-cash gain of $8.2 million due to the revaluation of our warrant liability during the quarter, which warrant liability resulted from the issuance of common stock and warrants in our November 2014 private placement. Effective March 25, 2016, each of the warrants was amended by agreement of the warrant holders to remove the provision that could require cash settlement from us under certain circumstances. These warrants were no longer accounted for as a liability at March 31, 2016. We

recorded a non-cash reclassification of the warrant fair value to stockholders equity based on the warrants fair value as of the March 25, 2016 modification date. No further adjustments to the fair value of these warrants will be made in the future. Our operating loss for the three months ended March 31, 2016 was $6.1 million. We expect to incur significant operating losses for the foreseeable future as we continue our clinical development activities and potentially seek regulatory approval of our product candidates. We have funded our operations primarily through the sale of equity securities, collaboration and license agreements, and prior to September 2012, product revenue from sales of FARESTON®, the rights to which we sold to a third party in the third quarter of 2012. We currently have no ongoing collaborations for the development and commercialization of our product candidates and no source of revenue, nor do we expect to generate revenue for the foreseeable future. We do not expect to obtain any regulatory approvals to market any of our product candidates, including enobosarm, for the foreseeable future, and it is possible that none of our product candidates will ever receive any regulatory approvals.

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At March 31, 2016, we had cash, cash equivalents and short-term investments of $24.3 million compared to $29.3 million at December 31, 2015. On March 6, 2014, we completed a private placement of units consisting of 12.0 million shares of common stock and warrants to purchase 10.2 million shares of our common stock for net proceeds to us of approximately $21.1 million, after deducting offering expenses. These warrants expired on March 6, 2015. On November 14, 2014, we completed a separate private placement of units consisting of an aggregate of 64.3 million shares of our common stock and warrants to purchase an aggregate of 64.3 million shares of our common stock for net proceeds to us of $42.8 million, after deducting offering expenses.

We estimate that our current cash, cash equivalents and short-term investments, together with interest thereon, will be sufficient to meet our projected operating requirements only through the end of 2016. Accordingly, we need to raise substantial additional capital in the near term in order to fund our operations beyond the end of 2016 and to continue as a going concern thereafter. In addition, we have based our cash sufficiency estimates on our current business plan and our assumptions that may prove to be wrong. We could utilize our available capital resources sooner than we currently expect, and we could need additional funding to sustain our operations even sooner than currently anticipated. While we estimate that our current cash, cash equivalents and short-term investments, together with interest thereon, will be sufficient to meet our projected operating requirements only through the end of 2016, during which time we expect to obtain results from the patients enrolled in the first stage of each of our ongoing open-label Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer and the results from our recently initiated Phase 2 proof-of-concept clinical trial evaluating enobosarm to treat postmenopausal women with SUI, we will need to raise substantial additional capital in the near term in order to:

- initiate and complete the second stage of both of our ongoing open-label Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer;

- meaningfully advance the preclinical development of our licensed SARD program through the preclinical studies required to initiate human clinical studies;

- undertake any further development of our SARMs beyond our ongoing Phase 2 clinical trials of enobosarm in breast cancer and SUI and our ongoing preclinical development activities related to the development of SARMs as a potential treatment for DMD; and

- fund our operations and to continue as a going concern.

If we are unable to raise additional funds in the near term to fund our operations beyond the end of 2016 and to continue as a going concern thereafter, we may be required to, among other things, make further reductions in our workforce similar to or greater than our October 2013 workforce reduction that resulted in the elimination of approximately 60% of our workforce, eliminate our ongoing clinical trials, discontinue the development of enobosarm and/or SARDs, liquidate all or a portion of our assets, and/or seek protection under the provisions of the U.S. Bankruptcy Code, all of which would have a material adverse effect on our business and stock price. In addition, the accompanying condensed financial statements do not include any adjustments or charges that might be necessary should we be unable to continue as a going concern, such as charges related to impairment of our assets, the recoverability and classification of assets or the amounts and classification of liabilities or other similar adjustments.

While we have been able to fund our operations to date, we currently have no ongoing collaborations for the development and commercialization of our product candidates and no source of revenue, nor do we expect to generate revenue for the foreseeable future. We also do not have any commitments for future external funding. Accordingly, we are seeking access to additional funds through potential collaboration, partnering or other strategic arrangements, or, if necessary, through public or private equity offerings or debt financings, or a combination of the foregoing. Our ability to raise additional funds and the terms upon which we are able to raise such funds have been severely harmed by the failure of our POWER 1 and POWER 2 Phase 3 clinical trials of enobosarm for the prevention and treatment of muscle wasting in patients with advanced non-small cell lung cancer, or NSCLC, to meet the primary statistical criterion for the co-primary endpoints agreed upon with the FDA, and may in the future be adversely impacted by the uncertainty regarding the prospects of our development of enobosarm for the treatment of patients with AR positive advanced breast cancer, our ability to realize any return on our investment in GTx-758 and our ability to advance the development of enobosarm or SARDs, if at all. Our ability to raise additional funds and the terms upon which we are able to raise such funds may also be adversely affected by the uncertainties regarding our financial condition, the sufficiency of our capital resources, our ability to maintain the listing of our common stock on the NASDAQ Capital Market and recent and potential future management

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turnover. As a result of these and other factors, we cannot be certain that additional funding will be available on acceptable terms, or at all.

Research and Development

Since our inception in 1997, we have been focused on drug discovery and development programs. Research and development expenses include, but are not limited to, our expenses for personnel and supplies associated with our research activities, screening and identification of product candidates, formulation and synthesis activities, manufacturing, preclinical studies, toxicology studies, clinical trials, regulatory and medical affairs activities, quality assurance activities and license fees.

We expect that our research and development expenses for fiscal year 2016 will increase as compared to fiscal year 2015 primarily due to our three ongoing Phase 2 clinical trials evaluating enobosarm in two different breast cancer indications targeting the androgen receptor and as a potential treatment for postmenopausal women with SUI.

There is a risk that any drug discovery and development program may not produce revenue. Moreover, because of the uncertainties inherent in drug discovery and development, including those factors described in Part II, Item 1A Risk Factors of this Quarterly Report on Form 10-Q, we may not be able to successfully develop and commercialize any of our product candidates.

Product Development Programs

The following table identifies the development phase and status for each of our clinical and preclinical product development programs:

Product Candidate/ Proposed Indication	Program	Development Phase	Status
Enobosarm			
Treatment of women with advanced AR positive TNBC (18 mg)	SARM	Phase 2	Commenced enrollment of a Phase 2 open-label proof-of-concept clinical trial evaluating enobosarm in patients with advanced AR positive TNBC.
Enobosarm			
Treatment of women with ER positive/AR positive advanced breast cancer (9 mg and 18 mg)	SARM	Phase 2	Commenced enrollment of a Phase 2 open-label clinical trial evaluating enobosarm in patients whose breast cancer is both ER positive and AR positive.
Enobosarm			
Treatment of postmenopausal women with SUI (3 mg)	SARM	Phase 2	Commenced enrollment of a Phase 2 proof-of-concept clinical trial evaluating

			enobosarm in postmenopausal women with SUI.
SARMs			
Treatment of DMD	SARM	Preclinical	Conducting preclinical research to better understand the potential of SARMs as a treatment for DMD.
SARDs			
Treatment of castration resistant prostate cancer	SARD	Preclinical	Drug development candidates undergoing preclinical studies required to support first in human clinical trials.

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General and Administrative Expenses

Our general and administrative expenses consist primarily of salaries and other related costs for personnel serving executive, finance, legal, human resources, information technology, and investor relations functions. General and administrative expenses also include facility costs, insurance costs, and professional fees for legal, accounting, and public relation services.

Critical Accounting Policies and Significant Judgments and Estimates

Our management s discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements as well as the reported revenues and expenses during the reporting periods. On an ongoing basis, we evaluate our estimates and judgments related to revenue recognition, valuation of warrants, income taxes, intangible assets, long-term service contracts, share-based compensation, and other contingencies. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 2 to our financial statements appearing in our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC, we believe that the following accounting policies are most critical to aid you in fully understanding and evaluating our reported financial results.

Warrant Liability

In November 2014, we issued warrants to purchase 64,311,112 shares of our common stock. We classified these warrants as a liability on our balance sheet since the warrants contained certain terms that could have required us (or our successor) to purchase the warrants for cash in an amount equal to the value (as calculated utilizing a contractually-agreed Black-Scholes-Merton option pricing valuation model) of the unexercised portion of the warrants in connection with certain change of control transactions occurring on or prior to December 31, 2016, with such cash payment capped at an amount equal to $0.125 per unexercised share underlying each warrant. As a result of the provision of the warrant requiring cash settlement upon certain change of control transactions, we were required to account for these warrants as a liability at fair value and the estimated warrant liability was required to be revalued at each balance sheet date until the earlier of the exercise of the warrants, the modification to remove the provision that could require cash settlement upon certain change of control transactions or the expiration of such provision on December 31, 2016. Effective March 25, 2016, each of the warrants was amended by agreement of the warrant holders to remove the provision that could require cash settlement upon certain change of control transactions. These warrants were no longer accounted for as a liability at March 31, 2016. We recorded a non-cash reclassification of the warrant fair value to stockholders equity based on the warrants fair value as of the March 25, 2016 modification date. No further adjustments to the fair value of these warrants will be made in the future.

Research and Development Expenses

Research and development expenses include, but are not limited to, our expenses for personnel, supplies, and facilities associated with research activities, screening and identification of product candidates, formulation and synthesis activities, manufacturing, preclinical studies, toxicology studies, clinical trials, regulatory and medical affairs activities, quality assurance activities and license fees. We expense these costs in the period in which they are incurred. We estimate our liabilities for research and development expenses in order to match the recognition of expenses to the period in which the actual services are received. As such, accrued liabilities related to third party research and development activities are recognized based upon our estimate of services received and degree of completion of the services in accordance with the specific third party contract.

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Share-Based Compensation

We have stock option and equity incentive plans that provide for the purchase or acquisition of our common stock by certain of our employees and non-employees. We measure compensation expense for our share-based payments based on the fair value of the awards on the grant date and recognize the expense over the period during which an employee or non-employee director is required to provide service in exchange for the award.

The determination of the fair value of stock options on the date of grant is based upon the expected life of the award, the expected stock price volatility over the expected life of the awards, and risk-free interest rate. We estimate the expected life of options by calculating the average of the vesting term and contractual term of the options. We estimate the expected stock price volatility based on the historical volatility of our common stock. The risk-free interest rate is determined using U.S. Treasury rates where the term is consistent with the expected life of the stock options. Expected dividend yield is not considered as we have not made any dividend payments and have no plans of doing so in the foreseeable future. The amount of share-based compensation expense recognized is reduced ratably over the vesting period by an estimate of the percentage of options granted that are expected to be forfeited or canceled before becoming fully vested. This estimate is adjusted periodically based on the extent to which actual forfeitures differ, or are expected to differ, from the previous estimate.

Share-based compensation also includes restricted stock units, or RSUs, granted to employees. We estimate the fair value of RSUs using the closing price of our stock on the grant date. The fair value of RSUs is amortized on a straight-line basis over the requisite service period of the awards.

The following table summarizes share-based compensation expense included within the condensed statements of operations for the three months ended March 31, 2016 and 2015:

	Three Months Ended March 31,	
	2016	2015
	(in thousands)	
Research and development expenses	$ 294	$ 189
General and administrative expenses	450	261
Total share-based compensation	$ 744	$ 450

Share-based compensation expense recorded in the condensed statement of operations as general and administrative expense for the three months ended March 31, 2016 and 2015 included share-based compensation expense related to deferred compensation arrangements for our non-employee directors of $30,000 and $31,000, respectively. At March 31, 2016, the total compensation cost related to non-vested stock options not yet recognized was approximately $4.6 million with a weighted average expense recognition period of 3.75 years. At March 31, 2016, the total compensation cost related to non-vested RSUs not yet recognized was approximately $3.4 million with a weighted average expense recognition period of 1.82 years.

Recent Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board issued Accounting Standard Update 2014-15, *Disclosure of Uncertainties about an Entity s Ability to Continue as a Going Concern*. The new guidance is intended to define management s responsibility to evaluate whether there is substantial doubt about an organization s ability to continue as a going concern within one year of the date the financial statements are issued and to provide related footnote disclosure. This new guidance is effective for the first annual period ending after December 15, 2016 and interim periods thereafter.

