

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-Q

(Mark One)

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

FOR THE QUARTERLY PERIOD ENDED June 30, 2014

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: 001-33415

OREXIGEN THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of Incorporation or Organization)

65-1178822
(I.R.S. Employer Identification No.)

3344 North Torrey Pines Court, Suite 200, La Jolla, CA
(Address of Principal Executive Offices)

92037
(Zip Code)

(858) 875-8600
(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 No

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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether 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", "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

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

As of August 8, 2014, the registrant had 122,534,843 shares of Common Stock (\$0.001 par value) outstanding.

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Orexigen Therapeutics, Inc.
Balance Sheets
(In thousands, except share and par value amounts)

	<u>June 30,</u> <u>2014</u>	<u>December 31,</u> <u>2013</u>
	(Unaudited)	(See note below)
Assets		
Current assets:		
Cash and cash equivalents	\$ 31,107	\$ 98,121
Investment securities, available-for-sale	102,194	78,875
Prepaid expenses and other current assets	5,840	1,286
Total current assets	139,141	178,282
Property and equipment, net	675	630
Other long-term assets	884	1,032
Restricted cash	177	177
Total assets	<u>\$ 140,877</u>	<u>\$ 180,121</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 8,071	\$ 4,787
Accrued clinical trial expenses	7,746	7,886
Accrued expenses	5,326	6,751
Deferred revenue, current portion	3,429	3,429
Total current liabilities	24,572	22,853
Long-term convertible debt	81,928	80,031
Deferred revenue, less current portion	33,429	35,143
Other long-term liabilities	401	232
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$.001 par value, 10,000,000 shares authorized at June 30, 2014 and December 31, 2013; no shares issued and outstanding at June 30, 2014 and December 31, 2013	—	—
Common stock, \$.001 par value, 300,000,000 shares authorized at June 30, 2014 and December 31, 2013; 122,531,843 and 104,970,200 shares issued and outstanding at June 30, 2014 and December 31, 2013, respectively	123	105
Additional paid-in capital	564,292	556,235
Accumulated other comprehensive income (loss)	12	(3)
Accumulated deficit	(563,880)	(514,475)
Total stockholders' equity	547	41,862
Total liabilities and stockholders' equity	<u>\$ 140,877</u>	<u>\$ 180,121</u>

See accompanying notes.

Note: The Balance Sheet at December 31, 2013 has been derived from the audited financial statements at that date.

Orexigen Therapeutics, Inc.
Statements of Operations
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014	2013	2014	2013
Revenues:				
Collaborative agreement	\$ 857	\$ 857	\$ 1,714	\$ 1,714
Total revenues	857	857	1,714	1,714
Operating expenses:				
Research and development	16,726	13,094	33,727	28,249
General and administrative	6,933	6,026	13,943	11,126
Total operating expenses	23,659	19,120	47,670	39,375
Loss from operations	(22,802)	(18,263)	(45,956)	(37,661)
Interest and other (expense) income, net:				
Interest income	26	17	52	48
Interest expense	(1,731)	—	(3,501)	(1)
Total interest and other (expense) income, net	(1,705)	17	(3,449)	47
Net loss	\$ (24,507)	\$ (18,246)	\$ (49,405)	\$ (37,614)
Net loss per share	\$ (0.21)	\$ (0.19)	\$ (0.43)	\$ (0.41)
Shares used in computing net loss per share	117,987	94,986	113,642	92,674

See accompanying notes.

Orexigen Therapeutics, Inc.
Statements of Comprehensive Income (Loss)
(In thousands)
(Unaudited)

	<u>Three Months Ended</u>		<u>Six Months Ended</u>	
	<u>June 30,</u>		<u>June 30,</u>	
	<u>2014</u>	<u>2013</u>	<u>2014</u>	<u>2013</u>
Net loss	\$(24,507)	\$(18,246)	\$(49,405)	\$(37,614)
Other comprehensive gain (loss)				
Unrealized gain (loss) on investment securities	<u>6</u>	<u>(14)</u>	<u>15</u>	<u>(16)</u>
Other comprehensive gain (loss)	<u>6</u>	<u>(14)</u>	<u>15</u>	<u>(16)</u>
Comprehensive loss	<u><u>\$(24,501)</u></u>	<u><u>\$(18,260)</u></u>	<u><u>\$(49,390)</u></u>	<u><u>\$(37,630)</u></u>

See accompanying notes.

Orexigen Therapeutics, Inc.
Statements of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended	
	June 30,	
	2014	2013
Operating activities		
Net loss	\$(49,405)	\$(37,614)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of premium on securities available-for-sale	428	398
Amortization of debt discount	1,897	—
Amortization of debt issuance costs	21	—
Depreciation	46	79
Stock-based compensation	7,397	5,330
Deferred revenue	(1,714)	(1,714)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(4,553)	(1,494)
Other assets	127	—
Accounts payable and accrued expenses	1,720	(6,431)
Deferred rent and lease incentives	169	(86)
Net cash used in operating activities	(43,867)	(41,532)
Investing activities		
Purchases of securities available-for-sale	(51,378)	(23,421)
Maturities of securities available-for-sale	27,645	41,900
Purchase of property and equipment	(91)	—
Net cash (used in) provided by investing activities	(23,824)	18,479
Financing activities		
Proceeds from issuance of common stock	677	534
Net cash provided by financing activities	677	534
Net decrease in cash and cash equivalents	(67,014)	(22,519)
Cash and cash equivalents at beginning of period	98,121	78,332
Cash and cash equivalents at end of period	<u>\$ 31,107</u>	<u>\$ 55,813</u>

See accompanying notes.

OREXIGEN THERAPEUTICS, INC.
NOTES TO UNAUDITED FINANCIAL STATEMENTS

1. The Company and Basis of Presentation

Organization

Orexigen Therapeutics, Inc. (the “Company”), a Delaware corporation, is a biopharmaceutical company focused on the development of pharmaceutical product candidates for the treatment of obesity. The Company was incorporated in September 2002 and commenced operations in 2003.

The Company’s primary activities since incorporation have been organizational activities, including recruiting personnel, conducting research and development, including clinical trials, and raising capital. In addition, the Company has experienced losses since its inception, and as of June 30, 2014, had an accumulated deficit of \$563.9 million. The Company expects to continue to incur losses for at least the next several years. Successful transition to attaining profitable operations is dependent upon achieving a level of revenues adequate to support the Company’s cost structure, and until that time, the Company may need to continue to raise additional equity or debt financing.

Basis of Presentation

The Company has prepared the accompanying unaudited financial statements in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Form 10-Q and Article 10-01 of Regulation S-X. Accordingly, they do not include all of the information and disclosures required by generally accepted accounting principles for complete financial statements. In the opinion of management, the accompanying unaudited financial statements reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the Company’s interim financial information.

The balance sheet as of December 31, 2013 has been derived from the audited financial statements as of December 31, 2013 but does not include all information and footnotes required by U.S. generally accepted accounting principles for complete financial statements. For more complete financial information, the accompanying unaudited financial statements and notes thereto should be read in conjunction with the audited financial statements for the year ended December 31, 2013 included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2013.

2. Summary of Significant Accounting Policies

Research and Development Costs

All research and development costs are charged to expense as incurred and consist principally of costs related to clinical trials managed by the Company’s contract research organizations, pre-launch expenses for NB32, license fees and salaries and related benefits. Clinical trial costs are a significant component of research and development expenses. These costs are accrued based on estimates of work performed, and require estimates of total costs incurred based on patients enrolled, progress of clinical studies and other events. Clinical trial costs are subject to revision as the trials progress and revisions are charged to expense in the period in which they become known.

Revenue Recognition

The Company has entered into agreements with Takeda Pharmaceutical Company Limited (“Takeda”) and Cypress Bioscience, Inc. (“Cypress”) which contain multiple elements, including nonrefundable upfront fees, payments for reimbursement of research costs, payments associated with achieving specific development milestones and royalties based on specified percentages of net product sales, if any.

Prior to the revised multiple element and milestone method of revenue recognition guidance adopted by the Company on January 1, 2011, nonrefundable, up-front license fees and milestone payments with standalone value that are not dependent on any future performance by the Company under the agreements were recognized as revenue upon the earlier of when payments were received or collection was assured, but were deferred if the Company had continuing performance obligations. If the Company had continuing involvement through contractual obligations under such agreements, such up-front fees were deferred and recognized over the period for which the Company continued to have a performance obligation. Both the Takeda and Cypress agreements had continuing obligations, and as a result the up-front fees were deferred upon receipt.

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Effective January 1, 2011, for multiple element agreements entered into or materially modified after December 31, 2010, the Company follows the provisions of Accounting Standards Update (“ASU”) No. 2009-13. In order to account for the multiple-element arrangements, the Company identifies the deliverables included within the agreement and evaluates which deliverables represent separate units of accounting. Analyzing the arrangement to identify deliverables requires the use of judgment, and each deliverable may be an obligation to deliver services, a right or license to use an asset, or another performance obligation. A delivered item is considered a separate unit of accounting when the delivered item has value to the partner on a standalone basis based on the consideration of the relevant facts and circumstances for each arrangement. Factors considered in this determination include the research capabilities of the partner and the availability of research expertise in this field in the general marketplace. Arrangement consideration is allocated at the inception of the agreement to all identified units of accounting based on their relative selling price. The relative selling price for each deliverable is determined using vendor-specific objective evidence (“VSOE”) of selling price or third-party evidence of selling price if VSOE does not exist. If neither VSOE nor third-party evidence of selling price exists, we use our best estimate of the selling price for the deliverable. The amount of allocable arrangement consideration is limited to amounts that are fixed or determinable. The consideration received is allocated among the separate units of accounting, and the applicable revenue recognition criteria are applied to each of the separate units. Changes in the allocation of the sales price between delivered and undelivered elements can impact revenue recognition but do not change the total revenue recognized under any agreement. Upfront license fee payments are recognized upon delivery of the license if facts and circumstances dictate that the license has standalone value from the undelivered items, which generally include research and development services and the manufacture of drug products, the relative selling price allocation of the license is equal to or exceeds the upfront license fee, persuasive evidence of an arrangement exists, the Company’s price to the partner is fixed or determinable, and collectability is reasonably assured.

Upfront license fee payments are deferred if facts and circumstances dictate that the license does not have standalone value. The determination of the length of the period over which to defer revenue is subject to judgment and estimation and can have a material impact on the amount of revenue recognized in a given period.

The terms of the Company’s partnership agreements provide for milestone payments upon achievement of certain regulatory/development and sales-based events. Effective January 1, 2011, the Company adopted on a prospective basis the guidance under ASU No. 2010-17, “*Revenue Recognition-Milestone Method*”. Under the Milestone Method of accounting, the Company recognizes consideration that is contingent upon the achievement of a milestone in its entirety as revenue in the period in which the milestone is achieved only if the milestone is substantive in its entirety. A milestone is considered substantive when it meets all of the following three criteria: 1) The consideration is commensurate with either the entity’s performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the entity’s performance to achieve the milestone, 2) The consideration relates solely to past performance, and 3) The consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. A milestone is defined as an event (i) that can only be achieved based in whole or in part on either the entity’s performance or on the occurrence of a specific outcome resulting from the entity’s performance, (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved and (iii) that would result in additional payments being due to the Company.

Royalties to be received based on sales of the Company’s licensed products by partners will be recognized as earned.

Recently Issued Accounting Standards

In July 2013, the Financial Accounting Standards Board (FASB) issued authoritative guidance for Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists, which provides explicit guidance on the financial statement presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The guidance is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. The Company adopted this guidance in the first quarter of 2014 and the adoption did not have a material impact on the Company’s financial statements.

In May 2014, the FASB issued new accounting guidance related to revenue recognition. This new standard will replace all current GAAP guidance on this topic and eliminate all industry-specific guidance. The new revenue recognition standard provides a unified model to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration for which the entity expects to be entitled in exchange for those goods or services. This guidance will be effective for fiscal years beginning after December 16, 2016, including interim periods within that reporting period, and can be applied either retrospectively to each period presented or as a cumulative-effect adjustment as of the date of adoption. Early adoption is prohibited. The Company is evaluating the impact of adopting this new accounting standard on its financial statements and related disclosures.

3. Net Loss per Share

Basic earnings per share (“EPS”) is calculated by dividing the net income or loss available to common stockholders by the weighted average number of common shares outstanding for the period, without consideration for common stock equivalents. Diluted EPS is computed by dividing the net income available to common stockholders by the weighted average number of common shares outstanding for the period and the weighted average number of dilutive common stock equivalents outstanding for the period determined using the treasury-stock method.

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For purposes of this calculation, options are considered to be common stock equivalents and are only included in the calculation of diluted earnings per share when their effect is dilutive.

(In thousands, except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014	2013	2014	2013
Numerator:				
Net loss	\$ (24,507)	\$ (18,246)	\$ (49,405)	\$ (37,614)
Denominator:				
Basic and diluted weighted average shares of common stock outstanding	117,987	94,986	113,642	92,674
Basic and diluted net loss per share	\$ (0.21)	\$ (0.19)	\$ (0.43)	\$ (0.41)
Potentially outstanding anti-dilutive securities not included in diluted net loss per share calculation include the following:				
Shares underlying convertible senior notes	14,042	—	14,042	—
Common stock warrants outstanding	572	24,529	572	24,529
Common stock options outstanding	19,613	17,286	19,613	17,286
	<u>34,227</u>	<u>41,815</u>	<u>34,227</u>	<u>41,815</u>

4. Investment Securities, Available-for-Sale

The Company invests its excess cash in investment securities, principally government agencies and debt instruments of financial institutions, corporations with investment grade credit ratings. A summary of the estimated fair value of investment securities, available-for-sale, is as follows at June 30, 2014 and December 31, 2013 (in thousands):

June 30, 2014	Maturity in Years	Amortized Cost	Unrealized		Fair Value
			Gains	Losses	
U.S. government agency securities	Less than 1	\$ 94,395	\$ 9	\$ (2)	\$ 94,402
U.S. government agency securities	1 to 2	7,787	5	—	7,792
Total investment securities		\$ 102,182	\$ 14	\$ (2)	\$102,194

December 31, 2013	Maturity in Years	Amortized Cost	Unrealized		Fair Value
			Gains	Losses	
U.S. government agency securities	Less than 1	\$ 77,877	\$ 4	\$ (7)	\$77,874
U.S. Treasury securities	Less than 1	1,001	—	—	1,001
Total investment securities		\$ 78,878	\$ 4	\$ (7)	\$78,875

Gross realized gains and losses on available-for-sale securities were immaterial during the three and six months ended June 30, 2014 and 2013.

5. Fair Value Measurements

The fair values of the Company's financial instruments are recorded using a hierarchal disclosure framework based upon the level of subjectivity of the inputs used in measuring assets and liabilities. The following table presents information about the Company's financial assets measured at fair value on a recurring basis as of June 30, 2014, and indicates the fair value hierarchy of the valuation techniques utilized by the Company to determine such fair value. In general, fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access. The Company classifies money market funds as Level 1 assets. Fair values determined by Level 2 inputs

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utilize inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, and inputs other than quoted prices that are observable for the asset or liability, such as interest rates and yield curves that are observable at commonly quoted intervals. The Company classifies commercial paper holdings, U.S. Treasury securities, U.S. government agency securities and asset-backed security holdings as Level 2 assets. Level 3 inputs are unobservable inputs for the asset or liability, and include situations where there is little, if any, market activity for the asset or liability. The Company does not hold any Level 3 assets. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the level in the fair value hierarchy within which the fair value measurement in its entirety falls has been determined based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and considers factors specific to the asset or liability.

Assets that have recurring measurements are shown below (in thousands):

Description	Balance as of June 30, 2014	Fair Value Measurement at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Financial instruments owned:				
Money market funds	\$ 29,233	\$ 29,233	\$ —	\$ —
U.S. government agency securities	102,194	—	102,194	—
Total financial instruments owned	<u>\$ 131,427</u>	<u>\$ 29,233</u>	<u>\$ 102,194</u>	<u>\$ —</u>

6. Property and Equipment

Property and equipment consist of the following (in thousands):

	Useful Life In Years	June 30, 2014	December 31, 2013
Furniture and fixtures	5	\$ 1,079	\$ 1,079
Computer equipment and software	3 to 5	440	422
Leasehold improvements	4	557	557
Laboratory equipment	5	566	—
Asset under construction		—	518
		2,642	2,576
Less accumulated depreciation and amortization		(1,967)	(1,946)
		<u>\$ 675</u>	<u>\$ 630</u>

7. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	June 30, 2014	December 31, 2013
Accrued compensation related expenses	\$2,758	\$ 4,774
Accrued research and development expenses	1,792	1,273
Accrued interest on convertible notes	264	220
Accrued legal and professional expenses	426	355
Other accrued liabilities	86	129
	<u>\$5,326</u>	<u>\$ 6,751</u>

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8. Stock-Based Compensation

Total stock-based compensation expense recognized during the three and six months ended June 30, 2014 and 2013 was comprised of the following (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014	2013	2014	2013
General and administrative	\$2,630	\$ 2,060	\$5,107	\$3,798
Research and development	1,170	868	2,290	1,532
	<u>\$3,800</u>	<u>\$ 2,928</u>	<u>\$7,397</u>	<u>\$5,330</u>

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option valuation model. The following weighted-average assumptions were utilized for the calculations during each period:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014	2013	2014	2013
Expected life (in years)	5.6	5.9	5.6	6.0
Expected volatility	107.3%	92.7%	107.3%	92.7%
Risk-free interest rate	1.9%	1.3%	1.8%	1.2%
Expected dividend yield	—	—	—	—

9. Convertible debt

2.75% Convertible Senior Notes due 2020

In December 2013, the Company issued \$115.0 million in aggregate principal amount of 2.75% convertible senior notes due 2020 ("2020 Notes") in an offering to qualified institutional buyers conducted in accordance with Rule 144A under the Securities Act of 1933, as amended. Debt issuance costs of approximately \$488,000 were primarily comprised of legal, accounting and other professional fees, the majority of which were recorded in other noncurrent assets and are being amortized to interest expense over the seven-year term of the 2020 Notes.

On June 27, 2014, the Company's stockholders approved a flexible conversion option that allows the Company to settle conversions of the 2020 Notes through payment or delivery, as the case may be, of cash, shares of the Company's common stock or a combination thereof, at the Company's election. Prior to this approval, the 2020 Notes could only be settled in shares of the Company's common stock (together with cash in lieu of any fractional shares). The conversion rate for the Notes will initially be 122.1225 shares per \$1,000 principal amount, which is equivalent to an initial conversion price of approximately \$8.19 per share of common stock, and is subject to adjustment under the terms of the Notes.

The 2020 Notes will mature on December 1, 2020, unless earlier repurchased or converted in accordance with their terms prior to such date. Prior to the close of business on the business day immediately preceding September 1, 2020, holders may convert all or a portion of their 2020 Notes only under the following circumstances: (1) during any fiscal quarter commencing after March 31, 2014, if, for at least 20 trading days (whether or not consecutive) during the 30 consecutive trading day period ending on the last trading day of the immediately preceding fiscal quarter, the last reported sale price of the Company's common stock on such trading day is greater than or equal to 130% of the applicable conversion price on such trading day; (2) during the five consecutive business day period immediately following any ten consecutive trading day period (the "measurement period") in which, for each trading day of that measurement period, the trading price per \$1,000 principal amount of notes for such trading day was less than 98% of the product of the last reported sale price of the Company's common stock on such trading day and the applicable conversion rate on such trading day, or (3) upon the occurrence of specified corporate transactions. On and after September 1, 2020 until the close of business on the business day immediately preceding the maturity date, holders may convert all or a portion of their 2020 Notes at any time, regardless of the foregoing circumstances. Holders of the Notes will have the right to require the Company to repurchase all or some of their Notes at 100% of their principal amount, plus any accrued and unpaid interest, upon the occurrence of certain events.

The Company pays 2.75% interest per annum on the principal amount of the 2020 Notes semi-annually in arrears in cash on June 1 and December 1 of each year, beginning on June 1, 2014. If a designated event, as defined in the indenture for the 2020 Notes, including, but not limited to, a change in control, certain mergers or liquidation, occurs prior to the maturity date, subject to certain limitations, holders of the Notes may require the Company to repurchase all or a portion of their 2020 Notes for cash at a repurchase price equal to 100% of the principal amount of the 2020 Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the repurchase date.

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The Company accounts separately for the liability and equity components of the 2020 Notes in accordance with authoritative guidance for convertible debt instruments that may be settled in cash upon conversion. The guidance requires the carrying amount of the liability component to be estimated by measuring the fair value of a similar liability that does not have an associated conversion feature. Because the Company has no outstanding non-convertible public debt, the Company determined that senior, unsecured corporate bonds traded on the market represent a similar liability to the 2020 Notes without the conversion option. The Company estimated the implied interest rate of its 2020 Notes to be 8.69%, assuming no conversion option. Assumptions used in the estimate represent what market participants would use in pricing the liability component, including market interest rates, credit standing, and yield curves, all of which are defined as Level 2 observable inputs. The estimated implied interest rate was applied to the 2020 Notes, which resulted in a fair value of the liability component of \$79.7 million upon issuance, calculated as the present value of implied future payments based on the \$115.0 million in aggregate principal amount. The \$31.3 million difference between the cash proceeds of \$111.0 million and the estimated fair value of the liability component was recorded in additional paid-in capital as the 2020 Notes were not considered redeemable.

