OPEXA THERAPEUTICS, INC.

FORM 10-Q
(Quarterly Report)

Filed 05/12/15 for the Period Ending 03/31/15

Address	2635 TECHNOLOGY FOREST BLVD. THE WOODLANDS, TX 77381
Telephone	(281) 272-9331
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Symbol	OPXA
SIC Code	2834 - Pharmaceutical Preparations
Industry	Biotechnology & Drugs
Sector	Healthcare
Fiscal Year	12/31

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 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 March 31, 2015

or

☐ **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: 001-33004

Opexa Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Texas	**2635 Technology Forest Blvd. The Woodlands, Texas 77381**	**76-0333165**
(State or other jurisdiction of Incorporation or organization)	(Address of principal executive offices and zip code)	(I.R.S. Employer Identification No.)

(281) 272-9331
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 the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

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

As of May 1, 2015, there were 53,353,642 shares of the issuer's Common Stock outstanding.

OPEXA THERAPEUTICS, INC.
For the Three Months Ended March 31, 2015

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

OPEXA THERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEETS
(Unaudited)

	March 31, 2015	December 31, 2014
Assets		
Current assets:		
Cash and cash equivalents	$ 9,572,880	$ 9,906,373
Other current assets	683,452	758,943
Total current assets	10,256,332	10,665,316
Property & equipment, net of accumulated depreciation of $2,196,371 and $2,099,389, respectively	1,007,532	1,098,104
Other long-term assets	29,204	38,939
Total assets	$ 11,293,068	$ 11,802,359
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,152,492	$ 702,494
Accrued expenses	1,272,698	1,199,184
Deferred revenue	2,905,165	1,230,746
Total current liabilities	5,330,355	3,132,424
Long term liabilities:		
Deferred revenue, net of current portion	2,178,877	1,230,748
Total liabilities	7,509,232	4,363,172
Commitments and contingencies	-	-
Stockholders' equity:		
Preferred stock, no par value, 10,000,000 shares authorized, none issued and outstanding	-	-
Common stock, $0.01 par value, 100,000,000 shares authorized, 28,255,205 and 28,234,751 shares issued and outstanding	282,552	282,348
Additional paid in capital	148,172,372	148,477,047
Accumulated deficit	(144,671,088)	(141,320,208)
Total stockholders' equity	3,783,836	7,439,187
Total liabilities and stockholders' equity	$ 11,293,068	$ 11,802,359

See accompanying notes to unaudited consolidated financial statements

OPEXA THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended March 31,	
	2015	**2014**
Revenue:		
Option revenue	$ 377,453	$ 348,837
Research and development	2,636,999	2,811,139
General and administrative	1,006,130	1,102,880
Depreciation and amortization	96,982	95,586
Operating loss	(3,362,658)	(3,660,768)
Interest income	1,478	5,194
Other income, net	10,300	-
Net loss	$ (3,350,880)	$ (3,655,574)
Basic and diluted loss per share	$ (0.12)	$ (0.13)
Weighted average shares outstanding - Basic and diluted	28,234,751	27,584,615

See accompanying notes to unaudited consolidated financial statements

OPEXA THERAPEUTICS, INC.
CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock		Additional Paid in Capital	Accumulated Deficit	Total
	Shares	Par			
Balances at December 31, 2014	28,234,751	$ 282,348	$ 148,477,047	$(141,320,208)	$ 7,439,187
Shares issued for services	20,454	204	44,259	—	44,463
Costs associated with rights offering			(615,888)	—	(615,888)
Option expense	—	—	266,954	—	266,954
Net loss	—	—	—	(3,350,880)	(3,350,880)
Balances at March 31, 2015	28,255,205	$ 282,552	$ 148,172,372	$(144,671,088)	$ 3,783,836

See accompanying notes to unaudited consolidated financial statements

OPEXA THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Three Months Ended March 31,	
	2015	**2014**
Cash flows from operating activities		
Net loss	$ (3,350,880)	$ (3,655,574)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Restricted stock issued to employees	44,463	100,176
Depreciation	96,982	95,586
Option expense	266,954	331,031
Changes in:		
Other current assets	75,491	(425,605)
Accounts payable - third parties and related parties	(61,033)	(12,614)
Accrued expenses	73,515	(4,323)
Deferred revenue	2,622,548	(348,837)
Other assets	9,735	11,017
Net cash used in operating activities	(222,225)	(3,909,143)
Cash flows from investing activities		
Purchase of property & equipment	(6,411)	(75,874)
Net cash used in investing activities	(6,411)	(75,874)
Cash flows from financing activities		
Payment of offering costs	(104,857)	-
Net cash used in financing activities	(104,857)	-
Net change in cash and cash equivalents	(333,493)	(3,985,017)
Cash and cash equivalents at beginning of period	9,906,373	23,644,542
Cash and cash equivalents at end of period	$ 9,572,880	$ 19,659,525
Cash paid for:		
Interest	$ 747	$ -
Income taxes	-	-
NON-CASH TRANSACTIONS		
Unpaid additions to property and equipment	$ -	14,311
Unpaid offering costs	$ 511,031	$ 17,467

See accompanying notes to unaudited consolidated financial statements

OPEXA THERAPEUTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

Note 1. Basis of Presentation

The accompanying interim unaudited consolidated financial statements of Opexa Therapeutics, Inc. ("Opexa" or the "Company"), have been prepared in accordance with accounting principles generally accepted in the United States of America and the rules of the Securities and Exchange Commission ("SEC") and should be read in conjunction with the audited financial statements and notes thereto contained in Opexa's latest Annual Report filed with the SEC on Form 10-K. In the opinion of management, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of financial position and the results of operations for the interim periods presented have been reflected herein. The results of operations for interim periods are not necessarily indicative of the results to be expected for the full year. Notes to the consolidated financial statements that would substantially duplicate the disclosure contained in the audited consolidated financial statements for the most recent fiscal year as reported in Form 10-K have been omitted.

The accompanying consolidated financial statements include the accounts of Opexa and its wholly owned subsidiary, Opexa Hong Kong Limited ("Opexa Hong Kong"). All intercompany balances and transactions have been eliminated in the consolidation.

Note 2. Significant Accounting Polices

Revenue Recognition. Opexa recognizes revenue in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("FASB ASC") 605, "Revenue Recognition." ASC 605 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) consideration is fixed or determinable; and (4) collectability is reasonably assured.

On February 4, 2013, Opexa entered into an Option and License Agreement (the "Merck Serono Agreement") with Ares Trading SA ("Merck Serono"), a wholly owned subsidiary of Merck Serono S.A. Pursuant to the terms, Merck Serono has an option to acquire an exclusive, worldwide (excluding Japan) license of Opexa's Tcelna® program for the treatment of multiple sclerosis ("MS"). Tcelna is currently in a Phase IIb clinical trial in patients with Secondary Progressive MS ("SPMS"). The option may be exercised by Merck Serono prior to or upon Opexa's completion of the Phase IIb Trial.

On March 9, 2015 Opexa entered into a First Amendment of Option and License Agreement with Merck Serono, to amend the Merck Serono Agreement (the "Merck Serono Amendment"). Opexa received $3 million in consideration for the activities described below:

(i) Opexa will create a detailed Pre-Phase III Plan (including a GANTT chart containing key tasks, decision points, timing, budget and milestones) documenting all of the activities necessary for laboratory facilities both in the U.S. and Europe to reach operational readiness by the end of December 2016 (e.g., review and identification of a preferred contract manufacturing organization in Europe; set-up, identification and qualification of third parties for raw materials; validation of laboratory facilities in the U.S. and Europe; and a hiring plan for key personnel). For Europe, the Pre-Phase III Plan would address the creation of a dedicated lab to support a Phase III trial, and for the U.S., the Pre-Phase III Plan would address the expansion of existing capabilities and infrastructure for a Phase III trial. The Joint Steering Committee ("JSC") established pursuant to the Merck Serono Agreement will be responsible for reviewing, approving and ultimately overseeing Opexa's completion of the Pre-Phase III Plan, which approval may not be unreasonably withheld or delayed. The JSC will meet at least quarterly to advise and make specific recommendations with respect to the Pre Phase III Plan. In the event the JSC has not approved the Pre-Phase III Plan prior to the end of the Option Period (as defined in the Merck Serono Agreement), the Option Period will be extended for 60 days following approval of the Pre Phase III Plan by the JSC.

(ii) Opexa will provide Merck Serono updates and analysis on a blinded basis, grouped in patient batches according to Opexa's analysis timetable, on the progress of Opexa's immune monitoring program (the "Program") being conducted in conjunction with Opexa's ongoing Abili-T clinical trial, with such updates and analysis to be shared with Merck Serono within 30 days of Opexa's initial assessment of such information. Opexa will inform Merck Serono of any existing or future external bioinformatics vendor used by Opexa for the Program, and Merck Serono will have the right, at its expense, to review current and future data storage and integrity measures for the on-going Abili-T clinical trial.

Opexa evaluated the Merck Serono Amendment and determined that the $3 million payment from Merck Serono has stand-alone value. Opexa's continuing performance obligations, in connection with the $3 million payment, include the creation of the Pre-Phase III Plan and delivery of updates and analysis relating to the Program. As a stand-alone value term in the Merck Serono Amendment, the $3 million payment is determined to be a single unit of accounting, and is recognized as revenue on a straight-line basis over the period equivalent to the expected completion of the Pre-Phase III Plan in December 2016. Opexa includes the unrecognized portion of the $3 million as deferred revenue on the consolidated balance sheets.

Cash and Cash Equivalents . Opexa considers all highly liquid investments with an original maturity of three months or less, when purchased, to be cash equivalents. Investments with maturities in excess of three months but less than one year are classified as short-term investments and are stated at fair market value.

Opexa primarily maintains cash balances on deposit in accounts at a U.S.-based financial institution. The aggregate cash balance on deposit in these accounts is insured by the Federal Deposit Insurance Corporation up to $250,000. Opexa's cash balances on deposit in these accounts may, at times, exceed the federally insured limits. Opexa has not experienced any losses in such accounts.

At March 31, 2015, Opexa had approximately $8.1 million in a savings account. For the three months ended March 31, 2015, the savings account recognized an average market yield of 0.10%. Interest income of $1,478 was recognized for the three months ended March 31, 2015 in the consolidated statements of operations.

Note 3. Other Current Assets

Other current assets consisted of the following at March 31, 2015 and December 31, 2014:

Description	March 31, 2015	December 31, 2014
Deferred offering costs	$ 259,989	$ 259,989
Prepaid expenses	423,463	498,954
	$ 683,452	$ 758,943

Prepaid expenses at March 31, 2015 and December 31, 2014 include advance payments totaling $118,709 and $131,289, respectively, made to vendors and consultants for the conduct of the Phase IIb clinical trial in SPMS.

Prepaid expenses at March 31, 2015 and December 31, 2014 also include costs incurred from third parties in connection with the Merck Serono Agreement (see Note 2). As of March 31, 2015 and December 31, 2014, the remaining costs of $38,938 in connection with the Merck Serono Agreement that are expected to be amortized over the upcoming 12-month period are capitalized and included in other current assets in the consolidated balance sheets. The remaining costs of $29,204 in connection with the Merck Serono Agreement that are expected to be amortized beyond the upcoming 12-month period are capitalized and included in other long term assets in the consolidated balance sheets (see Note 4).

Deferred offering costs at March 31, 2015 and December 31, 2014 include costs incurred from third parties in connection with the implementation of a $1.5 million Purchase Agreement in November 2012 pursuant to which Opexa has the right to sell to Lincoln Park Capital Fund, LLC ("Lincoln Park") up to $1.5 million in shares of its common stock, subject to certain conditions and limitations. As of March 31, 2015 and December 31, 2014, the remaining costs of $ 238,154 in connection with the implementation of the $1.5 million Purchase Agreement remained capitalized and are included in other current assets in the consolidated balance sheets. Upon the sales of shares of common stock under the $1.5 million Purchase Agreement, the remaining capitalized costs are offset against the proceeds of such sales of shares of common stock.