In March 2016, the Financial Accounting Standards Board issued Accounting Standard Update 2016-09, *Improvements to Employee Share-Based Payment Accounting*. The new guidance will require all income tax effects of awards to be recognized in the income statement when the awards vest or are settled. It will also allow an employer to repurchase more of an employee s shares than it can today for tax withholding purposes without triggering liability accounting and to make a policy election to account for forfeitures as they occur. This new guidance is effective for fiscal years beginning after December 15, 2016 and interim periods within those years. We do not expect the adoption of the standard update to have a significant impact on our financial position or results of operations.

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Results of Operations

Three Months Ended March 31, 2016 and 2015

Research and Development Expenses

The following table identifies the research and development expenses for each of our clinical product candidates, as well as research and development expenses pertaining to our other research and development efforts, for each of the periods presented. Research and development spending for past periods is not indicative of spending in future periods.

Proposed Candidate / Proposed Indication	Program	Three Months Ended March 31, 2016	2015
		(in thousands)	
Enobosarm			
Treatment of women with advanced AR positive TNBC (18 mg)	**SARM**	$ 1,291	$ 1,181
Enobosarm			
Treatment of women with ER positive and AR positive advanced breast cancer (9 mg and 18 mg)	**SARM**	1,495	839
Enobosarm			
Treatment of postmenopausal women with SUI (3 mg)	**SARM**	273	
GTx-758			
Secondary hormonal therapy in men with metastatic and non-metastatic CRPC	**Selective ER alpha agonist**	213	555
Other research and development		699	373
Total research and development expenses		$ 3,971	$ 2,948

Research and development expenses increased to $4.0 million for the three months ended March 31, 2016 from $2.9 million for the three months ended March 31, 2015.

Research and development expenses for enobosarm for the treatment of women with AR positive TNBC increased from the prior year period due to the timing of activities related to conducting the ongoing Phase 2 clinical trial for the treatment of women with AR positive TNBC, which commenced enrollment during the fourth quarter of 2015. The prior year period consisted primarily of expenses related to preparatory activities for this clinical trial.

Research and development expenses for enobosarm for the prevention and treatment of AR positive and ER positive metastatic breast cancer increased from the prior year period due primarily to the timing of activities related to conducting the ongoing Phase 2 clinical trial for the treatment of women with ER positive and AR positive advanced breast cancer, which commenced enrollment during the third quarter of 2015. The current year period also included expenses related to our ongoing Phase 2 proof-of-concept clinical trial evaluating enobosarm 9 mg for the treatment of AR positive and ER positive metastatic breast cancer in women who have previously responded to hormonal therapy for the treatment of their metastatic breast cancer that began in the second quarter of 2013. The prior year period consisted primarily of expenses related to preparatory activities for the ongoing Phase 2 clinical trial for the treatment of women with ER positive and AR positive advanced breast cancer and expenses related to the ongoing Phase 2 proof-of-concept clinical trial evaluating enobosarm 9 mg.

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Research and development expenses for enobosarm for the treatment of postmenopausal women with SUI during the three months ended March 31, 2016 consisted of expenses related to the Phase 2 proof-of-concept clinical trial of enobosarm to treat postmenopausal women with SUI that initiated enrollment in the first quarter of 2016.

Research and development expenses related to the ongoing Phase 2 clinical trial to evaluate GTx-758 as secondary hormonal therapy in men with metastatic CRPC decreased for the three months ended March 31, 2016 compared to the prior year period due to the timing of patient activities and related management expenses as this trial was initiated in the third quarter of 2012 and enrollment was completed during the first quarter of 2015.

Other research and development expenses for the three months ended March 31, 2016 included costs for research to identify one or more lead SARD compounds that could be advanced into preclinical and clinical development and activities relating to evaluating enobosarm and other compounds in our SARM portfolio for indications outside of oncology.

General and Administrative Expenses

General and administrative expenses of $2.1 million for the three months ended March 31, 2016 remained consistent with the prior year period.

Gain on Change in Fair Value of Warrant Liability

Prior to March 25, 2016, we recognized a warrant liability due to certain provisions of the warrants issued as part of our November 2014 private placement of common stock and warrants. The warrants were required to be accounted for as a liability at fair value and the fair value was required to be revalued at each balance sheet date until the earlier of the exercise of the warrants, the modification to remove the provision that could require cash settlement of the warrants upon certain change of control transactions or the expiration of such provision on December 31, 2016. The resulting non-cash gain or loss on the fair value revaluation at each balance sheet date was recorded as non-operating income in our condensed statement of operations. Effective March 25, 2016, each of the warrants was amended by agreement of the warrant holders to remove the provision that could require cash settlement upon certain change of control transactions. These warrants were no longer accounted for as a liability at March 31, 2016. We recorded a non-cash reclassification of the warrant fair value to stockholders equity based on the warrants fair value as of the March 25, 2016 modification date. No further adjustments to the fair value of these warrants will be made in the future. The final revaluation of the warrants fair value as of March 25, 2016 resulted in a non-cash gain of $8.2 million that was recorded as the change in fair value of warrant liability in our condensed statement of operations for the three months ended March 31, 2016.

Liquidity and Capital Resources

At March 31, 2016, we had cash, cash equivalents and short-term investments of $24.3 million compared to $29.3 million at December 31, 2015. Net cash used in operating activities was $4.8 million and $4.7 million for the three months ended March 31, 2016 and 2015, respectively, and resulted primarily from funding our operations.

Net cash provided by investing activities was $3.0 million for the three months ended March 31, 2016 and resulted primarily from the maturities of short-term investments of $10.2 million offset by the purchase of short-term investments of $7.2 million. Net cash provided by investing activities was $978,000 for the three months ended March 31, 2015 and resulted from the maturities of short-term investments of $11.2 million offset by the purchase of short-term investments of $10.2 million.

Net cash used in financing activities for the three months ended March 31, 2016 was $210,000 for tax payments related to shares withheld for vested restricted stock units. There was no cash provided by or used in financing activities for the three months ended March 31, 2015.

We estimate that our current cash, cash equivalents and short-term investments, together with interest thereon, will be sufficient to meet our projected operating requirements only through the end of 2016. Accordingly, we need to raise substantial additional capital in the near term in order to fund our operations beyond the end of 2016 and to continue as a going concern thereafter. In addition, we have based our cash sufficiency estimates on our current business plan and our assumptions that may prove to be wrong. We could utilize our available capital resources

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sooner than we currently expect, and we could need additional funding to sustain our operations even sooner than currently anticipated. While we estimate that our current cash, cash equivalents and short-term investments, together with interest thereon, will be sufficient to meet our projected operating requirements only through the end of 2016, during which time we expect to obtain results from the patients enrolled in the first stage of each of our ongoing open-label Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer and results from our recently initiated Phase 2 proof-of-concept clinical trial evaluating enobosarm to treat postmenopausal women with SUI, we will need to raise substantial additional capital in the near term in order to:

- initiate and complete the second stage of both of our ongoing open-label Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer;

- meaningfully advance the preclinical development of our licensed SARD program through the preclinical studies required to initiate human clinical studies;

- undertake any further development of our SARMs beyond our ongoing Phase 2 clinical trials of enobosarm in breast cancer and SUI and our ongoing preclinical development activities related to the development of SARMs as a potential treatment for DMD; and

- fund our operations and to continue as a going concern.

Our estimate of the period of time or events through which our financial resources will be adequate to support our projected operating requirements is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed under Part II, Item 1A Risk Factors section of this Quarterly Report on Form 10-Q. Because of the numerous risks and uncertainties associated with the development and potential commercialization of our product candidates and other research and development activities, including risks and uncertainties that could impact the rate of progress of our development activities, we are unable to estimate with certainty the amounts of increased capital outlays and operating expenditures associated with the future development of our product candidates, if any. Our future funding requirements will depend on many factors, including:

- the scope, rate of progress and cost of our preclinical and clinical development programs, including our ongoing and any future clinical trials of enobosarm;

- the terms and timing of any potential collaborative, licensing and other strategic arrangements that we may establish;

- the amount and timing of any licensing fees, milestone payments and royalty payments from potential collaborators, if any;

- future clinical trial results;

- the cost and timing of regulatory filings and/or approvals to commercialize our product candidates and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;

- the effect of competing technological and market developments; and

- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights, and the cost of defending any other litigation claims.

While we have been able to fund our operations to date, we currently have no ongoing collaborations for the development and commercialization of our product candidates and no source of revenue, nor do we expect to generate revenue for the foreseeable future. We also do not have any commitments for future external funding. Accordingly, we are seeking access to additional funds through potential collaboration, partnering or other strategic arrangements, or, if necessary, through public or private equity offerings or debt financings, or a combination of the foregoing. In October 2013, following our announcement that our POWER 1 and POWER 2 Phase 3 clinical trials for the prevention and treatment of muscle wasting in patients with advanced NSCLC failed to achieve the results required by the FDA for us to submit a new drug application for enobosarm, we announced and implemented a workforce reduction of approximately 60%. If we are unable to raise additional funds in the near term to fund our operations beyond the end of 2016 and to continue as a going concern thereafter, we could be required to, among other things, make further reductions in our workforce, eliminate our ongoing clinical trials, discontinue the development of enobosarm and/or SARDs, liquidate all or a portion of our assets, and/or seek

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protection under the provisions of the U.S. Bankruptcy Code, all of which would have a material adverse effect on our business and stock price. In addition, the accompanying condensed financial statements do not include any adjustments or charges that might be necessary should we be unable to continue as a going concern, such as charges related to impairment of our assets, the recoverability and classification of assets or the amounts and classification of liabilities or other similar adjustments.

To the extent that we raise additional funds through potential collaboration, partnering or other strategic arrangements, it may be necessary to relinquish rights to some of our technologies or product candidates, or grant licenses on terms that are not favorable to us, any of which could result in the stockholders of GTx having little or no continuing interest in our SARMs and/or SARDs programs as stockholders or otherwise. To the extent we raise additional funds by issuing equity securities, our stockholders may experience significant dilution, particularly given our currently depressed stock price, and debt financing, if available, may involve restrictive covenants. For example, we completed a private placement of common stock and warrants in March 2014, which was substantially dilutive, and completed a subsequent private placement in November 2014 that represented even greater dilution, and our stockholders may experience additional, perhaps substantial, dilution should we again raise additional funds by issuing equity securities. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. Our ability to raise additional funds and the terms upon which we are able to raise such funds have been severely harmed by the failure of our two prior enobosarm POWER trials to meet the primary statistical criterion for the co-primary endpoints agreed upon with the FDA, and may in the future be adversely impacted by the uncertainty regarding the prospects of our development of enobosarm for the treatment of patients with AR positive advanced breast cancer, our ability to realize any return on our investment in GTx-758 and our ability to advance the development of enobosarm or SARDs, if at all. Our ability to raise additional funds and the terms upon which we are able to raise such funds may also be adversely affected by the uncertainties regarding our financial condition, the sufficiency of our capital resources, our ability to maintain the listing of our common stock on the NASDAQ Capital Market and recent and potential future management turnover. As a result of these and other factors, we cannot be certain that additional funding will be available on acceptable terms, or at all.

Contractual Obligations

Our future minimum contractual obligations were reported in our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the SEC. There were no material changes during the first quarter of 2016 from the contractual obligations previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015.

NASDAQ Listing Compliance

On December 23, 2015, we received a letter from the staff, or Staff, of NASDAQ providing notification that, for the previous 30 consecutive business days, the closing bid price for our common stock was below the minimum $1.00 per share requirement for continued listing on The NASDAQ Capital Market, or the Bid Price Requirement. The notification had no immediate effect on the listing of our common stock. In accordance with NASDAQ listing rules, we were afforded 180 calendar days, or until June 20, 2016, to regain compliance with the Bid Price Requirement. If we do not regain compliance with the Bid Price Requirement by June 20, 2016, we may be eligible for an additional 180 calendar day compliance period. To qualify, we would need to meet, on the 180th day of the first compliance period, the continued listing requirement for market value of publicly held shares and all other applicable standards for initial listing on The NASDAQ Capital Market, with the exception of the Bid Price Requirement, and would need to provide written notice of our intention to cure the deficiency during the second compliance period by effecting a reverse stock split, if necessary. However, if it appears to the Staff that we will not be able to cure the deficiency, or if we are not eligible for a second compliance period, NASDAQ will notify us that our common stock will be subject to delisting. In the event of such a notification, we may appeal the Staff s determination to delist our common stock, but there can be no assurance the Staff

would grant our request for continued listing. In addition, we may be unable to meet other applicable NASDAQ listing requirements, including maintaining minimum levels of stockholders equity or market values of our common stock in which case, our common stock could be delisted notwithstanding our ability to demonstrate compliance with the Bid Price Requirement, whether through the implementation of a reverse stock split or otherwise. If our common stock is delisted, this would, among other things, substantially impair our ability to raise additional funds to fund our operations and to continue as a going concern, and could result in a loss of institutional investor interest and fewer development opportunities for us.