A summary of the liability and equity components of the 2020 Notes is as follows at June 30, 2014 and December 31, 2013 (in thousands):

	June 30, 2014	December 31, 2013
Principal amount of senior convertible notes outstanding	\$ 115,000	\$ 115,000
Unamortized discount of liability component	(33,072)	(34,969)
Long term convertible debt	<u>\$ 81,928</u>	<u>\$ 80,031</u>
Remaining amortization period of discount on the liability component	6.5 years	7.0 years
Carrying value of equity component, net of issuance costs	\$ 31,178	\$ 31,178

10. Commitments and Contingencies

Takeda Pharmaceutical Company Limited

In September 2010, the Company entered into a collaboration agreement with Takeda to develop and commercialize NB32 in the United States, Canada and Mexico. Under the terms of the collaboration agreement, the Company received a nonrefundable upfront cash payment of \$50.0 million from Takeda and is eligible to receive additional payments of over \$1.0 billion upon achieving certain anniversary, regulatory/development and sales-based milestones, including \$100.0 million that can be achieved between the execution of the collaboration agreement and the first commercial sale of NB32 in the United States. The Company is also eligible to receive tiered royalty payments ranging from a minimum of 20% to a maximum of 35%, subject to customary reductions, on increasing levels of net sales in the United States, Canada and Mexico. In accordance with the Company's continuing performance obligation of the collaboration, the upfront payment of \$50.0 million is being deferred and recognized over 14.5 years, the estimated term of the agreement. For the three and six months ended June 30, 2014 and 2013, the Company recognized revenues under this agreement of \$857,000, \$857,000, \$1.7 million and \$1.7 million, respectively. At June 30, 2014, deferred revenue under this agreement totaled \$36.9 million. At June 30, 2014, *Prepaid Expenses and Other Current Assets* includes a \$4.1 million receivable from Takeda for the purchase of pre-launch inventory supply of NB32 which was recorded as a reduction of Research and Development expense.

The Company has assessed milestones under the revised authoritative guidance for research and development milestones and determined that two regulatory/development milestone payments, \$20.0 million due to the Company upon regulatory approval in the United States and \$10.0 million due to the Company upon the delivery of launch supplies to Takeda, meet the definition of a milestone as: (1) they are events that can only be achieved in part on the Company's performance or upon the occurrence of a specific outcome resulting in the Company's performance, (2) there was substantive uncertainty at the date the agreement was entered into that the event will be achieved, and (3) they result in additional payments being due to the Company. The third regulatory/development milestone payment, \$70.0 million due to the Company upon the first commercial sale in the United States, does not meet the definition of a milestone as Takeda is responsible for the commercialization of NB32. Sales-based milestone payments currently do not meet these criteria and will not be classified as milestones as their achievement is solely based on the performance of Takeda. The Company has determined that the anniversary milestones do not meet the definition of a milestone as the Company believes these payments are contingent solely upon the passage of time.

11. Litigation

In May 2013, the Company received a shareholder demand alleging that certain option grants to the Company's President and Chief Executive Officer, Michael A. Narachi, the Company's Chief Business Officer and acting-Chief Financial Officer, Joseph P. Hagan, and the Company's Senior Vice President, General Counsel and Secretary, Heather D. Turner, in 2011 were granted in excess of the 1,500,000 share limit set forth in Section 3.3 of the 2007 Plan as to the number of shares of the Company's common stock with respect to which one or more stock awards may be granted to any one eligible participant during any of the Company's fiscal years. The Company refers to this limit as the 162(m) Award Limit. The Company's board of directors established a demand review committee composed of independent directors to conduct an investigation with respect to the shareholder demand and to make recommendations to the Company's board of directors. The demand review committee engaged independent counsel as part of its investigation and evaluated (1) the terms of the 2007 Plan, (2) the initial issuance procedures for the option grants to Mr. Narachi, Mr. Hagan and Ms. Turner during 2011, (3) the authority available to the compensation committee of the Company's board of directors under its charter and the 2007 Plan, (4) the expectations of the award recipients and (5) the intent of the Company's board of directors and the compensation committee regarding the availability of an exemption from the deductibility limitations of Section 162(m) of the Internal Revenue Code for such option grants. Following its investigation, the demand review committee determined that the 162(m) Award Limit first became effective as of June 2, 2011, and that, therefore, awards granted under the 2007 Plan prior to June 2, 2011, did not count toward the 162(m) Award Limit. The demand review committee determined that the awards granted to Mr. Hagan between June 2, 2011 and December 31, 2011 did not exceed the 162(m) Award Limit. The demand review committee further determined that the options granted to Mr. Narachi and Ms. Turner, including the portion of such awards in excess of the 162(m) Award Limit, were validly approved under the 2007 Plan, although the portion of those awards in excess of the 162(m) Award Limit does not qualify as performance-based compensation under Section 162(m). In September 2013, the compensation committee amended the 2007 Plan, with the approval of the Company's board of directors, to take the following actions: (1) to clarify that the 162(m) Award Limit only applies to awards or the portion thereof intended to qualify as performance-based compensation under Section 162(m); and (2) to confirm that the compensation committee has the authority to make awards in excess of the 162(m) Award Limit, which the Company refers to as the Plan Amendment. The Plan Amendment is deemed effective as of June 10, 2011, consistent with the authority of the compensation committee as administrator of the 2007 Plan as of that date. Any grants under the 2007 Plan in excess of the 162(m) Award Limit are not intended to qualify as performance-based compensation under Section 162(m).

On December 6, 2013, a plaintiff claiming to be a shareholder of the Company filed a derivative lawsuit purportedly on behalf of the Company against certain of the Company's officers and the members of the Company's board of directors, in the Superior Court for the State of California, County of San Diego, captioned *Wilkin v. Narachi, et al.* On December 9, 2013, the same shareholder who made a demand on the board in May 2013 filed a derivative lawsuit purportedly on the Company's behalf against certain of the Company's officers and current and former members of the Company's board of directors in the United States District Court, for the Southern District of California, captioned *Turgeman v. Narachi, et al.* Both of the lawsuits assert claims for breach of fiduciary duty, waste and unjust enrichment based on, among other things, the alleged grant of stock options to certain officers in excess of the 162(m) Award Limit, repricing stock options allegedly in violation of the Company's equity incentive plan, the board of directors' conduct in responding to the May 2013 shareholder demand, and making allegedly false and misleading statements. Both of the lawsuits seek, among other things, declaratory relief, corporate governance reforms, rescission of certain stock option awards, rescission of the Plan Amendment, injunctive relief, damages, restitution, disgorgement and attorney's fees. On July 23, 2014, the Company and the individual defendants filed a motion to dismiss the *Turgeman* complaint. A hearing on the motion to dismiss is currently scheduled for September 22, 2014. The current deadline to file a response to the *Wilkin* complaint is August 13, 2014. Although the Company's management believes that the claims lack merit and intends to defend against them vigorously, there are uncertainties inherent in any litigation and the Company cannot predict the outcome. However, the Company does not believe that the outcome would have a material adverse effect on the Company.

It is possible that securities class action litigation may be brought against the Company following stock price declines related to the release of information regarding the Company's NB32 NDA or clinical trial results, including the Light Study or related to the matters alleged in the May 2013 shareholder demand and/or the Plan Amendment. Any adverse determination in such litigation could subject the Company to significant liabilities.

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

This report contains certain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and is subject to the Safe Harbor provisions created by that statute. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. All statements other than statements of historical facts are "forward-looking statements" for purposes of these provisions. Forward-looking statements can be identified by the use of forward-looking words such as "believes," "expects," "hopes," "may," "will," "plans," "intends," "indicates," "suggests," "assuming," "designed," "estimates," "could," "should," "would," "continue," "seeks," "aims," "projects," "predicts," "pro forma," "anticipates," "potential," "probability" or other similar expressions that are intended to identify forward-looking statements. These statements are based on our current beliefs and expectations.

These statements include but are not limited to statements regarding: the Special Protocol Assessment, or SPA, and the protocol for the NB32 cardiovascular outcomes trial, or Light Study; the probability of success of the Light Study; the potential for, and timing of, approval of the New Drug Application, or NDA, for NB32; the benefit risk profile for NB32; the potential for past NB32 clinical trials to predict the outcome of future NB32 clinical trials; our plans to seek a commercialization partner in territories outside of North America; the potential to demonstrate the real world weight loss potential of NB32 with a commercially available comprehensive lifestyle intervention program; the potential to enter into a collaborative partnership to fund Phase III development and, if approved, commercialization of Empatic™; and the potential for the FDA to approve an NDA for Empatic without requiring data from a cardiovascular outcomes trial in addition to the data obtained from the Light Study. The inclusion of forward-looking statements should not be regarded as a representation by us that any of our plans will be achieved. Actual results may differ materially from those expressed or implied in this report by the forward-looking statements due to the risk and uncertainties inherent in our business, including the risks and uncertainties discussed below under Part II, Item 1A, "Risk Factors."

Given these risks and uncertainties, we urge you not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. You should read this report completely and with the understanding that our actual future results may be materially different from what we expect. The interim financial statements and this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the financial statements and notes thereto for the year ended December 31, 2013 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K for the year ended December 31, 2013. We hereby qualify our forward-looking statements by these cautionary statements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, whether as a result of new information, future events, or for any other reason.

Overview

Background

We are a biopharmaceutical company focused on the development of pharmaceutical product candidates for the treatment of obesity. Our product candidates are NB32 (formerly referred to as Contrave®), which has completed Phase III clinical trials and which is currently being studied in a cardiovascular outcomes trial, and Empatic™, which has completed Phase II clinical trials. Each of these product candidates is a combination of generic drug components, each of which has already received regulatory approval for other indications and been commercialized in the United States and in a majority of the member countries of the European Union. We are developing these combinations in an effort to demonstrate adequate efficacy and safety for potential regulatory approval. We submitted applications for regulatory approval of NB32 in the United States and the European Union, with potential approvals in 2014. We have not yet received regulatory approval in the United States or the European Union for either product candidate.

In January 2011, we received a complete response letter, or CRL, from the United States Food and Drug Administration, or FDA, regarding our New Drug Application, or NDA, for NB32. A CRL is issued by the FDA when the review of an NDA is completed and questions remain that preclude the approval of the NDA in its current form. The CRL for NB32 indicated that the FDA could not approve the NDA in its present form primarily due to concerns regarding the cardiovascular safety profile of NB32 when used long-term in a population of overweight and obese patients. The CRL stated that before our NDA could be approved, we must conduct a randomized, double-blind, placebo-controlled trial of sufficient size and duration to demonstrate that the risk of MACE in overweight and obese patients treated with NB32 does not adversely affect the drug's benefit-risk profile.

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In September 2011, following a meeting with senior officials in the FDA's Office of New Drugs, or OND, we received written correspondence from the director of the OND detailing the OND's design requirements for a randomized, double-blind, placebo-controlled cardiovascular outcomes trial, or CVOT, for NB32 that would address the CRL. We initiated the CVOT, which we refer to as the Light Study, in June 2012 and completed screening in December 2012, which resulted in approximately 8,900 patients randomized to treatment. We enrolled a patient population that we predicted would have an annualized MACE rate between 1% and 2%. The FDA previously agreed that if the interim analysis of the Light Study meets the specified criteria to exclude cardiovascular risk, NB32 could be approved. The pre-specified criteria for the interim analysis is to exclude a hazard ratio of 2.0, using the upper bound of the 95% confidence interval, for excess risk MACE in patients receiving NB32 as compared to placebo. In November 2013, we announced successful results of the interim analysis of the Light Study. In addition to meeting the pre-specified criteria for excluding cardiovascular risk, no new safety signals were observed.

In December 2013, we resubmitted the NDA for NB32 to the FDA, seeking approval for NB32 and in January 2014, the FDA assigned a Prescription Drug User Fee Act, or PDUFA, goal date of June 10, 2014 for its review of the resubmission, which was later reassigned one day beyond the original date to June 11, 2014 due to an FDA inadvertent administrative error. In June 2014, the FDA extended its review of the NDA for NB32 and assigned a new PDUFA goal date of September 11, 2014. The FDA indicated that the extension is needed to reach agreement on post-marketing obligations related to the previously agreed upon evaluation of cardiovascular outcomes of NB32. Pursuant to an agreement with the FDA, the independent Data Monitoring Committee's summary report of the interim analysis from the Light Study formed the basis of the resubmission of the NDA, and the clinical study report for the interim analysis was supplied to the FDA in February 2014.

In December 2013, we issued \$115.0 million in aggregate principal amount of 2.75% Convertible Senior Notes due 2020, or the 2020 Notes, in an offering to qualified institutional buyers conducted in accordance with Rule 144A under the Securities Act of 1933, as amended. Net cash proceeds from the issuance of the 2020 Notes were approximately \$110.5 million, after deducting initial purchasers' discounts and commissions and estimated offering expenses payable by us.

In October 2013, we submitted a Marketing Authorization Application for NB32 to the European Medicines Agency, or EMA. This submission is being reviewed for the first time. We received the Day 180 List of Outstanding Issues from the EMA's Committee for Medicinal Products for Human Use, or CHMP, and plan to submit our response in September.

Our primary activities since incorporation have been organizational activities, including recruiting personnel, conducting research and development, including clinical trials, and raising capital. We have incurred significant net losses since our inception. As of June 30, 2014, we had an accumulated deficit of \$563.9 million. These losses have resulted principally from costs incurred in connection with research and development activities, primarily costs of clinical trial activities associated with our current product candidates, and general and administrative expenses. We expect to continue to incur losses for the next several years. Successful transition to attaining profitable operations is dependent upon achieving a level of revenues adequate to support our cost structure, and until that time, we may need to continue to raise additional equity or debt financing.

Revenues

We generated approximately \$1.7 million in revenue for the six months ending June 30, 2014, resulting from the sublicensing of technology and amounts earned under our collaboration agreement with Takeda Pharmaceutical Company Limited, or Takeda. In September 2010, we entered into a collaboration agreement with Takeda to develop and commercialize NB32 in the United States, Canada and Mexico. Under the collaboration agreement, we received an upfront, nonrefundable cash payment of \$50.0 million from Takeda and this amount is being recognized ratably over the estimated life of the agreement.

Other than the amortization of the upfront payment of \$50.0 million from Takeda, we do not expect to generate any significant revenues from licensing, achievement of milestones or product sales unless and until we are able to obtain regulatory approval of, and commercialize, our product candidates.

Research and Development Expenses

The majority of our operating expenses to date have been incurred in research and development activities. Our research and development expenses consisted primarily of costs associated with clinical trials managed by our contract research organizations, or CROs, product development efforts, raw materials, inventory, and manufacturing-related expenses. License fees, salaries and related employee benefits for certain personnel, and costs associated with certain non-clinical activities such

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as regulatory expenses, are also included in this amount. Our most significant costs to date are expenses incurred in connection with the clinical trials for NB32 and Empatic. The clinical trial expenses included payments to vendors such as CROs, investigators, suppliers of clinical drug materials and related consultants. We charge all research and development expenses to operations as incurred because the underlying technology associated with these expenditures relates to our research and development efforts and has no alternative future uses.

Our internal research and development resources are not directly tied to any individual research project and are primarily deployed across our NB32 and Empatic programs, both of which target the obesity market. We are developing our two obesity product candidates in parallel and, due to the fact that we use shared resources across projects, we do not maintain information regarding our internal costs incurred for our research and development programs on a program-specific basis. We use external service providers to manage our clinical trials, to manufacture the product supplies used in these trials and for formulations development, consulting and other activities.

The following table summarizes our research and development expenses for the three and six months ended June 30, 2014 and 2013. Costs that are not attributable to a specific research program are included in the "Other" category (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014	2013	2014	2013
Costs of external service providers:				
Obesity	\$12,859	\$ 9,963	\$25,878	\$22,118
Other	93	91	185	173
Subtotal	12,952	10,054	26,063	22,291
Internal costs	2,604	2,172	5,374	4,426
Stock-based compensation	1,170	868	2,290	1,532
Total research and development expenses	<u>\$16,726</u>	<u>\$13,094</u>	<u>\$33,727</u>	<u>\$28,249</u>

At this time, due to the risks inherent in the drug development process, we are unable to estimate with any certainty the costs we will incur in the continued development, if any, of our product candidates for potential commercialization. Specifically, we cannot quantify the development expenses associated with completion of the Light Study for NB32 or the development of Empatic. Prior to its commencement, we anticipated that the costs to conduct the Light Study to the interim analysis would be approximately \$100.0 million. We believe the costs we have incurred to date and expect to incur in the future in connection with the conduct of the Light Study are consistent with our original projection. With respect to Empatic, prior to initiating Phase III studies, we plan to seek a collaboration partner to help fund Phase III clinical development of and, if approved, commercialization of this product candidate. However, we cannot forecast with any degree of certainty whether such a collaboration arrangement will be secured, if at all, and to what degree such arrangement would affect our development plans and capital requirements. As such, until we finalize any future development plans for Empatic, including based on additional feedback from the FDA and our ability to secure a collaboration partner, we are not able to estimate the expenses required to further develop Empatic. Future development expenses will depend on the timing of the Light Study and any other additional clinical trials for NB32, if any, our financial resources, our ability to secure a collaboration partner for, as well as decisions made with respect to the development of, Empatic and ongoing assessments as to each product candidate's commercial potential. Clinical development timelines, the probability of success and development costs can differ materially from expectations. The lengthy process of completing our clinical trials, including the Light Study, and seeking regulatory approval for our product candidates requires the expenditure of substantial resources. Any failure by us or delay in completing our clinical trials, including the Light Study, or in obtaining regulatory approvals, could cause a delay in the commencement of product revenues and cause our research and development expenses to increase and, in turn, have a material adverse effect on our results of operations. We do not expect NB32 to be commercially available in any major market until the fourth quarter of 2014, at the earliest, if at all, and Empatic to be commercially available in any major market for at least several years, if at all.

General and Administrative

Our general and administrative expenses consist primarily of salaries and related costs for personnel in executive, finance, accounting and internal support functions. In addition, general and administrative expenses include professional fees for legal, consulting and accounting services. We anticipate general and administrative expenses to remain generally unchanged.

Interest and Other (Expense), Income net

Interest and Other (Expense), Income net, consists principally of interest expense incurred on the 2020 Notes, offset by income earned on marketable securities.

Critical Accounting Policies and Estimates

Management's discussion and analysis of our financial condition and results of operations are based upon our financial statements, which are prepared in accordance with accounting principles that are generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, related disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. We continually evaluate our estimates and judgments, the most critical of which are those related to accounting for research and development expenses and stock-based compensation costs. We base our estimates and judgments on historical experience and other factors that we believe to be reasonable under the circumstances. Materially different results can occur as circumstances change and additional information becomes known.

There were no significant changes during the six months ended June 30, 2014 to the items that we disclosed as our critical accounting policies and estimates in Note 2 to our audited financial statements in our Annual Report on Form 10-K for the year ended December 31, 2013.

Results of Operations

Comparison of three months ended June 30, 2014 to three months ended June 30, 2013

Revenues. Revenues for each of the three months ended June 30, 2014 and 2013 were \$857,000 and represent revenue recognized under our collaboration agreement with Takeda.

Research and Development Expenses. Research and development expenses increased to \$16.7 million for the three months ended June 30, 2014 as compared to \$13.1 million for the comparable period during 2013. This increase of approximately \$3.6 million was due primarily to an increase in pre-launch expenses for NB32 including raw materials, inventory, and manufacturing-related expenses of \$4.7 million, an increase in salaries and personnel related costs of \$349,000 and an increase in stock-based compensation expense of \$302,000. These increases were partially offset by a \$2.0 million decrease in expenses in connection with our NB32 CVOT, related proprietary product formulation work and consulting activities.

General and Administrative Expenses. General and administrative expenses increased to \$6.9 million for the three months ended June 30, 2014 from \$6.0 million for the comparable period during 2013. This increase of approximately \$900,000 was due primarily to an increase in stock-based compensation expense of \$570,000, an increase in professional fees of \$239,000 and an increase in salaries and personnel related costs of \$59,000.

Interest and Other Expense, net. Interest and other expense, net increased to \$1.7 million in expense for the three months ended June 30, 2014 from \$17,000 in other income for the comparable period during 2013. This increase was primarily due to \$764,000 in interest accrued for the 2020 Notes and \$955,000 in amortization of the discount of the liability component of the 2020 Notes.

Comparison of six months ended June 30, 2014 to six months ended June 30, 2013

Revenues. Revenues for each of the six months ended June 30, 2014 and 2013 were \$1.7 million and represent revenue recognized under our collaboration agreement with Takeda.

Research and Development Expenses. Research and development expenses increased to \$33.7 million for the six months ended June 30, 2014 from \$28.2 million for the comparable period during 2013. This increase of approximately \$5.5 million was due primarily to an increase in pre-launch expenses for NB32 including raw materials, inventory, and manufacturing-related expenses of \$11.2 million, an increase in salaries and personnel related costs of \$1.0 million and an increase in stock-based compensation expense of \$758,000. These increases were partially offset by a \$7.6 million decrease in expenses in connection with our NB32 CVOT, related proprietary product formulation work and consulting activities.

General and Administrative Expenses. General and administrative expenses increased to \$13.9 million for the six months ended June 30, 2014 from \$11.1 million for the comparable period during 2013. This increase of approximately \$2.8 million was due primarily to an increase in stock-based compensation expense of \$1.3 million, an increase in professional fees of \$783,000, an increase in market research costs of \$284,000 and an increase in salaries and personnel related costs of \$260,000.

Interest and Other Expense, net. Interest and other expense, net increased to \$3.5 million in expense for the six months ended June 30, 2014 from \$47,000 in other income for the comparable period during 2013. This increase was primarily due to \$1.6 million in interest accrued for the 2020 Notes and \$1.9 million in amortization of the discount of the liability component of the 2020 Notes.