Deferred offering costs at March 31, 2015 also include costs incurred from third parties in connection with the implementation of an at-the-market program ("ATM Agreement") in March 2014 pursuant to which Opexa may sell shares of its common stock from time to time depending upon market demand through a sales agent in transactions deemed to be an "at-the-market" offering as defined in Rule 415 of the Securities Act of 1933. As of March 31, 2015, the remaining costs of $21,835 in connection with the implementation of the ATM Agreement remained capitalized and are included in other current assets in the consolidated balance sheets. Upon the sales of shares of common stock under the ATM Agreement, the remaining capitalized costs are offset against the proceeds of such sales of shares of common stock.

Note 4. Other Long Term Assets

Other long term assets at March 31, 2015 and December 31, 2014 also include costs incurred from third parties in connection with the Merck Serono Agreement (see Note 2), amounting to $29,204 and $38,939, respectively, that are expected to be amortized beyond the upcoming 12-month period.

Note 5. Equity

For the three months ended March 31, 2015, equity related transactions were as follows:

- Costs associated with rights offering. During the three months ended March 31, 2015, Opexa incurred costs of $615,888 associated with the rights offering consisting of legal, accounting, printing, filing fees and other related costs. These costs were recorded as an offset to subsequently received proceeds in connection with the completion of the rights offering (see Note 7).
- Opexa recognized stock based compensation expense of $33,213 related to vested shares of restricted common stock issued to certain members of Opexa's management and non-employee directors on February 28, 2014.
- On March 31, 2015, 20,454 shares of restricted common stock with an aggregate fair value of $11,250 were issued to certain non-employee directors for service on Opexa's Board. Opexa recognized stock based compensation of $11,250 related to these shares. The shares vested immediately upon grant.

Note 6. Stock-Based Compensation

Stock Options

The Board of Directors initially adopted the 2010 Stock Incentive Plan on September 2, 2010 for the granting of equity incentive awards to employees, directors and consultants of Opexa, and the Plan was initially approved by the Company's shareholders on October 19, 2010. On September 25, 2013, the Board approved the Amended and Restated 2010 Stock Incentive Plan ("the 2010 Plan"), and the Company's shareholders approved the amended 2010 Plan on November 8, 2013, in order to (i) increase the number of shares of common stock reserved for issuance by 3,000,000 shares and (ii) reset the number of stock-based awards issuable to a participant in any calendar year to align with the increase in the shares reserved. The 2010 Plan is the successor to and continuation of Opexa's June 2004 Compensatory Stock Option Plan (the "2004 Plan").

The 2010 Plan reserves a maximum of 3,625,000 shares of common stock for issuance plus the number of shares subject to stock options outstanding under the 2004 Plan that are forfeited or terminate prior to exercise and would otherwise be returned to the share reserves under the 2004 Plan and any reserved shares not issued or subject to outstanding grants, up to a maximum of 513,220 shares. The 2010 Plan provides for the grant of incentive stock options or nonqualified stock options, as well as restricted stock, stock appreciation rights, restricted stock units and performance awards that may be settled in cash, stock or other property. The Board of Directors or Compensation Committee, as applicable, administers the 2010 Plan and has discretion to determine the recipients, the number and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting. Subject to a limitation on repricing without shareholder approval, the Board or Compensation Committee, as applicable, may also determine the exercise price of options granted under the 2010 Plan. As of March 31, 2015, options to purchase an aggregate of 3,423,779 shares were issued and outstanding under the 2004 Plan and the 2010 Plan, and 501,824 shares remained available for the grant of options under the 2010 Plan.

Opexa accounts for stock-based compensation, including options and nonvested shares, according to the provisions of FASB ASC 718, "Share Based Payment." During the three months ended March 31, 2015, Opexa recognized stock-based compensation expense of $266,954. Unamortized stock-based compensation expense as of March 31, 2015 amounted to $2,559,639.

Stock Option Activity

A summary of stock option activity for the three months ended March 31, 2015 is presented below:

	Number of Shares	Weighted Avg. Exercise Price	Weighted Average Remaining Contract Term (# years)	Intrinsic Value
Outstanding at January 1, 2015	2,423,253	$ 2.92		
Granted	1,008,026	0.67		
Exercised	-	-		
Forfeited and canceled	(7,500)	1.68		
Outstanding at March 31, 2015	3,423,779	$ 2.26	8.4	$ -
Exercisable at March 31, 2015	1,467,068	$ 3.43	6.8	$ -

Employee Options:

Option awards are granted with an exercise price equal to the market price of Opexa's stock at the date of issuance, generally have a ten-year life, and have various vesting dates that range from no vesting or partial vesting upon date of grant to full vesting on a specified date. Opexa estimates the fair value of stock options using the Black-Scholes option-pricing model and records the compensation expense ratably over the service period.

During the three months ended March 31, 2015, time-based options to purchase an aggregate of 496,250 shares at exercise prices ranging from $.53 to $.82 were granted to employees. These options have a term of ten years and have a vesting schedule of the earlier of four years or termination of employment without cause following a change of control. Fair value of $380,537 was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model for these options include (1) discount rate range of 1.948% to 2.05%,

(2) expected term of 6.25 years, (3) expected volatility range of 141.07% to 143.46% and (4) zero expected dividends.

During the three months ended March 31, 2015, options to purchase 7,500 shares were forfeited and cancelled.

Opexa recognized stock based compensation expense of $159,194 and $221,692 for grants made to employees during the three months ended March 31, 2015 and March 31, 2014 respectively.

Non-Employee Options:

During the three months ended March 31, 2015, options to purchase an aggregate of 511,776 shares at an exercise price of $0.82 were granted to non-employee directors for service on Opexa's Board. Options to purchase an aggregate of 357,050 shares will expire on the earlier of 10 years or a change in control of Opexa, with 50% of the shares vesting immediately and 50% vesting on December 31, 2015. Options to purchase an aggregate of 119,020 shares have terms of 10 years, with 50% of the shares vesting immediately and 50% vesting on March 30, 2016. An option to purchase 35,706 shares will expire on the earlier of 10 years or a change in control of Opexa, with vesting in four quarterly increments beginning on March 31, 2015. Fair value of $214,844 was calculated using the Black-Scholes option-pricing model. Variables used in the Black-Scholes option-pricing model for these options include (1) discount rate of 2.05%, (2) expected term of 5.25 years, (3) expected volatility of 143.46% and (4) zero expected dividends.

Opexa recognized stock based compensation expense of $107,760 and $109,339 for grants made to non-employee directors during the three months ended March 31, 2015 and March 31, 2014 respectively.

Restricted Stock

See Note 5 for a description of restricted stock awards made to non-employee directors under the 2010 Plan during the three months ended March 31, 2015.

Warrant Activity

A summary of warrant activity for the three months ended March 31, 2015 is presented below:

	Number of Shares	Weighted Avg. Exercise Price	Weighted Average Remaining Contract Term (# years)	Intrinsic Value
Outstanding at January 1, 2015	3,046,801	$ 4.08		
Granted	-	-		
Exercised	-	-		
Forfeited and canceled	-	-		
Outstanding at March 31, 2015	3,046,801	$ 4.08	1.96	$ -
Exercisable at March 31, 2015	3,046,801	$ 4.08	1.96	$ -

Note 7. Subsequent Events

On March 16, 2015, Opexa distributed at no charge to holders of its common stock and to holders of its outstanding Series L warrants who were entitled to participate in the offering (the "Rights Offering"), as of 5:00 p.m., Eastern Time, on the record date of March 13, 2015, non-transferable subscription rights ("Subscription Rights") to purchase up to 28,776,419 "Units" at a subscription price of $0.55 per unit (the "Subscription Price"). Each Subscription Right entitled holders to purchase one unit (the "Basic Subscription Right"), consisting of one share of Opexa's common stock and a warrant (a "Series M warrant") representing the right to purchase one share of Opexa's common stock. The Series M warrants entitle the holder to purchase one share of Opexa's common stock at an exercise price of (i) $0.50 per share from the date of issuance (April 9, 2015) through June 30, 2016 and (ii) $1.50 per share from July 1, 2016 through their expiration three years from the date of issuance. If a holder fully exercised the holder's Basic Subscription Rights, and other shareholders or warrant holders did not fully exercise their Basic Subscription Rights, the holder was entitled to an oversubscription privilege to purchase a portion of the unsubscribed units at the Subscription Price, subject to proration and ownership limitations (the "Over-Subscription Privilege"). The Subscription Rights expired at 5:00 p.m., Eastern Time, on April 8, 2015.

Opexa raised $13,804,140 in gross proceeds, before expenses, through subscriptions for 25,098,437 units, including the exercise of Over-Subscription Privileges. Net proceeds, after deduction of fees and expenses, including dealer-manager fees, are expected to be approximately $12 million. Opexa issued an aggregate of 25,098,437 shares of common stock and Series M warrants for a like number of shares.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition is as of March 31, 2015. Our results of operations and cash flows should be read in conjunction with our unaudited consolidated financial statements and notes thereto included elsewhere in this report and the audited financial statements and the notes thereto included in our Form 10-K for the year ended December 31, 2014.

Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Statements contained in this report, other than statements of historical fact, constitute "forward-looking statements." The words "expects," "believes," "hopes," "anticipates," "estimates," "may," "could," "intends," "exploring," "evaluating," "progressing," "proceeding," and similar expressions are intended to identify forward-looking statements.

These forward-looking statements do not constitute guarantees of future performance. Investors are cautioned that statements which are not strictly historical statements, including, without limitation, statements regarding current or future financial payments, costs, returns, royalties, performance and position, plans and objectives for future operations, plans and objectives for product development, plans and objectives for present and future clinical trials and results of such trials, plans and objectives for regulatory approval, litigation, intellectual property, product development, manufacturing plans and performance, management's initiatives and strategies, and the development of Opexa's product candidates, Tcelna (imilecleucel T) and OPX-212, constitute forward-looking statements. Such forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated. These risks and uncertainties include, but are not limited to, those risks discussed in "Risk Factors," as well as, without limitation, risks associated with:

- market conditions;
- our capital position;
- our ability to compete with larger, better financed pharmaceutical and biotechnology companies;
- new approaches to the treatment of our targeted diseases;
- our expectation of incurring continued losses;
- our uncertainty of developing a marketable product;
- our ability to raise additional capital to continue our development programs (including to undertake and complete any ongoing or further clinical studies for Tcelna or OPX-212);
- our ability to maintain compliance with NASDAQ listing standards;
- the success of our clinical trials (including the Phase IIb trial for Tcelna in SPMS which, depending upon results, may determine whether Merck Serono elects to exercise its Option to acquire an exclusive, worldwide (excluding Japan) license of our Tcelna program for the treatment of multiple sclerosis (MS);
- whether Merck Serono exercises its Option and, if so, whether we receive any development or commercialization milestone payments or royalties from Merck Serono pursuant to the Option;
- our dependence (if Merck Serono exercises its Option) on the resources and abilities of Merck Serono for the further development of Tcelna;
- the efficacy of Tcelna for any particular indication, such as for relapsing remitting MS or secondary progressive MS, and the efficacy of OPX-212 for neuromyelitis optica (NMO);
- our ability to develop and commercialize products;
- our ability to obtain required regulatory approvals;
- our compliance with all Food and Drug Administration regulations;
- our ability to obtain, maintain and protect intellectual property rights (including for Tcelna and OPX-212);
- the risk of litigation regarding our intellectual property rights or the rights of third parties;
- the success of third party development and commercialization efforts with respect to products covered by intellectual property rights that we may license or transfer;
- our limited manufacturing capabilities;
- our dependence on third-party manufacturers;
- our ability to hire and retain skilled personnel;
- our volatile stock price; and
- other risks detailed in our filings with the SEC.

These forward-looking statements speak only as of the date made. We assume no obligation or undertaking to update any forward-looking statements to reflect any changes in expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based. You should, however, review additional disclosures we make in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed with the SEC.

Business Overview

Unless otherwise indicated, we use "Opexa," "the Company," "we," "our" and "us" to refer to the businesses of Opexa Therapeutics, Inc.