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ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

During the three months ended March 31, 2016, there were no material changes to our market risk disclosures as set forth in Part II, Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2015.

ITEM 4. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities and Exchange Act of 1934, as amended (the Exchange Act)) that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC s rules and forms and that such information is accumulated and communicated to our management, including our Principal Executive Officer and Principal Financial Officer, as appropriate, to allow for timely decisions regarding required disclosures.

We have carried out an evaluation, under the supervision and with the participation of our management, including our Principal Executive Officer and Principal Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based on the evaluation of these disclosure controls and procedures, our Principal Executive Officer and Principal Financial Officer have concluded that our disclosure controls and procedures were effective.

There were no changes in our internal control over financial reporting during the first quarter of 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II: OTHER INFORMATION

ITEM 1A. RISK FACTORS

We have identified the following additional risks and uncertainties that may have a material adverse effect on our business, financial condition or results of operations. Investors should carefully consider the risks described below before making an investment decision. Our business faces significant risks, and the risks described below may not be the only risks we face. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations. If any of these risks occur, our business, results of operations or financial condition could suffer, the market price of our common stock could decline and you could lose all or part of your investment in our common stock.

We have marked with an asterisk (*) those risks described below that reflect substantive changes from the risks described under Part I, Item 1A Risk Factors included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 15, 2016.

Risks Related to Our Financial Condition and Need for Additional Financing

We have incurred losses since inception, and we anticipate that we will incur continued losses for the foreseeable future.*

As of March 31, 2016, we had an accumulated deficit of $511.4 million. Though our net income for the three months ended March 31, 2016 was $2.1 million as a result of a non-cash gain of $8.2 million due to the revaluation of our warrant liability at March 31, 2016, our operating loss for the three months ended March 31, 2016 was $6.1 million and we expect to incur significant operating losses for the foreseeable future as we continue our clinical development activities and potentially seek regulatory approval of our product candidates. These losses, among other things, have had and will continue to have an adverse effect on our stockholders equity and working capital.

Our current product candidate, enobosarm (GTx-024), will require significant additional clinical development, financial resources and personnel in order to obtain necessary regulatory approvals for this product candidate and to develop it and our other SARMs into commercially viable products. A substantial portion of our efforts and

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expenditures were previously devoted to enobosarm 3 mg, which was the subject of our POWER 1 and POWER 2 Phase 3 clinical trials for the prevention and treatment of muscle wasting in patients with advanced non-small cell lung cancer, or NSCLC. The failure of the POWER trials to meet the primary statistical criterion for the co-primary endpoints agreed upon with the U.S. Food and Drug Administration, or FDA, significantly depressed our stock price and has harmed our future prospects. Although we evaluated the potential submission of a marketing authorization application, or MAA, to the European Medicines Agency, or EMA, seeking marketing approval of enobosarm 3 mg in the European Union, or EU, for the prevention and treatment of muscle wasting in patients with advanced NSCLC, based on input from the Medicines and Healthcare Products Regulatory Agency, or MHRA, we believe that the data from the POWER trials is not sufficient to support the filing and approval of a MAA without confirmatory data from another Phase 3 clinical trial of enobosarm 3 mg. As a result of this input, we do not intend to submit a MAA in the absence of such confirmatory data. In addition, since data from the two POWER trials failed to meet the primary statistical criterion pre-specified for the co-primary endpoints of lean body mass and physical function, the FDA will not accept a new drug application, or NDA, for enobosarm 3 mg for the prevention and treatment of muscle wasting in patients with advanced NSCLC. Accordingly, our strategy does not include further development of enobosarm for this indication in the U.S. or in Europe. Moreover, our current strategy is focused on the further development of enobosarm for the treatment of patients with androgen receptor, or AR, positive advanced breast cancer. However, the development of enobosarm for the treatment of patients with AR positive advanced breast cancer is at an early stage and is subject to the substantial risk of failure inherent in the development of early-stage product candidates. In addition, we have previously announced our decision not to commit additional internal resources for the development of another of our product candidates, GTx-758 (Capesaris®), once we have completed our ongoing Phase 2 clinical trial of the compound as a potential treatment for castration resistant prostate cancer. Accordingly, any further development of GTx-758, as well as our ability to derive any value from our GTx-758 program, depends entirely on our ability to partner or divest this product candidate to a third party. With regard to our remaining programs, our preclinical evaluation of our selective androgen receptor degrader, or SARD, technology, our preclinical evaluation of SARMs as a potential treatment of Duchenne muscular dystrophy, or DMD, and our clinical evaluation of enobosarm for the treatment of postmenopausal women with stress urinary incontinence, or SUI, will in each case require significant additional financial resources and personnel to continue our development of these programs. Because of the numerous risks and uncertainties associated with developing and commercializing small molecule drugs, we are unable to predict the extent of any future losses or when we will become profitable, if at all. In addition, we do not expect to obtain any regulatory approvals to market any of our product candidates, including enobosarm, for the foreseeable future, and it is possible that none of our product candidates will ever receive any regulatory approvals.

We have funded our operations primarily through public offerings and private placements of our securities, as well as payments from our former collaborators. We also previously recognized product revenue from the sale of FARESTON®, the rights to which we sold to a third party in the third quarter of 2012. Currently, we have no ongoing collaborations for the development and commercialization of our product candidates, and as a result of the sale of our rights and certain assets related to FARESTON®, we also currently have no sources of revenue.

If we are unable to raise substantial additional capital in the near term to fund our operations beyond the end of 2016 and to continue as a going concern thereafter, if we and/or any potential collaborators are unable to develop and commercialize SARMs, GTx-758, or SARD technology, if development is further delayed or is eliminated, or if sales revenue from SARMs, GTx-758, or SARD technology upon receiving marketing approval, if ever, is insufficient, we may never become profitable and we will not be successful.

We need to raise substantial additional capital in the near term and may be unable to raise capital when needed, which would force us to delay, reduce or eliminate our development programs and could cause us to discontinue our operations. We cannot be certain that additional capital will be available to us and, if substantial additional capital is not available in the near term, we may not be able to continue as a going concern which may result in actions that could adversely impact our stockholders.

At March 31, 2016, we had cash, cash equivalents and short-term investments of $24.3 million. We estimate that our current cash, cash equivalents and short-term investments, together with interest thereon, will be sufficient to meet our projected operating requirements only through the end of 2016. Accordingly, we need to raise substantial additional capital in the near term in order to fund our operations beyond the end of 2016 and to continue as a going concern thereafter. In addition, we have based our cash sufficiency estimates on our current business plan and our assumptions that may prove to be wrong. We could utilize our available capital resources sooner than we currently expect, and we could need additional funding to sustain our operations even sooner than currently anticipated. While we estimate that our current cash, cash equivalents and short-term investments, together with

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interest thereon, will be sufficient to meet our projected operating requirements only through the end of 2016, during which time we expect to obtain results from the patients enrolled in the first stage of each of our ongoing open-label Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer, using a Simon s two-stage clinical trial design, as well as the results from our recently initiated Phase 2 proof-of-concept clinical trial evaluating enobosarm to treat postmenopausal women with SUI, we will need to raise substantial additional capital in the near term in order to:

- initiate and complete the second stage of both of our ongoing open-label Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer;

- meaningfully advance the preclinical development of our licensed SARD program through the preclinical studies required to initiate human clinical studies;

- undertake any further development of our SARMs beyond our ongoing Phase 2 clinical trials of enobosarm in breast cancer and SUI and our ongoing preclinical development activities related to the development of SARMs as a potential treatment for DMD; and

- fund our operations and to continue as a going concern.

In any event, our future funding requirements will depend on many factors, including:

- the scope, rate of progress and cost of our preclinical and clinical development programs, including our ongoing and any future clinical trials of enobosarm;

- the terms and timing of any potential collaborative, licensing and other strategic arrangements that we may establish;

- the amount and timing of any licensing fees, milestone payments and royalty payments from potential collaborators, if any;

- future clinical trial results;

- the cost and timing of regulatory filings and/or approvals to commercialize our product candidates and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;

- the effect of competing technological and market developments; and

- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights, and the cost of defending any other litigation claims.

While we have been able to fund our operations to date, we currently have no ongoing collaborations for the development and commercialization of our product candidates and no source of revenue, nor do we expect to generate revenue for the foreseeable future. We also do not have any commitments for future external funding. Accordingly, we are seeking access to additional funds through potential collaboration, partnering or other strategic arrangements, if necessary, through public or private equity offerings or debt financings, or a combination of the foregoing. In October 2013, following our announcement that the POWER trials failed to achieve the results required by the FDA for us to submit a NDA for enobosarm, we announced and implemented a workforce reduction of approximately 60%. If we are unable to raise additional funds in the near term to fund our operations beyond the end of 2016 and to continue as a going concern thereafter, we could be required to, among other things, make further reductions in our workforce, eliminate our ongoing clinical trials, discontinue the development of enobosarm and/or SARDs, liquidate all or a portion of our assets, and/or seek protection under the provisions of the U.S. Bankruptcy Code, all of which would have a material adverse effect on our business and stock price. In addition, the accompanying condensed financial statements do not include any adjustments or charges that might be necessary should we be unable to continue as a going concern, such as charges related to impairment of our assets, the recoverability and classification of assets or the amounts and classification of liabilities or other similar adjustments.

To the extent that we raise additional funds through potential collaboration, partnering or other strategic arrangements, it may be necessary to relinquish rights to some of our technologies or product candidates, or grant licenses on terms that are not favorable to us, any of which could result in the stockholders of GTx having little or no continuing interest in our SARMs and/or SARDs programs as stockholders or otherwise. To the extent we raise additional funds by issuing equity securities, our stockholders may experience significant dilution, particularly given our currently depressed stock price, and debt financing, if available, may involve restrictive covenants. For example,

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we completed a private placement of common stock and warrants in March 2014, which was substantially dilutive, and completed a subsequent private placement in November 2014 that represented even greater dilution, and our stockholders may experience additional, perhaps substantial, dilution should we again raise additional funds by issuing equity securities. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. Our ability to raise additional funds and the terms upon which we are able to raise such funds have been severely harmed by the failure of our two prior enobosarm POWER trials to meet the primary statistical criterion for the co-primary endpoints agreed upon with the FDA, and may in the future be adversely impacted by the uncertainty regarding the prospects of our development of enobosarm for the treatment of patients with AR positive advanced breast cancer, our ability to realize any return on our investment in GTx-758 and our ability to advance the development of enobosarm or SARDs, if at all. Our ability to raise additional funds and the terms upon which we are able to raise such funds may also be adversely affected by the uncertainties regarding our financial condition, the sufficiency of our capital resources, our ability to maintain the listing of our common stock on the NASDAQ Capital Market and recent and potential future management turnover. As a result of these and other factors, we cannot be certain that additional funding will be available on acceptable terms, or at all.

Risks Related to Development of Product Candidates

We are substantially dependent on the success of enobosarm and our failure to advance the development of enobosarm or to obtain regulatory approval of enobosarm would significantly harm our prospects.*

Our current strategy is focused on the further development of SARMs. However, the development of enobosarm for the treatment of patients with AR positive advanced breast cancer is at an early stage and is subject to the significant risk of failure inherent in the development of early-stage product candidates. Moreover, we still have only limited data from our preclinical models of breast cancer and our Phase 2 proof-of-concept clinical trial evaluating enobosarm 9 mg in women with ER positive and AR positive metastatic breast cancer. As a result, we will need to conduct costly and time-consuming additional clinical trials of enobosarm for the treatment of patients with AR positive advanced breast cancer to determine whether enobosarm is an effective treatment for patients with advanced AR positive TNBC and ER positive/AR positive advanced breast cancer.

Preclinical studies, including studies of SARMs in animal models of disease, may not accurately predict the results of subsequent human clinical trials of enobosarm, including the results of our ongoing Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer. Furthermore, the positive results from our Phase 2 proof-of-concept clinical trial evaluating enobosarm 9 mg in women whose breast cancer is both ER positive and AR positive does not ensure that our ongoing Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer will be successful or that any later trials will be successful. A number of companies in the pharmaceutical industry, including us and those with greater resources and experience than we have, have suffered significant setbacks in Phase 3 and later-stage clinical trials, even after receiving encouraging results in earlier clinical trials. Due to the uncertain and time-consuming clinical development and regulatory approval process, we may not be successful in developing enobosarm for the treatment of patients with AR positive advanced breast cancer, or in developing or partnering any of our product candidates, and it is possible that none of our current product candidates will ever become commercial products.