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Liquidity and Capital Resources

Since inception, our operations have been financed primarily through the sale of equity and convertible debt securities. Through June 30, 2014, we received net proceeds of approximately \$574.2 million from the sale of shares of our preferred and common stock and 2020 Notes as follows:

- from September 12, 2002 to December 31, 2006, we issued and sold a total of 1,053,572 shares of common stock for aggregate net proceeds of \$14,801;
- in March 2004, we issued and sold a total of 9,322,035 shares of Series A redeemable convertible preferred stock for aggregate net proceeds of \$9.2 million and the conversion of promissory notes and interest thereon totaling \$1.7 million;
- from April 2005 to May 2005, we issued and sold 14,830,509 shares of Series B redeemable convertible preferred stock for aggregate net proceeds of \$34.9 million;
- in November 2006, we issued and sold a total of 8,771,930 shares of Series C convertible preferred stock for aggregate net proceeds of \$29.9 million;
- in May 2007, we issued and sold a total of 8,050,000 shares of common stock for aggregate net proceeds of \$87.9 million;
- in January and February 2008, we issued and sold a total of 7,326,435 shares of common stock for aggregate net proceeds of \$74.9 million;
- in July 2009, we issued and sold a total of 11,500,000 shares of common stock for aggregate net proceeds of \$81.6 million;
- in December 2011, we issued and sold a total of 5,646,173 shares of common stock and common stock warrants to purchase up to 56,461,730 shares for aggregate net proceeds of \$86.9 million; and
- in October 2013, we issued and sold a total of 11,000,000 shares of common stock for aggregate net proceeds of \$56.5 million.
- in December 2013, we issued the 2020 Notes for aggregate net proceeds of \$110.5 million.

As of June 30, 2014, we had \$31.1 million in cash and cash equivalents and an additional \$102.2 million in investment securities, available-for-sale. As of June 30, 2014, our holdings primarily consisted of treasury-backed money market funds, treasuries and other instruments that are insured, guaranteed or supported by the U.S. federal government. We maintain established guidelines relating to diversification and maturities of our investments to preserve principal and maintain liquidity.

Net cash used in operating activities was \$43.9 million and \$41.5 million for the six months ended June 30, 2014 and 2013, respectively. Net cash used in each of these periods was primarily a result of external research and development expenses, clinical trial costs, personnel-related costs, third-party supplier expenses and professional fees.

Net cash used in investing activities was \$23.8 million and for the six months ended June 30, 2014 and net cash provided by investing activities was \$18.5 million for the six months ended June 30, 2013. These amounts are primarily the result of the net purchases and maturities of investment securities.

Net cash provided by financing activities was \$677,000 and \$534,000 for the six months ended June 30, 2014 and 2013, respectively. The net cash used in financing activities in 2014 and 2013 was a result of proceeds from the issuance of common stock due to exercises of stock options and purchases under the employee stock purchase plan.

We cannot be certain if, when or to what extent we will receive cash inflows from the commercialization of our product candidates. We will incur substantial additional development expenses to conduct the Light Study for NB32 and to develop Empatic. We initiated the Light Study in June 2012. Prior to its commencement, we anticipated that the costs to conduct the

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Light Study to the interim analysis would be approximately \$100.0 million. We believe the costs we have incurred to date and expect to incur in the future in connection with the conduct of the Light Study are consistent with our original projection. Until we finalize any future development plans for Empatic, including based on additional feedback from the FDA and our ability to secure a collaboration partner, we are not able to estimate the expenses required to further develop Empatic.

We have entered into license agreements to acquire the rights to develop and commercialize NB32 and Empatic. Pursuant to these agreements, we obtained exclusive and non-exclusive licenses to the patent rights and know-how for selected indications and territories. Under our license agreement with Duke University, we issued 442,624 shares of our common stock in March 2004 and may be required to make future milestone payments totaling up to \$1.7 million upon the achievement of various milestones related to regulatory or commercial events. Under our license agreement with Lee Dante, M.D., we issued an option to purchase 73,448 shares of our common stock in April 2004. We also paid Dr. Dante an upfront fee of \$100,000 and, in September 2010, we paid him an additional \$1.0 million upon the execution of the collaboration agreement with Takeda. In the future, we may be obligated to pay royalties to Dr. Dante related to certain revenues we receive in connection with any sublicense agreements we enter into, including our collaboration agreement with Takeda. Under our license agreement with Oregon Health & Science University, we issued 76,315 shares of our common stock in December 2003 and paid an upfront fee of \$65,000. Under these three agreements, we are also obligated to pay royalties on any net sales of the licensed products.

Our future capital uses and requirements depend on numerous factors. These factors include but are not limited to the following:

- the rate of progress and cost of the Light Study, and the scope, cost and timing of any additional clinical trials required for NB32 and clinical trials for Empatic, including expenses to support the trials and milestone payments that may become payable, and the decisions we make with respect to the continued development of such product candidates;
- the extent to which we in-license, acquire or invest in other indications, products, technologies and businesses;
- the terms and timing of any collaborative, licensing, co-promotion or other arrangements that we may establish with respect to NB32 or Empatic;
- the costs of establishing sales, marketing and distribution capabilities in order to commercialize NB32 if and when it is approved for marketing, should we elect to do so;
- the costs involved in enforcing or defending patent claims or other intellectual property rights;
- the costs and timing of regulatory approvals for NB32 and Empatic, if at all; and
- the successful commercialization of our products, if approved.

Although it is difficult to predict future liquidity requirements, we believe that our existing cash and cash equivalents and investment securities, available-for-sale will be sufficient to meet our projected operating requirements through the next 12 months.

Until we can generate significant cash from our operations, we expect to continue to fund our operations with existing cash resources, proceeds of potential offerings of our equity securities, debt, potential milestone payments under our existing collaboration agreement, receivables or royalty financings and potential future corporate collaborations and licensing arrangements. However, we cannot be sure that our existing cash and investment resources will be adequate, that additional financing will be available when needed or that, if available, financing will be obtained on terms favorable to us or our stockholders. Having insufficient funds may require us to delay, scale back or eliminate some or all of our development programs and/or our pre-commercialization and commercialization activities, relinquish some or even all rights to product candidates or renegotiate less favorable terms than we would otherwise choose. Failure to obtain adequate financing also may adversely affect our ability to operate as a going concern. If we raise additional funds by issuing equity securities, substantial dilution to existing stockholders would likely result. Debt, receivables and royalty financings may be coupled with an equity component, such as warrants to purchase stock, which could also result in dilution of our existing stockholders' ownership. If we raise additional funds through debt, receivables or royalty financings, the terms of such financings may involve significant cash payment obligations as well as covenants and specific financial requirements that may restrict our ability to operate our business.

Any turbulence in the U.S. and international markets and economies may adversely affect our ability to access the capital markets and obtain additional financing on terms acceptable to us, or at all.

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Off-Balance Sheet Arrangements

We have not engaged in any off-balance sheet activities as defined in Regulation S-K 303(a)(4)(ii).

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There has been no material change in the our assessment of our sensitivity to market risk since the presentation set forth in Item 7A, “Quantitative and Qualitative Disclosures About Market Risk,” in our Annual Report on Form 10-K for the year ended December 31, 2013.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Securities Exchange Act of 1934, as amended, or the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we carried out an evaluation of the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a — 15(e) and 15d — 15(e) under the Exchange Act) as of June 30, 2014. Based on such evaluation, our management has concluded as of June 30, 2014, our disclosure controls and procedures are effective.

Changes in Internal Control over Financial Reporting

There has been no change in our internal controls over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

In May 2013, we received a shareholder demand alleging that certain option grants to our President and Chief Executive Officer, Michael A. Narachi, our Chief Business Officer and acting-Chief Financial Officer, Joseph P. Hagan, and our Senior Vice President, General Counsel and Secretary, Heather D. Turner, in 2011 were granted in excess of the 1,500,000 share limit set forth in Section 3.3 of the Orexigen Therapeutics, Inc. 2007 Equity Incentive Award Plan, or Plan, as to the number of shares of our common stock with respect to which one or more stock awards may be granted to any one eligible participant during any of our fiscal years. We refer to this limit as the 162(m) Award Limit. Our board of directors established a demand review committee composed of independent directors to conduct an investigation with respect to the shareholder demand and to make recommendations to our board of directors. The demand review committee engaged independent counsel as part of its investigation and evaluated (1) the terms of the Plan, (2) the initial issuance procedures for the option grants to Mr. Narachi, Mr. Hagan and Ms. Turner during 2011, (3) the authority available to the compensation committee of our board of directors under its charter and the Plan, (4) the expectations of the award recipients and (5) the intent of our board of directors and the compensation committee regarding the availability of an exemption from the deductibility limitations of Section 162(m) of the Internal Revenue Code for such option grants. Following its investigation, the demand review committee determined that the 162(m) Award Limit first became effective as of June 2, 2011, and that, therefore, awards granted under the Plan prior to June 2, 2011, did not count toward the 162(m) Award Limit. The demand review committee determined that the awards granted to Mr. Hagan between June 2, 2011 and December 31, 2011 did not exceed the 162(m) Award Limit. The demand review committee further determined that the options granted to Mr. Narachi and Ms. Turner, including the portion of such awards in excess of the 162(m) Award Limit, were validly approved under the Plan, although the portion of those awards in excess of the 162(m) Award Limit does not qualify as performance-based compensation under Section 162(m). In September 2013, the compensation committee amended the Plan, with the approval of our board of directors, to take the following actions: (1) to clarify that the 162(m) Award Limit only applies to awards or the portion thereof intended to qualify as performance-based compensation under Section 162(m); and (2) to confirm that the compensation committee has the authority to make awards in excess of the 162(m) Award Limit, which board action we refer to as the Plan Amendment. The Plan Amendment is deemed effective as of June 10, 2011, consistent with the authority of the compensation committee as administrator of the Plan as of that date. Any grants under the Plan in excess of the 162(m) Award Limit are not intended to qualify as performance-based compensation under Section 162(m).

On December 6, 2013, a plaintiff claiming to be a shareholder of ours filed a derivative lawsuit purportedly on behalf of the Company against certain of our officers and the members of our board of directors, in the Superior Court for the State of California, County of San Diego, captioned *Wilkin v. Narachi, et al.* On December 9, 2013, the same shareholder who made a demand on the board in May 2013 filed a derivative lawsuit purportedly on our behalf against certain of our officers and current

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and former members of our board of directors in the United States District Court, for the Southern District of California, captioned *Turgeman v. Narachi, et al.* Both of the lawsuits assert claims for breach of fiduciary duty, waste and unjust enrichment based on, among other things, the alleged grant of stock options to certain officers in excess of the 162(m) Award Limit, repricing stock options allegedly in violation of our equity incentive plan, the board of directors' conduct in responding to the May 2013 shareholder demand, and making allegedly false and misleading statements. Both of the lawsuits seek, among other things, declaratory relief, corporate governance reforms, rescission of certain stock option awards, rescission of the Plan Amendment, injunctive relief, damages, restitution, disgorgement and attorney's fees. On July 23, 2014, we and the individual defendants filed a motion to dismiss the *Turgeman* complaint. A hearing on the motion to dismiss is currently scheduled for September 22, 2014. The current deadline to file a response to the *Wilkin* complaint is August 13, 2014. Although management believes that the claims lack merit and intends to defend against them vigorously, there are uncertainties inherent in any litigation and we cannot predict the outcome.

It is possible that securities class action litigation may be brought against us following stock price declines related to the release of information regarding our NB32 NDA or clinical trial results, including the Light Study or related to the matters alleged in the May 2013 shareholder demand and/or the Plan Amendment. Any adverse determination in such litigation could subject us to significant liabilities.

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Item 1A. Risk Factors.

You should carefully consider the following risk factors, as well as the other information in this report, before deciding whether to purchase, hold or sell shares of our common stock. The occurrence of any of the following risks could harm our business, financial condition, results of operations and/or growth prospects or cause our actual results to differ materially from those contained in forward-looking statements we have made in this report and those we may make from time to time. You should consider all of the factors described when evaluating our business.

We have marked with an asterisk () those risk factors that reflect substantive changes from the risk factors included in our previously filed Annual Report on Form 10-K for the year ended December 31, 2013.*

Risks Related to Our Business and Industry

Our success depends substantially on our product candidates, NB32 (naltrexone/bupropion, each in a sustained release, or SR, formulation) and Empatic™ (zonisamide/bupropion, each in a SR formulation). We cannot be certain that either product candidate will receive regulatory approval or be successfully commercialized. *

We currently have only a limited number of product candidates in development, and our business currently depends entirely on their successful development and commercialization. We currently have no drug products approved for sale, and we may never be able to develop marketable drug products. The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of drug products are subject to extensive regulation by the U.S. Food and Drug Administration, or FDA, and other regulatory authorities in the United States and other countries, whose regulations differ from country to country. Neither we nor our collaborative partner for NB32 (formerly referred to as Contrave®) in North America, Takeda Pharmaceutical Company Limited, or Takeda, are permitted to market our product candidates in the United States until we receive approval of a New Drug Application, or NDA, from the FDA, or in any foreign countries until we receive the requisite approval from the regulatory authorities of such countries.

In January 2011, we received a complete response letter, or CRL, from the FDA regarding our NDA for NB32. The CRL indicated that the FDA could not approve the NDA in its present form primarily due to concerns regarding the cardiovascular safety profile of NB32 when used long-term in a population of overweight and obese subjects. The CRL stated that before our NDA could be approved, we must conduct a randomized, double-blind, placebo-controlled trial of sufficient size and duration to demonstrate that the risk of major adverse cardiovascular events, or MACE, in overweight and obese patients treated with NB32 does not adversely affect the drug's benefit-risk profile. Our near-term success is substantially dependent on the approval of the NB32 NDA.

In September 2011, following a meeting with senior officials in the FDA's Office of New Drugs, or OND, we received written correspondence from the director of the OND detailing the OND's design requirements for a randomized, double-blind, placebo-controlled cardiovascular outcomes trial, or CVOT, for NB32 that would address the CRL. The CVOT as detailed would evaluate the occurrence of MACE in patients participating in the study. The exclusion of a doubling of risk of MACE in patients receiving NB32 compared to placebo was established as the threshold for approvability of NB32 during discussions with the FDA prior to the start of the CVOT. An interim analysis was planned once the CVOT's independent Data Monitoring Committee, or DMC, had determined that sufficient information had been gathered for the analysis that would include at least 87 adjudicated MACE. In February 2012, we reached agreement with the FDA on a Special Protocol Assessment, or SPA, for the CVOT. A SPA is a written agreement with the FDA on the details of the design and planned analysis for a clinical trial. A SPA is generally binding upon the FDA unless a substantial scientific issue essential to determining safety or efficacy is identified after the trial begins. Although we are not aware of any such issue, there is no assurance that the FDA will ultimately consider our SPA to be binding. Moreover, any change to the CVOT protocol can invalidate the SPA. If the FDA does not consider the SPA to be binding, the agency could assert that additional trial or data are required to support a regulatory submission.

In October 2012, we received a response to a formal dispute resolution request from the FDA's Center for Drug Evaluation and Research, or CDER. We had requested that NB32 be considered for approval on the basis of existing data together with a postmarketing requirement to supply the interim analysis of the CVOT shortly after approval. CDER denied this request, reaffirming that the cardiovascular outcomes data from the interim analysis of the CVOT is required prior to approval; however, CDER indicated that it was highly supportive of the exploration of a faster path to resubmission of the NB32 NDA. In January 2013, the FDA's Division of Metabolism and Endocrinology Products, or DMEP, proposed a resubmission procedure that would allow the DMC's summary report of the CVOT interim analysis to form the basis of the resubmission of the NB32 NDA. The complete clinical study report for the interim analysis, which would ordinarily form the basis for the NDA resubmission filing, would be provided to the FDA during its review of the NDA within 60 days of the NDA resubmission.

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We initiated the CVOT, which we refer to as the Light Study, in June 2012 and completed screening in December 2012, which resulted in approximately 8,900 patients randomized to treatment. In November 2013, after sufficient MACE had occurred, NB32 successfully achieved the pre-established criteria for the interim analysis in order to enable resubmission of the NB32 NDA. In December 2013, we resubmitted the NDA for NB32 to the FDA and the FDA assigned a Prescription Drug User Fee Act, or PDUFA, goal date of June 10, 2014 for the review of the resubmission, which was later reassigned one day beyond the original date to June 11, 2014 due to an FDA inadvertent administrative error. In June 2014, the FDA extended its review of the NDA for NB32 and assigned a new PDUFA goal date of September 11, 2014. The FDA indicated that the extension is needed to reach agreement on post-marketing obligations related to the previously agreed upon evaluation of cardiovascular outcomes of NB32. Under the resubmission procedure set forth by the DMEP, we submitted the clinical study report for the interim analysis in February 2014. We plan to continue the Light Study, blinded, until the trial is completed, even if NB32 is approved by the FDA in September 2014.

Even with the December 2013 resubmission, the timing and potential approval of the NDA is still subject to a number of risks and uncertainties, including:

- the potential for the FDA to issue a CRL or further delay or miss the scheduled PDUFA goal date of September 11, 2014 due to the FDA's internal resource constraints, failure to reach agreement on any post-marketing obligations or other reasons; and
- additional evaluation of the interim analysis and data from the continuing Light Study, including safety-related data, may produce negative or inconclusive results, or may be inconsistent with the initial conclusion that the interim analysis was successful.

In addition, other companies have previously publicly reported results from blinded studies conducted for their product candidates prior to trial completion and have faced trial integrity issues, and we can provide no assurance that the public announcement of the successful interim analysis and resubmission of the NDA will not introduce bias into the blinded, Light Study and later be deemed to jeopardize the integrity of the results of the Light Study. We have implemented procedures to limit the dissemination of the data underlying the interim analysis, but we cannot be sure that the data will not be disclosed publicly, whether inadvertently or otherwise. If the integrity of the trial were to be questioned, we could be required to conduct additional, costly studies, which results may not be consistent with the Light Study, or would otherwise affect the approvability of the NDA for NB32.

The conduct of the Light Study has been, and will continue to be, a lengthy, expensive, complex and uncertain process requiring the expenditure of substantial resources. Even though the interim analysis met the pre-specified threshold for resubmission of the NDA, we can provide no assurance that the results of the interim analysis will support approval of the NDA whether as a result of the factors identified in the CRL or otherwise. Moreover, the interim analysis may not be predictive of future results in the Light Study. The FDA has substantial discretion in the drug approval process, including the ability to delay, limit or deny approval of a product candidate for many reasons. For example:

- the FDA may not deem a product candidate safe and effective;
- the FDA may not find the data from preclinical studies and clinical trials, including the Light Study, sufficient to support approval;
- the FDA may not agree with our interpretation and characterization of efficacy and safety data from our clinical trials, including the Light Study;
- the FDA may require additional preclinical or clinical studies;
- the FDA may not approve of our third-party manufacturers' processes and facilities;
- the FDA may not approve of the formulation and/or the specifications of a product candidate;
- the FDA may not agree with our proposed labeling;
- the FDA may not approve our plan for any post-marketing requirement on cardiovascular outcomes; or
- the FDA may change its approval policies, adopt new regulations or provide new guidance.

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In addition, the FDA issued draft guidance on developing products for weight management in February 2007. The draft guidance provides recommendations on the design of studies evaluating the efficacy and safety of products intended to treat obesity. It also provides guidance on the general efficacy benchmarks required in pivotal trials for comparison against placebo. The FDA is not required to follow the draft guidance and can change this guidance, which could require us to conduct additional clinical trials for NB32 (in addition to the Light Study), or create other requirements that could have the effect of preventing or delaying approval. For example, the FDA held an advisory committee in late March 2012 to discuss cardiovascular safety assessment of obesity drugs. In that meeting, the Endocrinologic and Metabolic Drugs Advisory Committee, or EMDAC, voted 17 to 6 that obesity drugs without a theoretic risk or signal for cardiovascular harm should be required to rule out a certain degree of excess cardiovascular risk with a cardiovascular outcomes trial or any appropriately sized meta-analysis of Phase II and Phase III MACE data. Although we received written assurance from the OND that such advisory committee would not impact the CVOT advice provided in their letter, we cannot be assured of the outcome of that meeting or its effect on the SPA, draft guidance or on the development and approvability of our obesity product candidates. For example, we can provide no assurance that DMEP's interpretation of the input received from the March 2012 EMDAC meeting will not result in changes to the issued guidance regarding the development of obesity compounds, the Light Study design, or the need to conduct additional trials prior to potential approval of the NB32 NDA. Even if the FDA approves our NDA, the final results of the Light Study may not support continued approval of NB32.

Our other product candidate, Empatic, has been evaluated in Phase II clinical trials and it will need to successfully complete two or more pivotal trials, as well as potential additional non-pivotal clinical trials we may be required to conduct based on feedback we may receive from the FDA. Similar to NB32, obtaining approval of an NDA for Empatic will be a lengthy, expensive, complex and uncertain process that will require the expenditure of substantial resources. In addition, Empatic contains bupropion, the same active ingredient that gave rise to the FDA's concerns regarding the cardiovascular safety profile of NB32, which depending on the result of the NDA for NB32 and any additional studies we conduct for it, may adversely affect the development and regulatory approval prospects of Empatic.

In our discussions with the FDA on the continued development of Empatic, the FDA stated that Phase III data for Empatic may be sufficient to support submission of an NDA without data from a cardiovascular outcomes trial. The FDA indicated that as long as the placebo-subtracted changes in body weight, blood pressure and heart rate for Empatic are similar to or more favorable than the placebo-subtracted changes observed with NB32, and there are no signals of cardiovascular concern in the Empatic development program, reassuring results of a cardiovascular outcomes trial with NB32 will be sufficient. In addition, while the FDA reiterated its belief that the preclinical teratogenicity data for zonisamide and the pregnancy outcome data with Empatic from the Phase II clinical trials are very concerning, it will allow Phase III studies of Empatic to include women of childbearing potential with a body mass index, or BMI, $>27\text{kg/m}^2$ in the presence of at least one weight-related comorbidity such as hypertension, type 2 diabetes mellitus or dyslipidemia and a BMI $>30\text{kg/m}^2$ without additional restrictions if appropriate safety measures and adequate informed consent are provided. However, we can provide no assurance that such guidance by the FDA related to Empatic will not change prior to or during any continued development of Empatic. The FDA noted that similar safety measures and understanding of risk in the Phase III trials may need to be applied in the intended marketed population if Empatic is approved. The FDA added that additional worrisome pregnancy outcome data in the Empatic trials may have an impact on approvability, labeling or risk evaluation and mitigation strategy, or REMS.