Opexa is a biopharmaceutical company developing a personalized immunotherapy with the potential to treat major illnesses, including multiple sclerosis (MS) as well as other autoimmune diseases such as neuromyelitis optica (NMO). These therapies are based on our proprietary T-cell technology. Our mission is to lead the field of Precision Immunotherapy® by aligning the interests of patients, employees and shareholders. Information related to our product candidates, Tcelna® and OPX-212, is preliminary and investigative. Tcelna and OPX-212 have not been approved by the U.S. Food and Drug Administration (FDA) or other global regulatory agencies for marketing.

MS is an inflammatory autoimmune disease of the central nervous system (CNS), which is made up of the brain, spinal cord and optic nerves, with a clinically heterogeneous and unpredictable course that persists for decades. MS attacks the covering surrounding nerve cells, or myelin sheaths, leading to loss of myelin (demyelination) and nerve damage. In addition to demyelination, the neuropathology of MS is characterized by variable loss of oligodendroglial cells and axonal degeneration and manifests in neurological deficits. Symptoms may be mild, such as numbness in the limbs, or severe, such as paralysis or loss of vision. This inflammatory, demyelinating, autoimmune disease has varied clinical presentations, ranging from relapses and remissions (relapsing remitting MS, or RRMS) to slow accumulation of disability with or without relapses (secondary progressive MS, or SPMS). There are approximately 450,000 MS patients in North America and over 2,000,000 patients worldwide according to estimates from The National MS Society. The portion of the MS patient population that can be classified as SPMS is estimated by various industry sources to be between 30-45% of the total MS patient population.

We believe that our lead product candidate, Tcelna, has the potential to fundamentally address the root cause of MS by stopping the demyelination process and supporting the generation of new myelin sheaths where demyelination has occurred (remyelination). Tcelna is an autologous T-cell immunotherapy that is currently being developed for the treatment of SPMS and is specifically tailored to each patient's immune response profile to myelin. Tcelna is designed to reduce the number and/or functional activity of specific subsets of myelin-reactive T-cells (MRTCs) known to attack myelin. This technology was originally licensed from Baylor College of Medicine in 2001.

Tcelna is manufactured using our proprietary method for the production of an autologous T-cell product, which comprises the collection of blood from the MS patient and the expansion of MRTCs from the blood. Upon completion of the manufacturing process, an annual course of therapy consisting of five doses is cryopreserved. At each dosing time point, a single dose of Tcelna is formulated and attenuated by irradiation before returning the final product to the clinical site for subcutaneous administration to the patient.

Tcelna has received Fast Track designation from the FDA in SPMS, and we believe it is positioned as a potential first-to-market personalized T-cell therapy for MS patients. The FDA's Fast Track program is designed to facilitate the development and expedite the review of drug candidates intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs.

In addition to our ongoing clinical development of Tcelna, we announced on September 8, 2014, that we are also developing OPX-212 as an autologous T-cell immunotherapy for the treatment of NMO. NMO is an autoimmune disorder in which immune system cells and antibodies attack and destroy astrocytic/myelin cells in the optic nerves and the spinal cord leading to demyelination and loss of axons. There are currently no FDA-approved therapies for NMO, other than to treat an attack while it is happening, to reduce symptoms and to prevent relapses. OPX-212 is specifically tailored to each patient's immune response to a protein, aquaporin-4, which is the targeted antigen in NMO. In NMO, the immune system recognizes aquaporin-4 as foreign, thus triggering the attack. We believe a mechanism of action of OPX-212 may be to reduce the number and/or regulate aquaporin-4 reactive T-cells (ARTCs), thereby reducing the frequency of clinical relapses and subsequent progression in disability. See "—NMO – OPX-212" below for more information on our development plans for OPX-212 in NMO.

Opexa was incorporated in Texas in March 1991. Our principal executive offices are located at 2635 Technology Forest Blvd., The Woodlands, Texas 77381, and our telephone number is (281) 775-0600.

Multiple Sclerosis—Background

MS is a disease that is more common in females than males (2:1) between the ages of 20 and 40, with a peak onset of approximately 25 years of age. MS frequently causes impairment of motor, sensory, coordination and balance, visual, and/or cognitive functions, as well as urinary (bladder) or bowel dysfunction and symptoms of fatigue. The identified autoimmune mechanisms directed at myelin tissue of the CNS may play an important role in the pathogenesis of MS. Epidemiologic studies suggest that a variety of genetic, immunologic, and environmental factors including viral infections may play a role in defining the etiology and in triggering the onset and progression of MS.

At the onset of MS, approximately 85% of MS patients have RRMS. Without disease-modifying medication, one-half of these RRMS patients will develop steadily progressive disease, SPMS, within 10 years, increasing to 90% within 25 years of MS diagnosis. The MS drug market was approximately $13 billion in 2012 and is forecasted to reach as much as $16 billion by 2015.

MS remains a challenging autoimmune disease to treat because the pathophysiologic mechanisms are diverse, and the chronic, unpredictable course of the disease makes it difficult to determine whether the favorable effects of short-term treatment will be sustained. Therapies that are easy to use and can safely prevent or stop the progression of disease represent the greatest unmet need in MS.

In recent years, the understanding of MS pathogenesis has evolved to comprise an initial, T-cell-mediated inflammatory activity followed by selective demyelination (erosion of the myelin coating of the nerve fibers) and then neurodegeneration. The discovery of disease-relevant immune responses has accelerated the development of targeted therapeutic products for the treatment of the early stages of MS. Some subjects, who have the appropriate genetic background, have increased susceptibility for the in vivo activation and expansion of MRTCs. These MRTCs may remain dormant, but at some point they are activated in the periphery, thus enabling them to cross the blood-brain barrier and infiltrate the healthy tissue of the brain and spinal cord. The cascade of pathogenic events leads to demyelination of protrusions from nerve cells called axons, which causes nerve impulse transmissions to diffuse into the tissue resulting in disability to the individual.

Tcelna for MS

We believe that Tcelna works selectively on the MRTCs by harnessing the body's natural immune defense system and feedback mechanisms to deplete these T-cells and induce favorable immune regulatory responses by rebalancing the immune system. Tcelna is a personalized immunotherapy that is specifically tailored to each patient's disease profile. Tcelna is manufactured by using ImmPath®, our proprietary method for the production of a patient-specific T-cell immunotherapy which encompasses the collection of blood from the MS patient, isolation of peripheral blood mononuclear cells, generation of an autologous pool of MRTCs raised against selected peptides from myelin basic protein (MBP), myelin oligodendrocyte glycoprotein (MOG) and proteolipid protein (PLP), expanding these MRTCs to a therapeutic dose ex-vivo, and attenuating them with gamma irradiation to prevent DNA replication and thereby cellular proliferation. These attenuated MRTCs are then injected subcutaneously into the body in therapeutic dosages. The body recognizes specific T-cell receptor molecules of these MRTCs as immunogenic and initiates an immune response reaction against them, resulting in the depletion and/or immunosuppression of circulating MRTCs carrying the peptide-specific T-cell receptor molecules. In addition, we believe that T-cell activation molecules on the surface of the activated MRTCs promote anti-inflammatory responses. We believe that because the therapy uses an individual's own cells, the only direct identifiable side effect observed thus far is injection site reactions which typically are minor and generally clear within 24 hours.

Tcelna Clinical Development Program

Tcelna is a novel T-cell immunotherapy in Phase IIb clinical development for the treatment of patients with SPMS. It is also positioned to enter Phase III clinical development for the treatment of patients with RRMS, subject to the availability of sufficient resources or a strategic partnering commitment.

The Tcelna clinical development program spans studies conducted by Baylor College of Medicine and by Opexa.

Summary of Phase I Dose Escalation Study in MS

A Phase 1 dose escalation study completed in 2006 was conducted in patients with both RRMS and SPMS who were intolerant or unresponsive to current approved therapies for MS. The open-label, dose escalation study evaluated safety and clinical benefit by administering a primary series of four treatments at one of three dose levels administered at baseline and weeks 4, 8 and 12. Results of the efficacy analyses provide some evidence of the effectiveness of Tcelna in the treatment of MS. Data from the Phase I study evaluating the Expanded Disability Status Scale (EDSS) showed improvements in some subjects in comparison to baseline for weeks 20 and 28.

Subjects showed statistically significant improvement in overall reduction of MRTC counts over baseline at all visits through week 52 for subjects receiving 30-45 million cells per dose, as assessed by total MRTC count percentage changes. These data indicate that Tcelna treatment causes a depletion or immunomodulation of these cells, most obvious at time points closer to the injections. These findings were published in Clinical Immunology (2009) 131, 202-215.

Overall, results of the safety analyses indicate that treatment with Tcelna is well-tolerated. Reported adverse events were mostly mild or moderate in intensity. Mild injection site reactions were observed but all resolved rapidly without treatment. In conclusion, data from this study suggest that Tcelna is safe for the treatment of MS.

Summary of Phase I/IIA Clinical Trial Data in MS

The second clinical study performed by Opexa was an open-label extension study completed in 2007 to treat patients who were previously treated with T-cell immunotherapy but who saw a rebound in MRTC activity. The purpose of this extension study was to continue evaluating the efficacy, safety and tolerability of Tcelna in patients with RRMS and SPMS with repeated administration of Tcelna. Results of the study provide evidence of the effectiveness of Tcelna in the treatment of MS with repeated dosing. Improvements from baseline at both week 28 and week 52 of the extension study were observed for the frequency of MS exacerbations, or annualized relapse rate (ARR). Evaluation of the Multiple Sclerosis Impact Scale (MSIS-29) component scores suggests a trend for Tcelna therapy in the improvement of physical and psychological parameters assessed by the MSIS-29. The EDSS score analysis revealed an upward trend for the percentage of subjects that reported improvement and sustained improvement over baseline as a result of Tcelna treatment.

Subjects showed statistically significant reduction over baseline in the MRTC counts for each time point through month nine of the extension study. Overall, results of the safety analyses indicate that repeated treatment with Tcelna is well-tolerated. Reported adverse events (AEs) were mostly mild or moderate in intensity. Mild injection site reactions were observed but all resolved rapidly without treatment. Furthermore, results from this study suggest that repeated dosing of Tcelna has a substantive effect in reduction of ARR in subjects with MS and was well-tolerated.

Summary of TERMS Phase IIb Clinical Trial Data in RRMS

Tovaxin for Early Relapsing Multiple Sclerosis (TERMS) was a Phase IIb clinical study of Tcelna in RRMS patients completed in 2008. Although the study did not show statistical significance in its primary endpoint (the cumulative number of gadolinium-enhanced brain lesions using magnetic resonance imaging (MRI) scans summed at various points in the study), the study showed compelling evidence of efficacy in various clinical and other MRI endpoints.

The TERMS study was a multi-center, randomized, double blind, placebo-controlled trial in 150 patients with RRMS or high risk Clinically Isolated Syndrome. The inclusion criteria for TERMS was an EDSS score of 0 to 5.5. Patients received a total of five subcutaneous injections at weeks 0, 4, 8, 12 and 24. Key results from the TERMS trial included:

- In the modified intent to treat patient population consisting of all patients who received at least one dose of study product and had at least one MRI scan at week 28 or later (n=142), the ARR for Tcelna-treated patients was 0.214 as compared to 0.339 for placebo-treated patients, which represented a 37% decrease in ARR for Tcelna as compared to placebo in the general population;

- In a prospective group of patients with more active disease (ARR>1, n=50), Tcelna demonstrated a 55% reduction in ARR as compared to placebo, an 88% reduction in whole brain atrophy and a statistically significant improvement in disability (EDSS) compared to placebo ($p<0.045$) at week 52 during the 24-week period following the administration of the full course of treatment; and

- In a retrospective analysis in patients naïve to previous disease modifying treatment, the results showed that patients, when treated with Tcelna, had a 56% to 73% reduction in ARR versus placebo for the various subsets and p values ranged from 0.009 to 0.06.

We remain committed to further advancing Tcelna in RRMS at a later date assuming the availability of sufficient resources or a strategic partnering commitment. For Opexa, however, SPMS is an area which we believe represents a higher unmet medical need.