A substantial portion of our efforts and expenditures have been devoted to enobosarm 3 mg, which was the subject of our POWER 1 and POWER 2 Phase 3 clinical trials evaluating enobosarm 3 mg for the prevention and treatment of muscle wasting in patients with advanced NSCLC. We announced in August 2013 that these two Phase 3 clinical trials failed to meet the co-primary endpoints of lean body mass and physical function that were assessed statistically using responder analyses as required by the FDA. The failure of the POWER trials to meet the primary statistical criterion for the co-primary endpoints agreed upon with the FDA significantly depressed our stock price and has harmed our

future prospects. Although we evaluated the potential submission of a MAA to the EMA seeking marketing approval of enobosarm 3 mg in the EU for the prevention and treatment of muscle wasting in patients with advanced NSCLC, based on input from the MHRA, we believe that the data from the POWER trials is not sufficient to support the filing and approval of a MAA without confirmatory data from another Phase 3 clinical trial of enobosarm 3 mg. As a result of this input, we do not intend to submit a MAA in the absence of such confirmatory data. In addition, since data from the two POWER trials failed to meet the primary statistical criterion pre-specified for the co-primary endpoints of lean body mass and physical function, the FDA will not accept a NDA for enobosarm 3 mg for the prevention and treatment of muscle wasting in patients with advanced NSCLC. Accordingly, our strategy does not include further development of enobosarm for this indication in the U.S. or in Europe.

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Our evaluation of our SARD program is at an early stage and to complete preclinical development of our SARD program through the requisite preclinical studies to support initial human clinical trials, we will require additional funding. In addition, our evaluation of SARMs as a potential treatment for SUI and DMD is at an early stage, and our ability to meaningfully advance development of SARMs as a potential treatment for SUI or DMD is subject to our ability to obtain additional funding. Accordingly, our current strategy and near-term prospects are substantially dependent on the successful development of enobosarm for the treatment of patients with AR positive advanced breast cancer.

We and any potential collaborators will not be able to commercialize our product candidates if our preclinical studies do not produce successful results or if our clinical trials do not adequately demonstrate safety and efficacy in humans.

Significant additional clinical development and financial resources will be required to obtain necessary regulatory approvals for our product candidates and to develop them into commercially viable products. Preclinical and clinical testing is expensive, can take many years to complete and has an uncertain outcome. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and interim results of a clinical trial do not necessarily predict final results. Typically, the failure rate for development candidates is high. If a product candidate fails at any stage of development, we will not have the anticipated revenues from that product candidate to fund our operations, and we will not receive any return on our investment in that product candidate. For example, we announced in August 2013 that our POWER 1 and POWER 2 Phase 3 clinical trials evaluating enobosarm for the prevention and treatment of muscle wasting in patients with advanced NSCLC failed to meet the co-primary endpoints of lean body mass and physical function that were assessed statistically using responder analyses as agreed upon with the FDA. Although we evaluated the potential submission of a MAA to the EMA seeking marketing approval of enobosarm 3 mg in the EU for the prevention and treatment of muscle wasting in patients with advanced NSCLC, based on input from the MHRA, we believe that the data from the POWER trials is not sufficient to support the filing and approval of a MAA without confirmatory data from another Phase 3 clinical trial of enobosarm 3 mg. As a result of this input, we do not intend to submit a MAA in the absence of such confirmatory data. In addition, since data from the two POWER trials failed to meet the primary statistical criterion pre-specified for the co-primary endpoints of lean body mass and physical function, the FDA will not accept a NDA for enobosarm 3 mg for the prevention and treatment of muscle wasting in patients with advanced NSCLC. Accordingly, our strategy does not include further development of enobosarm for this indication in the U.S. or in Europe.

In addition, in the first quarter of 2015, we entered into an exclusive worldwide license agreement with the University of Tennessee Research Foundation, or UTRF, to develop its proprietary SARD technology. However, our evaluation of the licensed SARD program is at an early stage and it is possible that we may determine not to move forward with any meaningful preclinical development of our SARD program. Even if we do determine to move forward with any meaningful preclinical development of our SARD program, to complete preclinical development of our SARD program through the requisite preclinical studies necessary to support initial human clinical trials, we will require additional funding. Accordingly, as a result of our unsuccessful research and preclinical development and/or our inability to obtain sufficient funding to meaningfully advance preclinical development of our SARD program, we may fail to realize the anticipated benefits of our licensing of this program.

Significant delays in clinical testing could materially impact our product development costs. We do not know whether our ongoing clinical trials will need to be modified or will be completed on schedule, if at all. For example, our ongoing Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer are designed to be conducted using a Simon s two-stage design, pursuant to which we plan to enroll approximately half of the patients in the first stage, and, upon achievement of a pre-specified minimal response rate, we plan to proceed with enrollment of the second stage. However, even if we achieve the pre-specified minimal response rate, our ability to proceed with enrollment of and to complete the second stage in both trials is subject to our ability to obtain additional funding, which we may be unable to do. In any event, we or any potential collaborators may experience numerous unforeseen and/or adverse events during, or as a result of, preclinical testing and the clinical trial process that could delay or prevent our or our potential collaborators ability to commercialize our product candidates, including:

- regulators or institutional review boards may not authorize us or any potential collaborators to commence a clinical trial or conduct a clinical trial at a prospective trial site, or we may experience

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substantial delays in obtaining these authorizations;

- preclinical or clinical trials may produce negative or inconclusive results, which may require us or any potential collaborators to conduct additional preclinical or clinical testing or to abandon projects that we expect to be promising;

- even if preclinical or clinical trial results are positive, the FDA or foreign regulatory authorities could nonetheless require us to conduct unanticipated additional clinical trials;

- registration or enrollment in clinical trials may be slower than we anticipate, resulting in significant delays or study terminations;

- we or any potential collaborators may suspend or terminate clinical trials if the participating patients are being exposed to unacceptable health risks;

- regulators or institutional review boards may suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements; and

- our product candidates may not have the desired effects or may include undesirable side effects.

If any of these events were to occur and, as a result, we or any potential collaborators have significant delays in or termination of clinical trials, our costs could increase and our ability to generate revenue could be impaired, which would materially and adversely impact our business, financial condition and growth prospects.

If we or any potential collaborators observe serious or other adverse events during the time our product candidates are in development or after our products are approved and on the market, we or any potential collaborators may be required to perform lengthy additional clinical trials, may be required to cease further development of such product candidates, may be denied regulatory approval of such products, may be forced to change the labeling of such products or may be required to withdraw any such products from the market, any of which would hinder or preclude our ability to generate revenues.*

In our Phase 2 clinical trials for enobosarm for the treatment of muscle wasting in patients with cancer and healthy older males and postmenopausal females, we observed mild elevations of hepatic enzymes, which in certain circumstances may lead to liver failure, in a few

patients in both the placebo and enobosarm treated groups. Reductions in high-density lipoproteins, or HDL, have also been observed in subjects treated with enobosarm. Lower levels of HDL could lead to increased risk of adverse cardiovascular events. In addition, in our Phase 2 proof-of-concept clinical trial evaluating enobosarm in a 9 mg daily dose for the treatment of patients with ER positive and AR positive metastatic breast cancer, bone pain of the chest cage, a serious adverse event, or SAE, was assessed as possibly related to enobosarm. Although doses up to 30 mg have been evaluated in short duration studies, doses of 9 mg and 18 mg currently being tested in our ongoing Phase 2 clinical trials may increase the risk or incidence of known potential side effects of SARMs including elevations in hepatic enzymes and further reductions in HDL, in addition to the emergence of side effects that have not been seen to date.

In three Phase 2 clinical trials of GTx-758, we observed venous thromboembolic events (VTEs), or blood clots, in subjects treated with GTx-758 at the doses then being studied in these clinical trials (1000 mg and higher per day) and reported those events to the FDA. There were two deaths in subjects treated with GTx-758 and two deaths in subjects treated with Lupron Depot®. In February 2012, the FDA placed all of our then ongoing clinical studies of GTx-758 on full clinical hold, and we suspended further enrollment into these studies and notified clinical sites to discontinue treatment of subjects with GTx-758. In May 2012, the FDA notified us that it had removed the full clinical hold on GTx-758. In the third quarter of 2012, we initiated a Phase 2 clinical trial to evaluate GTx-758, at doses lower than those which were previously being tested in our discontinued Phase 2 clinical trials, as secondary hormonal therapy in men with metastatic castration-resistant prostate cancer, or CRPC. Although our current Phase 2 clinical trial is evaluating GTx-758 at doses lower than those which were previously being tested in our discontinued Phase 2 clinical trials, we cannot be confident that we will not observe an unacceptable incidence of venous thromboembolic events or other SAEs in the current Phase 2 clinical trial. In this regard, there has been one reported incidence of a VTE and one reported incidence of a myocardial infarction, or MI, in patients enrolled in the 250 mg arm of our ongoing Phase 2 clinical trial of GTx-758, resulting in the discontinuation of both patients from active treatment, and we cannot assure you that we will not observe additional SAEs in this trial. If an unacceptable incidence of VTEs, MIs, or other SAEs are observed in our current Phase 2 clinical trial of GTx-758, our prospects for securing any third party interest in partnering or otherwise acquiring this product candidate could be eliminated, in which case, we would not receive any return on our investment in this product candidate.

If the incidence of serious or other adverse events related to our product candidates increases in number or

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severity, if a regulatory authority believes that these or other events constitute an adverse effect caused by the drug, or if other effects are identified during clinical trials that we or any potential collaborators may conduct in the future or after any of our product candidates are approved and marketed:

- we or any potential collaborators may be required to conduct additional preclinical or clinical trials, make changes in the labeling of any such approved products, reformulate any such products, or implement changes to or obtain new approvals of our contractors manufacturing facilities;

- regulatory authorities may be unwilling to approve our product candidates or may withdraw approval of our products;

- we may experience a significant drop in the sales of the affected products;

- our reputation in the marketplace may suffer; and

- we may become the target of lawsuits, including class action suits.

Any of these events could prevent approval or harm sales of the affected product candidates or products, or could substantially increase the costs and expenses of commercializing and marketing any such products.

Risks Related to Our Dependence on Third Parties

If we do not establish collaborations for our product candidates or otherwise raise substantial additional capital, we will likely need to alter, delay or abandon our development and any commercialization plans.

Our strategy includes selectively partnering or collaborating with leading pharmaceutical and biotechnology companies to assist us in furthering development and potential commercialization of our product candidates. We face significant competition in seeking appropriate collaborators, and collaborations are complex and time consuming to negotiate and document. We may not be successful in entering into new collaborations with third parties on acceptable terms, or at all. In addition, we are unable to predict when, if ever, we will enter into any additional collaborative arrangements because of the numerous risks and uncertainties associated with establishing such arrangements. If we are unable to negotiate new collaborations, we may have to curtail the development of a particular product candidate, reduce, delay, or terminate its development or one or more of our other development programs, delay its potential commercialization or reduce the scope of our sales or marketing activities or increase our expenditures and undertake development or commercialization activities at our own expense. For example, we may have to cease

further development of our enobosarm program if we are unable to raise sufficient funding for any additional clinical development of enobosarm through new collaborative arrangements with third parties or other financing alternatives. In this regard, if we decide to undertake any further development of our SARMs beyond our ongoing clinical trials and preclinical development, we would need to obtain additional funding for such development, either through financing or by entering into collaborative arrangements or partnerships with third parties for any such further development. Moreover, the ongoing Phase 2 clinical trials of enobosarm in patients with AR positive advanced breast cancer are designed to be conducted using a Simon s two-stage design, pursuant to which we plan to enroll approximately half of the patients in the first stage, and, upon achievement of a pre-specified minimal response rate, we plan to proceed with enrollment of the second stage. However, even if we achieve the pre-specified minimal response rate, our ability to proceed with enrollment of and to complete the second stage in both trials is subject to our ability to obtain additional funding, which we may be unable to do. In addition, we do not plan to dedicate further resources to GTx-758 after the conclusion of our ongoing Phase 2 clinical trial of GTx-758 and while we are currently determining third party interest in partnering or acquiring this asset and other preclinical ER alpha agonist compounds, we may be unable to partner or divest these assets in a timely manner, or at all, and therefore may not receive any return on our investment in GTx-758. Likewise, to complete preclinical development of our SARD program through the requisite preclinical studies to support initial human clinical trials, we will require additional funding. In addition, our evaluation of SARMs as a potential treatment for SUI and DMD is at an early stage, and our ability to meaningfully advance development of SARMs as a potential treatment for SUI or DMD is subject to our ability to obtain additional funding. There can be no assurances that we will be successful in obtaining additional funding in any event. If we are not able to raise substantial additional capital in the near term, we will not be able to advance the development of our product candidates or otherwise bring our product candidates to market and generate product revenues.