Even if we receive approval of an NDA for NB32, the FDA may grant approval contingent on the performance of costly additional clinical trials which may be required after approval. The FDA also may approve NB32 for fewer or more limited indications or a narrower patient population than we originally requested, and the FDA may not approve the labeling that we and our collaborative partner believe is necessary or desirable for the successful commercialization of NB32. Any failure to obtain regulatory approval of NB32 would limit our ability to ever generate revenues (and any failure to obtain such approval for all of the indications and labeling claims we deem desirable could reduce our potential revenue), would potentially harm the development prospects of Empatic and would have a material and adverse impact on our business.

Our SPA with the FDA relating to the NB32 CVOT does not guarantee any particular outcome from regulatory review of the trial or the product candidate, including NDA approval.

The protocol for the Light Study was reviewed by the FDA under its SPA process, which allows for FDA evaluation of a clinical trial protocol in support of an NDA, and provides an agreement that the study design, including trial size, clinical endpoints and/or data analyses are acceptable to the FDA. However, the SPA agreement is not a guarantee of approval, the FDA retains the right to require additional testing and we cannot be certain that the design of, or data collected from, the Light Study will be adequate to demonstrate the safety of NB32, or otherwise be sufficient to support FDA or any foreign regulatory approval. Although the SPA agreement calls for review of interim data, and such interim data was submitted in connection with our NDA resubmission, there is no assurance that such review will result in approval. Further, the SPA agreement is not binding on the FDA if public health concerns unrecognized at the time the SPA agreement was entered into

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become evident, other new scientific concerns regarding product safety or efficacy arise, or if we fail to comply with the agreed upon trial protocols. The March 2012 EMDAC meeting, as well as the FDA's interpretation of the input received at the meeting, heightens these risks. While the FDA stated that the March 2012 EMDAC meeting will not impact the advice provided in the OND's letter and the agency will honor the advice provided, we cannot be certain that the FDA will not seek to alter the agreement reached in the SPA. In addition, the SPA agreement may be changed by us or the FDA on written agreement of both parties, and the FDA retains significant latitude and discretion in interpreting the terms of the SPA agreement and the data and results from the Light Study. As a result, we do not know how the FDA will interpret the parties' respective commitments under the SPA agreement, how it will interpret the data and results from the Light Study, or whether NB32 will receive any regulatory approvals as a result of the SPA agreement or the Light Study. Therefore, significant uncertainty remains regarding the clinical development and regulatory approval process for NB32.

Our clinical trials, including the Light Study, may fail to demonstrate acceptable levels of safety or efficacy of our product candidates, which could prevent or significantly delay their regulatory approval. *

Our product candidates are prone to the risks of failure inherent in drug development. Before obtaining regulatory approvals for the commercial sale of NB32, Empatic or any other product candidate for a target indication, we must demonstrate with substantial evidence gathered in adequate and well-controlled clinical trials, and, with respect to approval in the United States, to the satisfaction of the FDA and, with respect to approval in other countries, similar regulatory authorities in those countries, that the product candidate is safe and effective for use for that target indication. Based on our communications with the FDA, we must conduct a cardiovascular outcomes trial to assess NB32 compared to placebo on the occurrence of MACE, including nonfatal myocardial infarction, nonfatal stroke, or cardiovascular death in overweight and obese patients. The FDA has indicated that NB32 could be approved prior to completion of the cardiovascular outcomes trial based on the resubmission of interim data. We and the FDA estimated that such a study would require approximately 87 total MACE events by the interim data analysis to enable resubmission of the NB32 NDA for approval. In February 2012, we reached agreement with the FDA on the SPA for the CVOT. We initiated the CVOT, which we refer to as the Light Study, in June 2012. In November 2013, after sufficient MACE had occurred, NB32 successfully achieved the pre-established criteria for the interim analysis in order to enable resubmission of the NB32 NDA. In December 2013, we resubmitted the NDA for NB32 with the FDA and in January 2014, the FDA assigned a PDUFA goal date of June 10, 2014 for the review of the resubmission, which was later reassigned one day beyond the original date to June 11, 2014 due to an FDA inadvertent administrative error. In June 2014, the FDA extended its review of the NB32 NDA and a new PDUFA goal date of September 11, 2014 was assigned. However, even though the interim analysis met the pre-specified criteria for NDA resubmission, we can provide no assurance that the interim analysis or the Light Study will demonstrate acceptable levels of cardiovascular risk or that the interim analysis or results of the Light Study will support approval of the NB32 NDA.

Although we received written assurance from the OND that the March 2012 EMDAC meeting would not impact the advice provided in their letter, we cannot assure you that the DMEP's interpretation of the input received from the March 2012 EMDAC meeting would not result in changes to the Light Study design, issued guidance regarding the development of obesity compounds or the need to conduct additional trials prior to potential approval of the NB32 NDA, irrespective of the SPA. In addition, additional evaluation of the interim analysis, including safety-related data, may produce negative or inconclusive results, or may be inconsistent with the conclusion that the interim analysis was successful.

With respect to Empatic, in September 2009, we announced the results of our latest Phase IIb clinical trial which we believe established that the combination of Empatic's components is more effective than the individual components. It is not clear what magnitude of superiority the FDA will require Empatic to demonstrate versus the most active individual component in order to agree that Phase III clinical trials may be conducted against placebo only. In addition, Empatic contains bupropion, the same active ingredient that gave rise to the FDA's concerns regarding the cardiovascular safety profile of NB32, which depending on the result of the NDA for NB32 and any additional studies we conduct for it, as well as the FDA's interpretation of the input received from the March 2012 EMDAC meeting, may adversely affect the development of Empatic. In our discussions with the FDA on the continued development of Empatic, the FDA stated that Phase III data for Empatic may be sufficient to support submission of an NDA without data from a cardiovascular outcomes trial. The FDA indicated that as long as the placebo-subtracted changes in body weight, blood pressure and heart rate for Empatic are similar to or more favorable than the placebo-subtracted changes observed with NB32, and there are no signals of cardiovascular concern in the Empatic development program, reassuring results of a cardiovascular outcomes trial with NB32 will be sufficient. In addition, while the FDA reiterated its belief that the preclinical teratogenicity data for zonisamide and the pregnancy outcome data with Empatic from the Phase II clinical trials are very concerning, it will allow Phase III studies of Empatic to include women of childbearing potential with a body mass index, or BMI, $>27\text{kg/m}^2$ in the presence of at least one weight-related comorbidity such as hypertension, type 2 diabetes mellitus or dyslipidemia and a BMI $>30\text{kg/m}^2$ without additional restrictions if appropriate safety measures and adequate informed consent are provided. The FDA noted that similar safety measures and understanding of risk in the Phase III trials may need to be applied in the intended marketed population if Empatic is approved. The FDA added

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that additional worrisome pregnancy outcome data in the Empatic trials may have an impact on approvability, labeling or REMS. However, we can provide no assurance that such guidance by the FDA related to Empatic will not change prior to or during any continued development of Empatic.

In addition, we may need to complete additional preclinical testing of our product candidates to evaluate safety and toxicity and the FDA may require us to conduct additional clinical trials. The results from the preclinical and clinical trials that we have completed for NB32 and Empatic may not be replicated in future trials, or we may be unable to demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals for either product candidate. A number of companies in the biotechnology and pharmaceutical industries have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. If our drug candidates are not shown to be safe and effective in clinical trials, our clinical development programs could be delayed or terminated. Any delays could also result in the need for additional financing, and our failure to adequately demonstrate the efficacy and safety of NB32, Empatic or any other product candidates that we may develop, in-license or acquire would prevent receipt of regulatory approval and, ultimately, the commercialization of that product candidate.

Delays in the commencement or completion of clinical trials, including the Light Study, or the requirement to conduct additional clinical trials could result in increased costs to us and delay or limit our ability to continue development programs and/or generate revenues.

Delays in the commencement or completion of clinical trials, including the Light Study, could significantly affect our product development costs. We do not know whether clinical trials will begin on time or whether clinical trials, including the Light Study, will be completed on schedule, if at all. The commencement and completion of clinical trials, including the Light Study, can be delayed for a number of reasons, including delays related to:

- obtaining regulatory approval to commence a clinical trial, including regulatory approval of the design of a clinical trial;
- reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- manufacturing sufficient quantities of a product candidate for use in clinical trials;
- obtaining institutional review board, or IRB, approval to conduct a clinical trial at a prospective site;
- recruiting and enrolling patients to participate in clinical trials for a variety of reasons, including competition from other clinical trial programs for the treatment of obesity or similar indications and the restrictions imposed by the design and length of a clinical trial;
- retaining patients who have initiated a clinical trial, including the Light Study, but may be prone to withdraw due to side effects from the therapy, lack of efficacy or personal issues, or who are lost to further follow-up;
- the status of our collaborative relationship with Takeda with respect to any additional clinical trials required for NB32; and
- collecting, reviewing and analyzing our clinical trial data.

Clinical trials may also be delayed as a result of ambiguous or negative interim results. In addition, a clinical trial, including the Light Study, may be suspended or terminated by us, a collaborative partner, the FDA, the IRB overseeing the clinical trial at issue, any of our clinical trial sites with respect to that site, or other regulatory authorities due to a number of factors, including:

- failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols;
- lack of adequate funding or other resources to continue the clinical trial;
- inspection of the clinical trial operations or trial sites by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;

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- unforeseen safety issues; and
- logistical and operational challenges inherent in complex clinical trials.

Additionally, changes in regulatory requirements and guidance for developing products for weight management may occur and we may need to initiate new clinical trials or change protocols of existing clinical trials to account for these changes. For instance, based on the FDA's interpretation of the input received from the March 2012 EMDAC meeting, the FDA may issue final guidance on developing products for weight management. While we believe the designs of our pivotal clinical trials for NB32 and the design for the Light Study are consistent with the current recommendations made by the FDA in the draft guidance, we cannot guarantee that the FDA will not require different or additional clinical trials or studies to support regulatory approval in addition to the Light Study. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials, including the Light Study, may also ultimately lead to the termination of a development program and/or the denial of regulatory approval of a product candidate, including the denial of the NB32 NDA.

Our product candidates may cause undesirable side effects that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other regulatory authorities. NB32 has been evaluated in four completed Phase III clinical trials, which we refer to collectively as the Contrave® Obesity Research, or COR, program. Across the entire COR program, seven patients experienced serious adverse events that were attributed by investigators as possibly related or related to NB32 treatment. These include cholecystitis (gallbladder inflammation) (2), seizure (2), palpitations (1), paresthesia (1) and vertigo (1). The most frequently observed treatment-emergent adverse events were nausea, constipation, vomiting and dizziness. Nausea was the leading adverse event resulting in discontinuation; however, for the majority of patients experiencing nausea, it was mild to moderate, transient and manageable. In the Light Study interim analysis, there were no unexpected new safety signals observed. Serious adverse events and adverse events leading to discontinuation were generally consistent with the overall safety profile established in the COR program. However, these conclusions are only preliminary and based on the interim analysis, and may change upon further review of the data in connection with the ongoing conduct of the trial. In September 2009, we announced the results from our latest Phase IIb clinical trial for Empatic. The most frequent side effects observed in this clinical trial were headache, nausea and insomnia. Adverse events and laboratory findings appeared to be consistent with the individual components of Empatic, bupropion and zonisamide. Specifically, infrequent reports of idiopathic neutropenia, or transient extremely low white blood cell counts, were observed. Sulfonamides, of which zonisamide belongs, are one of many classes of drugs which have been reported to infrequently cause benign, idiopathic neutropenia.

The safety data we have disclosed to date represents our interpretation of the data at the time of disclosure and it is subject to our further review and analysis. Serious adverse events have been reported to the FDA and study investigators as required in accordance with current guidelines and standards. Serious adverse events that are not characterized by clinical investigators as possibly related to our study drug or adverse events that occur in small numbers may not be disclosed to the public until such time the various documents submitted to the FDA as part of the approval process are made public. We are unable to determine if the subsequent disclosure of adverse events will have an adverse effect on our stock price. In addition, our interpretation of the safety data from our clinical trials is contingent upon the review and ultimate approval of the FDA. The FDA may not agree with our methods of analysis or our interpretation of the results.

In addition, the constituent drugs of each of our product candidates each has its own side effect profile that is included in the respective current product label. If our product candidates are approved by the FDA, we would anticipate that their labels would include the side effect profiles of each of the constituent drugs. Moreover, patients in our clinical trials may experience side effects that are indicated in the constituent drugs' labels, as was the case with the side effects experienced by patients in our clinical trials of NB32 and Empatic to date. In addition, while the constituent drugs that make up NB32 and Empatic have post-marketing safety records and while we have tested these constituent drugs in combination in our clinical trials of NB32 and Empatic to date, the safety of the combined use of the constituents of NB32 and Empatic is not yet fully known, and any future trials may produce side effects not observed to date. For example, despite our interim analysis for the Light Study, analysis of subsequent data from the Light Study may demonstrate that the risk of MACE in overweight and obese patients treated with NB32 adversely affects the drug's benefit-risk profile and could delay or prevent the regulatory approval of NB32. In addition, in the Light Study the incidence of known side effects may occur at increased rates or new undesirable side effects may arise that could delay or prevent the regulatory approval of NB32. The approvability and eventual labeling of NB32 and Empatic will be determined by the safety experience with the drugs in the context of their relative merits (efficacy) in an obese population. Any of the side effects of NB32 or Empatic, or their individual constituent drugs, could delay or prevent their regulatory approval or limit the commercial profile of an approved label.

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Further, if any of our product candidates receives marketing approval and we or others, including our collaborative partner, identify undesirable side effects caused by the product (or any other similar product) after the approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw or limit their approval of the product;
- regulatory authorities may require the addition of labeling statements, such as a “boxed” warning with NB32 or Empatic or a contraindication;
- we may be required to change the way the product is distributed or administered, conduct additional clinical trials or change the labeling of the product;
- we or our collaborative partner may decide to remove the products from the marketplace;
- we could be sued and held liable for injury caused to individuals exposed to or taking our product candidates; and
- our reputation may suffer.

Any of these events could prevent us and our collaborative partner from achieving or maintaining market acceptance of the affected product candidate and could substantially increase the costs of commercializing our product candidates and significantly impact our ability and our collaborative partner’s ability to successfully commercialize our product candidates and generate revenues.

We rely primarily on third parties to assist us in the preparation of our regulatory applications and conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates within our expected timeframes or at all.

We are currently working with a number of CROs for monitoring, oversight and statistical support for the Light Study. In addition, we expect to use a CRO to assist us with the development of Empatic and the preparation of the regulatory submissions for our product candidates. The third parties with whom we contract for preparation of our regulatory applications and execution of our clinical trials play a significant role in the preparation of regulatory applications, the conduct of our clinical trials and the subsequent collection, review and analysis of data. These third parties, including CROs and investigators, are not our employees, and we have limited ability to control the amount or timing of resources that they devote to our programs. If our CROs, consultants or independent investigators fail to devote sufficient time and resources to our drug development programs and related regulatory applications, or if their performance is substandard, it may delay the potential approval of our regulatory applications and the commercialization of our product candidates. In addition, the execution of clinical trials, the subsequent compilation, review and analysis of the data produced and the preparation of regulatory applications requires coordination among various parties. In order for these functions to be carried out effectively and efficiently, it is imperative that these parties provide the necessary resources and communicate and coordinate with one another. If these third parties are unable to provide the necessary resources or coordinate and communicate with one another, our clinical trials may be delayed or the completion and analysis of the data and the related regulatory applications may be delayed or compromised. Moreover, these third parties may also have relationships with other commercial entities, some of which may compete with us. If these third parties also contract to provide services for our competitors, it could adversely affect our business.

If the contract manufacturers upon whom we rely fail to produce our product candidates in the volumes that we and our current and any future collaborative partner require on a timely basis, or fail to comply with stringent regulations applicable to pharmaceutical drug manufacturers, we and such collaborative partner may face delays in the development and commercialization of our product candidates.

We do not currently possess nor do we plan to implement manufacturing processes internally. We currently utilize the services of contract manufacturers to manufacture our clinical supplies. These clinical supplies include the formulations of our product candidates’ active pharmaceutical ingredients, or API, from our API suppliers, the tablets combining those components and the bottles used to package these tablets for use in clinical trials. If the contract manufacturers upon whom we rely fail to produce our product candidates in the volumes required on a timely basis, we may face delays in the development of our product candidates. In addition, pursuant to an amendment to our collaboration agreement with Takeda,

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effective in September 2013 Takeda assumed from us the responsibility to package NB32 for commercial sale in the United States, Canada and Mexico. We will continue to supply bulk tablets of NB32 to Takeda in accordance with the terms of the collaboration agreement.

In March 2010, we entered into a long-term manufacturing services agreement, or manufacturing agreement, with Patheon Pharmaceuticals and Patheon Inc., which we collectively refer to as Patheon, pursuant to which Patheon has agreed to manufacture commercial quantities of our NB32 tablet products. Under the terms of the manufacturing agreement, as amended by the parties in November 2013, we are required to purchase from Patheon a certain percentage of our requirements for NB32 tablet products intended for commercial sale, provided certain terms and conditions are met. The initial term of the manufacturing agreement commenced in March 2010 and shall continue in effect until December 31st of the year that is five years from the date NB32 first receives approval for marketing from the FDA or any foreign regulatory agencies competent to grant marketing approvals for pharmaceutical products. Upon expiration of the initial term, the agreement will be automatically renewed for additional two year terms. Patheon may terminate the manufacturing agreement at any time upon specified prior written notice to us. We may also terminate the manufacturing agreement with specified prior written notice to Patheon, subject to our payment of certain termination amounts. Either party may terminate the manufacturing agreement effective immediately upon written notice to the other in the event that (a) the other party dissolves, is declared insolvent or bankrupt by a court of competent jurisdiction, (b) a voluntary petition of bankruptcy is filed in any court of competent jurisdiction, or (c) the manufacturing agreement is assigned for the benefit of creditors. We may terminate the manufacturing agreement upon specified prior written notice if any governmental or regulatory authority, including, but not limited to, the FDA, takes any action, or raises any objection, that prevents us from importing, exporting, purchasing or selling NB32 tablet products. We are also required to give specified advance notice if we intend to no longer order commercial supplies of NB32 tablet products pursuant to the manufacturing agreement due to the product's discontinuance in the market. Patheon may terminate the manufacturing agreement upon specified prior written notice to us if we assign any of our rights under the manufacturing agreement to an assignee that, in the opinion of Patheon acting reasonably, is (a) not a credit worthy substitute for us, or (b) a competitor of Patheon. Moreover, either party may terminate the manufacturing agreement upon written notice to the other party where the other party has failed to remedy a material breach of any of its representations, warranties, or other obligations under the manufacturing agreement within a specified period of time following receipt of a written notice of the breach, subject to specified terms and conditions.

If we change to other manufacturers in the future, the FDA and comparable foreign regulators must approve these manufacturers' facilities and processes prior to use, which would require new testing and compliance inspections, and the new manufacturers would have to be educated in or demonstrate successful technology transfer of the processes necessary for the production of our product candidates.

The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products often encounter difficulties in production, particularly in scaling up for commercial production. These problems include difficulties with production costs and yields, quality control, including stability of the product candidate and quality assurance testing, shortages of qualified personnel and production capacity, equipment failures as well as compliance with strictly enforced federal, state and foreign regulations, which include product requirements established by the FDA or other regulatory agencies and stability requirements in other foreign countries that our current product candidate formulations may not be able to meet. If our manufacturers were to encounter any of these difficulties in the United States or in other foreign countries or otherwise fail to comply with their obligations to us, or if we or our collaborative partner do not accurately forecast our demand, our ability or our collaborative partner's ability to provide product candidates to patients in our and our current and any future collaborative partner's clinical trials, including the Light Study, or to commercially launch a product candidate would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, including the Light Study, increase the costs associated with maintaining a clinical trial program and, depending upon the period of delay, require us or such collaborative partner to commence new trials at significant additional expense or terminate the trials completely.

In addition, all manufacturers of our products must comply with current good manufacturing practice, or cGMP, requirements enforced by the FDA through its facilities inspection program. These requirements include, among other things, quality control, quality assurance and the generation and maintenance of records and documentation. Manufacturers of our products may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. While we have implemented a quality oversight program, we have little control over our manufacturers' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any product supplied is compromised due to our manufacturers' failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully complete the Light Study or any other

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required clinical trials or commercialize our products, and we may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical trials, including the Light Study, regulatory submissions, approvals or commercialization of our product candidates, entail higher costs or result in our or our current or any future collaborative partner being unable to effectively commercialize our products. Furthermore, if our manufacturers fail to deliver the required commercial quantities on a timely basis, pursuant to provided specifications and at commercially reasonable prices, we and our current and any future collaborative partner may be unable to meet demand for our products and would lose potential revenues.

There are labeled adverse side effects to the individual use of bupropion, naltrexone and zonisamide.

A key constituent of NB32 and Empatic is bupropion, which has been approved by the FDA for the treatment of depression and to assist smoking cessation. The FDA has directed manufacturers of all antidepressant drugs to include in their product labels a “boxed” warning and expanded warning statements regarding an increased risk of suicidal thinking and behavior in children and adolescents being treated with these drugs. The package insert for bupropion includes such a “boxed” warning statement. In December 2006, the FDA held an advisory committee meeting regarding suicidal thinking and behavior in adults being treated with antidepressant drugs. The advisory committee recommended that the “boxed” warning be extended to cover adults up to their mid-20’s. To the extent that any additional warnings or labeling changes related to suicidal thinking and behavior in adults are required, we expect that any such additional warnings or other labeling changes will also be required on labeling for both NB32 and Empatic, if approved. In July 2009, the FDA issued a news release announcing that it was requiring manufacturers to put a “boxed” warning on the prescribing information for smoking cessation drugs including Zyban®, which is a branded form of bupropion. The warning highlights the risk of serious mental health events including changes in behavior, depressed mood, hostility, and suicidal thoughts. Although neither NB32 nor Empatic is intended to be promoted for or used in the treatment of major depression or smoking cessation, we expect that a similar warning statement will be required on labeling for both NB32 and Empatic, particularly because it is likely that there will be obese patients who smoke or depressed obese patients who will use these product candidates, if approved.