SPMS Overview and Tcelna Mechanism of Action

SPMS is characterized by a steady accrual of irreversible disability, despite, in some cases, relapses followed by remissions or clinical plateaus. Older age at onset of MS diagnosis is the strongest predictor of conversion to SPMS. Males have a shorter time to conversion to SPMS compared with females. Available immunomodulating and immunosuppressive therapies used for RRMS have not been effective in SPMS. In clinical trials, these therapies have demonstrated anti-inflammatory properties as measured by the reduction in number and volume of contrast-enhancing or acutely inflammatory CNS lesions most commonly seen in patients with RRMS. The typical SPMS patient, however, has little or no radiographic evidence of acute inflammation. It is commonly observed that contrast-enhancing CNS lesions are uncommon among these patients, despite a clearly deteriorating neurologic course.

The lack of effect of conventional MS therapeutics in SPMS suggests that the cerebral deterioration characterizing progressive disease may be driven by factors other than acute inflammation. For instance, the immunopathology of SPMS is more consistent with a transition to a chronic T-cell dependent inflammatory type, which may encompass the innate immune response and persistent activation of microglia cells. Meningeal follicles close to cortical gray matter lesions suggests that adaptive immune responses involving antibody and complement contribute to progression in SPMS. Furthermore, chronic MRTCs may be contributing to the development of both innate and adaptive immune responses persisting in the CNS.

Radiographic features that stand out among patients with SPMS include significantly more atrophy of gray matter compared with RRMS patients. Of note, long-term disability in MS in general appears more closely correlated to gray matter atrophy than to white matter inflammation. Such atrophy may be suggestive of progressive clinical disability. Both clinically and radiographically, SPMS represents a disease process with certain features distinct from those of RRMS, and one with extremely limited treatment options.

Tcelna immunotherapy in SPMS may reduce the drivers of this chronic disease by down-regulating anti-myelin immunity through priming regulatory responses that may act in the periphery as well as within the CNS. We believe that our clinical results show therapeutic subcutaneous dosing of 30-45 million cells of Tcelna stimulates host reactivity to the over-represented MRTCs and, as a consequence, a dominant negative regulatory T-cell response is induced leading to down-regulation of similar endogenous disease-causing MRTCs.

We believe that Tcelna has the potential to induce an up-regulation of regulatory cells, such as Foxp3+ Treg cells and IL-10 secreting Tr1 cells, which may effect a reduction in inflammation and provide neuroprotection should they gain entry to the CNS. Data from our TERMS study showed statistically significant changes from baseline ($p=0.02$) in Foxp3+ Treg cells for the subset of Tcelna patients who had ARR >1. The placebo arm for this subset was not statistically different from its baseline levels. Three SPMS patients from prior clinical studies, whose blood samples were analyzed to measure Tr1 cells prior to treatment and post treatment, showed an increase in the levels of Tr1 cells from non-detectable levels to the range of healthy donor samples. These three patients who had relapses in the preceding 12-24 month period remained relapse free during the 52-week assessment period and also showed a 57% to 67% reduction in MRTCs.

Current Treatment Options for SPMS

Only one product, mitoxantrone, is currently approved for the indication of SPMS in the U.S. However, since 2005, this drug carries a black box warning, due to significant risks of decreased systolic function, heart failure, and leukemia. The American Academy of Neurology has issued a report indicating that these risks are even higher than suggested in the original report leading to the black box warning. Hence, a safe and effective treatment for SPMS remains a significant unmet medical need.

Tcelna Clinical Overview in SPMS

In multiple previously conducted clinical trials for the treatment of patients with MS (which have been weighted significantly toward patients with RRMS), Tcelna has demonstrated one of the safest side effect profiles for any marketed or development-stage MS therapy, as well as encouraging efficacy signals. A total of 144 MS patients have received Tcelna in previously conducted Opexa trials for RRMS and SPMS. The therapy has been well-tolerated in all subjects and has demonstrated an excellent overall safety profile. The most common side effect is mild to moderate irritation at the site of injection, which is typically resolved in 24 hours. Tcelna has been administered to a total of 36 subjects with SPMS across three previous clinical studies.

In a pooled assessment of data from 36 SPMS patients treated in Phase I open label studies at the Baylor College of Medicine completed in 1998 and in Opexa-sponsored studies completed in 2006 and 2007, approximately 80% of the 35 SPMS patients who completed two years of treatment showed disease stabilization as measured by EDSS following two years of treatment with Tcelna, with the other 20% showing signs of progression. This compares to historical control data which showed a progression rate of 40% in SPMS patients (as reported in ESIMS Study published in Hommes Lancet 2004). The 10 SPMS patients in Opexa sponsored studies showed a substantial reduction in ARR at two years from 0.5 to an ARR less than 0.1. Only 1 out of the 10 patients experienced one episode of relapse during the two years of assessment. This same cohort showed no worsening of physical or psychological condition (key quality of life indicators as measured by the MS Impact Scale) after two years of treatment with Tcelna. Additionally, there were no reported serious adverse events (SAEs) in any of the patients. Based on preliminary data suggesting stabilized or improved disability among SPMS subjects receiving Tcelna, we believe that further development of this product candidate in SPMS is warranted.

Abili-T Trial: Phase IIb Clinical Study in Patients with SPMS

In September 2012, we announced the initiation of a Phase IIb clinical trial of Tcelna in patients with SPMS. The trial is entitled: A Phase II Double-Blind, Placebo Controlled Multi-Center Study to Evaluate the Efficacy and Safety of Tcelna in Subjects with Secondary Progressive Multiple Sclerosis and has been named the “Abili-T” trial. The Abili-T trial is a double-blind, 1:1 randomized, placebo-controlled study in SPMS patients who demonstrate evidence of disease progression with or without associated relapses. The trial is being conducted at approximately 35 leading clinical sites in the U.S. and Canada and has enrolled patients who have Expanded Disability Status Scale (EDSS) scores between 3.0 and 6.0. According to the study protocol, patients are receiving two annual courses of Tcelna treatment consisting of five subcutaneous injections per year at weeks 0, 4, 8, 12 and 24.

The primary efficacy endpoint of the trial is the percentage of brain volume change (whole brain atrophy) at 24 months. Study investigators will also measure several important secondary outcomes commonly associated with MS including sustained disease progression as measured by EDSS, changes in EDSS, time to sustained progression, ARR, change in Multiple Sclerosis Functional Composite (MSFC) assessment of disability and change in Symbol Digit Modality Test. Data on certain exploratory endpoints such as quality of life metrics as measured by the Multiple Sclerosis Quality of Life Inventory (MSQLI), MRI measures and immune monitoring metrics are also being collected.

As part of the Abili-T trial, we are undertaking a comprehensive immune monitoring program for all patients enrolled in the study. The goals of this program are to further understand the biology behind the mechanism of action for Tcelna and to possibly identify novel biomarkers that are dominant in the pathophysiology of SPMS patients. The program encompasses an analysis of various pro-inflammatory and anti-inflammatory biomarkers and biomarker data is being gathered during the course of the trial on a blinded basis. We believe that directional movement of certain biomarkers, when corroborated with final clinical trial data, may be indicative of responders and disease stabilization or progression.

A scheduled Data Safety Monitoring Board meeting took place during the week of April 27, 2015, and a recommendation was made to continue the study. We reached our enrollment target for the Abili-T trial in June 2014, and a total of 190 patients have been enrolled in this two-year study. We expect top-line data for Tcelna to be available in the second half of 2016.

Option and License Agreement with Merck Serono

On February 4, 2013, we entered into an Option and License Agreement with Ares Trading SA ("Merck Serono"), a wholly owned subsidiary of Merck Serono S.A. Pursuant to the agreement, Merck Serono has an option (the "Option") to acquire an exclusive, worldwide (excluding Japan) license of our Tcelna program for the treatment of MS. The Option may be exercised by Merck Serono prior to or upon completion of our ongoing Abili-T trial of Tcelna in patients with SPMS. Under the terms of the agreement, we received an upfront payment of $5 million for granting the Option. If the Option is exercised, Merck Serono would pay us an upfront license fee of $25 million unless Merck Serono is unable to advance directly into a Phase III clinical trial of Tcelna for SPMS without a further Phase II clinical trial (as determined by Merck Serono), in which event the upfront license fee would be $15 million. After exercising the Option, Merck Serono would be solely responsible for funding development, regulatory and commercialization activities for Tcelna in MS, although we would retain an option to co-fund certain development in exchange for increased royalty rates. We would also retain rights to Tcelna in Japan, certain rights with respect to the manufacture of Tcelna, and rights to use for other indications outside of MS.

Based upon the achievement of development milestones by Merck Serono for Tcelna in SPMS, we would be eligible to receive one-time milestone payments totaling up to $70 million as follows: (i) milestone payments aggregating $35 million if Tcelna is submitted for regulatory approval and commercialized in the United States; (ii) milestone payments aggregating $30 million if Tcelna is submitted for regulatory approval in Europe and commercialized in at least three major countries in Europe; and (iii) a milestone payment of $5 million if Tcelna is commercialized in certain markets outside of the United States and Europe. If Merck Serono elects to develop and commercialize Tcelna in RRMS, we would be eligible to receive milestone payments aggregating up to $40 million based upon the achievement by Merck Serono of various development, regulatory and first commercial sale milestones.

If Tcelna receives regulatory approval and is commercialized by Merck Serono, we would be eligible to receive royalties pursuant to a tiered structure at rates ranging from 8% to 15% of annual net sales, with step-ups over such range occurring when annual net sales exceed $500 million, $1 billion and $2 billion. Any royalties would be subject to offset or reduction in various situations, including if third party rights are required or if patent protection is not available in an applicable jurisdiction. We would also be responsible for royalty obligations to certain third parties, such as Baylor College of Medicine from which we originally licensed related technology. If we were to exercise an option to co-fund certain of Merck Serono's development, the royalty rates payable by Merck Serono would be increased to rates ranging from 10% to 18%. In addition to royalty payments, we would be eligible to receive one-time commercial milestones totaling up to $85 million, with $55 million of such milestones achievable at annual net sales targets in excess of $1 billion.

On March 9, 2015, we entered into a First Amendment of Option and License Agreement with Merck Serono to amend the Merck Serono Agreement (the "Merck Serono Amendment"). We received a payment of $3 million in consideration for the activities described below:

(i) We will create a detailed Pre-Phase III Plan (including a GANTT chart containing key tasks, decision points, timing, budget and milestones) documenting all of the activities necessary for laboratory facilities both in the U.S. and Europe to reach operational readiness by the end of December 2016 (e.g., review and identification of a preferred contract manufacturing organization in Europe; set-up, identification and qualification of third parties for raw materials; validation of laboratory facilities in the U.S. and Europe; and a hiring plan for key personnel). For Europe, the Pre-Phase III Plan would address the creation of a dedicated lab to support a Phase III trial, and for the U.S., the Pre-Phase III Plan would address the expansion of existing capabilities and infrastructure for a Phase III trial. The Joint Steering Committee ("JSC") established pursuant to the Merck Serono Agreement will be responsible for reviewing, approving and ultimately overseeing our completion of the Pre-Phase III Plan, which approval may not be unreasonably withheld or delayed. The JSC will meet at least quarterly to advise and make specific recommendations with respect to the Pre Phase III Plan. In the event the JSC has not approved the Pre-Phase III Plan prior to the end of the Option Period (as defined in the Agreement), the Option Period will be extended for 60 days following approval of the Pre Phase III Plan by the JSC.

(ii) We will provide Merck Serono updates and analysis on a blinded basis, grouped in patient batches according to our analysis timetable, on the progress of our immune monitoring program (the "Program") being conducted in conjunction with our ongoing Abili-T clinical trial, with such updates and analysis to be shared with Merck Serono within 30 days of our initial assessment of such information. We will inform Merck Serono of any existing or future external bioinformatics vendor we use for the Program, and Merck Serono will have the right, at its expense, to review current and future data storage and integrity measures for the on-going Abili-T clinical trial.