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Any collaborative arrangements that we establish in the future may not be successful or we may otherwise not realize the anticipated benefits from these collaborations. In addition, any future collaborative arrangements may place the development and commercialization of our product candidates outside our control, may require us to relinquish important rights or may otherwise be on terms unfavorable to us.

We have in the past established and intend to continue to establish collaborations with third parties to develop and commercialize some of our current and future product candidates, and these collaborations may not be successful or we may otherwise not realize the anticipated benefits from these collaborations. For example, in March 2011, we and Ipsen Biopharm Limited, or Ipsen, mutually agreed to terminate our collaboration for the development and commercialization of our toremifene-based product candidate, and, as a result, we will not receive any additional milestone payments from Ipsen on account of our collaboration with Ipsen. As of the date of this report, we have no ongoing collaborations for the development and commercialization of our product candidates. We may not be able to locate third-party collaborators to develop and market our product candidates, and we lack the capital and resources necessary to develop our product candidates alone.

Dependence on collaborative arrangements subjects us to a number of risks, including:

- we may not be able to control the amount and timing of resources that our potential collaborators may devote to our product candidates;

- potential collaborations may experience financial difficulties or changes in business focus;

- we may be required to relinquish important rights such as marketing and distribution rights;

- should a collaborator fail to develop or commercialize one of our compounds or product candidates, we may not receive any future milestone payments and will not receive any royalties for the compound or product candidate;

- business combinations or significant changes in a collaborator s business strategy may also adversely affect a collaborator s willingness or ability to complete its obligations under any arrangement;

- under certain circumstances, a collaborator could move forward with a competing product candidate developed either independently or in collaboration with others, including our competitors; and

- collaborative arrangements are often terminated or allowed to expire, which could delay the development and may increase the cost of developing our product candidates.

If third parties do not manufacture our product candidates in sufficient quantities, in the required timeframe, at an acceptable cost, and with appropriate quality control, clinical development and commercialization of our product candidates would be delayed.

We do not currently own or operate manufacturing facilities, and we rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our product candidates. Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins, if any, and our ability to develop product candidates and commercialize any product candidates on a timely and competitive basis.

We rely on third-party vendors for the manufacture of SARM and SARD drug substance. If the contract manufacturers that we are currently utilizing to meet our supply needs for enobosarm or any future SARM or SARD product candidates prove incapable or unwilling to continue to meet our supply needs, we could experience a delay in conducting any additional clinical trials of enobosarm or any future SARM or SARD product candidates. We may not be able to maintain or renew our existing or any other third-party manufacturing arrangements on acceptable terms, if at all. If our suppliers fail to meet our requirements for enobosarm or any future product candidates for any reason, we would be required to obtain alternate suppliers. Any inability to obtain alternate suppliers, including an inability to obtain approval from the FDA of an alternate supplier, would delay or prevent the clinical development and commercialization of our product candidates.

Use of third-party manufacturers may increase the risk that we will not have adequate supplies of our product candidates.

Reliance on third-party manufacturers entails risks, to which we would not be subject if we manufactured our product candidates ourselves, including:

- reliance on the third party for regulatory compliance and quality assurance;

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- the possible breach of the manufacturing agreement by the third party because of factors beyond our control;

- the possible termination or non-renewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us; and

- drug product supplies not meeting the requisite requirements for clinical trial use.

If we are not able to obtain adequate supplies of our product candidates, it will be more difficult for us to develop our product candidates and compete effectively. Our product candidates and any products that we and/or our potential collaborators may develop may compete with other product candidates and products for access to manufacturing facilities.

Our present or future manufacturing partners may not be able to comply with FDA-mandated current Good Manufacturing Practice regulations, other FDA regulatory requirements or similar regulatory requirements outside the United States. Failure of our third-party manufacturers or us to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates.

If third parties on whom we rely do not perform as contractually required or expected, we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.

We do not have the ability to independently conduct clinical trials for our product candidates, and we must rely on third parties, such as contract research organizations, or CROs, medical institutions, clinical investigators and contract laboratories to conduct our clinical trials. In addition, we rely on third parties to assist with our preclinical development of product candidates. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our preclinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.

Risks Related to Our Intellectual Property

If we lose our licenses from UTRF, we may be unable to continue our business.

We have licensed intellectual property rights and technology from UTRF used in a substantial part of our business. Our license agreements with UTRF, under which we were granted rights to SARM compounds and technologies, including enobosarm, and more recently, to SARD compounds and technology, may be terminated by UTRF if we are in breach of our obligations under, or fail to perform any terms of, the relevant agreement and fail to cure that breach. If one or both of these agreements are terminated, then we may lose our rights to utilize the SARM and/or SARD technology and intellectual property covered by those agreements to market, distribute and sell licensed products, which may prevent us from continuing our business and may cause us to cease operations altogether.

If some or all of our or our licensor s patents expire or are invalidated or are found to be unenforceable, or if some or all of our patent applications do not result in issued patents or result in patents with narrow, overbroad, or unenforceable claims, or claims that are not supported in regard to written description or enablement by the specification, or if we are prevented from asserting that the claims of an issued patent cover a product of a third party, we may be subject to competition from third parties with products in the same class of products as our product candidates or products with the same active pharmaceutical ingredients as our product candidates, including in those jurisdictions in which we have no patent protection.

Our commercial success will depend in part on obtaining and maintaining patent and trade secret protection for our product candidates, as well as the methods for treating patients in the product indications using these product candidates. We will be able to protect our product candidates and the methods for treating patients in the product indications using these product candidates from unauthorized use by third parties only to the extent that we or our exclusive licensor owns or controls such valid and enforceable patents or trade secrets.

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Our rights to certain patents and patent applications relating to SARM compounds that we have licensed from UTRF are subject to the terms of UTRF s inter-institutional agreements with The Ohio State University, or OSU, and our rights to future related improvements in some instances are subject to UTRF s exercise of exclusive options under its agreements with OSU for such improvements.

Even if our product candidates and the methods for treating patients for prescribed indications using these product candidates are covered by valid and enforceable patents and have claims with sufficient scope, disclosure and support in the specification, the patents will provide protection only for a limited amount of time. Our and our licensor s ability to obtain patents can be highly uncertain and involve complex and in some cases unsettled legal issues and factual questions. Furthermore, different countries have different procedures for obtaining patents, and patents issued in different countries provide different degrees of protection against the use of a patented invention by others. Therefore, if the issuance to us or our licensor, in a given country, of a patent covering an invention is not followed by the issuance, in other countries, of patents covering the same invention, or if any judicial interpretation of the validity, enforceability, or scope of the claims in, or the written description or enablement in, a patent issued in one country is not similar to the interpretation given to the corresponding patent issued in another country, our ability to protect our intellectual property in those countries may be limited. Changes in either patent laws or in interpretations of patent laws in the United States and other countries may materially diminish the value of our intellectual property or narrow the scope of our patent protection.

We may be subject to competition from third parties with products in the same class of products as our product candidates or products with the same active pharmaceutical ingredients as our product candidates in those jurisdictions in which we have no patent protection. Even if patents are issued to us or our licensor regarding our product candidates or methods of using them, those patents can be challenged by our competitors who can argue such patents are invalid or unenforceable, lack of utility, lack sufficient written description or enablement, or that the claims of the issued patents should be limited or narrowly construed. Patents also will not protect our product candidates if competitors devise ways of making or using these product candidates without legally infringing our patents. The Federal Food, Drug, and Cosmetic Act and FDA regulations and policies create a regulatory environment that encourages companies to challenge branded drug patents or to create non-infringing versions of a patented product in order to facilitate the approval of abbreviated new drug applications for generic substitutes. These same types of incentives encourage competitors to submit new drug applications that rely on literature and clinical data not prepared for or by the drug sponsor, providing another less burdensome pathway to approval.

We also rely on trade secrets to protect our technology, especially where we do not believe that patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. Our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our confidential information to competitors, and confidentiality agreements may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time-consuming, and the outcome is unpredictable. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

If we infringe intellectual property rights of third parties, it may increase our costs or prevent us from being able to commercialize our product candidates.

There is a risk that we are infringing the proprietary rights of third parties because numerous United States and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields that are the focus of our development and manufacturing efforts. Others might have been the first to make the inventions covered by each of our or our licensor s pending patent applications and issued patents and/or might have been the first to file patent applications for these inventions. In addition, because patent applications take many months to publish and patent applications can take many years to issue, there may be currently pending applications, unknown to us or our licensor, which may later result in issued patents that cover the production, manufacture, synthesis, commercialization, formulation or use of our product candidates. In addition, the production, manufacture, synthesis, commercialization, formulation or use of our product candidates may infringe

existing patents of which we are not aware. Defending ourselves against third-party claims, including litigation in particular, would be costly and time consuming and would divert management s attention from our business, which could lead to delays in our development or commercialization efforts. If third parties are successful in their claims, we might have to pay substantial damages or take other actions that are adverse to our business.

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As a result of intellectual property infringement claims, or to avoid potential claims, we might:

- be prohibited from selling or licensing any product that we and/or any potential collaborators may develop unless the patent holder licenses the patent to us, which the patent holder is not required to do;

- be required to pay substantial royalties or other amounts, or grant a cross license to our patents to another patent holder; or

- be required to redesign the formulation of a product candidate so that it does not infringe, which may not be possible or could require substantial funds and time.

Risks Related to Regulatory Approval of Our Product Candidates

If we or any potential collaborators are not able to obtain required regulatory approvals, we or such collaborators will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.*

Our product candidates and the activities associated with their development and commercialization are subject to comprehensive regulation by the FDA, other regulatory agencies in the United States and by comparable authorities in other countries, including the EMA. Failure to obtain regulatory approval for a product candidate will prevent us or any potential collaborator from commercializing the product candidate. We have not received regulatory approval to market any of our product candidates in any jurisdiction, and we do not expect to obtain FDA, EMA or any other regulatory approvals to market any of our product candidates for the foreseeable future, if at all. The process of obtaining regulatory approvals is expensive, often takes many years, if approval is obtained at all, and can vary substantially based upon the type, complexity and novelty of the product candidates involved.

Changes in the regulatory approval policy during the development period, changes in or the enactment of additional regulations or statutes, or changes in regulatory review for each submitted product application may cause delays in the approval or rejection of an application. Even if the FDA or the EMA approves a product candidate, the approval may impose significant restrictions on the indicated uses, conditions for use, labeling, advertising, promotion, marketing and/or production of such product, and may impose ongoing requirements for post-approval studies, including additional research and development and clinical trials. Any FDA approval may also impose risk evaluation mitigation strategies, or REMS, on a product if the FDA believes there is a reason to monitor the safety of the drug in the market place. REMS may include requirements for additional training for health care professionals, safety communication efforts and limits on channels of distribution, among other things. The sponsor would be required to evaluate and monitor the various REMS activities and adjust them if need be. The FDA and EMA also may impose various civil or criminal sanctions for failure to comply with regulatory requirements, including withdrawal of product approval.

Furthermore, the approval procedure and the time required to obtain approval varies among countries and can involve additional testing beyond that required by the FDA. Approval by one regulatory authority does not ensure approval by regulatory authorities in other jurisdictions.

The FDA, the EMA and other foreign regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data is insufficient for approval and require additional preclinical, clinical or other studies. For example, in October 2009, we received a Complete Response Letter from the FDA regarding our NDA for toremifene 80 mg to reduce fractures in men with prostate cancer on ADT notifying us that the FDA would not approve our NDA as a result of certain clinical deficiencies identified in the Complete Response Letter. We have since discontinued our toremifene 80 mg development program, as well as our other toremifene-based products and terminated our license and supply agreement with Orion for toremifene products. Although we evaluated the potential submission of a MAA to the EMA seeking marketing approval of enobosarm 3 mg in the EU for the prevention and treatment of muscle wasting in patients with advanced NSCLC, based on input from the MHRA, we believe that the data from the POWER trials is not sufficient to support the filing and approval of a MAA without confirmatory data from another Phase 3 clinical trial of enobosarm 3 mg. As a result of this input, we do not intend to submit a MAA in the absence of such confirmatory data. In addition, since data from the two POWER trials failed to meet the primary statistical criterion pre-specified for the co-primary endpoints of lean body mass and physical function, the FDA will not accept a NDA for enobosarm 3 mg for the prevention and treatment of muscle wasting in patients with advanced NSCLC. Accordingly, our strategy does not include further development of enobosarm for this indication in the U.S. or in Europe.