The FDA has also directed manufacturers of antidepressant drugs to create Medication Guides to be distributed to patients regarding the risk of suicidal thinking and behavior in children and adolescents. Although we have not included children or adolescents in either the NB32 or Empatic clinical trials, it is possible that the FDA will require a Medication Guide for both NB32 and Empatic. These warnings and other requirements may have the effect of limiting the market acceptance by our current and any future collaborative partner’s targeted physicians and patients of NB32 and Empatic, if these product candidates are approved.

The other constituent of NB32, naltrexone, has been approved by the FDA for the treatment of alcohol and opioid dependence. The FDA has directed the manufacturers of naltrexone for these indications to include in their product labels a “boxed” warning and expanded warnings statements regarding hepatotoxicity, or liver toxicity. A similar warning statement may be required on labeling for NB32, if approved.

Each of the constituent drugs included in the NB32 and Empatic combinations has in its package insert a “Category C” pregnancy precaution. This means that animal studies have shown that each of these constituent drugs has the potential to cause birth defects and that there have been no adequate and well-controlled studies of the constituent drugs in pregnant women, but that the FDA has determined that the benefits from the use of such drugs in pregnant women may be acceptable despite the potential risks. In addition, although NB32 is not known to be teratogenic, it appears from a recent FDA action, in which the FDA stated that weight loss offers no potential benefit to a pregnant woman and may result in fetal harm, that the FDA is likely to classify all weight loss pharmaceutical products as Category X. Both of the obesity therapeutics approved by the FDA in 2012 and orlistat have Category X pregnancy precautions.

Zonisamide, a constituent drug of Empatic, also has a warning that women of childbearing age should be advised to use contraception due to the teratogenicity seen in animal studies. In addition, because of concerns published in academic journals regarding the possible developmental effects of zonisamide in animals as well as reports from Japan in which women receiving zonisamide combined with other anticonvulsants had children with birth defects, it is likely that Empatic, if approved, will receive a “Category X” pregnancy precaution and thus, would be contraindicated for use by pregnant or nursing women with warnings about use of Empatic in women of childbearing age. This means that there could be a labeling limitation or REMS on the use of Empatic without adequate contraception or perhaps a prohibition on the use of Empatic by all women of childbearing age. Although we have designed our clinical trials to educate women about the necessity of using adequate contraception while taking, and for a period of time after taking, our product candidates, women may not take the necessary precautions to prevent pregnancy and as a result, women taking our product candidates may risk bearing children with birth defects. For example, during the first Phase IIb trial, four women on Empatic became pregnant and carried the pregnancies to term. Three of the pregnancies resulted in normal infants at birth. In the fourth case there were birth abnormalities, one of which, a cardiac abnormality, was corrected surgically. Although this case is a complicated one with a number of plausible,

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alternative etiologies, it has been reported by the investigator as a serious adverse event and possibly related to Empatic. Sulfonamides, of which zonisamide belongs, are one of many classes of drugs which have been reported to infrequently cause benign, idiopathic neutropenia, or transient extremely low white blood cell counts. Infrequent reports of idiopathic neutropenia were observed in our Empatic Phase IIb trial.

The FDA has issued an alert based on updated clinical data that treatment with zonisamide can cause metabolic acidosis in some patients. Metabolic acidosis is a disturbance in the body's acid-base balance that results in excessive acidity in the blood. The FDA recommended that healthcare professionals monitor for metabolic acidosis at the start of treatment with zonisamide and periodically during treatment with zonisamide even in the absence of symptoms. We have been monitoring for metabolic acidosis in all of our Empatic clinical trials, and we have not observed any clinically meaningful cases of metabolic acidosis. A warning statement about metabolic acidosis may be required in the labeling for Empatic.

The FDA has analyzed reports of suicidal behavior or ideation from placebo-controlled clinical studies of eleven anticonvulsants (including zonisamide). In the FDA's analysis, patients receiving anticonvulsants had approximately twice the risk of suicidal behavior or ideation compared to patients receiving placebo. The relative risk for suicidal behavior or ideation was higher in the patients with epilepsy compared to patients who were given one of the anticonvulsants for conditions other than epilepsy. The FDA has indicated that it will be working with manufacturers of marketed anticonvulsants to include this new information in the labeling of these products. It is possible that any changes related to suicidal behavior or ideation that occur to the labels of these anticonvulsants will be required on the labeling for Empatic, if approved.

Notwithstanding the existing labeling for the constituents of our drugs in development, the FDA may choose to apply more stringent warning statements or stronger classifications or categorizations of risk in the labeling for NB32 or Empatic, if approved, based on the different risk-benefit profile of our product candidates in the context of unmet need in the treatment of obesity, as compared to the approved indications for the constituent drugs of NB32 and Empatic. For example, the label ultimately approved for NB32 or Empatic, if any, may include restrictions on use that may not appear in the existing labeling for the constituent drugs in NB32 or Empatic, including restrictions based on pregnancy status, level of obesity and duration of treatment or a "boxed" warning consistent with those for antidepressants, anticonvulsants, products for smoking cessation, naltrexone or otherwise.

Any of these known side effects and any associated warning statements or classification or categorization of risk may limit the commercial profile of an approved label for our product candidates and prevent us or our collaborative partner from achieving or maintaining market acceptance of our product candidates.

The CRL we received for the NB32 NDA may also materially and adversely affect our Empatic development program.

Empatic contains bupropion, the same active ingredient that gave rise to the FDA's concerns regarding the cardiovascular safety profile of NB32. We are unable to predict whether the FDA may extend the requirement to conduct a CVOT to Empatic as well or whether the March 2012 EMDAC meeting will result in other such requirements. In our discussions with the FDA on the continued development of Empatic, the FDA stated that Phase III data for Empatic may be sufficient to support submission of an NDA without data from a CVOT. The FDA indicated that as long as the placebo-subtracted changes in body weight, blood pressure and heart rate for Empatic are similar to or more favorable than the placebo-subtracted changes observed with NB32, and there are no signals of cardiovascular concern in the Empatic development program, reassuring results of a CVOT with NB32 will be sufficient. Even though the Light Study interim analysis met the pre-specified threshold for resubmission of our NDA, later evidence we gather from the Light Study may not demonstrate that NB32 is safe and effective for use in our target indication and, moreover, may demonstrate that the risk of adverse cardiovascular events in overweight and obese patients treated with NB32 adversely affects the drug's benefit-risk profile. Such a result could not only delay or terminate our development program for NB32, but Empatic as well, which could result in our inability to continue operations because we currently have no additional product candidates in development.

Even if our product candidates receive regulatory approval, they may still face future development and regulatory difficulties.

Even if U.S. regulatory approval is obtained, the FDA may still impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies. For example, the label ultimately approved for NB32 or Empatic, if any, may include restrictions on use, including restrictions based on pregnancy status, level of obesity and duration of treatment or a "boxed" warning consistent with those for antidepressants, anticonvulsants, products for smoking cessation, naltrexone or otherwise. Our product candidates will also be subject to ongoing FDA requirements governing the labeling, packaging, storage, advertising, promotion, recordkeeping and submission

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of safety and other post-market information. In addition, we are unable to predict whether the FDA may require a CVOT for Empatic or if the FDA will request additional clinical trials be conducted after either product candidate receives regulatory approval. We may not have the resources to conduct such additional clinical trials, if required, and our ability to comply with the FDA requirements may be negatively impacted.

Manufacturers of drug products and their facilities are also subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP regulations. If we, a collaborative partner or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured (including a change or revision to the specifications set forth in the facility's drug master file, or DMF), a regulatory agency may impose restrictions on that product, the manufacturer, our collaborative partner or us, including requiring withdrawal of the product from the market or suspension of manufacturing. If we, a collaborative partner, our product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue Warning Letters or untitled letters;
- impose civil or criminal penalties;
- suspend regulatory approval;
- suspend any ongoing clinical trials, including the Light Study;
- refuse to approve pending applications or supplements to applications filed by us;
- impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products or require us or our collaborative partner to initiate a product recall.

If the suppliers upon whom we rely for API fail to produce such ingredients in the volumes that we or our collaborative partner require on a timely basis, or to comply with stringent regulations applicable to pharmaceutical drug manufacturers, we or our collaborative partner may face delays in the development or commercial launch of our product candidates.

We do not manufacture any of our API nor do we plan to develop any capacity to do so. Instead, we rely on suppliers of API to provide component materials to our other contract manufacturers, who produce finished pharmaceutical products incorporating the API. The failure or inability of our API suppliers to satisfy our API requirements on a timely basis could delay our development programs, including the Light Study, or commercial launch of our product candidates, if approved.

Although naltrexone itself is not addictive, synthesis of naltrexone is a multi-step process with a natural opiate starting material that has the potential for abuse and is therefore regulated as a controlled substance under the federal Controlled Substances Act or applicable foreign equivalents. As such, manufacturers of naltrexone API must be registered with the Drug Enforcement Administration, or DEA, or applicable foreign equivalents. Manufacturers making naltrexone also must obtain annual quotas from the DEA for the opiate starting material. Because of the DEA-related requirements and modest current demand for naltrexone API, there currently exist a limited number of manufacturers of this API. Therefore, API costs for naltrexone are greater than for the other constituents of our product candidates. Demand for NB32 may require amounts of naltrexone greater than the currently available worldwide supply or our or our collaborative partner's current forecasts for the supply to us of NB32 or its components. Any lack of sufficient quantities of naltrexone would limit our or our collaborative partner's ability to complete any additional required clinical trials, including the Light Study, and to launch and continue to commercialize NB32. Although we are evaluating additional possible manufacturers to supplement our current naltrexone manufacturing capacity, including those in the United States, Europe and Asia, we may not be successful in accessing additional manufacturing supply of naltrexone API or other necessary components of our product candidates at the appropriate quantities, quality or price.

We have entered into long-term supply agreements for the supply of naltrexone API. In January 2009, we entered into a supply agreement with Cilag AG, pursuant to which Cilag will manufacture commercial supplies of naltrexone for use in our drug products. The supply agreement shall continue in effect until four years from the period beginning on the first December 31st following marketing approval by the FDA for a drug product of ours containing naltrexone. Either party may terminate the supply agreement effective immediately upon written notice to the other in the event that (a) the other party dissolves, is declared insolvent or bankrupt by a court of competent jurisdiction, (b) a voluntary or involuntary petition of bankruptcy is filed in any court of competent jurisdiction, or (c) the supply agreement is assigned for the benefit of creditors. In addition, we may terminate the supply agreement effective immediately upon written notice in the event that (a) any regulatory

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agency takes any action, or raises any objection that prevents us from importing, exporting, purchasing or selling a finished product containing naltrexone, (b) the product containing naltrexone fails during clinical trials and we withdraw our NDA, (c) we determine, in our sole discretion, to no longer pursue the development and/or commercialization of a product containing naltrexone, or (d) a legal proceeding shall be instituted against Cilag, which is reasonably likely to materially adversely affect Cilag's ability to properly perform under the supply agreement or subject us to any material risk of liability or loss. Moreover, either party may terminate the agreement upon specified written notice of a failure by the other party to perform or observe any material covenant, condition or agreement to be performed or observed by it under the supply agreement, unless such breach has been cured within the specified notice period.

We entered into a supply agreement with Mallinckrodt LLC, effective in January 2013, pursuant to which Mallinckrodt will manufacture commercial supplies of naltrexone for use in our drug products. Pursuant to the terms of the supply agreement, we will pay a certain fixed price for such naltrexone, which prices may be adjusted, subject to specified limitations. We are required to purchase from Mallinckrodt a specified percentage of our requirements for naltrexone in our drug products containing naltrexone, which are intended for commercial sale, provided that certain terms and conditions are met.

The initial term of the supply agreement commenced in January 2013 and will continue in effect through December 2014. This initial term may only be renewed with the express written agreement of both parties. Either party may terminate the supply agreement effective immediately upon written notice to the other in the event that (a) the other party dissolves, is declared insolvent or bankrupt by a court of competent jurisdiction, (b) a voluntary or involuntary (if not dismissed within a specified number of days) petition of bankruptcy is filed in any court of competent jurisdiction, or (c) the supply agreement is assigned for the benefit of creditors. Either party may terminate the supply agreement upon specified written notice to the other party of a failure by that party to perform or observe any material covenant, condition or agreement to be performed or observed by it under the supply agreement, unless such breach has been cured within the specified notice period. We may terminate the supply agreement upon 60 days' prior written notice to Mallinckrodt in the event that, (a) any regulatory agency takes any action, or raises any objection that prevents us from importing, exporting, purchasing or selling naltrexone or any of our drug product containing naltrexone, (b) our drug product containing naltrexone fails during clinical trials and we withdraw our NDA, or (c) we determine, in our sole discretion, to no longer pursue the development and/or commercialization of any of our drug products containing naltrexone.

We have no other material, long-term commitments or supply agreements with any of our other API suppliers. Although we may seek to establish additional long-term supply commitments in the future, we may be required to agree to minimum volume requirements, exclusivity arrangements or other restrictions. We may not be able to enter into additional long-term agreements on commercially reasonable terms, or at all. Consequently, even if and when our product candidates are approved, we and our current and any future collaborative partner may not be able to successfully commercialize these product candidates if we are unable to secure long-term supply commitments for all of their API components.

In addition, our API suppliers must comply with cGMP requirements enforced by the FDA through its facilities inspection program and must maintain and comply with their respective DMFs on file with the FDA. These requirements include, among other things, quality control, quality assurance and the generation and maintenance of records and documentation. Suppliers of our API may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. While we have implemented a quality oversight program, we have little control over our manufacturers' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any product supplied is compromised due to our suppliers' failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products, and we may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical trials, including the Light Study, regulatory submissions, approvals or commercialization of our product candidates, entail higher costs or result in our and our current and any future collaborative partner being unable to effectively commercialize our products. Furthermore, if our suppliers fail to deliver the required commercial quantities of API on a timely basis, pursuant to the required specifications set forth in their respective DMF and at commercially reasonable prices, and we are unable to timely secure and qualify additional suppliers with applicable regulatory authorities, we and our current or any future collaborative partner may not be able to successfully commercialize our product candidates, any commercial launch could be delayed and/or we and such collaborative partner may be unable to meet demand for our products and would lose potential revenues.

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We are dependent on our collaboration with Takeda to commercialize NB32 in the United States, Canada and Mexico, and, if our NDA for NB32 is approved by the FDA, to further develop NB32. This collaboration may place the commercialization and, if applicable, the development outside our control, and poor performance under or failure to maintain the collaboration agreement between us and Takeda could have a material and adverse impact on our business.

In September 2010, we entered into a collaboration agreement with Takeda for the development and commercialization of NB32 in the United States, Canada and Mexico. Under the collaboration agreement as amended, Takeda is also responsible for the packaging of NB32 for commercial sale. We cannot be certain that our collaboration with Takeda will continue. Both we and Takeda have the right to terminate the collaboration agreement, in certain circumstances, prior to its expiration, including a right by Takeda to terminate the agreement upon specified prior written notice. If the agreement is terminated prior to its expiration, we may not be able to find another collaborator for the development and commercialization of NB32, and even if we elected to pursue further development and commercialization of NB32 on our own, we might not be able to do so successfully and would experience substantially increased capital requirements that we might not be able to fund.

Our dependence on Takeda and the collaboration agreement will subject us to a number of risks, including:

- Takeda may not perform as expected and we may not be able to control the amount and timing of resources that Takeda may devote to commercial packaging or the post-approval development or commercialization of NB32;
- we and Takeda could disagree as to pre-approval or post-approval development plans and Takeda may delay clinical trials, including the Light Study, or stop a clinical trial, including the Light Study;
- there may be disputes between us and Takeda, including disagreements regarding the collaboration agreement, that may result in (a) the delay of (or prevent entirely) the achievement of regulatory and commercial objectives that would result in milestone payments, (b) the delay or termination of the development, commercial packaging or commercialization of NB32, and/or (c) costly litigation or arbitration that diverts our management's attention and resources;
- Takeda may not comply with applicable regulatory guidelines with respect to the development, commercial packaging or commercialization of NB32, which could adversely impact the development of or sales of NB32 and could result in administrative or judicially imposed sanctions, including warning letters, civil and criminal penalties, injunctions, product seizures or detention, product recalls, total or partial suspension of production and refusal to approve any new drug applications;
- Takeda may not provide us with timely and accurate information regarding sales activities and supply forecasts, which could adversely impact our ability to comply with our manufacturing and supply obligations under the collaboration agreement and our and Takeda's ability to launch and commercialize NB32, if approved;
- Takeda may experience financial difficulties;
- business combinations or significant changes in Takeda's business strategy may also adversely affect Takeda's ability to perform its obligations under our collaboration agreement;
- Takeda may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation; and
- notwithstanding the non-competition requirements in the collaboration agreement, Takeda could independently move forward with a competing product candidate developed either independently or in collaboration with others, including our competitors.

Any failure of Takeda to adequately perform its obligations under our collaboration agreement or the termination of such agreement could have a material and adverse impact on our business.

We expect intense competition in the obesity marketplace for NB32 and Empatic, if approved, and new products may emerge that provide different or better therapeutic alternatives for obesity and weight loss.

If approved and commercialized, both NB32 and Empatic will compete with well-established prescription drugs for the treatment of obesity, including Xenical® (orlistat), marketed by Genentech, Inc. Orlistat has also been launched by GlaxoSmithKline in over-the-counter form under the brand name alli®, which represents additional competition and potential negative pricing pressure. Orlistat is marketed by a pharmaceutical company with substantially greater resources than we have. In addition, a number of generic pharmaceutical products are prescribed for obesity, including phentermine, phendimetrazine, benzphetamine and diethylpropion. Some of these generic drugs, and others, are prescribed in combinations that have shown

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anecdotal evidence of efficacy. These products are sold at much lower prices than we or our collaborative partner intend to charge for our product candidates, if approved. The availability of a large number of branded prescription products, including drugs that are prescribed off-label, generic products and over-the-counter products could limit the demand for, and the price we or our collaborative partner are able to charge for, our product candidates. In addition, in June 2012, Arena Pharmaceuticals, Inc., or Arena, obtained FDA approval for its product, locaserin. In July 2012, Vivus, Inc. obtained FDA approval for its combination product, phentermine/topiramate. Vivus commercially launched its combination product in the United States under the name Qsymia in September 2012. Eisai Inc., commercially launched locaserin in the United States under the name Belviq in June 2013. Vivus, Arena and Eisai may build a significant competitive advantage prior to the time we and our collaborative partner are able to market NB32, or we or any future collaborative partner are able to market Empatic, if approved. Further, if safety concerns about these products' use arise after their launch, such concerns may materially and adversely affect the labeling for NB32 or Empatic and/or our ability to gain approval of the NDA for NB32 or Empatic and, if approved, our and our collaborative partner's ability to effectively market and sell NB32 or Empatic. If such products are successfully marketed, they could represent additional competition and potential negative pricing pressure with respect to NB32 or Empatic.

Currently, there are a number of drug products in development for obesity which could become competitors against our product candidates. These include products being developed by AstraZeneca, Athertsys, Inc., Bristol-Myers Squibb, Norgine BV, Novo Nordisk A/S, Roche, our partner, Takeda, and Zafgen, Inc.

There are also surgical approaches to treat severe obesity that are becoming increasingly accepted and could become competitors against our product candidates. Two of the most well established surgical procedures are gastric bypass surgery and adjustable gastric banding. In addition, other potential approaches which utilize various implantable devices or surgical tools are in development, including an endoscopic approach for treating obesity. Some of these approaches are in late stage development and may be approved for marketing. Companies such as Allergan, Inc., Boston Scientific, Covidien Ltd., EnteroMedics, Inc., GI Dynamics, Inc., Johnson & Johnson, Medtronic, Inc. and Obalon Therapeutics, Inc. are all active in this space and may have substantially greater resources than we have.

New developments, including the development of other drug technologies and methods of preventing the incidence of disease, occur in the nutritional, pharmaceutical and medical technology industries at a rapid pace. These developments may render our product candidates less competitive. Some of our potential competitors are large pharmaceutical or device firms and have substantially greater resources than we have. These resources could be directed toward the obesity market and include:

- research and development resources, including personnel and technology;
- regulatory experience;
- drug development and clinical trial experience;
- experience and expertise in exploitation of intellectual property rights; and
- capital resources.

As a result of these factors, our competitors may obtain regulatory approval of their products more rapidly than we do or may obtain patent protection or other intellectual property rights that limit our ability to develop or commercialize our product candidates. Our competitors may also develop drugs or surgical approaches that are more effective, more useful and less costly than ours and may also be more successful in manufacturing and marketing their products. In addition, our competitors may be more effective in commercializing their products. We currently outsource our manufacturing and therefore rely on third parties for that competitive expertise. There can be no assurance that we will be able to develop or contract for these capabilities on acceptable economic terms, or at all. In addition, should both NB32 and Empatic be approved to treat obesity, these product candidates may compete with one another. While we intend to direct each product candidate to specific segments of the obesity marketplace, the FDA does not distinguish between these types of obesity and, if approved, any potential label for NB32 and Empatic would be expected to refer to obesity generally. There is no guarantee that we and our current and any future collaborative partner will be successful in marketing NB32 and Empatic to their respective target markets, if approved, or minimizing competition between them.

Our product candidates are combinations of generically-available pharmaceutical products, and our success is dependent on our ability and our collaborative partner's ability to compete against off-label generic substitutes and demonstrate the advantages of our proprietary combination products.