NMO – OPX-212

In addition to our ongoing clinical development of Tcelna, we are also developing OPX-212 as an autologous T-cell immunotherapy for the treatment of NMO. This program is currently in the preclinical development stage. NMO is an autoimmune disorder in which immune system cells and antibodies attack astrocytes leading to the secondary destruction of nerve cells (axons) in the optic nerves and the spinal cord. OPX-212 is specifically tailored to each patient's immune response to a protein, aquaporin-4 expressed by astrocytes, which is the targeted antigen in NMO. In NMO, the immune system recognizes aquaporin-4 as foreign, thus triggering the attack. We believe a mechanism of action of OPX-212 may be to reduce the number and/or regulate aquaporin-4 reactive T-cells (ARTCs), thereby reducing the frequency of clinical relapses and subsequent progression in disability.

Patients with NMO present with acute, often severe, attacks of blindness in one or both eyes followed within days or weeks by varying degrees of paralysis in the arms and legs. Most patients have relapsing attacks (separated by months or years with partial recovery), with usually sequential index episodes of optic neuritis (ON) and myelitis. A relapsing course is more frequent in women, and nearly 90% of patients are female (typically late middle-aged). It is estimated that there are approximately 4,800 cases of NMO in the U.S. NMO has a worldwide estimated prevalence of 1-2 people per 100,000 population.

There are currently no FDA-approved therapies for NMO. An initial attack is usually treated with a combination of corticosteroids and/or by plasma exchange to limit the severity of the attack. Although not approved for NMO, some physicians may utilize an immunosuppressant such as Rituximab as long-term therapy to provide protection from increasing neurological impairments through relapse.

We expect to manufacture OPX-212 using ImmPath, our proprietary method for the production of an autologous T-cell product, which comprises the collection of a blood product from the NMO patient and the expansion of ARTCs from the blood product. Upon completion of the manufacturing process, ARTCs are cryopreserved in dose-equivalents until required for use. On demand, a dose-equivalent is thawed, formulated and attenuated by irradiation before being returned to the patient for subcutaneous injection, with the express purpose of inducing a regulatory immune response to reduce the frequency and/or function of pathogenic ARTCs.

We initiated development activities for OPX-212, our drug development candidate for NMO, in 2014 and have achieved a number of regulatory and early development milestones to date, which, include conducting a pre-Investigational New Drug application (pre-IND) meeting with the U.S. FDA. We are continuing with preclinical development and IND enabling activities, and, we expect to file an IND with the FDA by the end of calendar year 2015. We believe OPX-212 for NMO will qualify for Orphan drug designation, and we also expect to apply for Fast Track designation.

We believe part of the value of our T-cell platform comes from the ability to move relatively quickly and cost effectively into new autoimmune diseases. We do not expect our ongoing preclinical development activities related to the NMO program to materially affect our cash burn through IND submission. Assuming successful completion of the preclinical development activities and submission and acceptance of the IND by the FDA and/or CTA by Health Canada, we may thereafter advance into clinical development with a Phase 1/2 proof-of-concept study. We intend to evaluate various options to fund such clinical study, including public or private capital raises as well as potential partnership and out-licensing activities.

Other Opportunities

Our proprietary T-cell technology has enabled us to develop intellectual property and a comprehensive sample database that may enable discovery of novel biomarkers associated with MS. Depending upon the outcome of further feasibility analysis, the T-cell platform may have applications in developing treatments for other autoimmune disorders. While the primary focus of Opexa remains the development of Tcelna in SPMS, as well as our development plans for OPX-212 in NMO, we continue to investigate the expansion of the T-cell platform into other autoimmune diseases as well as potential in-licensing of other novel technologies.

Critical Accounting Policies

General. Our discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies affect our most significant judgments and estimates used in preparation of our financial statements.

Revenue Recognition. We adopted the provisions of FASB ASC 605, "Revenue Recognition." ASC 605 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) consideration is fixed or determinable; and (4) collectability is reasonably assured.

We evaluated the Merck Serono Agreement and determined that the $5 million upfront payment from Merck Serono has stand-alone value. Opexa's continuing performance obligations, in connection with the $5 million payment, include the execution and completion of the Abili-T clinical trial in SPMS using commercially reasonable efforts at our own costs. As a stand-alone value term in the Merck Serono Agreement, the $5 million upfront payment is determined to be a single unit of accounting, and is recognized as revenue on a straight-line basis over the exclusive option period based on the expected completion term of the Abili-T clinical trial in SPMS.

We evaluated the Merck Serono Amendment and determined that the $3 million payment from Merck Serono has stand-alone value. Opexa's continuing performance obligations, in connection with the $3 million payment, include the creation of the Pre-Phase III Plan and delivery of updates and analysis relating to the Program. As a stand-alone value term in the Merck Serono Amendment, the $3 million payment is determined to be a single unit of accounting, and is recognized as revenue on a straight-line basis over the period equivalent to the expected completion of the Pre-Phase III Plan in December 2016. Opexa includes the unrecognized portion of the $3 million as deferred revenue on the consolidated balance sheets.

Stock-Based Compensation. We adopted the provisions of FASB ASC 718 which establishes accounting for equity instruments exchanged for employee service. We utilize the Black-Scholes option pricing model to estimate the fair value of employee stock-based compensation at the date of grant, which requires the input of highly subjective assumptions, including expected volatility and expected life. Changes in these inputs and assumptions can materially affect the measure of estimated fair value of our share-based compensation. These assumptions are subjective and generally require significant analysis and judgment to develop. When estimating fair value, some of the assumptions will be based on, or determined from, external data and other assumptions may be derived from our historical experience with stock-based payment arrangements. The appropriate weight to place on historical experience is a matter of judgment, based on relevant facts and circumstances.

We estimated volatility by considering historical stock volatility. We have opted to use the simplified method for estimating expected term of options as equal to the midpoint between the vesting period and the contractual term.

Research and Development. The costs of materials and equipment or facilities that are acquired or constructed for research and development activities and that have alternative future uses are capitalized as tangible assets when acquired or constructed. The cost of such materials consumed in research and development activities and the depreciation of such equipment or facilities used in those activities are research and development costs. However, the costs of materials, equipment, or facilities acquired or constructed for research and development activities that have no alternative future uses are considered research and development costs and are expensed at the time the costs are incurred.

Results of Operations and Financial Condition

Comparison of the Three Months Ended March 31, 2015 with the Three Months Ended March 31, 2014

Revenue. Revenues of $307,686 and $348,837 related to the $5 million upfront payment from Merck Serono in connection with the Merck Serono Agreement were recognized for the three months ended March 31, 2015 and 2014, respectively. The decrease in revenue is primarily a reflection of an increase in the number of months over which the deferred revenue is being recognized from 43 months to 47 months. In addition, revenues for the three months ended March 31, 2015 also include $69,767 related to the $3 million payment from Merck Serono in connection with Merck Serono Amendment (see Revenue Recognition).

Research and Development Expenses. Research and development expenses were $2,636,999 for the three months ended March 31, 2015, compared with $2,811,139 for the three months ended March 31, 2014. The decrease in expenses is primarily due to a decrease in the costs in connection with the ongoing clinical trial of Tcelna in SPMS, a decrease in the procurement and use of supplies for product manufacturing and development, partially offset by increases in employee compensation expense and facility costs.

General and Administrative Expenses. General and administrative expenses for the three months ended March 31, 2015 were $1,006,130, compared with $1,102,880 for the three months ended March 31, 2014. The decrease in expense is due to decreases in employee compensation and stock compensation expenses partially offset by increases in business development expenses.

Depreciation and Amortization Expenses. Depreciation and amortization expenses for the three months ended March 31, 2015 were $96,982, compared with $95,586 for the three months ended March 31, 2014. The increase in expense is due to increases in depreciation for laboratory, manufacturing and computer equipment acquired during 2014 and 2015.

Interest Income. Interest income was $1,478 for the three months ended March 31, 2015, compared to $5,194 for the three months ended March 31, 2014.

Other Income and Expense, net . Other Income and Expense, net was $10,300 for the three months ended March 31, 2015, compared to $0 in the three months ending March 31, 2014. This was primarily driven by a gain on exchange rate, which was related to two clinical sites located in Canada and the difference between the Canadian dollar and the US dollar on payments to these clinical sites. Payments to these sites began in December 2014. The gain for the three months ended March 31, 2015 was $11,047, which was partially offset by interest expense of $747. Interest expense of $747 was recorded for the three months ended March 31, 2015 which related to financing charges on our insurance policies.

Net loss. We had a net loss for the three months ended March 31, 2015 of approximately $3.4 million, or $0.12 loss per share (basic and diluted), compared with a net loss of approximately $3.7 million or $0.13 loss per share (basic and diluted) for the three months ended March 31, 2014. The decreased net loss is primarily related to the decrease in research and development expenses, the decrease in general and administrative expenses, and was partially offset by the gain on exchange rate and by higher revenues for the quarter ending March 31, 2015.

Liquidity and Capital Resources

Historically, we have financed our operations primarily from the sale of debt and equity securities. As of March 31, 2015, we had cash and cash equivalents of approximately $9.6 million, including receipt of $3 million from Merck Serono pursuant to the Merck Serono Amendment which provides support for our ongoing Abili-T clinical study. Subsequent to March 31, 2015, we raised $13,804,140 in gross proceeds, before expenses, through subscriptions for 25,098,437 units in a Rights Offering to holders of our common stock and holders of our outstanding Series L warrants who were entitled to participate. Each unit was composed of one share of common stock and a Series M warrant to purchase an additional share of common stock. The Rights Offering was completed on April 9, 2015. We issued an aggregate of 25,098,437 shares of common stock and Series M warrants for a like number of shares. Net proceeds, after deduction of fees and expenses, including dealer-manager fees, are expected to be approximately $12 million.

On November 2, 2012, we entered into a $15.0 million purchase agreement and registration rights agreement, and on November 5, 2012, we entered into a $1.5 million purchase agreement, each with Lincoln Park Capital Fund, LLC ("Lincoln Park") pursuant to which we have the right to sell to Lincoln Park an aggregate of up to $16.5 million in shares of our common stock, subject to certain conditions and limitations. Under the terms and subject to the conditions of the purchase agreements, Lincoln Park is obligated to purchase up to an aggregate of $16.5 million in shares of common stock (subject to certain limitations) from time to time over a 30-month period. We may direct Lincoln Park, at our sole discretion and subject to certain conditions, to purchase up to 100,000 shares of common stock in regular purchases, increasing to amounts of up to 300,000 shares depending upon the closing sale price of our common stock. In addition, we may direct Lincoln Park to purchase additional amounts as accelerated purchases. The purchase price of shares of common stock related to the future funding will be based on the prevailing market prices of such shares at the time of sales (or over a period of up to 12 business days leading up to such time), but in no event will shares be sold to Lincoln Park on a day the common stock closing price is less than the adjusted minimum floor price of $1.00. As of March 31, 2015, we have sold an aggregate of 390,000 shares of our common stock to Lincoln Park for gross proceeds of $523,709 and have a remaining commitment amount of $15,976,291 available to us through Lincoln Park purchase agreements. However, there can be no assurance that we will be able to receive any or all of the additional funds from Lincoln Park because the purchase agreements contain limitations, restrictions, requirements, events of default and other provisions that could limit our ability to cause Lincoln Park to buy common stock from us, including the requirement to keep current the prospectus included as part of the Form S-1 registration statement relating to the $15.0 million purchase agreement (which is not current as of this date) as well as a minimum floor price of $1.00 per share.