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Additionally, there can be no assurance that the FDA will determine that the data from our ongoing or potential future clinical trials of enobosarm for the treatment of patients with AR positive advanced breast cancer will be sufficient for approval of these product candidates in any indications. For example, we may observe an unacceptable incidence of adverse events in our ongoing or potential future clinical trials of enobosarm, which could require us to abandon the development of enobosarm.

In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit, or prevent regulatory approval of a product candidate. Even if we submit an application to the FDA, the EMA and other foreign regulatory authorities for marketing approval of a product candidate, it may not result in any marketing approvals.

We do not expect to receive regulatory approval for the commercial sale of any of our product candidates that are in development for the foreseeable future, if at all. The inability to obtain approval from the FDA, the EMA and other foreign regulatory authorities for our product candidates would prevent us or any potential collaborators from commercializing these product candidates in the United States, the EU, or other countries. See the section entitled Business Government Regulation under Part 1, Item 1 of our Annual Report on Form 10-K, filed with the SEC on March 15, 2016, for additional information regarding risks associated with marketing approval, as well as risks related to potential post-approval requirements.

Risks Related to Commercialization

The commercial success of any products that we and/or any potential collaborators may develop will depend upon the market and the degree of market acceptance among physicians, patients, health care payors and the medical community.

Any products that we and/or any potential collaborators may develop, including enobosarm, may not gain market acceptance for its stated indication among physicians, patients, health care payors and the medical community. If these products do not achieve an adequate level of acceptance, we may not generate material product revenues or receive royalties to the extent we currently anticipate, and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- efficacy and safety results in clinical trials;
- the prevalence and severity of any side effects;
- potential advantages over alternative treatments;

- whether the products we commercialize remain a preferred course of treatment;
- the ability to offer our product candidates for sale at competitive prices;
- relative convenience and ease of administration;
- the strength of marketing and distribution support; and
- sufficient third-party coverage or reimbursement.

For example, if we are able to raise sufficient funding for any additional clinical development of enobosarm 3 mg through new collaborative arrangements with third parties or other financing alternatives and a MAA is submitted to the EMA for the marketing approval of enobosarm 3 mg in the EU for the more narrow indication of the prevention and treatment of muscle wasting in patients with advanced NSCLC treated with platinum plus taxane chemotherapy and marketing approval is obtained, we anticipate that the commercial prospects for enobosarm 3 mg could be diminished as a result of this more limited product indication.

If we are unable to establish sales and marketing capabilities or establish and maintain agreements with third parties to market and sell our product candidates, we may be unable to generate product revenue from such candidates.

We have limited experience as a company in the sales, marketing and distribution of pharmaceutical products. In the event one of our product candidates is approved, we will need to establish sales and marketing capabilities or establish and maintain agreements with third parties to market and sell our product candidates. We may be unable to build our own sales and marketing capabilities, and there are risks involved with entering into arrangements with

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third parties to perform these services, which could delay the commercialization of any of our product candidates if approved for commercial sale. In addition, to the extent that we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenues are likely to be lower than if we market and sell any products that we develop ourselves.

If we and/or any potential collaborators are unable to obtain reimbursement or experience a reduction in reimbursement from third-party payors for products we sell, our revenues and prospects for profitability will suffer.

Sales of products developed by us and/or any potential collaborators are dependent on the availability and extent of reimbursement from third-party payors. Changes in the reimbursement policies of these third-party payors that reduce reimbursements for any products that we and/or any potential collaborators may develop and sell could negatively impact our future operating and financial results.

Medicare coverage and reimbursement of prescription drugs exists under Medicare Part D for oral drug products capable of self-administration by patients. Our oral drug product candidates would likely be covered by Medicare Part D (if covered by Medicare at all). In March 2010, the United States Congress enacted the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act. This health care reform legislation will increase the number of individuals who receive health insurance coverage and will close a gap in drug coverage under Medicare Part D. The legislation, however, also implemented cost containment and other measures that could adversely affect revenues from sales of product candidates, including an increase in drug rebates manufacturers must pay under Medicaid for brand name prescription drugs and extension of these rebates to Medicaid managed care.

Pharmaceutical manufacturers and importers of brand name prescription drugs are assessed a fee based on our proportionate share of sales of brand name prescription drugs to certain government programs, including Medicare and Medicaid, made in the preceding year if such sales exceed a defined threshold. Since 2011, manufacturers have been required to provide a 50% discount on brand name prescription drugs sold to beneficiaries who fall within a gap that exists in the Medicare Part D prescription drug program (commonly known as the donut hole).

The health care reform legislation has been subject to political and judicial challenge. In 2012, the Supreme Court considered the constitutionality of certain provisions of the law. The court upheld as constitutional the mandate for individuals to obtain health insurance but held that the provision allowing the federal government to withhold certain Medicaid funds to states that do not expand state Medicaid programs was unconstitutional. In 2015, the Court considered whether the health care reform legislation provided for tax credits to low income individuals purchasing health insurance through health insurance exchanges (essentially entities established for the comparison and purchase of health insurance) only if the health insurance exchange had been established by a state (rather than the federal government). The Court held that the law should be interpreted to allow for tax credits regardless of whether the health insurance was purchased through an exchange operated by a state or the federal government. There may be additional judicial challenges to the law in the future and the success and impact of those challenges remains uncertain. Regardless of the various judicial rulings, political challenges to the law and its application may continue and it is not possible to predict the impact of such challenges.

Economic pressure on state budgets may result in states increasingly seeking to achieve budget savings through mechanisms that limit coverage or payment for drugs. State Medicaid programs are increasingly requesting manufacturers to pay supplemental rebates and requiring prior authorization for use of drugs where supplemental rebates are not provided. Private health insurers and managed care plans are likely to continue challenging the prices charged for medical products and services, and many of these third-party payors may limit reimbursement for newly-approved health care products. In particular, third-party payors may limit the indications for which they will reimburse patients who use any products that we and/or any potential collaborators may develop or sell. These cost-control initiatives could decrease the price we might establish for products that we or any potential collaborators may develop or sell, which would result in lower product revenues or royalties

payable to us.

Similar cost containment initiatives exist in countries outside of the United States, particularly in the countries of the EU, where the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can extend well beyond the receipt of regulatory marketing approval for a product and may require us or any potential collaborators to conduct a clinical trial that compares the cost effectiveness of our product candidates or products to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in our or a potential collaborators commercialization efforts. Third-party payors are challenging the prices charged for medical products and services, and many third-party payors limit reimbursement for newly-approved health care products. Recently budgetary pressures in many EU countries are also causing governments to consider or implement various cost-containment measures, such as price freezes,

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increased price cuts and rebates. If budget pressures continue, governments may implement additional cost containment measures. Cost-control initiatives could decrease the price we might establish for products that we or any potential collaborators may develop or sell, which would result in lower product revenues or royalties payable to us.

Another development that could affect the pricing of drugs would be if the Secretary of Health and Human Services allowed drug reimportation into the United States. The Medicare Prescription Drug, Improvement and Modernization Act of 2003 gives discretion to the Secretary of Health and Human Services to allow drug reimportation into the United States under some circumstances from foreign countries, including from countries where the drugs are sold at a lower price than in the United States. If the circumstances were met and the Secretary exercised the discretion to allow for the direct reimportation of drugs, it could decrease the price we or any potential collaborators receive for any products that we and/or any potential collaborators may develop, negatively affecting our revenues and prospects for profitability.

Health care reform measures could hinder or prevent our product candidates commercial success.

Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting health care reform, as evidenced by the enactment in the United States of the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act in 2010. Federal and state legislatures within the United States and foreign governments will likely continue to consider changes to existing health care legislation. These changes adopted by governments may adversely impact our business by lowering the price of health care products in the United States and elsewhere. For example, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. We cannot predict what health care reform initiatives may be adopted in the future. Further federal, state and foreign legislative and regulatory developments are likely, and we expect ongoing initiatives to increase pressure on drug pricing, which could decrease the price we might establish for products that we or any potential collaborators may develop or sell, which would result in lower product revenues or royalties payable to us.

We operate in a highly regulated industry and new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to health care availability, method of delivery or payment for health care products and services, or sales, marketing and pricing practices could negatively impact our business, operations and financial condition.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to our prior commercial sales of FARESTON® and the testing of our product candidates in human clinical trials, and we will face an even greater risk if we commercially sell any product that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize any products for which we obtain or hold marketing approvals.

We have product liability insurance that covers our clinical trials and any commercial products up to a $25 million annual aggregate limit. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost, and we may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise.

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If our competitors are better able to develop and market products than any products that we and/or any potential collaborators may develop, our commercial opportunity will be reduced or eliminated.*

We face competition from commercial pharmaceutical and biotechnology enterprises, as well as from academic institutions, government agencies and private and public research institutions. Our commercial opportunities will be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer side effects or are less expensive than any products that we and/or any potential collaborators may develop. Competition could result in reduced sales and pricing pressure on our product candidates, if approved, which in turn would reduce our ability to generate meaningful revenue and have a negative impact on our results of operations. In addition, significant delays in the development of our product candidates could allow our competitors to bring products to market before us and impair any ability to commercialize our product candidates.

Various products are currently marketed or used off-label for some of the diseases and conditions that we are targeting in our pipeline, and a number of companies are or may be developing new treatments. These product uses, as well as promotional efforts by competitors and/or clinical trial results of competitive products, could significantly diminish any ability to market and sell any products that we and/or any potential collaborators may develop.

With respect to our SARM program, there are other SARM product candidates in development that may compete with enobosarm and any future SARM product candidates, if approved for commercial sale. We are developing enobosarm for the treatment of patients with AR positive advanced breast cancer. To our knowledge, no other SARMs are currently in development for the treatment of AR positive advanced breast cancer; however, SARMs in development for muscle wasting and cachexia could enter into a breast cancer program in the future. For example, Radius Health, Inc. has stated that it may test its SARM compound, RAD140, in a breast cancer indication in the future. A number of other compounds targeting the androgen axis in breast cancer could compete with enobosarm if one or more are approved for commercial sale in the indications for which enobosarm is being developed. These compounds fall into two categories, androgen synthesis inhibitors, or ASIs, and androgen receptor antagonists, or ARAs. ASIs in development include orteronel being developed by Takeda Pharmaceuticals. ARAs in development include XTANDI® (enzalutamide) being developed by Medivation Inc. and Astellas Pharma, Inc., and generic bicalutamide. Agents targeting pathways outside of the androgen axis also may compete with enobosarm in breast cancer as they are directed towards similar patient populations that may benefit from enobosarm. Additionally, we initiated a proof of concept study in advanced AR positive TNBC patients for which there are no currently approved therapies, beyond chemotherapy. However, a number of approaches for the treatment of TNBC are currently under investigation. Agents also targeting the androgen axis include XTANDI® (enzalutamide) being developed by Medivation and Astellas Pharma, orteronel (TAK-700) being developed by Takeda, and CR-1447 being developed by Curadis. Only a subset of the total TNBC population is AR positive; therefore, agents targeting TNBC as a whole may also compete with enobosarm if approved for commercial sale. These agents include: PI3K/AKT inhibitors (BKM120 being developed by Novartis), IL6/JAK/Stat inhibitors (ruxolitinib being developed by Incyte), mTOR inhibitors (Neratinib being developed by Puma), and PARP inhibitors (Velaparib being developed by AbbVie), PD-1 inhibitors (pembrolizumab) being developed by Merck & Co. and MPDL3280A being developed by Roche.

We initiated a Phase 2 proof-of-concept clinical trial of enobosarm to treat postmenopausal women with SUI. There are a variety of treatments that may be used for SUI in women; however, currently, there are no available oral agents approved for the treatment of SUI. Behavioral modification and pelvic floor physical therapy are common initial treatment approaches. Bulking agents, including carbon coated beads (Durasphere® marketed by Coloplast Corp), calcium hydroxlapatite (Coaptite® marketed by BioForm Medical, Inc.) and silicon (Macroplastique® marketed by Cogentix Medical), can be injected into or around the urethra for treating intrinsic sphincter deficiency, a cause of SUI symptoms. Biologic bulking agents including patient-derived adipose

stem cells and autologous muscle-derived stem cells (Cook Myosite) are being developed. Recently, an over-the-counter vaginal pessary (Impressa® marketed Kimberly-Clark) has been approved for the temporary management of urine leakage in women with SUI. Finally, surgical procedures (e.g. sling; bladder neck suspension) have been demonstrated to be effective in some women.