Off-label use occurs when physicians prescribe a drug that is approved by the FDA for one indication for a

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different, unapproved indication. We believe that a practitioner seeking safe and effective therapy is not likely to prescribe such off-label generics in place of NB32 or Empatic because the dosage strengths, pharmacokinetic profiles and titration regimens recommended for NB32 and Empatic are not available using existing generic preparations of immediate release, or IR, naltrexone, zonisamide IR and bupropion SR, and there are no oral generic SR formulations of naltrexone or zonisamide. However, a physician could seek to prescribe off-label generics in place of NB32 or Empatic. Such off-label prescriptions could significantly diminish the market potential of our products and significantly impact our ability and our collaborative partner's ability to generate revenues.

With regard to off-label substitution at the pharmacy level, we expect to rely on the novel dose ratios and novel pharmacokinetic properties of our product candidates, as well as the differences in their approved indications, to provide sufficient distinction such that generic preparations are not considered therapeutic equivalents by the FDA. State pharmacy laws in many instances only permit pharmacists to substitute generic products for branded products if the products are therapeutic equivalents. Therefore, the lack of therapeutic equivalency should limit generic substitution by pharmacies and/or pharmacy benefit managers. However, we cannot be certain that pharmacists and/or pharmacy benefit managers will not seek prescriber authorization to substitute generics in place of NB32 and Empatic, which could significantly diminish their market potential and significantly impact our ability and our collaborative partner's ability to successfully commercialize our product candidates and generate revenues.

In addition, although we believe the current market prices for the generic forms of naltrexone and zonisamide make generic substitution by physicians, pharmacists or pharmacy benefit managers unlikely, should the prices of the generic forms decline, the motivation for generic substitution may become stronger. Wide scale generic substitution by physicians and at the pharmacy level could have substantial negative consequences to our business.

We have limited sales and marketing experience and resources, and if we do not enter into additional collaboration or co-promotion arrangements, we may not be able to effectively market and sell NB32 outside the United States, Canada or Mexico or Empatic, if approved, and our ability to generate revenues may be delayed or limited.

We are developing our obesity product candidates for large markets traditionally served by general and family practitioners and internists. Generalist physicians number in the several hundred thousand in the United States. Traditional pharmaceutical companies employ groups of sales representatives numbering in the thousands to call on this large generalist physician population. In order to effectively promote to these physician groups, we entered into a collaboration agreement with Takeda in September 2010 to develop and commercialize NB32 in the United States, Canada and Mexico. In order to expand the market opportunity outside of these countries for NB32 and to address the commercialization of Empatic, if approved, we must either establish additional sales and marketing collaborations or co-promotion arrangements or expend significant resources to develop our own sales and marketing presence. We currently possess limited resources and may not be successful in developing our own sales and marketing presence. We may not be able to enter into additional collaboration or co-promotion arrangements on acceptable terms, if at all. If we are unable to enter into additional collaboration or co-promotion arrangements for NB32 outside the United States, Canada and Mexico or for Empatic, and we must develop our own sales and marketing presence to address the large market of general and family practitioners and internists in these areas, we will require additional capital and our ability to market and sell our product candidates and generate revenues from our product candidates may be delayed or limited. We also face competition in our search for collaborators, co-promoters and sales force personnel. If our competitors are able to establish collaboration or co-promotion arrangements with pharmaceutical companies who have substantially greater resources than we have, our ability to successfully commercialize NB32 outside the United States, Canada and Mexico and/or Empatic will be limited and as a result our competitors may be more successful in marketing and selling their products in these areas. Even if we do enter into additional collaboration or co-promotion arrangements with third parties, we will be reliant on such third parties to successfully develop and/or commercialize our product candidates in these areas. These third parties may fail to develop or effectively commercialize our product candidates because they cannot obtain the necessary regulatory approvals, decide to pursue a competitive potential product that may be developed outside of the collaboration or fail to devote the resources necessary to realize the full commercial potential of our product candidates, especially in light of the resources being devoted by our competitors' collaboration and co-promotion partners. Any such failures would negatively affect our ability to generate revenues from sales of NB32 outside the United States, Canada and Mexico or from sales of Empatic.

Our development and commercialization strategy depends upon access to findings of safety and effectiveness based on data not developed by us but which the FDA may reference in reviewing our U.S. marketing applications. In territories outside the United States, we must either negotiate access to these safety and effectiveness findings or develop them ourselves.

The Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act, added Section 505(b)(2) to the Federal Food, Drug, and Cosmetic Act. Section 505(b)(2) permits the filing of an NDA where at

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least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference. This statutory provision expressly allows the FDA to rely, for purposes of approving an NDA, on findings of safety and effectiveness based on data not developed by the filer of the NDA. Under these guidelines, we were able to move directly into Phase II clinical trials for each of our drug combinations, because our NDA for NB32 would rely, and our planned NDA for Empatic, will rely, in part, upon the FDA's findings of safety and effectiveness for the previously-approved products that are incorporated into NB32 and Empatic. Similar legislation for active substances with well-established medicinal use exists in the European Union under article 10a of European Directive 2001/83/EC, which allows for reference to scientific literature if active substances have been approved for at least ten years with recognized efficacy and an acceptable level of safety. There also are alleviations under article 10b of European Directive 2001/83/EC of the obligation to provide scientific references relating to individual active substances in combination products if such individual active substances have been previously authorized in the European Union, although not the obligation to provide results of new pre-clinical tests or new clinical trials relating to such combination products, which could provide an alternative pathway in Europe. In territories where data are not freely available, we may not have the ability to commercialize our products without negotiating rights from third parties to refer to their clinical data in our regulatory applications, which could require the expenditure of significant additional funds to generate our own data. We may be unable to obtain rights to the necessary clinical data and may be required to develop our own proprietary safety and manufacturing dossiers. In addition, even though we can take advantage of Section 505(b)(2) to support potential U.S. approval for NB32 and Empatic, the FDA may also require us to perform additional studies or measurements to support changes from the previously-approved products incorporated into our product candidates.

To the extent that a Section 505(b)(2) application relies on the FDA's finding of safety and effectiveness of a previously-approved drug, the applicant is required to make certifications to the FDA with respect to any patents listed for the approved product in the FDA's publication called "Approved Drug Products with Therapeutic Equivalence Evaluations," otherwise known as the "Orange Book." Specifically, the applicant must certify when the application is submitted that: (1) there is no relevant patent information listed; (2) the listed patent has expired; (3) the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or (4) the listed patent is invalid or will not be infringed by the manufacture, use, or sale of the new product. A certification that the new product will not infringe the already approved product's Orange Book listed patents or that such patents are invalid is called a paragraph IV certification. If the 505(b)(2) applicant has provided a paragraph IV certification to the FDA, the applicant must also send notice of the paragraph IV certification to the NDA holder and patent owner. We have made paragraph IV certifications that NB32 does not infringe the bupropion SR formulation patents listed in the Orange Book, and have sent the appropriate notice to the patent holder and NDA holder. We will be required to make similar certifications if and when we file an NDA for Empatic. In the event that the patent holder or NDA holder files a patent infringement lawsuit against us within 45 days of its receipt of our paragraph IV certification, such lawsuit would automatically prevent the FDA from approving our Section 505(b)(2) NDA until the earliest of 30 months, expiration of the applicable patent (2013 in the case of bupropion SR), settlement of the lawsuit or a decision in the infringement case that is favorable to us. Any such patent infringement lawsuit could be costly, take a substantial amount of time to resolve and divert management resources. This 45-day period with respect to our certifications related to bupropion SR in NB32 has elapsed and no such lawsuit was filed against us. If we obtain FDA approval for either NB32 or Empatic, we could obtain three years of Hatch-Waxman marketing exclusivity for such product, since we have conducted a substantial clinical program that is essential to approval of our NDA. Under this form of exclusivity, the FDA would be precluded from approving a 505(b)(2) NDA or ANDA for the same drug product for the protected indication (for example, a product that incorporates the change or innovation represented by our product) for a period of three years, although the FDA may accept and commence review of such applications. However, this form of exclusivity might not prevent the FDA from approving a 505(b)(1) NDA that relies on its own clinical data. Further, if another company obtains approval for an identical product candidate for the same indication we are studying before we do, our approval could be blocked until the other company's Hatch-Waxman marketing exclusivity expires.

Even if our product candidates receive regulatory approval in the United States, we may never receive approval or commercialize our products outside of the United States.*

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety, efficacy and manufacturing. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks detailed above regarding FDA approval in the United States as well as other risks. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. For example, although Vivus obtained FDA approval for its combination product, phentermine/topiramate, in October 2012, the European Medicines Agency's, or EMA's, Committee for Medicinal Products for Human Use, or CHMP, adopted an opinion recommending against the approval

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of the marketing authorization application for such product due to concerns about its long-term effects on the heart and blood vessels, particularly due to the effects of the phentermine component, its long-term psychiatric effects (depression and anxiety were reported in the studies) and cognitive effects (such as problems with memory and attention) related to the topiramate component, as well as known risks with topiramate being potentially harmful to the unborn baby if taken by pregnant women. The CHMP also noted that there was a high probability that, if approved, Vivus' product would not be used strictly for the intended patients. Vivus requested a re-examination of the CHMP's opinion. After considering the grounds for this request, the CHMP re-examined the initial opinion, and confirmed the refusal of the marketing authorization in February 2013. Further, according to Vivus, the CHMP indicated that a pre-approval CVOT would be necessary to establish the long-term safety of its product. Additionally, although Arena obtained FDA approval for its product, lorcaserin, in May 2013, Arena announced that it has notified the EMA that it is withdrawing its marketing authorization application for lorcaserin in the European Union due to the CHMP's view that certain major objections remain outstanding that preclude a recommendation for approval of such marketing authorization application and Arena's belief that it cannot resolve the major objections related to the results of non-clinical studies prior to the time the CHMP would issue its final opinion. We may face similar negative recommendations with respect to any regulatory filings we submit for our product candidates in the European Union and other geographies.

In October 2013, we submitted a community marketing authorization, or Community MA, application for NB32 to the EMA, utilizing the EMA's centralized procedure, seeking approval of NB32 in the European Economic Area, or EEA, (which is comprised of the 28 Member States of the European Union plus Norway, Iceland and Liechtenstein) for the management of obesity, including weight loss. As part of this process, we have established the required pediatric investigation plan, or PIP, which has been agreed to by the EMA's Pediatric Committee. The centralized procedure allows for the simultaneous approval of a product in all the Member States of the EEA. A Community MA application is reviewed by the CHMP. After submission and validation of the Community MA application, the CHMP generally has 210 days to complete its assessment and adopt an opinion on whether or not to recommend the granting of the Community MA. The 210 days period does not include the anticipated "clock stops" at specified points in the procedure, typically at day 120 (Consolidated List of Questions) and at day 180 (List of Outstanding Issues). The clock stops allow time for us to address the outstanding questions or issues raised by the CHMP. After day 180, depending on the List of Outstanding Issues, an oral hearing with the CHMP may be required to address specific issues. Assuming a positive opinion from the CHMP, the European Commission has to adopt a decision granting the Community MA, based on the CHMP opinion. The European Commission must adopt this decision within 67 days after receipt of the CHMP opinion, not counting clock stops as noted above.

In February 2014, we received from the EMA's CHMP the Day 120 Consolidated List of Questions regarding our NB32 Community MA. The CHMP's key questions were consistent with the issues raised by the FDA during the course of NB32 development and the initial review of the NDA, such as manufacturing and quality, non-clinical studies, dosing regimen, and, most significantly, cardiovascular safety. We believe the questions were adequately addressed in our response based in part on the interim analysis of the Light Study.

In July 2014, we received the day 180 List of Outstanding Issues, or the Day 180 LOI, from the CHMP for our NB32 Community MA. The Day 180 LOI raised new issues. Specifically, the CHMP requested further justification of the balance of benefits and risks of NB32 treatment as well as additional information regarding post-approval risk minimization measures and pharmacovigilance activities. Details were also requested of our third-party suppliers of bupropion related to the starting materials. In order to have the time to coordinate responses from these suppliers, we have requested an extension of one month and plan to submit our response to the Day 180 LOI in September. While we believe that the CHMP's requests are addressable, we may not have sufficient data to respond or the EMA may ask for additional or different data in connection with its review of the Community MA which could result in additional delays in its potential approval. We can provide no assurance that the Community MA will be approved on this timeframe, or at all. Failure to obtain regulatory approval for our product candidates in other countries or any delay or setback in obtaining such approval could have the same adverse effects detailed above regarding FDA approval in the United States. As described above, such effects include the risks that our product candidates may not be approved for all indications requested, which could limit the uses of our product candidates and have an adverse effect on their commercial potential or require costly, post-marketing follow-up studies.

We can provide no assurance that the Community MA will be approved on this timeframe, or at all. Failure to obtain regulatory approval for our product candidates in other countries or any delay or setback in obtaining such approval could have the same adverse effects detailed above regarding FDA approval in the United States. As described above, such effects include the risks that our product candidates may not be approved for all indications requested, which could limit the uses of our product candidates and have an adverse effect on their commercial potential or require costly, post-marketing follow-up studies.

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We face potential product liability exposure, and, if successful claims are brought against us, we may incur substantial liability.

The use of our product candidates in clinical trials, including the Light Study, and the sale of any products for which we obtain marketing approval expose us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health-care providers, pharmaceutical companies or others selling or otherwise coming into contact with our products. If we cannot successfully defend ourselves against product liability claims, we could incur substantial liabilities. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- decreased demand for our product candidates;
- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs of related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- loss of revenues; and
- the inability to commercialize our product candidates.

We have in the past obtained product liability insurance coverage for our clinical trials and we have obtained product liability insurance coverage for the Light Study. Our insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive, and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for any of our product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain this product liability insurance on commercially reasonable terms. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

If any of our product candidates for which we receive regulatory approval does not achieve broad market acceptance, the revenues, including any milestone or royalty payments we may be eligible to receive under our collaboration agreement with Takeda, that we generate from their sales will be limited.

The commercial success of our product candidates for which we obtain marketing approval from the FDA or other regulatory authorities will depend upon the acceptance of these products by both the medical community and patient population. Coverage and reimbursement of our product candidates by third-party payors, including government payors, generally is also necessary for optimal commercial success. The degree of market acceptance of any of our approved products will depend on a number of factors, including:

- our ability to provide acceptable evidence of safety and efficacy;
- the timing of market introduction of our products as well as competitive products;
- the relative convenience and ease of administration;
- the prevalence and severity of any adverse side effects;
- limitations or warnings contained in a product's FDA-approved labeling, including, for example, potential "black box" warnings or pregnancy precautions associated with the APIs in NB32 and/or Empatic;
- availability of alternative treatments and the potential or perceived advantages or disadvantages of such treatments, including, in the case of NB32 and/or Empatic, a number of competitive products already approved for the treatment of weight loss or expected to be commercially launched in the near future;
- pricing and cost effectiveness;
- our REMS;
- the effectiveness of our, or our current or any future collaborators' sales and marketing strategies;

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- our and our current or any future collaborative partner's ability to obtain sufficient third-party coverage or reimbursement; and
- the willingness of patients to pay out of pocket in the absence of third-party coverage.

If our product candidates are approved but do not achieve an adequate level of acceptance by physicians, health care payors and patients, we may not generate sufficient revenue from these products, and we may not become or remain profitable. In addition, our and our current and any future collaborative partner's efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may never be successful.

We and our current and any future collaborative partner are subject to uncertainty relating to reimbursement policies which, if not favorable to our product candidates, could hinder or prevent our product candidates' commercial success.

Our ability and our current and any future collaborative partner's ability to commercialize our product candidates successfully will depend in part on the extent to which governmental authorities, private health insurers and other third-party payors establish appropriate coverage and reimbursement levels for our product candidates and related treatments. As a threshold for coverage and reimbursement, third-party payors generally require that drug products have been approved for marketing by the FDA. Third-party payors also are increasingly challenging the effectiveness of and prices charged for medical products and services. We cannot provide any assurances that we or such collaborative partner will be able to obtain third-party coverage or reimbursement for our product candidates in whole or in part.

The obesity therapy market, in particular, continues to be marked by limited coverage and reimbursement from health insurers and other payors, who have historically viewed obesity as a lifestyle issue. For example, state Medicaid programs, administered by individual states for qualifying low-income individuals, are permitted to exclude coverage for weight loss drugs. In addition, weight loss drugs are excluded from coverage under the Medicare Part D prescription drug program for eligible seniors and disabled individuals. Medicare is a federal governmental third-party payor whose policies often are emulated or adopted by other payors. Although the Centers for Medicare & Medicaid Services, or CMS, which administers the Medicare program, has removed longstanding policy language that obesity itself cannot be considered an illness, the agency interprets the Part D exclusion of weight loss drugs as applying to novel obesity therapies. However, CMS has since issued a national policy covering bariatric surgery for co-morbid conditions associated with obesity, and in the fourth quarter of 2011 announced that the Medicare program was adding new benefit coverage for prevention with the objective of treating obesity. The benefit provides for screening for obesity and counseling for eligible beneficiaries by primary care providers in physician's offices. Although third-party payor attitudes regarding obesity-related products and services appear to be changing, as exemplified by Medicare changes, we may continue to face a poor coverage and reimbursement environment.

Currently, our competitors' drug products have limited third-party payor coverage. This means that individuals prescribed such drug products often either have significant out-of-pocket costs or pay for the products entirely by themselves. If our product candidates do not receive adequate coverage or reimbursement, the market acceptance and commercial success of our products may be limited.

Healthcare 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 changes in healthcare systems to contain healthcare costs and improve quality. While reform proposals often involve expanding coverage to more individuals, healthcare reform may also involve increased government price controls, additional regulatory mandates and other measures designed to lower medical and pharmaceutical costs. Within the United States, the pharmaceutical industry has been a particular focus of both the U.S. Congress, as well as state governments.

In March 2010, the President signed into law one of the most significant health reform measures in decades. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the PPACA, substantially changes the way healthcare is financed by both governmental and private insurers, including several payment reforms that establish payments to hospitals and physicians based in part on quality measures, subjects biologic products to potential competition by lower-cost "biosimilars," and significantly impacts the pharmaceutical and medical device industries. The PPACA includes, among other things, the following measures:

- annual, non-deductible fees on any entity that manufactures or imports certain prescription branded drugs and biologics;

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- increased Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program for both branded and generic drugs and expanded rebates owed by manufacturers to include rebates on Medicaid managed care utilization;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in and conduct comparative clinical research;
- new requirements for manufacturers to discount drug prices to eligible patients in the coverage gap by 50% at the pharmacy level and for mail order services in order for their outpatient drugs to be covered under Medicare Part D;
- an increase in the number of entities eligible for discounts under the Public Health Service pharmaceutical pricing program; and
- establishes a licensure framework for follow-on biologic products.

The PPACA provisions on comparative clinical effectiveness research extend the initiatives of the American Recovery and Reinvestment Act of 2009, also known as the stimulus package, which included \$1.1 billion in funding to study the comparative effectiveness of healthcare treatments and strategies. This stimulus funding was designated for, among other things, conducting, supporting or synthesizing research that compares and evaluates the risks and benefits, clinical outcomes, effectiveness and appropriateness of products. The PPACA also appropriates additional funding to comparative clinical effectiveness research. Although Congress has indicated that this funding is intended to improve the quality of healthcare, it remains unclear how the research will impact current Medicare coverage and reimbursement or how new information will influence other third-party payor policies.

In addition, the PPACA provides for a prevention and health promotion outreach and education campaign to raise public awareness of health improvement, including obesity reduction and obesity-related services that are available to Medicaid enrollees. The PPACA also provides funding for projects designed to reduce childhood obesity.

In the European Union and some other international markets, the government provides health care at low cost to consumers and regulates pharmaceutical prices, patient eligibility or reimbursement levels to control costs for the government-sponsored health care system. Many countries have announced or implemented measures to reduce health care costs to constrain their overall level of government expenditures. These measures vary by country and may include, among other things, patient access restrictions, suspensions on price increases, prospective and possibly retroactive price reductions and other recoupments and increased mandatory discounts or rebates, recoveries of past price increases, and greater importation of drugs from lower-cost countries to higher-cost countries. If our products are approved in these markets, these measures may negatively impact our revenues. In addition, certain countries set prices by reference to the prices in other countries where approved products are marketed. Thus, our inability to secure adequate prices for our products, if approved, in a particular country may not only limit the marketing of these products within that country, but may also adversely affect our ability to obtain acceptable prices in other markets. This may create the opportunity for third party cross border trade or influence our decision to sell or not to sell a product, if approved, thus adversely affecting our revenues.

We cannot predict what effect the PPACA or other healthcare reform or cost control initiatives that may be adopted in the future will have on our business. The continuing efforts of the government, insurance companies, managed care organizations and other payors of health care services to contain or reduce costs of health care may adversely affect:

- our and our current and any future collaborative partner's ability to set a price we believe is fair for our product candidates, if approved;
- our or any of our current or any future collaborative partner's ability to generate revenues and achieve or maintain profitability; and
- the availability of capital.

Our failure to successfully acquire, develop and market additional product candidates or approved products would impair our ability to grow.

As part of our corporate strategy, we may acquire, in-license, develop and/or market additional products and product candidates. Because our internal research capabilities are limited, we may be dependent upon pharmaceutical and biotechnology companies, academic scientists and other researchers to sell or license products or technology to us. The success of this strategy depends partly upon our ability to identify, select and acquire promising pharmaceutical product candidates and products.

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The process of proposing, negotiating and implementing a license or acquisition of a product candidate or approved product is lengthy and complex. Other companies, including some with substantially greater financial, marketing and sales resources, may compete with us for the license or acquisition of product candidates and approved products. We have limited resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into our current infrastructure. Moreover, we may devote resources to potential acquisitions or in-licensing opportunities that are never completed, or we may fail to realize the anticipated benefits of such efforts. We may not be able to acquire the rights to additional product candidates on terms that we find acceptable, or at all.