On September 6, 2012, we entered into a Sales Agreement (the "ATM Agreement") with Brinson Patrick Securities Corporation (the "Original Sales Manager") in which we could offer and sell shares of our common stock from time to time depending upon market demand, with the Original Sales Manager acting as an agent for the sale of shares in transactions deemed to be an "at the market" offering as defined in Rule 415 of the Securities Act of 1933. During February 2013, we sold an aggregate of 167,618 shares of our common stock, for gross proceeds of $536,417 pursuant to the ATM Agreement. On March 5, 2014, we entered into a First Amendment to Sales Agreement with the Original Sales Manager and Meyers Associates, L.P. (doing business as Brinson Patrick, a division of Meyers Associates, L.P.) ("Brinson Patrick"), pursuant to which the ATM Agreement was assigned by the Original Sales Manager to Brinson Patrick. The ATM Agreement, as amended, is referred to herein as the "new ATM Agreement." Under the new ATM Agreement, we may offer and sell shares of our common stock from time to time depending upon market demand, with Brinson Patrick acting as an agent for the sale of shares in transactions deemed to be an "at the market" offering as defined in Rule 415 of the Securities Act of 1933. We have registered up to an additional 2,500,000 shares of our common stock for potential sale under the new ATM Agreement. As of March 31, 2015, we have generated gross and net proceeds including amortization of deferred financing costs of $674,126 and $648,175, respectively, under the new ATM Agreement on sales of an aggregate of 518,412 shares of our common stock at average prices ranging from $1.68 to $1.12 per share.

Our operating cash burn rate during the three months ended March 31, 2015 was approximately $1.1 million per month. We reached our enrollment target for the Abili-T trial in June 2014, and a total of 190 patients have been enrolled in this two-year study. Costs associated with the ongoing Abili-T trial and the potential commencement of a Phase 1/2 proof-of-concept study for OPX-212 in NMO may result in an increase in our monthly operating cash burn in 2015. However, costs associated with our ongoing preclinical and manufacturing activities for OPX-212 should not materially affect our cash burn through IND submission, which is expected by the end of calendar year 2015.

We will need to secure additional resources to conduct a Phase 1/2 proof-of-concept study of OPX-212 in NMO, if initiated, as well as to support our operations during the course of the trial. We believe that we have sufficient liquidity to support our current clinical activities for the Abili-T trial of Tcelna in SPMS, to continue planned preclinical development activities for OPX-212 in NMO with a possible IND submission by the end of calendar year 2015, and for general operations to sustain the Company and support such activities into the fourth quarter of 2016. Any other costs, however, such as costs associated with the initiation and completion of a Phase 1/2 proof-of-concept study of OPX-212 in NMO or with pursuing additional disease indications for our T-cell technology or other research or development programs, would of course shorten this period.

We currently intend to use our available cash to fund general corporate purposes (including working capital, business development and operational purposes) and continue the ongoing Abili-T clinical study and complete the OPX-212 preclinical development activities. We expect top-line data for the Abili-T clinical study to be available in the second half of 2016. While we believe we have sufficient resources to complete the Abili-T clinical study and support our operations during the pendency of the trial, if our projections prove to be inaccurate or we encounter additional costs to complete the trial or to sustain our operations, we may need to raise additional capital or modify the Abili-T clinical study or our current business plan.

Given our need for additional amounts of capital to support our current business plan, we intend to continue to explore potential opportunities and alternatives to obtain additional resources, including one or more additional financing transactions. There can be no assurance that any such financings or potential opportunities and alternatives can be consummated on acceptable terms, if at all.

If Merck Serono does not exercise the Option and acquire the exclusive, worldwide (excluding Japan) license of our Tcelna program for MS, or if we are not successful in attracting another partner and entering into a collaboration on acceptable terms, we may not be able to complete development of or commercialize any product candidate, including Tcelna. In particular, we may be unable to undertake, or complete, any Phase III clinical study of Tcelna in SPMS, assuming the results of the Abili-T Phase IIb study warrant such a further study. In such event, our ability to generate revenues and achieve or sustain profitability would be significantly hindered and we may not be able to continue operations as proposed, requiring us to modify our business plan, curtail various aspects of our operations or cease operations.

We do not maintain any external lines of credit beyond the purchase agreements with Lincoln Park. Should we need any additional capital in the future beyond our at-the-market program with Brinson Patrick, management will be reliant upon “best efforts” debt or equity financings. As our prospects for funding, if any, develop during the fiscal year, we will assess our business plan and make adjustments accordingly. Although we have successfully funded our operations to date by attracting additional investors in our equity and debt securities, there is no assurance that our capital raising efforts will be able to attract additional necessary capital for our operations in the future.

Off-Balance Sheet Arrangements

None.

Recent Accounting Pronouncements

For the three months ended March 31, 2015, there were no accounting standards or interpretations issued that are expected to have a material impact on our financial position, operations or cash flows.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Not Applicable.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in the reports that we file or submit to the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized, and reported within the time periods specified by the Securities and Exchange Commission's rules and forms, and that information is accumulated and communicated to our management, including our principal executive and principal financial officer (whom we refer to in this periodic report as our Certifying Officers), as appropriate to allow timely decisions regarding required disclosure. Our management evaluated, with the participation of our Certifying Officers, the effectiveness of our disclosure controls and procedures as of March 31, 2015, pursuant to Rule 13a-15(b) under the Securities Exchange Act. Based upon that evaluation, our Certifying Officers concluded that, as of March 31, 2015, our disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during our most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 5. Other Information

Not applicable.

PART II - OTHER INFORMATION

Item 1A. Risk Factors

Investing in our securities involves a high degree of risk. You should consider the following risk factors, as well as other information contained in this prospectus, before deciding to invest in our securities. The following factors affect our business, our intellectual property, the industry in which we operate and our securities. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known or which we consider immaterial as of the date hereof may also have an adverse effect on our business. If any of the matters discussed in the following risk factors were to occur, our business, financial condition, results of operations, cash flows or prospects could be materially adversely affected, the market price of our securities could decline and you could lose all or part of your investment in our securities.

Risks Related to Our Business

We will be required to raise additional capital, and our ability to obtain funding is uncertain. If sufficient capital is not available, we may not be able to continue our operations as proposed (including any study planned for OPX-212 in NMO and any Phase III studies of Tcelna without Merck Serono's financial support), which may require us to modify our business plan, curtail various aspects of our operations, cease operations or seek relief under applicable bankruptcy laws.

As of March 31, 2015, we had cash and cash equivalents of $9.6 million, including receipt of $3 million from Merck Serono pursuant to the Merck Serono Amendment which provides support for our ongoing Abili-T clinical study. Subsequent to March 31, 2015, we raised $13,804,140 in gross proceeds, before expenses, through subscriptions for 25,098,437 units in a Rights Offering to holders of our common stock and holders of our outstanding Series L warrants who were entitled to participate. Each unit was composed of one share of common stock and a warrant to purchase an additional share of common stock. The Rights Offering was completed on April 9, 2015. We issued an aggregate of 25,098,437 shares of common stock and Series M warrants for a like number of shares. Net proceeds, after deduction of fees and expenses, including dealer-manager fees, are expected to be approximately $12 million.

Between March 5, 2014 and March 31, 2015, we generated gross and net proceeds including amortization of deferred financing costs of $674,126 and $648,175, respectively, on sales of an aggregate of 518,412 shares of our common stock under an amendment to our ATM sales agreement pursuant to which Meyers Associates, L.P. (doing business as Brinson Patrick, a division of Meyers Associates, L.P.) became the new sales agent.

Our operating cash burn rate during the three months ended March 31, 2015 was approximately $1.1 million per month. We reached our enrollment target for the Abili-T trial in June 2014, and a total of 190 patients have been enrolled in this two-year study. Costs associated with the ongoing Abili-T trial and the potential commencement of a Phase 1/2 proof-of-concept study of OPX-212 in NMO may result in an increase in our monthly operating cash burn in 2015. However, costs associated with our ongoing preclinical and manufacturing activities for OPX-212 should not materially affect our cash burn through IND submission, which is expected by the end of calendar year 2015.

We will need to secure additional resources to conduct a Phase 1/2 proof-of-concept study of OPX-212 in NMO, if initiated, as well as to support our operations during the course of the trial. We believe that we have sufficient liquidity to support our current clinical activities for the Abili-T trial of Tcelna in SPMS, to continue planned preclinical development activities for OPX-212 in NMO with a possible IND submission by the end of calendar year 2015, and for general operations to sustain the Company and support such activities into the fourth quarter of 2016. Any other costs, however, such as costs associated with the initiation and completion of a Phase 1/2 proof-of-concept study of OPX-212 in NMO or with pursuing additional disease indications for our T-cell technology or other research or development programs, would of course shorten this period.

We currently intend to use our available cash to fund general corporate purposes (including working capital, business development and operational purposes) and continue the ongoing Abili-T clinical study and complete the OPX-212 preclinical development activities. We expect top-line data for the Abili-T clinical study to be available in the second half of 2016. While we believe we have sufficient resources to complete the Abili-T clinical study and support our operations during the pendency of the trial, if our projections prove to be inaccurate or we encounter additional costs to complete the trial or to sustain our operations, we may need to raise additional capital or modify the Abili-T clinical study or our current business plan.

Given our need for additional amounts of capital to support our current business plan, we intend to continue to explore potential opportunities and alternatives to obtain additional resources, including one or more additional financing transactions, that will be necessary to support our operations and potentially other research and development programs. There can be no assurance that any such financings or potential opportunities and alternatives can be consummated on acceptable terms, if at all. If we are unable to obtain additional funding to support our current clinical trial activities and operations beyond the projected runway, we may not be able to initiate or complete the Phase 1/2 proof-of-concept study of OPX-212 in NMO or otherwise continue our operations as proposed, which may require us to suspend or terminate any ongoing clinical trials (including the Abili-T clinical study), modify our business plan, curtail various aspects of our operations, cease operations or seek relief under applicable bankruptcy laws. In such event, our shareholders may lose a portion or even all of their investment.

Other than the $1.5 million purchase agreement and the $15.0 million purchase agreement we entered into with Lincoln Park on November 5, 2012 and November 2, 2012, respectively, each of which is subject to certain limitations and conditions, we have no sources of debt or equity capital committed for funding and we must rely upon best efforts third-party debt or equity funding. We can provide no assurance that we will be successful in any funding effort. The timing and degree of any future capital requirements will depend on many factors, including:

- our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- the accuracy of the assumptions underlying our estimates for capital needs in 2015 and beyond as well as for the clinical study of Tcelna;
- scientific progress in our research and development programs;
- the magnitude and scope of our research and development programs;
- our progress with preclinical development and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and
- the number and type of product candidates that we pursue.

If we raise additional funds by issuing equity securities, shareholders may experience substantial dilution. Debt financing, if available, may involve restrictive covenants that may impede our ability to operate our business. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our shareholders. There is no assurance that our capital raising efforts will be able to attract the capital needed to execute on our business plan and sustain our operations.

We may make changes to discretionary R&D investments that may have an impact on costs.

We are presently complementing the Abili-T clinical trial with an immune monitoring program. Expenses associated with the immune monitoring program are incurred at our discretion and are not required to satisfy any FDA-mandated criteria. Consequently, we may make changes to the parameters that are being analyzed, and these changes may result in either increased or decreased expenses for the study.

We may also incur discretionary expenses related to Phase I, Phase II and/or Phase III development programs, manufacturing scale-up/automation and technology transfer, research on additional indications and business development activities. There is no assurance that any such future expenses would be recovered by us.

Funding from our purchase agreements with Lincoln Park and our ATM facility may be limited or be insufficient to fund our operations or to implement our strategy.

Under our $1.5 million purchase agreement and our $15.0 million purchase agreement with Lincoln Park, we may direct Lincoln Park to purchase up to $16.5 million of shares of common stock, subject to certain limitations and conditions, over a 30-month period. From November 2012 through January 2013, we sold an aggregate of 390,000 shares to Lincoln Park pursuant to the $1.5 million purchase agreement, and we issued an aggregate of 56,507 initial commitment shares and 3,585 additional commitment shares in connection therewith. There can be no assurance that we will be able to receive any or all of the additional funds from Lincoln Park because the $1.5 million purchase agreement and the $15.0 million purchase agreement contain limitations, restrictions, requirements, events of default and other provisions that could limit our ability to cause Lincoln Park to buy common stock from us, including that the closing price of our stock is at least $1.00 and that Lincoln Park own no more than 4.99% of our common stock under the $1.5 million purchase agreement or no more than 9.99% of our common stock under the $15.0 million purchase agreement, and the requirement to keep current the prospectus included as part of the Form S-1 registration statement relating to the $15.0 million purchase agreement (which is not current as of this date). In addition, under the applicable rules of the NASDAQ Capital Market, if we seek to issue shares which may be aggregated with shares sold to Lincoln Park under the $1.5 million purchase agreement and the $15.0 million purchase agreement in excess of 1,151,829 shares or 19.99% of the total common stock outstanding as of the date of the $15.0 million purchase agreement, we may be required to seek shareholder approval in order to be in compliance with the NASDAQ Capital Market rules.