We are also exploring the potential of SARMs to treat DMD. DMD is a rare genetic disorder which currently has no cure and leads to a progressive weakening of all the muscles in the body. A number of drugs are in various stages of development by pharmaceutical companies to meet the unmet medical need in DMD. These drugs may compete for patient enrollment during the clinical trial phase, should we be able to advance the development of SARMs as a potential treatment of DMD, or commercially should any of them be approved. The most advanced development is by those companies who are targeting the genetic mutation with exon skipping or codon blocking

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therapies including drisapersen by BioMarin Pharmaceutical Inc., eteplirsen by Sarepta Therapeutics Inc., PTC 124 by PTC Therapeutics Inc. and DS-1541b, by Daiichi Sankyo Co. Santhera Pharmaceuticals has completed a Phase 3 trial with a synthetic analog of coenzyme Q10, idebenone. Marathon Pharmaceuticals LLC has completed a Phase 3 trial with a glucocorticoid, deflazacort. Pfizer Inc. is developing its anti-myostatin monoclonal antibody, PF-06252616, and is currently in a Phase 2 trial. In addition, Akashi Therapeutics is developing two compounds for DMD, one of which is a SARM. Tarix Orphan is developing TXA127, an angiotensin 1-7 peptide. Fibrogen is developing FG-3019, a monoclonal antibody which inhibits connective tissue growth factor.

We have entered into an exclusive worldwide license agreement with UTRF to develop its proprietary SARD technology which has the potential to provide compounds that can degrade multiple forms of AR for patients who do not respond or are resistant to current therapies to inhibit tumor growth in patients with progressive CRPC. We anticipate evaluating SARDs as a potentially novel treatment for men with CRPC, including those who do not respond or are resistant to currently approved therapies. Drugs in commercial development having potentially similar approaches to removing the AR by degradation include Arvinas Inc. s ARV-330, a chimera with an AR binding moiety on one end and an E3 ligase recruiting element on the other, in preclinical development for application to treat advanced prostate cancer and Androscience Corporation s androgen receptor degrader enhancer, or ARD, currently in development for acne and alopecia with the potential for development as a treatment for prostate cancer. Additionally, it has been reported that two other companies are developing drugs to treat men with CRPC who are resistant to current therapies: Tokai Pharmaceuticals is developing TOK-001 (Galeterone) with a principal mechanism of action as a CYP17 lyase inhibitor and AR antagonist and Essa Pharma Inc. is beginning early studies with EPI-506, an AR antagonist that targets the N-terminal domain of the AR. C4 Therapeutics, Inc. is developing degronimids as means to degrade the AR through ligand binding domain associated degradation. CellCentric is developing therapies that target the histone methyltransferase enzyme to lower AR levels and Oric Pharmaceuticals is targeting the glucocorticoid receptor as a means to impact men that have CRPC. In addition to this specific potential mechanistic competition, there are various products approved or under clinical development in the broader space of treating men with advanced prostate cancer who have metastatic CRPC which may compete with our proposed initial clinical objective for our SARD compounds. Provenge®, which was recently acquired by Valeant Pharmaceuticals, is an autologous cellular immunotherapy for the treatment of asymptomatic or minimally symptomatic metastatic castrate resistant prostate cancer. Medivation and Astellas Pharma market XTANDI® (enzalutamide), an oral androgen receptor antagonist, for the treatment of metastatic CRPC in men previously treated with docetaxel as well as those that have not yet received chemotherapy. Zytiga®, sold by Johnson & Johnson, has been approved for the treatment of metastatic CRPC in patients who have received prior chemotherapy and recently received approval for the treatment of metastatic castrate resistant prostate cancer prior to chemotherapy. Johnson & Johnson acquired Aragon Pharmaceuticals, Inc., which developed a second generation anti-androgen (ARN-509) that is currently being evaluated in Phase 3 studies in men with progressive, advanced prostate cancer. Bayer HealthCare and Orion Corporation are currently performing a Phase 3 study of ODM-201 in men with CRPC without metastases and with a rising PSA examining safety and efficacy by measuring metastatic free survival. Millennium: The Takeda Oncology Company is developing TAK-700 for the treatment of men with metastatic CRPC prior to chemotherapy.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies and technology licenses complementary to our programs or advantageous to our business.

Risks Related to Employees, Growth and Other Aspects of Operations

Management transition creates uncertainties and could harm our business.*

Over the past few years, we have experienced significant changes in executive leadership, and more could occur. For example, on April 3, 2014, Mr. Hanover was appointed as our interim Chief Executive Officer and on February 12, 2015, Mr. Hanover was appointed as our permanent Chief Executive Officer. Upon the appointment of Mr. Hanover as interim Chief Executive Officer, the duties of our principal financial officer were assigned to Mr. Shackelford. Also, on March 2, 2015, Robert J. Wills was appointed as our Executive Chairman and effective July 13, 2015, Diane C. Young joined us as our Vice President, Chief Medical Officer.

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As a result of the changes in our management team, Messrs. Hanover and Shackelford have taken on substantially more responsibility for the management of our business and of our financial reporting which has resulted in greater workload demands and could divert their attention away from certain key areas of our business. For instance, Mr. Hanover has taken on the role of our Chief Executive Officer in addition to the role he served when functioning as our President and Chief Operating Officer, positions that were previously occupied by two persons. In addition, while Dr. Wills role as our Executive Chairman is, in part, to support Mr. Hanover in his role as our permanent Chief Executive Officer, the position of Executive Chairman is relatively new to us and it may be some time before we can determine if Mr. Hanover will require additional assistance. Changes in our organization as a result of executive management transition may have a disruptive impact on our ability to implement our strategy and could have a material adverse effect on our business, financial condition and results of operations.

Changes to company strategy, which can often times occur with the appointment of new executives, can create uncertainty, may negatively impact our ability to execute quickly and effectively, and may ultimately be unsuccessful. In addition, executive leadership transition periods are often difficult as the new executives gain detailed knowledge of our operations, and friction can result from changes in strategy and management style. Management transition inherently causes some loss of institutional knowledge, which can negatively affect strategy and execution. Until we integrate new personnel, and unless they are able to succeed in their positions, we may be unable to successfully manage and grow our business, and our results of operations and financial condition could suffer as a result.

Our internal computer and information technology systems, or those of our CROs or other contractors or consultants, may fail or suffer security breaches, or could otherwise face serious disruptions, which could result in a material disruption of our product development efforts.

Despite the implementation of security measures, our internal computer systems and those of our CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, and telecommunication and electrical failures. Such events could cause interruptions of our operations. For instance, the loss of preclinical data or data from our ongoing and potential future clinical trials involving our product candidates could result in delays in our development and regulatory filing efforts and significantly increase our costs. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data, or inappropriate disclosure of confidential, proprietary or protected health information, we could incur liability and the development of our product candidates could be delayed. In addition, our information technology and other internal infrastructure systems, including corporate firewalls, servers, leased lines and connection to the Internet, face the risk of systemic failure that could disrupt our operations. A significant disruption in the availability of our information technology and other internal infrastructure systems could cause delays in our research and development work and could otherwise adversely affect our business.

If we fail to attract and keep senior management and key scientific personnel, we may be unable to successfully develop or commercialize our product candidates.*

Our success depends on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel and on our ability to develop and maintain important relationships with leading academic institutions, clinicians and scientists. If we are not able to attract and keep senior management and key scientific personnel, we may not be able to successfully develop or commercialize our product candidates. All of our employees are at-will employees and can terminate their employment at any time.

In October 2013, we announced a reduction of approximately 60% of our workforce following our announcement that our POWER trials failed to achieve the results required by the FDA to file a NDA for enobosarm 3 mg for the prevention and treatment of muscle wasting in patients with advanced NSCLC. In addition, since our October 2013 workforce reduction, our former Chief Executive Officer, former Chief Financial Officer

and former Chief Scientific Officer have resigned. Primarily as a result of our October 2013 workforce reduction, only 28 employees remained as employees of GTx as of March 31, 2016. Accordingly, we have been and are operating with a shortage of resources and may not be able to effectively conduct our operations with this limited number of employees. In addition, we announced past workforce reductions in each of December 2009 and June 2011, and our history of implementing workforce reductions, along with the potential for future workforce reductions, may negatively affect our ability to retain or attract talented employees. Further, to the extent we experience additional management transition, competition for top management is high and it may take many months to find a candidate that meets our requirements. If we are unable to attract and retain qualified management personnel, our business could suffer.

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If we are able to raise sufficient additional funds necessary to continue as a going concern and to pursue the development or our SARM and SARD programs, we may need to hire additional employees in order to grow our business. Any inability to manage future growth could harm our ability to develop and commercialize our product candidates, increase our costs and adversely impact our ability to compete effectively.

If we are able to raise sufficient additional funds necessary to continue as a going concern and to pursue the development of our SARM and SARD programs, we may need to hire experienced personnel to develop and commercialize our product candidates and to otherwise grow our business, and we may need to expand the number of our managerial, operational, financial and other employees to support that growth. Competition exists for qualified personnel in the biotechnology field. As of March 31, 2016, we had only 28 employees.

Future growth, if any, will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Our future financial performance and our ability to develop and commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively.

Risks Related to Our Common Stock

If we fail to meet continued listing standards of The NASDAQ Stock Market LLC, our common stock may be delisted. Delisting could adversely affect the liquidity of our common stock and the market price of our common stock could decrease, and our ability to obtain sufficient additional capital to fund our operations and to continue as a going concern would be substantially impaired.

Our common stock is currently listed on The NASDAQ Capital Market. The NASDAQ Stock Market LLC, or NASDAQ, has minimum requirements that a company must meet in order to remain listed on The NASDAQ Capital Market. These requirements include maintaining a minimum closing bid price of $1.00 per share. On December 23, 2015, we received a letter from the staff, or Staff, of NASDAQ providing notification that, for the previous 30 consecutive business days, the closing bid price for our common stock was below the minimum $1.00 per share requirement for continued listing on The NASDAQ Capital Market, or the Bid Price Requirement. The notification had no immediate effect on the listing of our common stock. In accordance with NASDAQ listing rules, we were afforded 180 calendar days, or until June 20, 2016, to regain compliance with the Bid Price Requirement. If we do not regain compliance with the Bid Price Requirement by June 20, 2016, we may be eligible for an additional 180 calendar day compliance period. To qualify, we would need to meet, on the 180th day of the first compliance period, the continued listing requirement for market value of publicly held shares and all other applicable standards for initial listing on The NASDAQ Capital Market, with the exception of the Bid Price Requirement, and would need to provide written notice of our intention to cure the deficiency during the second compliance period by effecting a reverse stock split, if necessary. However, if it appears to the Staff that we will not be able to cure the deficiency, or if we are not eligible for a second compliance period, NASDAQ will notify us that our common stock will be subject to delisting. In the event of such a notification, we may appeal the Staff s determination to delist our common stock, but there can be no assurance the Staff would grant our request for continued listing. In addition, we may be unable to meet other applicable NASDAQ listing requirements, including maintaining minimum levels of stockholders equity or market values of our common stock in which case, our common stock could be delisted notwithstanding our ability to demonstrate compliance with the Bid Price Requirement, whether through the implementation of a reverse stock split or otherwise.

If our common stock is delisted, we would expect our common stock to be traded in the over-the-counter market, which could adversely affect the liquidity of our common stock. Additionally, we could face significant material adverse consequences, including:

- a limited availability of market quotations for our common stock;

- a reduced amount of news and analyst coverage for us;

- a decreased ability to issue additional securities and a concomitant substantial impairment in our ability to obtain sufficient additional capital to fund our operations and to continue as a going concern;

- reduced liquidity for our stockholders;

- potential loss of confidence by employees and potential future partners or collaborators; and

- loss of institutional investor interest and fewer business development opportunities.