In addition, future acquisitions may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management's time and attention to develop acquired products or technologies;
- incurrence of substantial debt or dilutive issuances of securities to pay for acquisitions;
- higher than expected acquisition and integration costs;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and
- inability to retain key employees of any acquired businesses.

Further, any product candidate that we acquire may require additional development efforts prior to commercial sale, including extensive clinical testing and approval by the FDA and applicable foreign regulatory authorities. All product candidates are prone to risks of failure typical of pharmaceutical product development, including the possibility that a product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. In addition, we cannot provide assurance that any products that we develop or approved products that we may acquire will be commercialized profitably or achieve market acceptance.

We may not be able to manage our business effectively if we are unable to attract and retain key personnel.

We may not be able to attract or retain qualified management and scientific and clinical personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses, particularly in the San Diego, California area. Our retention efforts may be particularly challenging in light of our historical regulatory interactions with our NB32 NDA and our workforce reductions completed in February and June 2011. Our industry has experienced a high rate of turnover of management personnel in recent years. If we are not able to attract, retain and motivate necessary personnel to accomplish our business objectives, we may experience constraints that will significantly impede the successful development and commercialization of our product candidates, our ability to raise additional capital and our ability to implement our overall business strategy.

We are highly dependent on the development, regulatory, commercial and financial expertise of our senior management, particularly Michael A. Narachi, our President and Chief Executive Officer. Although we have employment agreements with each of our executive officers, these agreements are terminable at will at any time with or without notice and, therefore, we may not be able to retain their services as expected. If we lose any members of our senior management team, including Mr. Narachi, we may not be able to find suitable replacements, and our business may be harmed as a result. We are not aware of any key personnel who has plans to retire or leave our company in the near future. In addition to the competition for personnel, the San Diego area in particular is characterized by a high cost of living. As such, we could have difficulty attracting experienced personnel to our company and may be required to expend significant financial resources in our employee recruitment and retention efforts.

In addition, we have scientific and clinical advisors who assist us in formulating our product development and

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clinical and regulatory strategies. These advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us, or may have arrangements with other companies to assist in the development of products that may compete with ours.

We will need to obtain approval of our proposed product names, and any failure or delay associated with such approval may adversely impact our business.

Any name we intend to use for our product candidates will require approval from the FDA, regardless of whether we have secured a formal trademark registration from the U.S. Patent and Trademark Office, or PTO, as well as comparable regulatory authorities. The FDA and comparable regulatory authorities typically conduct a rigorous review of proposed product names, including an evaluation of potential for confusion with other product names. The FDA and comparable regulatory authorities may also object to a product name if they believe the name inappropriately implies medical claims. If the FDA or comparable regulatory authorities object to our proposed product names, we may be required to adopt an alternative name for our initial product candidates. If we adopt an alternative name, we would lose the benefit of our existing trademark applications for CONTRAVE or Empatic and may be required to expend significant additional resources in an effort to identify a suitable product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA and comparable regulatory authorities. We and our current and any future collaborative partner may be unable to build a successful brand identity for a new trademark in a timely manner or at all, which would limit our and such collaborative partner's ability to commercialize our product candidates.

If we fail to comply with healthcare regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

As a manufacturer of pharmaceuticals, even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payors, certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business. We could be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business, without limitation. The laws that may affect our ability to operate include:

- the federal healthcare program Anti-Kickback Statute (as amended by the PPACA, which modified the intent requirement of the Anti-Kickback Statute so that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it), which prohibits, among other things, persons from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;
- federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent, and which may apply to entities like us which promote pharmaceutical products and provide coding and billing advice to customers, and under the PPACA, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal false claims laws;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters and which also imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information;
- the Federal Food, Drug, and Cosmetic Act, which among other things, strictly regulates drug product marketing, prohibits manufacturers from marketing drug products for off-label use and regulates the distribution of drug samples; and
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

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Additionally, the compliance environment is changing, with more states, such as California and Massachusetts, mandating implementation of compliance programs, compliance with industry ethics codes, and spending limits, and other states, such as Vermont and Minnesota requiring reporting to state governments of gifts, compensation, and other remuneration to physicians. The PPACA also imposes new reporting and disclosure requirements on device and drug manufacturers for any “transfer of value” made or distributed to prescribers and other healthcare providers. Such information will be made publicly available in a searchable format. In addition, device and drug manufacturers will also be required to report and disclose any investment interests held by physicians and their immediate family members during the preceding calendar year. Manufacturers were required to begin collecting requisite information on August 1, 2013, with the first reports due June 30, 2014. Failure to submit requisite information may result in civil monetary penalties of up to an aggregate of \$150,000 per year (and up to an aggregate of \$1 million per year for “knowing failures”), for all payments, transfers of value or ownership or investment interests not reported in an annual submission. Finally, under the PPACA, effective April 1, 2012, pharmaceutical manufacturers and distributors must provide the U.S. Department of Health and Human Services with an annual report on the drug samples they provide to physicians. The shifting regulatory environment, along with the requirement to comply with multiple jurisdictions with different compliance and/or reporting requirements, increases the possibility that a pharmaceutical company may run afoul of one or more laws.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, the risks cannot be entirely eliminated. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management’s attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security and fraud laws may prove costly.

Our business involves the use of hazardous materials and we and our third-party manufacturers must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our third-party manufacturers’ activities involve the controlled storage, use and disposal of hazardous materials owned by us, including the components of our product candidates and other hazardous compounds. We and our manufacturers are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. Although we believe that the safety procedures utilized by our third-party manufacturers for handling and disposing of these materials comply with the standards prescribed by these laws and regulations, we cannot eliminate the risk of accidental contamination or injury from these materials. In the event of an accident, state or federal authorities may curtail the use of these materials and interrupt our business operations. We do not currently maintain hazardous materials insurance coverage. If we are subject to any liability as a result of our third-party manufacturers’ activities involving hazardous materials, our business and financial condition may be adversely affected.

Our business and operations would suffer in the event of system failures.

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, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical trial data from completed or ongoing clinical trials for NB32 or Empatic, including the Light Study, could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of our product candidates could be delayed.

Risks Related to Intellectual Property

Our market opportunity for NB32 and Empatic may be limited by the relatively small number of issued U.S. patents and foreign patents that we own or in-license. In addition, although we have additional U.S. and international patent applications pending which seek further protection of our product candidates, these applications may not issue on a timely basis or at all.

NB32 is currently protected by U.S. patent number 7,375,111, which we refer to as the Weber/Cowley composition patent, and U.S. patent number 7,462,626, which we refer to as the Weber/Cowley methods patent. Provided maintenance fees are paid, the Weber/Cowley composition patent is expected to expire in March 2025, and the Weber/Cowley methods patent is expected to expire in July 2024. Collectively, we refer to the Weber/Cowley composition patent and the Weber/Cowley methods patent as the Weber/Cowley patents. We own the Weber/Cowley patents, but they are subject to our license agreement with Oregon Health & Science University, or OHSU, and our license agreement with Duke University, or Duke. The Weber/Cowley patents cover the current composition of NB32 and methods of administering it to treat obesity. We and/or our licensors have filed a number of international counterparts to the Weber/Cowley patents in foreign countries. A European counterpart application to the Weber/Cowley patent has issued in the European Patent Office, or EPO, and provides protection for NB32 in the various EPO countries in which the patent has been registered. Several international counterparts to the Weber/Cowley patents have also issued in other foreign jurisdictions. However, we cannot provide assurance that other pending international counterparts will issue on a timely basis or at all. There is also no assurance that the currently pending claims in those foreign countries will not be rejected, that any such rejections and any future rejections will ultimately be overcome, nor that any claims that may issue will be sufficiently broad to protect NB32 in those foreign countries. Furthermore, we cannot be certain that the scope of any issued foreign patent will be consistent with the currently pending claims, as there is a significant likelihood that the scope of the currently pending claims will be modified. If a competitor is willing to challenge the scope or validity of the Weber/Cowley patents, the competitor could file an NDA seeking approval any time before we obtain approval from the FDA of an NDA for NB32 and three years after we obtain such approval.

We have also filed patent applications, directed to various treatment and formulation aspects of NB32, in the United States and certain foreign countries under the Patent Cooperation Treaty, or PCT. Use of our proprietary tri-layer NB32 tablet for weight loss is protected in the United States by U.S. patent numbers 8,088,786 and 8,318,788, which are expected to expire in February 2029 and November 2027, respectively. Corresponding patents have issued in several foreign countries. In addition, the dose escalation schedule of Contrave is protected by U.S. patent 8,722,085, which is expected to expire in November 2027. The PCT is an international treaty providing a unified procedure under which the initial filing of a single patent application can provide an effective filing date in each participating country in which appropriate steps are subsequently taken. Such steps have been taken in various foreign countries, including Europe and Japan, with respect to a number of our PCT filings. Thus, we now have patent applications pending in those foreign countries, along with our previous filings in the United States and certain non-PCT countries. These filings seek to provide further protection for NB32 in the United States and overseas; however, we cannot provide assurance that the claims in the other patent applications will issue in their current form or at all.

Our intellectual property protection for Empatic derives from U.S. patent number 7,109,198, which was issued in September 2006 and which we refer to as the Gadde patent, and from U.S. patent number 7,425,571, which was issued in September 2008. We have in-licensed these patents on an exclusive basis from Duke together with several related patent applications. The Gadde patent provides composition coverage for the Empatic zonisamide/bupropion combination and also covers methods for using Empatic to treat obesity and to reduce the risk of hypertension, diabetes or dyslipidemia. Provided maintenance fees are paid, the Gadde patent is also expected to expire in 2023. U.S. patent number 7,425,571 covers methods of using zonisamide (including combinations with bupropion) to cause weight loss. Provided maintenance fees are paid, this patent is expected to expire in 2023. U.S. patent number 7,754,748, which issued in July 2010, protects the use of zonisamide SR for reducing weight in overweight and obese subjects, and is expected to expire in 2023, provided maintenance fees are paid. In addition, Duke has filed international counterparts to the Gadde patent that have issued in several countries and are currently pending in others; however, there is no assurance that the claims in these applications will issue in their currently pending form or at all. We have also filed patent applications in the United States, under the PCT and in certain foreign countries with the goal of protecting the formulations and use of zonisamide SR, an ingredient in Empatic. The PCT filing has matured into patent applications in Europe and Japan. The European application has issued, and provides protection for zonisamide SR in the various EPO countries in which the patent has been registered. Thus we now have patent applications pending in the United States, Japan and certain other foreign countries. However, we cannot provide assurance that the claims in these patent applications will issue in their currently pending form or at all. Use of our proprietary tri-layer Empatic tablet for weight loss is protected in the United States by U.S. patent number 8,318,788, which is expected to expire in November 2027.

We may face additional competition outside of the United States as a result of a lack of patent enforcement in foreign countries and off-label use of other dosage forms of the generic components in our product candidates.

While we have filed patent applications in many countries outside the United States, and have obtained some patent coverage for certain of our product candidates in certain foreign countries, we do not currently have widespread patent protection for NB32 and Empatic outside the United States and have no protection in many foreign jurisdictions. Even if international patent applications ultimately issue or receive approval, it is likely that the scope of protection provided by such patents will be different from, and possibly less than, the scope provided by our corresponding U.S. patents. The success of our

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international market opportunity is dependent upon the enforcement of patent rights in various other countries. A number of countries in which we have filed or intend to file patent applications have a history of weak enforcement and/or compulsory licensing of intellectual property rights. Even if we have patents issued in these jurisdictions, there can be no assurance that our patent rights will be sufficient to prevent generic competition or unauthorized use. We and our current and any future collaborative partner may face competition from the off-label use of other dosage forms of the generic components in our product candidates. In addition, others may attempt to commercialize our product candidate combinations in the countries of the European Union, Canada, Mexico, Japan or other markets, in some of which, we do not have patent protection for our product candidates. Due to the lack of patent protection for these combinations in some territories outside the United States and the potential for correspondingly lower prices for the drugs in those markets, it is possible that patients will seek to acquire the generic IR components of our product candidates (naltrexone IR and zonisamide IR), in those other territories. The off-label use of the generic IR components in the United States or the importation of the generic IR components from foreign markets could adversely affect the commercial potential for our product candidates and adversely affect our overall business and financial results.

We have in-licensed all or a portion of the rights to our product candidates from third parties. If we default on any of our material obligations under those licenses, we could lose rights to our product candidates.

We have in-licensed and otherwise contracted for rights to our product candidates, and we may enter into similar licenses in the future to supplement our product candidate pipeline. Under the relevant agreements, we are subject to commercialization, development, sublicensing, royalty, insurance and other obligations. If we or our current or any future collaborative partner fail to comply with any of these requirements, or otherwise breach these license agreements, the licensor may have the right to terminate the license in whole or to terminate the exclusive nature of the license. Loss of any of these licenses or the exclusive rights provided therein could harm our financial condition and operating results.

Restrictions on our patent rights relating to our product candidates may limit our and our current and any future collaborative partner's ability to prevent third parties from competing against us.

Our success will depend on our and our current and any future collaborative partner's ability to obtain and maintain patent protection for our product candidates, preserve our trade secrets, prevent third parties from infringing upon our proprietary rights and operate without infringing upon the proprietary rights of others. Composition of matter patents on APIs are generally considered to be the strongest form of intellectual property protection for pharmaceutical products as they apply without regard to any method of use. Entirely new individual chemical compounds, often referred to as new chemical entities, are typically entitled to composition of matter coverage. Current law also allows novel and unobvious combinations of old compounds to receive composition of matter coverage for the combination. However, we cannot be certain that the current law will remain the same, or that our product candidates will be considered novel and unobvious by the PTO and courts.

In addition to composition of matter patents and patent applications, we also have issued and filed method of use patents and patent applications. This type of patent protects the use of the product only for the specified method. However, this type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if these competitors do not actively promote their product for our targeted indication, physicians may prescribe these products "off-label." Although off-label prescriptions may infringe or contribute to the infringement of method of use patents, the practice is common and such infringement is difficult to prevent or prosecute.

Although we believe we and our licensors have conducted appropriate prior art searches relating to our key patents and patent applications, there is no assurance that all of the potentially relevant prior art has been found. Moreover, because the constituents of our combination product candidates have been on the market as separate monotherapeutic products for many years, it is possible that these monotherapies have previously been used off-label in such a manner that such prior usage would affect the validity of our method of use patents.

Patent applications in the United States and most other countries are confidential for a period of time until they are published, and publication of discoveries in scientific or patent literature typically lags actual discoveries by several months or more. As a result, we cannot be certain that we and the inventors of the issued patents and applications that we in-licensed were the first to conceive inventions covered by the patents and pending patent applications or that we and those inventors were the first to file patent applications for such inventions.

We and our current and any future collaborative partner also rely upon unpatented trade secrets, unpatented know-how and continuing technological innovation to develop and maintain our competitive position, which we seek to

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protect, in part, by confidentiality agreements with our employees and our collaborators and consultants, some of whom assist with the development of other obesity drugs. We and our collaborative partner also have agreements with our employees and selected consultants that obligate them to assign their inventions to us. It is possible that technology relevant to our business will be independently developed by a person that is not a party to such an agreement. Furthermore, if the employees and consultants that are parties to these agreements breach or violate the terms of these agreements, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets through such breaches or violations. Further, our trade secrets could otherwise become known or be independently discovered by our competitors.

If we or our current or any future collaborative partner are sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in that litigation would have a material adverse effect on our business.

Our commercial success depends upon our and our current and any future collaborative partner's ability to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we and our collaborative partner are developing products. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates and/or proprietary technologies may give rise to claims of infringement of the patent rights of others. There may be issued patents of third parties of which we are currently unaware that may be infringed by our product candidates or proprietary technologies. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us or our collaborative partner, which may later result in issued patents that our product candidates or proprietary technologies may infringe.

We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that our product candidates and/or proprietary technologies infringe their intellectual property rights. If one of these patents is found to cover our product candidates, proprietary technologies or their uses, we or our current or any future collaborative partner could be enjoined by a court and required to pay damages and could be unable to commercialize our product candidates or use our proprietary technologies unless we or they obtained a license to the patent. A license may not be available to us or our current or any future collaborative partner on acceptable terms, if at all. In addition, during litigation, the patent holder could obtain a preliminary injunction or other equitable relief which could prohibit us or our current or any future collaborative partner from making, using or selling our products, technologies or methods pending a trial on the merits, which could be years away.

There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries generally. If a third party claims that we or our collaborative partner infringe its intellectual property rights, we may face a number of issues, including, but not limited to:

- infringement and other intellectual property claims which, regardless of merit, may be expensive and time-consuming to litigate and may divert our management's attention from our core business;
- substantial damages for infringement, which we may have to pay if a court decides that the product at issue infringes on or violates the third party's rights, and if the court finds that the infringement was willful, we could be ordered to pay treble damages and the patent owner's attorneys' fees;
- a court prohibiting us from selling or licensing the product unless the third party licenses its product rights to us, which it is not required to do;
- if a license is available from a third party, we may have to pay substantial royalties and fees and/or grant cross-licenses to intellectual property rights for our products; and
- redesigning our products or processes so they do not infringe, which may not be possible or may require substantial monetary expenditures and time.

We will be obtaining our bupropion SR, zonisamide SR, naltrexone SR, our finished NB32 and Empatic tablets combining these components, and the packaging for these tablets from third-party manufacturers. Each aspect of product design, formulation, manufacturing, packaging, and use has the potential to implicate third-party patent rights. We have taken various measures to reduce the potential for infringement. However, we could be exposed to potential patent infringement liability from other third parties who hold patents on various formulations of bupropion and naltrexone.

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No assurance can be given that patents do not exist, have not been filed, or could not be filed or issued, which contain claims covering these or other aspects of our products, technology or methods, as implemented by us or by third-party manufacturers with whom we contract. Because of the large number of patents issued and patent applications filed in our field, we believe there is a risk that third parties may allege they have patent rights encompassing our products, technology or methods. Such third-party patent rights, if relevant, could prevent us or our current or any future collaborative partner from adopting or marketing a particular formulation or product, or could expose us to patent infringement liability.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on the Gadde patents covering Empatic and the Weber/Cowley patents covering NB32, as well as our other issued patents, are due to be paid to the PTO in several stages over the lifetimes of the patents. We have systems in place to remind us to pay these fees, and we employ an outside firm, Computer Patent Annuities, to pay annuity fees due to foreign patent agencies on our issued and pending foreign patent applications. The PTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

We have not yet registered our trademarks in all of our potential markets, and failure to secure those registrations could adversely affect our business.

We have received U.S. trademark registration number 3396021 for our corporate logo for use in connection with pharmaceutical preparations and substances for the treatment of obesity, inducement of weight loss and prevention of weight gain. We have obtained trademark registrations in Canada, the European Union, and Japan for the same mark. In addition, we have received U.S. trademark registration number 3396807 for our corporate name OREXIGEN for use in connection with pharmaceutical preparations for the treatment of disorders of the central nervous system, or CNS, printed instructional, educational and teaching materials in the field of treatment and management of disorders of the CNS, and providing medical information in the field of disorders of the CNS. We have obtained trademark registrations in Canada, the European Union, and Japan for the same mark and have pending applications in Brazil and Russia. We have obtained foreign trademark registrations for the corporate name Orexigen Therapeutics, Inc. in the European Union and Japan. We have received U.S. trademark registration number 3393576 for the mark CONTRAVE for use in connection with pharmaceutical preparations for use in the treatment of obesity and inducing weight loss. An intent-to-use application for the CONTRAVE mark has been filed in the United States in connection with certain printed materials and medical information services. We have also obtained foreign trademark registrations for the mark CONTRAVE in Canada, Europe and Japan and have pending applications in Brazil, Canada, and Russia. In addition, applications for a Contrave logo for use in connection with pharmaceutical preparations for use in the treatment of obesity and inducing weight loss, certain printed materials and medical information services are pending in the U.S. and Canada. The Contrave logo is registered in Europe and Japan. An intent-to-use trademark application for the mark EMPATIC is pending for use in connection with pharmaceutical preparations, including those for use in the treatment of obesity and inducing weight loss, various printed materials, and medical information services. Foreign trademark registrations have issued in the European Union and Japan for the mark EMPATIC, and an application remains pending in Canada. However, no assurance can be given that our allowed trademark applications will actually become registered, or that our registered trademarks can be maintained or enforced. During trademark registration proceedings in the various countries, we have received and expect to receive rejections. Although we are given an opportunity to respond to those rejections, there can be no assurance that the rejections can be successfully overcome. In addition, in the PTO and in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to cancel registered trademarks. For example, another pharmaceutical company opposed the registration of EXCALIA, the prior mark for the product candidate that we now call EMPATIC. No assurance can be given that opposition or cancellation proceedings will not be filed against our trademarks, nor can there be any assurance that our trademarks would survive such proceedings.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is common in the biotechnology and pharmaceutical industries, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or

otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Risks Related to Our Finances and Capital Requirements

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

We have focused primarily on developing our first two product candidates, NB32 and Empatic, with the goal of supporting regulatory approval for these product candidates. We have financed our operations almost exclusively through the sale of our preferred and common stock and debt and have incurred losses in each year since our inception in September 2002. As of June 30, 2014, we had an accumulated deficit of approximately \$563.9 million. These losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital. We expect to continue to incur significant and increasing operating losses for the foreseeable future and such losses have had, and will continue to have, an adverse effect on our stockholders' equity. Because of the numerous risks and uncertainties associated with developing pharmaceutical products, we are unable to predict the extent of any future losses or when we will become profitable, if at all.