The extent to which we rely on Lincoln Park as a source of funding will depend on a number of factors, including the amount of working capital needed, the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources. If obtaining sufficient funding from Lincoln Park were to prove unavailable or prohibitively dilutive, we would need to secure another source of funding.

We will need to keep current the offering prospectus relating to the ATM Agreement with Brinson Patrick, a division of Meyers Associates, L.P., in order to use the program to sell shares of our common stock. The number of shares and price at which we may be able to sell shares under the new ATM Agreement may be limited due to market conditions and other factors beyond our control.

We have a history of operating losses and do not expect to be profitable in the foreseeable future.

We have not generated any profits since our entry into the biotechnology business and we have incurred significant operating losses. We expect to incur additional operating losses for the foreseeable future. We have not received, and we do not expect to receive for at least the next several years, any revenues from the commercialization of any potential products. We do not currently have any sources of revenues and may not have any in the foreseeable future.

Our business is at an early stage of development. We are largely dependent on the success of our lead product candidate, Tcelna, and we cannot be certain that Tcelna will receive regulatory approval or be successfully commercialized.

Our business is at an early stage of development. We do not have any product candidates that have completed late-stage clinical trials nor do we have any products on the market. We have only one product candidate, Tcelna, which has progressed to the stage of being studied in human clinical trials in the United States. Additionally, our second pipeline candidate, OPX-212 is currently in preclinical development for the treatment of NMO. Tcelna, and any other potential products, including OPX-212, will require regulatory approval prior to marketing in the United States and other countries. Obtaining such approval requires significant research and development and preclinical and clinical testing. We may not be able to develop any products, to obtain regulatory approvals, to continue clinical development of Tcelna, to enter clinical trials (or any development activities) for any other product candidates (such as OPX-212) or to commercialize any products. Tcelna, and any other potential products (such as OPX-212), may prove to have undesirable or unintended side effects or other characteristics adversely affecting their safety, efficacy or cost-effectiveness that could prevent or limit their use. Any product using any of our technology may fail to provide the intended therapeutic benefits or to achieve therapeutic benefits equal to or better than the standard of treatment at the time of testing or production.

We have provided Merck Serono with the Option, which provides Merck Serono with the opportunity, if exercised, to control the development and commercialization of Tcelna in MS.

In February 2013, we granted the Option to Merck Serono. The Option permits Merck Serono to acquire an exclusive, worldwide (excluding Japan) license of our Tcelna program for the treatment of MS. The Option may be exercised by Merck Serono prior to or upon completion of our ongoing Phase IIb trial of Tcelna in patients with SPMS. If Merck Serono exercises the Option, Merck Serono would be solely responsible for funding development, regulatory and commercialization activities for Tcelna in MS, although we would retain an option to co-fund certain development in exchange for increased royalty rates. We would also retain rights to Tcelna in Japan, certain rights with respect to the manufacture of Tcelna, and rights outside of MS. In consideration for the Option, we received an upfront payment of $5 million and may be eligible to receive an option exercise fee as well as milestone and royalty payments based on achievement of development and commercialization milestones. The rights we have relinquished to our product candidate Tcelna, including development and commercialization rights, may harm our ability to generate revenues and achieve or sustain profitability. On March 9, 2015, we entered into the Merck Serono Amendment pursuant to which we agreed to perform additional development activities in preparation for a potential Phase III trial and to share with Merck Serono certain information from our immune monitoring program in consideration for payment by Merck Serono of $3 million.

If Merck Serono exercises the Option, we would become reliant on Merck Serono's resources and efforts with respect to Tcelna in MS. In such an event, Merck Serono may fail to develop or effectively commercialize Tcelna for a variety of reasons, including that Merck Serono:

- does not have sufficient resources or decides not to devote the necessary resources due to internal constraints such as limited cash or human resources;
- decides to pursue a competitive potential product;
- cannot obtain the necessary regulatory approvals;
- determines that the market opportunity is not attractive; or
- cannot manufacture or obtain the necessary materials in sufficient quantities from multiple sources or at a reasonable cost.

If Merck Serono does not exercise the Option, we may be unable to enter into a collaboration with any other potential partner on acceptable terms, if at all. We face competition in our search for partners from other organizations worldwide, many of whom are larger and are able to offer more attractive deals in terms of financial commitments, contribution of human resources, or development, manufacturing, regulatory or commercial expertise and support.

If Merck Serono does not exercise the Option, and we are not successful in attracting another partner and entering into collaboration on acceptable terms, we may not be able to complete development of or commercialize any product candidate, including Tcelna. In such event, our ability to generate revenues and achieve or sustain profitability would be significantly hindered and we may not be able to continue operations as proposed, requiring us to modify our business plan, curtail various aspects of our operations or cease operations.

We will need regulatory approvals for any product candidate, including Tcelna, prior to introduction to the market, which will require successful testing in clinical trials. Clinical trials are subject to extensive regulatory requirements, and are very expensive, time-consuming and difficult to design and implement. Any product candidate, such as Tcelna, may fail to achieve necessary safety and efficacy endpoints during clinical trials in which case we will be unable to generate revenue from the commercialization and sale of our products.

Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous FDA requirements, and must otherwise comply with federal, state and local requirements and policies of the medical institutions where they are conducted. The clinical trial process is also time-consuming. We reached our enrollment target for the Abili-T trial in June 2014, and a total of 190 patients have been enrolled in this two-year study. We expect top-line data for Tcelna to be available in the second half of 2016. In addition, we anticipate that at least a pivotal Phase III clinical trial would be necessary before an application could be submitted for approval of Tcelna for SPMS. Failure can occur at any stage of the trials, and problems could be encountered that would cause us or Merck Serono (in the event the Option is exercised) to be unable to initiate a trial, or to abandon or repeat a clinical trial.

The commencement and completion of clinical trials, including the continuation and completion of the Phase IIb clinical trial of Tcelna in SPMS, may be delayed or prevented by several factors, including:

- FDA or IRB objection to proposed protocols;
- discussions or disagreement with the FDA over the adequacy of trial design to potentially demonstrate effectiveness, and subsequent design modifications;
- unforeseen safety issues;
- determination of dosing issues, epitope profiles, and related adjustments;
- lack of effectiveness during clinical trials;
- slower than expected rates of patient recruitment;
- product quality problems (e.g., sterility or purity);
- challenges to patient monitoring, retention and data collection during or after treatment (e.g., patients' failure to return for follow-up visits or to complete the trial, detection of epitope profiles in subsequent visits, etc.); and
- failure of medical investigators to follow our clinical protocols.

In addition, we, Merck Serono with respect to Tcelna (if the Option is exercised) or the FDA (based on its authority over clinical studies) may delay a proposed investigation or suspend clinical trials in progress at any time if it appears that the study may pose significant risks to the study participants or other serious deficiencies are identified. Prior to approval of any product candidate, the FDA must determine that the data demonstrate safety and effectiveness. The large majority of drug candidates that begin human clinical trials fail to demonstrate the desired safety and efficacy characteristics.

Furthermore, changes in regulatory requirements and guidance may occur and we may need to amend clinical trial protocols, or otherwise modify our intended course of clinical development, to reflect these changes. This, too, may impact the costs, timing or successful completion of a clinical trial. In light of widely publicized events concerning the safety risk of certain drug products, regulatory authorities, members of Congress, the U.S. Government Accountability Office, medical professionals and the general public have raised concerns about potential drug safety issues. These events have resulted in the withdrawal of drug products, revisions to drug labeling that further limit use of the drug products, and establishment of risk management programs that may, for instance, restrict distribution of drug products. The increased attention to drug safety issues may result in a more cautious approach by the FDA to clinical trials. Data from clinical trials may receive greater scrutiny with respect to safety, which may make the FDA or other regulatory authorities more likely to terminate clinical trials before completion or require longer or additional clinical trials that may result in substantial additional expense and a delay or failure in obtaining approval or approval for a more limited indication than originally sought.

Even if regulatory approval is obtained for any product candidate, such as Tcelna, any such approval may be subject to limitations on the indicated uses for which it may be marketed. Our ability to generate revenues from the commercialization and sale of any potential products, whether directly or through any development arrangement (such as where Merck Serono exercises the Option) will be limited by any failure to obtain or limitation on necessary regulatory approvals.

If Merck Serono exercises the Option, Merck Serono would be solely responsible for funding development, regulatory and commercialization activities for Tcelna in MS, although we would retain an option to co-fund certain development in exchange for increased royalty rates.

We will rely on third parties to conduct our clinical trials and perform data collection and analysis, which may result in costs and delays that may hamper our ability to successfully develop and commercialize any product candidate, including Tcelna.

Although we have participated in the design and management of our past clinical trials, we do not have the ability to conduct clinical trials directly for any product candidate, including Tcelna. We will need to rely on contract research organizations, medical institutions, clinical investigators and contract laboratories to conduct our clinical trials and to perform data collection and analysis, including the Phase IIb trial of Tcelna in patients with SPMS.

Our clinical trials may be delayed, suspended or terminated if:

- any third party upon whom we rely does not successfully carry out its contractual duties or regulatory obligations or meet expected deadlines;
- licenses needed from third parties for manufacturing in order to conduct Phase III trials or to conduct commercial manufacturing, if applicable, are not obtained;
- any such third party needs to be replaced; or
- the quality or accuracy of the data obtained by the third party is compromised due to its failure to adhere to clinical protocols or regulatory requirements or for other reasons.

Failure to perform by any third party upon whom we rely may increase our development costs, delay our ability to obtain regulatory approval and prevent the commercialization of any product candidate, including Tcelna. While we believe that there are numerous alternative sources to provide these services, we might not be able to enter into replacement arrangements without delays or additional expenditures if we were to seek such alternative sources.

If we fail to identify and license or acquire other product candidates, we will not be able to expand our business over the long term.

We have focused on MS as the first disease to be pursued off our T-cell platform technology, and last year, we announced the initiation of NMO as the second disease we are pursuing. As a platform technology, there exists the potential to address other autoimmune diseases with the technology. Early development activities including preclinical and manufacturing activities have been initiated in OPX-212. The work in NMO is modest compared to the effort that has been committed to the lead MS indication. Our business over the long term is substantially dependent on our ability to develop, license or acquire product candidates and further develop them for commercialization. The success of this strategy depends upon our ability to expand our existing platform or identify, select and acquire the right product candidates. We have limited experience identifying, negotiating and implementing economically viable product candidate acquisitions or licenses, which is a lengthy and complex process. Also, the market for licensing and acquiring product candidates is intensely competitive, and many of our competitors have greater resources than we do. We may not have the requisite capital resources to consummate product candidate acquisitions or licenses that we identify to fulfill our strategy.

Moreover, any product candidate acquisition that we do complete will involve numerous risks, including:

- difficulties in integrating the development program for the acquired product candidate into our existing operations;
- diversion of financial and management resources from existing operations;
- risks of entering new potential markets or technologies;
- inability to generate sufficient funding to offset acquisition costs; and
- delays that may result from our having to perform unanticipated preclinical trials or other tests on the product candidate.

We are dependent upon our management team and a small number of employees.

Our business strategy is dependent upon the skills and knowledge of our management team. If any critical employee leaves, we may be unable on a timely basis to hire suitable replacements to operate our business effectively. We also operate with a very small number of employees and thus have little or no backup capability for their activities. The loss of the services of any member of our management team or the loss of just a few other employees could have a material adverse effect on our business and results of operations.

If we fail to meet our obligations under our license agreements, we may lose our rights to key technologies on which our business depends.