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The market price of our common stock has been volatile and may continue to be volatile in the future. This volatility may cause our stock price and the value of your investment to decline.*

The market prices for securities of biotechnology companies, including ours, have been highly volatile and may continue to be so in the future. In this regard, the closing market price for our common stock has varied between a high of $1.57 on July 2, 2015 and a low of $0.47 on January 15, 2016 in the twelve-month period ended March 31, 2016. The market price of our common stock is likely to continue to be volatile and subject to significant price and volume fluctuations. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- delays in the initiation, enrollment and/or completion of our ongoing and any future clinical trials of enobosarm, or negative, inconclusive or mixed results reported in any of our ongoing and any future clinical trials of enobosarm;

- our ability to raise additional capital in the near term to carry through with our preclinical and clinical development plans, including to initiate and complete the second stage of our ongoing Phase 2 clinical trials of enobosarm, as well as our current and future operations, and the terms of any related financing arrangements;

- reports of unacceptable incidences of adverse events observed in any of our ongoing clinical trials of enobosarm and GTx-758;

- announcements regarding further cost-cutting initiatives or restructurings;

- uncertainties created by our past and potential future management turnover;

- our ability to enter into new collaborative, licensing or other strategic arrangements with respect to our product candidates;

- the terms and timing of any future collaborative, licensing or other arrangements that we may establish;

- announcements regarding our ability to comply with the minimum listing requirements of The NASDAQ Stock Market LLC;

- the timing of achievement of, or failure to achieve, our and any potential collaborators clinical, regulatory and other milestones, such as the commencement of clinical development, the completion of a clinical trial or the receipt of regulatory approval;

- announcement of FDA approval or non-approval of our product candidates or delays in or adverse events during the FDA review process;

- actions taken by regulatory agencies with respect to our product candidates or our clinical trials, including regulatory actions requiring or leading to a delay or stoppage of our ongoing clinical trials;

- the commercial success of any product approved by the FDA or its foreign counterparts;

- introductions or announcements of technological innovations or new products by us, our potential collaborators, or our competitors, and the timing of these introductions or announcements;

- market conditions for equity investments in general, or the biotechnology or pharmaceutical industries in particular;

- regulatory developments in the United States and foreign countries;

- changes in the structure or reimbursement policies of health care payment systems;

- any intellectual property infringement lawsuit involving us;

- actual or anticipated fluctuations in our results of operations;

- changes in financial estimates or recommendations by securities analysts;

- hedging or arbitrage trading activity that may develop regarding our common stock;

- sales of large blocks of our common stock;

- sales of our common stock by our executive officers, directors and significant stockholders;

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- the trading volume of our common stock;
- changes in accounting principles; and
- additional losses of any of our key scientific or management personnel.

In addition, the stock markets in general, and the markets for biotechnology stocks in particular, have experienced significant volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock.

In the past, class action litigation has often been instituted against companies whose securities have experienced periods of volatility in market price. Any such litigation brought against us could result in substantial costs, which would hurt our financial condition and results of operations and divert management s attention and resources, which could result in delays of our clinical trials or commercialization efforts.

Our executive officers, directors and largest stockholders have the ability to control all matters submitted to stockholders for approval.*

As of March 31, 2016, our executive officers, directors and holders of 5% or more of our outstanding common stock, including their affiliated or associated entities, held approximately 74.6% of our outstanding common stock, and our executive officers and directors alone, including their affiliated or associated entities, held approximately 36.1% of our outstanding common stock as well as warrants to purchase up to an additional 24.8 million shares of common stock. As a result, these stockholders, acting together, have the ability to control all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions. The interests of this group of stockholders may not always coincide with our interests or the interests of other stockholders.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an ownership change, generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes (such as research tax credits) to offset its post-change taxable income or taxes may be limited. We completed a study through December 31, 2014 to determine whether any Section 382 limitations exist and, as a result of this study and our analysis of subsequent ownership changes, we do not believe that any Section 382 limitations exist through December 31, 2015, Section 382 of the Internal Revenue Code is an extremely complex provision with respect to which there are many uncertainties and we have not established whether the IRS agrees with our determination. In any event, changes in our stock ownership, some of which are outside of our control, could in the future result in an ownership change and an accompanying Section 382 limitation. If a limitation were to apply, utilization of a portion of our domestic net operating loss and tax credit carryforwards could be limited in future periods and a portion of the carryforwards could expire before being available to reduce future income tax liabilities.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our certificate of incorporation and our bylaws may delay or prevent an acquisition of us or a change in our management. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors. Because our Board of Directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. These provisions include:

- a classified Board of Directors;

- a prohibition on actions by our stockholders by written consent;

- the ability of our Board of Directors to issue preferred stock without stockholder approval, which could be used to institute a poison pill that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our Board of Directors; and

- limitations on the removal of directors.

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Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. Finally, these provisions establish advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted upon at stockholder meetings. These provisions would apply even if the offer may be considered beneficial by some stockholders.

If there are substantial sales of our common stock, the market price of our common stock could drop substantially, even if our business is doing well.*

For the 12-month period ended March 31, 2016, the average daily trading volume of our common stock on The NASDAQ Capital Market was 128,040 shares. As a result, future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the then-prevailing market price of our common stock. As of March 31, 2016, we had 141,749,150 shares of common stock outstanding. In addition, as a result of the relatively low trading volume of our common stock, the trading of relatively small quantities of shares by our stockholders may disproportionately influence the market price of our common stock in either direction. The price for our shares could, for example, decline significantly in the event that a large number of our common shares are sold on the market without commensurate demand, as compared to an issuer with a higher trading volume that could better absorb those sales without an adverse impact on its stock price.

In November 2014, we completed a private placement 64.3 million shares of our common stock and warrants to purchase 64.3 million shares of our common stock. Similarly, in March 2014 we completed a private placement of 12.0 million shares of our common stock and warrants to purchase 10.2 million shares of our common stock. Pursuant to the terms of a registration rights agreement we entered into in connection with the March 2014 private placement, we filed a registration statement under the Securities Act registering the resale of the 12.0 million shares of common stock we issued to the investors in the March 2014 private placement, which include J.R. Hyde, III, our largest stockholder, as well as the 10.2 million shares of common stock underlying the warrants we issued to those investors. Likewise, pursuant to the terms of the securities purchase agreement we entered into in connection with the November 2014 private placement, we filed registration statements under the Securities Act registering the resale of the 64.3 million shares of common stock we issued to the investors in the November 2014 private placement, which included J.R. Hyde, III, as well as the additional 64.3 million shares of common stock subject to the warrants we issued to the investors in the November 2014 private placement. Moreover, J.R. Hyde, III and certain of his affiliates, have rights under a separate registration rights agreement with us to require us to file resale registration statements covering an additional 7.9 million shares of common stock held in the aggregate or to include these shares in registration statements that we may file for ourselves or other stockholders. If Mr. Hyde or his affiliates or any of our other significant stockholders, including the other investors in our 2014 private placements, were to sell large blocks of shares in a short period of time, the market price of our common stock could drop substantially.

ITEM 5. OTHER INFORMATION

Submission of Matters to a Vote of Security Holders

At our 2016 Annual Meeting of Stockholders, or the Annual Meeting, held on May 4, 2016 at our corporate offices in Memphis, Tennessee, our stockholders voted on the following four proposals:

(1) *Proposal No. 1*: Proposal to elect the two nominees for Class III director named below to serve until our 2019 Annual Meeting of Stockholders and until their successors have been duly elected and qualified. Both of the named nominees were so elected, with the votes thereon at the Annual Meeting as follows:

	Final Voting Results		
Nominee	**For**	**Withheld**	**Broker Non-Vote**
Michael G. Carter, M.D., Ch.B., F.R.C.P.	109,545,811	2,713,177	23,511,286
J. R. Hyde, III	103,218,960	9,040,028	23,511,286

Our Class I directors, Marc S. Hanover and Kenneth S. Robinson, M.D., M.Div., will each continue to serve on our Board of Directors until our 2017 Annual Meeting of Stockholders and until his successor is elected and has qualified, or until his earlier death, resignation or removal. Our Class III directors, J. Kenneth Glass and Robert J.

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Wills, Ph.D., will each continue to serve on our Board of Directors until our 2018 Annual Meeting of Stockholders and until his successor is elected and has qualified, or until his earlier death, resignation or removal.

(2) *Proposal No. 2: P*roposal to ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2016. This proposal was approved, with the votes thereon at the Annual Meeting as follows:

Final Voting Results			
For	**Against**	**Abstain**	**Broker Non-Vote**
135,525,584	103,027	141,663	

(3) *Proposal No. 3:* Proposal to approve a series of alternate amendments to our Restated Certificate of Incorporation to effect, at the discretion of our Board of Directors, a reverse stock split at a reverse stock split ratio ranging from one-for-five (1:5) and one-for-fifteen (1:15), inclusive, as more specifically described in our definitive proxy statement filed with the SEC on March 28, 2016, or the Proxy Statement. This proposal was approved, with the votes thereon at the Annual Meeting as follows:

Final Voting Results			
For	**Against**	**Abstain**	**Broker Non-Vote**
134,345,318	1,369,770	55,186	

(4) *Proposal No. 4:* Proposal to approve a series of alternate amendments to our Restated Certificate of Incorporation to effect, if and only if Proposal No. 3 is both approved and implemented, a corresponding reduction in the total number of authorized shares of our common stock, as more specifically described in the Proxy Statement. This proposal was approved, with the votes thereon at the Annual Meeting as follows:

Final Voting Results			
For	**Against**	**Abstain**	**Broker Non-Vote**
134,500,979	914,191	355,104	

ITEM 6. EXHIBITS

The exhibits listed on the accompanying Exhibit Index are filed or incorporated by reference (as stated therein) as part of this Quarterly Report on Form 10-Q.

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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 thereunto duly authorized.

GTx, Inc.

Date: May 10, 2016	By:	/s/ Marc S. Hanover Marc S. Hanover, President, Chief Executive Officer ***(Principal Executive Officer)***
Date: May 10, 2016	By:	/s/ Jason T. Shackelford Jason T. Shackelford, Senior Director of Accounting and Corporate Controller and Principal Financial and Accounting Officer ***(Principal Financial and Accounting Officer)***

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EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporation By Reference			
		Form	SEC File No.	Exhibit	Filing Date
2.1	Asset Purchase Agreement dated as of September 28, 2012 between the Registrant and Strakan International S.à r.l.	8-K	000-50549	2.1	10/03/2012
3.1	Restated Certificate of Incorporation of GTx, Inc.	S-3	333-127175	4.1	08/04/2005
3.2	Certificate of Amendment of Restated Certificate of Incorporation of GTx, Inc.	8-K	000-50549	3.2	05/06/2011
3.3	Certificate of Amendment of Restated Certificate of Incorporation of GTx, Inc.	8-K	000-50549	3.3	05/09/2014
3.4	Certificate of Amendment of Restated Certificate of Incorporation of GTx, Inc.	10-Q	000-50549	3.4	05/11/2015
3.5	Amended and Restated Bylaws of GTx, Inc.	8-K	000-50549	3.2	07/26/2007
4.1	Reference is made to Exhibits 3.1, 3.2, 3.3, 3.4 and 3.5				
4.2	Specimen of Common Stock Certificate	S-1	333-109700	4.2	12/22/2003
4.3	Amended and Restated Registration Rights Agreement between Registrant and J. R. Hyde, III dated August 7, 2003	S-1	333-109700	4.4	10/15/2003
4.4	Consent, Waiver and Amendment between Registrant and J. R. Hyde, III and Pittco Associates, L.P. dated December 3, 2007	S-3	333-148321	4.6	12/26/2007
4.5	Waiver and Amendment Agreement among Registrant, J.R. Hyde, III and Pittco Associates, L.P. dated March 6, 2014	10-K	000-50549	4.5	03/12/2014
4.6	Amended and Restated Registration Rights Agreement among Registrant, J.R. Hyde, III and The Pyramid Peak Foundation, dated August 4, 2014	10-Q	000-50549	4.6	08/05/2014
4.7	Consent, Waiver and Amendment Agreement between Registrant and J.R. Hyde, III and Pittco Associates, L.P., dated August 4, 2014	10-Q	000-50549	4.8	08/05/2014
4.8	Form of Common Stock Warrant, issued on November 14, 2014 by Registrant pursuant to the Purchase Agreement, dated November 9, 2014, between Registrant and the purchasers identified in Exhibit A therein	10-K	000-50549	4.9	03/16/2015
4.9+	Form of Warrant Amendment Agreement entered into effective as of March 25, 2016 between Registrant and each holder of a Common Stock Warrant originally issued on November 14, 2014				
10.1+	2016 Compensation Information for Registrant s Executive Officers				
10.2	Directors Deferred Compensation Plan, as amended and restated effective February 18, 2016	10-K	000-50549	10.36	03/15/2016
10.3	Non-Employee Director Compensation Policy of GTx, Inc., effective January 1, 2016	10-K	000-50549	10.39	03/15/2016
31.1+	Certification of Principal Executive Officer, as required by Rule 13a-14(a) or Rule 15d-14(a)				

31.2+	Certification of Principal Financial Officer, as required by Rule 13a-14(a) or Rule 15d-14(a)
32.1+	Certification of Principal Executive Officer, as required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350)(1)

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32.2+	Certification of Principal Financial Officer, as required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350)(1)
101.INS+	XBRL Instance Document
101.SCH+	XBRL Taxonomy Extension Schema Document
101.CAL+	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF+	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB+	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE+	XBRL Taxonomy Extension Presentation Linkbase Document

+ Filed herewith

(1) This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.