We have not generated any revenue from our product candidates and may never be profitable.*

Our ability to become profitable depends upon our ability to generate revenue. With the exception of the \$50 million upfront cash payment we received from Takeda upon execution of the collaboration agreement, we have not generated any revenue from our development-stage product candidates, and we do not know when, or if, we will generate any revenue. Our ability to generate revenue depends on a number of factors, including, but not limited to, our ability to:

- successfully complete future trials for NB32 and Empatic, including the Light Study and the Ignite Study;
- obtain regulatory approval for NB32 and Empatic;
- manufacture commercial quantities of our product candidates at acceptable cost levels if regulatory approvals are received;
- successfully manage our collaborative relationship with Takeda to effectively market and sell NB32, if approved, in the United States, Canada and Mexico; and
- identify and enter into one or more additional strategic collaborations to effectively market and sell Empatic or market and sell NB32 outside the United States, Canada and Mexico, if approved.

Even if one or more of our product candidates is approved for commercial sale, which we do not expect to occur, with respect to NB32, until September 2014 at the earliest, assuming the PDUFA goal date assigned by the FDA for the resubmitted NB32 NDA is not delayed further, we anticipate incurring significant costs associated with commercializing and continued development for any approved product. We may not achieve profitability soon after generating product sales, if ever. If we or our collaborative partner are unable to generate product revenues, we will not become sustainably profitable and may be unable to continue operations without continued funding.

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We may need additional funds and/or need to enter into additional collaborative or other agreements in order to fund any additional clinical trials for NB32 beyond the Light Study, to the extent required, commercialize NB32 outside the United States, Canada and Mexico and continue the development of Empatic, and we may be unable to raise capital when needed or enter into such an agreement, which would force us to delay, reduce or eliminate any additional development activities required for NB32, our commercialization efforts for NB32 outside such countries and our development efforts for Empatic.

Developing products for the obesity market, conducting clinical trials, establishing outsourced manufacturing relationships and successfully manufacturing and marketing drugs that we may develop is expensive. We believe that our existing cash, cash equivalents and short-term investments will be sufficient to meet our projected operating requirements through at least the next 12 months. However, we have based these estimates on assumptions that may prove to be wrong, and we could spend our available financial resources much faster than we currently expect. Further, we will need additional capital to:

- fund our operations and continue to conduct clinical trials to support potential regulatory approval of Empatic;
- commercialize NB32 outside the United States, Canada and Mexico, Empatic or any other product candidates that we may develop, in-license or acquire, if any of these product candidates receives regulatory approval;
- co-promote NB32 in the United States, if it receives regulatory approval; and
- qualify and outsource the commercial-scale of our products under cGMP.

The amount and timing of our future funding requirements will depend on many factors, including, but not limited to:

- the rate of progress and cost of the Light Study, and the scope and cost of any additional clinical trials required for NB32 and clinical trials for Empatic, including expenses to support the trials and milestone payments that may become payable, and the decisions we make with respect to the continued development of such product candidates;
- the terms and timing of any collaborative, licensing, co-promotion or other arrangements that we may establish with respect to NB32 or Empatic;
- the costs of establishing sales, marketing and distribution capabilities in order to commercialize NB32 if and when it is approved for marketing, should we elect to do so;
- the costs involved in enforcing or defending patent claims or other intellectual property rights;
- the costs and timing of regulatory approvals for NB32 and Empatic, if at all;
- the extent to which we in-license, acquire or invest in other indications, products, technologies and businesses; and
- the successful commercialization of our products, if approved.

Future capital requirements will also depend on the extent to which we acquire or invest in additional complementary businesses, products and technologies. We currently have no commitments or agreements relating to any of these types of transactions.

Until we can generate a sufficient amount of product revenue and achieve profitability, we expect to finance future cash needs through public or private equity offerings, debt, receivables or royalty financings, or corporate collaboration and licensing arrangements, as well as through interest income earned on cash and investment balances. We cannot be certain that additional funding will be available on acceptable terms, or at all. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate one or more of our development programs or our commercialization efforts.

Our quarterly operating results may fluctuate significantly.

We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- variations in the level of expenses related to our two existing product candidates, including the conduct of the Light Study and the Ignite Study, or future development programs;
- regulatory developments affecting our product candidates or those of our competitors;
- the timing of future payments, if any, we may receive under our collaboration agreement with Takeda;
- our execution of any additional collaborative, licensing or similar arrangements, and the timing of payments we may make or receive under these arrangements;
- addition or termination of clinical trials, including the Light Study and the Ignite Study, or funding support;

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- any intellectual property infringement lawsuit in which we may become involved; and
- if any of our product candidates receives regulatory approval, the level of underlying demand for our product candidates, wholesalers' buying patterns and with respect to NB32, Takeda's performance under our collaboration agreement.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Raising additional funds by issuing securities may cause dilution to existing stockholders and raising funds through lending and licensing arrangements may restrict our operations or require us to relinquish proprietary rights.

To the extent that we raise additional capital by issuing equity securities, our existing stockholders' ownership will be diluted. Debt, receivables and royalty financings typically contain covenants that restrict operating activities and may impair our ability to in-license potential products and/or product candidates. Debt, receivables and royalty financings may also be coupled with an equity component, such as warrants to purchase stock, which could also result in dilution of our existing stockholders' ownership.

If we raise additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish potentially valuable rights to our current product candidates, potential products or proprietary technologies, or grant licenses on terms that are not favorable to us. If adequate funds are not available, our ability to achieve profitability or to respond to competitive pressures would be significantly limited and we may be required to delay, significantly curtail or eliminate the development of one or more of our product candidates.

We recently sold \$115 million aggregate principal amount of 2.75% Convertible Senior Notes, which may impact our financial results, result in the dilution of existing stockholders, and restrict our ability to take advantage of future opportunities.*

In December of 2013, we sold \$115 million aggregate principal amount of 2.75% Convertible Senior Notes due 2020, or the 2020 Notes. We will be required to pay interest on the 2020 Notes until they come due, are called by us, or are converted, and the payment of that interest will reduce our net income. The sale of the 2020 Notes may also affect our earnings per share figures, as accounting requirements require that we include in our calculation of earnings per share the number of shares of our common stock into which the 2020 Notes are convertible. On June 27, 2014, our stockholders approved a flexible conversion option that allows us to pay the conversion right on these 2020 Notes in cash and/or shares. The flexible conversion right may allow us to exclude from the earnings per share calculation the shares of our common stock into which the 2020 Notes are convertible. However, we cannot guarantee that the flexible conversion option would result in the accounting treatment described above. The 2020 Notes may be converted, under the conditions and at the premium specified in those 2020 Notes, into shares of our common stock and/or into the cash equivalent of shares of our common stock. If converted into shares, the 2020 Notes will result in the dilution of our shareholders. If converted into cash, the 2020 Notes may require the payment of significant additional amounts above the initial principal. The payment of the interest payments, the repayment of the principal, and the potential payment of the conversion premium will require the use of a substantial amount of our cash, and if such cash is not available, we may be required to sell other assets or enter into alternate financing arrangements at terms that may or may not be desirable. The existence of the 2020 Notes and the obligations we incurred by issuing them may restrict our ability to take advantage of certain future opportunities, such as engaging in future debt or equity financing activities, which may reduce or impair our ability to acquire new businesses or invest in our existing businesses.

We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to public company compliance initiatives.

As a public company, we incur significant legal, accounting and other expenses. In addition, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules subsequently implemented by the Securities and Exchange Commission, or the SEC, and the Nasdaq Stock Market, Inc., or Nasdaq, have imposed various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations result in increased legal and financial compliance costs and will make some activities more time-consuming and costly.

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The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure. In particular, we are required to perform system and process evaluation and testing of our internal controls over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses. We have incurred and continue to expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404. We currently do not have an internal audit function, and we may need to hire additional accounting and financial staff with appropriate experience and technical accounting knowledge. Moreover, if we do not comply with the requirements of Section 404, or if we or our independent registered public accounting firm identifies deficiencies in our internal controls that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities, which would entail expenditure of additional financial and management resources.

Our results of operations and liquidity needs could be materially negatively affected by market fluctuations and economic downturn.

Our results of operations could be materially negatively affected by economic conditions generally, both in the U.S. and elsewhere around the world. Domestic and international equity markets have experienced and may continue to experience heightened volatility and turmoil based on domestic and international economic conditions and concerns. In the event these economic conditions and concerns continue and the markets continue to remain volatile, our results of operations could be adversely affected by those factors in many ways, including making it more difficult for us to raise funds if necessary, and our stock price may further decline. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are not federally insured. If economic instability continues, we cannot provide assurance that we will not experience losses on these investments.

We may lose the ability to use our net operating loss carryforwards, which could prevent or delay us from offsetting future taxable income.

We have incurred substantial losses during our history and do not expect to become profitable in 2014 and may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire. Our federal and state net operating loss carryforwards begin to expire in 2024 and 2015, respectively. Additionally, the future utilization of our net operating loss carryforwards and credits to offset future taxable income is subject to annual limitations, pursuant to Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, as a result of ownership changes that have occurred in prior years or may occur in the future, which could defer our ability to utilize or prevent us from fully utilizing our net operating loss carryforwards and credits, which could have an adverse effect on our results of operations. We completed an ownership change analysis in accordance with Section 382 from inception through December 31, 2013. As a result of the study, it was determined that we experienced several ownership changes during this period with the last one occurring in December 2011. The analysis to determine the limitation of NOLs and federal credits as a result of the ownership changes has not been finalized. When this analysis is finalized, we will reassess the amount of net operating losses and federal credits subject to limitation under Section 382.

Risks Relating to Securities Markets and Investment in Our Stock

*The market price of our common stock has fluctuated and is likely to continue to fluctuate, which could reduce the market price of our common stock.**

The market prices for securities of biotechnology and pharmaceutical companies have historically been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Over the last several years, the overall capital markets have been highly volatile. Since the commencement of trading in connection with our initial public offering, or IPO, the publicly traded shares of our common stock have themselves experienced significant price and volume fluctuations. During the quarter ended June 30, 2014, the price per share for our common stock on the Nasdaq Global Market has ranged from a low sale price of \$4.76 to a high sale price of \$7.02. This market volatility is likely to continue and could reduce the market price of our common stock, regardless of our operating performance. In addition, the trading price of our common stock could change significantly over short periods of time in response to many factors, including:

- FDA or international regulatory actions, including announcements concerning our NDA or our communications with the FDA for NB32, including the status of the FDA's review of our NDA for NB32, or failure to receive regulatory approval for any of our product candidates;
- announcements regarding our clinical trials, including the Light Study and the Ignite Study;
- announcements regarding Vivus', Arena's and Eisai's approved obesity products, including sales, safety and efficacy results, and their respective regulatory submissions and/or the results of their respective clinical trials;
- announcements regarding our other competitors' regulatory submissions and/or the results of their clinical trials;
- announcements regarding our collaborative relationship with Takeda;
- announcements regarding bupropion, naltrexone or zonisamide;
- announcements regarding manufacturing or supply developments for NB32 or Empatic;
- failure of any of our product candidates, if approved, to achieve commercial success;
- developments concerning current or future strategic collaborations;
- announcements of the introduction of new products by us or our competitors;
- market conditions in the pharmaceutical and biotechnology sectors;
- announcements concerning product development results or intellectual property rights of others;
- litigation or public concern about the safety of our potential products;
- actual and anticipated fluctuations in our quarterly operating results;
- deviations in our operating results from the estimates of securities analysts or other analyst comments;
- additions or departures of key personnel;
- healthcare reform measures and other third-party coverage and reimbursement policies; and
- discussion of us or our stock price by the financial and scientific press and in online investor communities.

The realization of any of the risks described in these "Risk Factors" could also have a dramatic and material adverse impact on the market price of our common stock.

Future sales of our common stock may depress our stock price.

Any 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 price of our common stock. We cannot predict the effect, if any, that market sales of any such shares of common stock or the availability of any such shares of common stock for sale would have on the market price of our common stock.

In addition, persons who were our stockholders prior to the sale of shares in our IPO continue to hold a substantial number of shares of our common stock that they may be able to sell in the public market, subject to the limitations of Rule 144 of the Securities Act of 1933, as amended. Significant portions of these shares are held by a small number of stockholders. Sales by our current stockholders of a substantial number of shares, or the expectation that such sales may occur, could significantly reduce the market price of our common stock. For example, certain of our executive officers have established selling plans under Rule 10b5-1 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, for the purpose of effecting specified sales of our common stock over a specified period of time. Moreover, the holders of a substantial number of shares of common stock may have rights, subject to certain conditions, to require us to file registration statements to permit the resale of their shares in the public market or to include their shares in registration statements that we may file for ourselves or other stockholders.

We have also registered all common stock that we may issue under our employee benefits plans. As a result, these shares can be freely sold in the public market upon issuance, subject to restrictions under the securities laws. In addition, our

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directors and executive officers may in the future establish programmed selling plans under Rule 10b5-1 of the Exchange Act for the purpose of effecting sales of our common stock, in addition to the already established plans. If any of these events cause a large number of our shares to be sold in the public market, the sales could reduce the trading price of our common stock and impede our ability to raise future capital.

Our executive officers, directors, principal stockholders and their respective affiliates will exercise significant influence over stockholder voting matters in a manner that may not be in the best interests of all of our stockholders.*

As of August 1, 2014, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates together controlled approximately 38.8% of our outstanding common stock, assuming no exercise of outstanding options or warrants. As a result, these stockholders will collectively be able to significantly influence all matters requiring approval of our stockholders, including the election of directors and approval of significant corporate transactions. The concentration of ownership may delay, prevent or deter a change in control of our company even when such a change may be in the best interests of some stockholders, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company or our assets and might affect the prevailing market price of our common stock.

Anti-takeover provisions under our charter documents and Delaware law could delay or prevent a change of control which could limit the market price of our common stock and may prevent or frustrate attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. Some of these provisions include:

- a board of directors divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time;
- a prohibition on stockholder action through written consent;
- a requirement that special meetings of stockholders be called only by the chairman of the board of directors, the chief executive officer, the president or by a majority of the total number of authorized directors;
- advance notice requirements for stockholder proposals and nominations;
- a requirement of approval of not less than 66 ²/₃% of all outstanding shares of our capital stock entitled to vote to amend any bylaws by stockholder action, or to amend specific provisions of our certificate of incorporation; and
- the authority of the board of directors to issue preferred stock on terms determined by the board of directors without stockholder approval.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporate Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors, including to delay or impede a merger, tender offer or proxy contest involving our company. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

We have never paid dividends on our capital stock, and because we do not anticipate paying any cash dividends in the foreseeable future, capital appreciation, if any, of our common stock will be your sole source of gain on an investment in our stock.

We have paid no cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

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We may become involved in securities class action litigation that could divert management's attention and harm our business and could subject us to significant liabilities.*

The stock markets have from time to time experienced significant price and volume fluctuations that have affected the market prices for the common stock of pharmaceutical companies. These broad market fluctuations may cause the market price of our common stock to decline. In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology and biopharmaceutical companies have experienced significant stock price volatility in recent years. We may become involved in this and other types of shareholder litigation in the future. Litigation often is expensive and diverts management's attention and resources, which could adversely affect our business.

In May 2013, we received a shareholder demand alleging that certain option grants to our President and Chief Executive Officer, Michael A. Narachi, our Chief Business Officer and acting-Chief Financial Officer, Joseph P. Hagan, and our Senior Vice President, General Counsel and Secretary, Heather D. Turner, in 2011 were granted in excess of the 1,500,000 share limit set forth in Section 3.3 of the Orexigen Therapeutics, Inc. 2007 Equity Incentive Award Plan, or Plan, as to the number of shares of our common stock with respect to which one or more stock awards may be granted to any one eligible participant during any of our fiscal years. We refer to this limit as the 162(m) Award Limit. Our board of directors established a demand review committee composed of independent directors to conduct an investigation with respect to the shareholder demand and to make recommendations to our board of directors. The demand review committee engaged independent counsel as part of its investigation and evaluated (1) the terms of the Plan, (2) the initial issuance procedures for the option grants to Mr. Narachi, Mr. Hagan and Ms. Turner during 2011, (3) the authority available to the compensation committee of our board of directors under its charter and the Plan, (4) the expectations of the award recipients and (5) the intent of our board of directors and the compensation committee regarding the availability of an exemption from the deductibility limitations of Section 162(m) of the Internal Revenue Code for such option grants. Following its investigation, the demand review committee determined that the 162(m) Award Limit first became effective as of June 2, 2011, and that, therefore, awards granted under the Plan prior to June 2, 2011, did not count toward the 162(m) Award Limit. The demand review committee determined that the awards granted to Mr. Hagan between June 2, 2011 and December 31, 2011 did not exceed the 162(m) Award Limit. The demand review committee further determined that the options granted to Mr. Narachi and Ms. Turner, including the portion of such awards in excess of the 162(m) Award Limit, were validly approved under the Plan, although the portion of those awards in excess of the 162(m) Award Limit does not qualify as performance-based compensation under Section 162(m). In September 2013, the compensation committee amended the Plan, with the approval of our board of directors, to take the following actions: (1) to clarify that the 162(m) Award Limit only applies to awards or the portion thereof intended to qualify as performance-based compensation under Section 162(m); and (2) to confirm that the compensation committee has the authority to make awards in excess of the 162(m) Award Limit, which board action we refer to as the Plan Amendment. The Plan Amendment is deemed effective as of June 10, 2011, consistent with the authority of the compensation committee as administrator of the Plan as of that date. Any grants under the Plan in excess of the 162(m) Award Limit are not intended to qualify as performance-based compensation under Section 162(m).

On December 6, 2013, a plaintiff claiming to be a shareholder of ours filed a derivative lawsuit purportedly on behalf of us against certain of our officers and the members of our board of directors, in the Superior Court for the State of California, County of San Diego, captioned *Wilkin v. Narachi, et al.* On December 9, 2013, the same shareholder who made a demand on the board in May 2013 filed a derivative lawsuit purportedly on behalf of us against certain of our officers and current and former members of our board of directors in the United States District Court, for the Southern District of California, captioned *Turgeman v. Narachi, et al.* Both of the lawsuits assert claims for breach of fiduciary duty, waste and unjust enrichment based on, among other things, the alleged grant of stock options to certain officers in excess of the 162(m) Award Limit, repricing stock options allegedly in violation of our equity incentive plan, the board of directors' conduct in responding to the May 2013 shareholder demand, and making allegedly false and misleading statements. Both of the lawsuits seek, among other things, declaratory relief, corporate governance reforms, rescission of certain stock option awards, rescission of the Plan Amendment, injunctive relief, damages, restitution, disgorgement and attorney's fees. On July 23, 2014, we and the individual defendants filed a motion to dismiss the *Turgeman* complaint. A hearing on the motion to dismiss is currently scheduled for September 22, 2014. The current deadline to file a response to the *Wilkin* complaint is August 13, 2014. Although management believes that the claims lack merit and intends to defend against them vigorously, there are uncertainties inherent in any litigation and we cannot predict the outcome.

It is possible that securities class action litigation may be brought against us following stock price declines related to the release of information regarding our NB32 NDA or clinical trial results, including the Light Study or related to the matters alleged in the May 2013 shareholder demand and/or the Plan Amendment. Any adverse determination in such litigation could subject us to significant liabilities.

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ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

None.

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ITEM 6. EXHIBITS

Exhibit Number	Description
3.1(1)	Amended and Restated Certificate of Incorporation of the Registrant
3.2(2)	Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Registrant
3.3(1)	Amended and Restated Bylaws of the Registrant
3.4(3)	Amendment to Amended and Restated Bylaws of the Registrant
4.1(1)	Form of the Registrant's Common Stock Certificate
4.2(4)	Form of Warrant to Purchase Common Stock
4.3(5)	Indenture dated as of December 6, 2013 by and between the Registration and Wilmington Trust, National Association, as trustee
10.1(6) [†]	Form of Acknowledgment Orexigen Therapeutics, Inc. Recoupment Policy
31.1*	Certification of Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 promulgated pursuant to the Securities Exchange Act of 1934, as amended
31.2*	Certification of Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 promulgated pursuant to the Securities Exchange Act of 1934, as amended
32.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following financial statements and footnotes from the Orexigen Therapeutics Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2014 formatted in eXtensible Business Reporting Language (XBRL): (i) Balance Sheets; (ii) Statements of Operations; (iii) Statements of Comprehensive Income (Loss); (iv) Statements of Cash Flows; and (v) the Notes to Unaudited Financial Statements, tagged as blocks of text.

(1) Filed with the Registrant's Registration Statement on Form S-1 on December 19, 2006, as amended (File No. 333-139496).

(2) Filed with the Registrant's Registration Statement on Form S-8 on June 22, 2011.

(3) Filed with the Registrant's Current Report on Form 8-K on July 3, 2014.

(4) Filed with the Registrant's Current Report on Form 8-K on December 15, 2011.

(5) Filed with the Registrant's Current Report on Form 8-K on December 9, 2013.

(6) Filed with the Registrant's Current Report on Form 8-K on April 25, 2014.

* These certifications are being furnished solely to accompany this quarterly report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and are not to be incorporated by reference into any filing of Orexigen Therapeutics, Inc., whether made before or after the date hereof, regardless of any general incorporation language in such filing.

† Indicates management contract or compensatory plan.

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.

OREXIGEN THERAPEUTICS, INC.

Date: August 8, 2014

By: /s/ Michael A. Narachi

Michael A. Narachi
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 8, 2014

By: /s/ Joseph P. Hagan

Joseph P. Hagan
Chief Business Officer
(Principal Financial and Accounting Officer)

INDEX TO EXHIBITS

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†	Indicates management contract or compensatory plan.

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Michael A. Narachi, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Orexigen Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 8, 2014

/s/ Michael A. Narachi

Michael A. Narachi
President and Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Joseph P. Hagan, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Orexigen Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 8, 2014

/s/ Joseph P. Hagan

Joseph P. Hagan
Chief Business Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Orexigen Therapeutics, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2014, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael A. Narachi, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 8, 2014

/s/ Michael A. Narachi

Michael A. Narachi
President and Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Orexigen Therapeutics, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2014, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph P. Hagan, Chief Business Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 8, 2014

/s/ Joseph P. Hagan
Joseph P. Hagan
Chief Business Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.