Our business depends on licenses from third parties. These third party license agreements impose obligations on us, such as payment obligations and obligations diligently to pursue development of commercial products under the licensed patents. We may also need to seek additional licenses as we move into Phase III trials and, if applicable, the commercial stage of operations. These licenses may require increased payments to the licensors. If a licensor believes that we have failed to meet our obligations under a license agreement, the licensor could seek to limit or terminate our license rights, which could lead to costly and time-consuming litigation and, potentially, a loss of the licensed rights. During the period of any such litigation, our ability to carry out the development and commercialization of potential products could be significantly and negatively affected. If our license rights were restricted or ultimately lost, our ability to continue our business based on the affected technology platform could be adversely affected.

Our research and manufacturing facility is not large enough to manufacture product candidates, such as Tcelna, for certain clinical trials or, if such clinical trials are successful, commercial applications.

We conduct our research and development in a 10,200 square foot facility in The Woodlands, Texas, which includes an approximately 1,200 square foot suite of three rooms for the manufacture of T-cell therapies. We believe our facility should have the capacity to support full clinical development of Tcelna in North American trials for SPMS and, if applicable, a Phase 1/2 proof-of-concept study of OPX-212 in NMO. It is not sufficient, however, to support clinical trials outside North America including Europe and Asia, if required, or the commercial launch of Tcelna or any other product candidate. In this case, we would need to expand our manufacturing staff and facility, obtain a new facility, contract with corporate collaborators or other third parties to assist with future drug production and commercialization, or defer to Merck Serono (in the event the Option is exercised) to address manufacturing requirements.

In the event that we decide to establish a commercial-scale manufacturing facility, we will require substantial additional funds and will be required to hire and train significant numbers of employees and comply with applicable regulations, which are extensive. We do not have funds available for building a manufacturing facility, and we may not be able to build a manufacturing facility that both meets regulatory requirements and is sufficient for our commercial-scale manufacturing.

We may arrange with third parties for the manufacture of our future products, if any. However, our third-party sourcing strategy may not result in a cost-effective means for manufacturing our future products. If we employ third-party manufacturers, we will not control many aspects of the manufacturing process, including compliance by these third parties with cGMP and other regulatory requirements. We further may not be able to obtain adequate supplies from third-party manufacturers in a timely fashion for development or commercialization purposes, and commercial quantities of products may not be available from contract manufacturers at acceptable costs.

Problems with our manufacturing process or with a manufacturing facility (whether ours or a third party's) could result in the failure to produce, or a delay in producing, adequate supplies of a product candidate such as Tcelna. A number of factors could cause interruptions or delays, including equipment malfunctions or failures, destruction or damage to a manufacturing facility due to natural disasters or otherwise, contamination of materials, changes in regulatory requirements or standards that require modifications to our manufacturing process, action by a regulatory agency or by a manufacturer (whether us or a third party) that results in the halting or slowdown of production due to regulatory issues, any third-party manufacturer going out of business or failing to produce as contractually required, or other similar factors.

Difficulties, delays or interruptions in the manufacture and supply of a product candidate such as Tcelna could require us to stop treating patients in our clinical development of such product candidate and/or require a halt to or suspension of, or otherwise adversely affect, a clinical trial, thus increasing our costs and damaging our reputation. If a product candidate such as Tcelna is approved, difficulties, delays or interruptions in the manufacture and supply of such product candidate could cause a delay in or even halt or suspend the commercialization of such product candidate, potentially causing a partial or complete loss of revenue or market share.

Tcelna is manufactured using our proprietary ImmPath® technology for the production of an autologous T-cell immunotherapy utilizing a patient's own blood. Our manufacturing process may raise development issues that may not be resolvable, regulatory issues that could delay or prevent approval, or personnel issues that may prevent the further development or commercialization, if approved, of any product candidate such as Tcelna.

Tcelna is based on our novel T-cell immunotherapy platform, ImmPath, which produces an autologous T-cell immunotherapy utilizing a patient's own blood. OPX-212 is expected to be similarly produced. The manufacture of living T-cell products requires specialized facilities, equipment and personnel which are different than the resources required for manufacturing chemical or biologic compounds. Scaling-out the manufacture of living cell products to meet demands for commercialization will require substantial amounts of such specialized facilities, equipment and personnel, especially where, as is the case for Tcelna and expected to be the case for OPX-212, the products are personalized and must be made for each patient individually. Because our manufacturing processes are complex, require facilities and personnel that are not widely available in the industry, involve equipment and training with long lead times, and the establishment of new manufacturing facilities is subject to a potentially lengthy regulatory approval process, alternative qualified production capacity may not be available on a timely basis or on reasonably terms, if at all. In addition, not many consultants or advisors in the industry have relevant experience and can provide guidance or assistance because active immune therapies such as Tcelna are fundamentally a new category of product in two major ways: (i) the product consists of living T-cells, not chemical or biologic compounds; and (ii) the product is personalized. There can be no assurance that manufacturing problems will not arise in the future which we may not be able to resolve or which may cause significant delays in development or, if any product candidate such as Tcelna is approved, commercialization.

Regulatory approval of product candidates such as Tcelna that are manufactured using novel manufacturing processes such as ours can be more expensive and take longer than other, more well-known or extensively studied pharmaceutical or biopharmaceutical products, due to a lack of experience with them. FDA approval of personalized immunotherapy products has been limited to date. This lack of experience and precedent may lengthen the regulatory review process, require that additional studies or clinical trials be conducted, increase development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization, or lead to significant post-approval limitations or restrictions.

In addition, the novel nature of product candidates such as Tcelna also means that fewer people are trained in or experienced with product candidates of this type, which may make it difficult to find, hire and retain capable personnel for research, development and manufacturing positions.

If any product we may eventually have is not accepted by the market or if users of any such product are unable to obtain adequate coverage of and reimbursement for such product from government and other third-party payors, our revenues and profitability will suffer.

In the instance of Tcelna, if Merck Serono exercises the Option then our ability to achieve revenue will be dependent upon the efforts and success of Merck Serono in developing and commercializing Tcelna. Our ability to successfully commercialize any product we may eventually have, to the extent applicable, and/or our ability to receive any revenue associated with Tcelna in the event Merck Serono exercises the Option, will depend in significant part on the extent to which appropriate coverage of and reimbursement for such product and any related treatments are obtained from governmental authorities, private health insurers and other organizations, such as health maintenance organizations, or HMOs. Third-party payors are increasingly challenging the prices charged for medical products and services. We cannot provide any assurances that third-party payors will consider any product cost-effective or provide coverage of and reimbursement for such product, in whole or in part.

Uncertainty exists as to the coverage and reimbursement status of newly approved medical products and services and newly approved indications for existing products. Third-party payors may conclude that any product is less safe, less clinically effective, or less cost-effective than existing products, and third-party payors may not approve such product for coverage and reimbursement. If adequate coverage of and reimbursement for any product from third-party payors cannot be obtained, physicians may limit how much or under what circumstances they will prescribe or administer them. Such reduction or limitation in the use of any such product would cause sales to suffer. Even if third-party payors make reimbursement available, payment levels may not be sufficient to make the sale of any such product profitable.

In addition, the trend towards managed health care in the United States and the concurrent growth of organizations such as HMOs, which could control or significantly influence the purchase of medical services and products, may result in inadequate coverage of and reimbursement for any product we may eventually have. Many third-party payors, including in particular HMOs, are pursuing various ways to reduce pharmaceutical costs, including, for instance, the use of formularies. The market for any product depends on access to such formularies, which are lists of medications for which third-party payors provide reimbursement. These formularies are increasingly restricted, and pharmaceutical companies face significant competition in their efforts to place their products on formularies of HMOs and other third-party payors. This increased competition has led to a downward pricing pressure in the industry. The cost containment measures that third-party payors are instituting could have a material adverse effect on our ability to operate profitably.

Any product candidate, such as Tcelna, if approved for sale, may not gain acceptance among physicians, patients and the medical community, thereby limiting our potential to generate revenues.

Even if a product candidate, such as Tcelna, is approved for commercial sale by the FDA or other regulatory authorities, the degree of market acceptance of any approved product candidate by physicians, healthcare professionals and third-party payors, and our profitability and growth, will depend on a number of factors, including:

- demonstration of efficacy;
- relative convenience and ease of administration;
- the prevalence and severity of any adverse side effects;
- availability and cost of alternative treatments, including cheaper generic drugs;
- pricing and cost effectiveness, which may be subject to regulatory control;
- effectiveness of sales and marketing strategies for the product and competition for such product;
- the product labeling or product insert required by the FDA or regulatory authority in other countries; and
- the availability of adequate third-party insurance coverage or reimbursement.

If any product candidate does not provide a treatment regimen that is as beneficial as the current standard of care or otherwise does not provide patient benefit, that product candidate, if approved for commercial sale by the FDA or other regulatory authorities, likely will not achieve market acceptance and our ability to generate revenues from that product candidate would be substantially reduced.

We have incurred, and expect to continue to incur, increased costs and risks as a result of being a public company.

As a public company, we are required to comply with the Sarbanes-Oxley Act of 2002, or SOX, as well as rules and regulations implemented by the SEC and The NASDAQ Stock Market (NASDAQ). Changes in the laws and regulations affecting public companies, including the provisions of SOX and rules adopted by the SEC and by NASDAQ, have resulted in, and will continue to result in, increased costs to us as we respond to their requirements. Given the risks inherent in the design and operation of internal controls over financial reporting, the effectiveness of our internal controls over financial reporting is uncertain. If our internal controls are not designed or operating effectively, we may not be able to conclude an evaluation of our internal control over financial reporting as required or we or our independent registered public accounting firm may determine that our internal control over financial reporting was not effective. In addition, our registered public accounting firm may either disclaim an opinion as it relates to management's assessment of the effectiveness of our internal controls or may issue an adverse opinion on the effectiveness of our internal controls over financial reporting. Investors may lose confidence in the reliability of our financial statements, which could cause the market price of our common stock to decline and which could affect our ability to run our business as we otherwise would like to. New rules could also make it more difficult or more costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the coverage that is the same or similar to our current coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our Board of Directors, our Board committees and as executive officers. We cannot predict or estimate the total amount of the costs we may incur or the timing of such costs to comply with these rules and regulations.

Under the corporate governance standards of NASDAQ, a majority of our Board of Directors and each member of our Audit and Compensation Committees must be an independent director. If any vacancies on our Board or our Audit or Compensation Committees occur that need to be filled by independent directors, we may encounter difficulty in attracting qualified persons to serve on our Board and, in particular, our Audit Committee. If we fail to attract and retain the required number of independent directors, we may be subject to SEC enforcement proceedings and delisting of our common stock from the NASDAQ Capital Market.

Any acquisitions that we make could disrupt our business and harm our financial condition.

We expect to evaluate potential strategic acquisitions of complementary businesses, products or technologies on a global geographic footprint. We may also consider joint ventures, licensing and other collaborative projects. We may not be able to identify appropriate acquisition candidates or strategic partners, or successfully negotiate, finance or integrate acquisitions of any businesses, products or technologies. Furthermore, the integration of any acquisition and management of any collaborative project may divert our management's time and resources from our core business and disrupt our operations. We do not have any experience with acquiring companies, or with acquiring products outside of the United States. Any cash acquisition we pursue would potentially divert the cash we have on our balance sheet from our present clinical development programs. Any stock acquisitions would dilute our shareholders' ownership. While we from time to time evaluate potential collaborative projects and acquisitions of businesses, products and technologies, and anticipate continuing to make these evaluations, we have no present commitments or agreements with respect to any acquisitions or collaborative projects.

Risks Related to Doing Business Internationally

We plan to do business internationally, which may prove to be difficult and fraught with economic, regulatory and political issues. We may acquire or in-license foreign companies or technologies or commercialize our T-cell or stem cell platform in countries where the business, economic and political climates are very different from those of the United States. We may not be aware of some of these issues and it may be difficult for a U.S. company to overcome these issues and ultimately become profitable. Certain foreign countries may favor businesses that are owned by nationals of those countries as opposed to foreign-owned business operating locally. As a small company, we may not have the resources to engage in the negotiation and time-consuming work needed to overcome some of these potential issues.

Risks Related to Our Intellectual Property

Patents obtained by other persons may result in infringement claims against us that are costly to defend and which may limit our ability to use the disputed technologies and prevent us from pursuing research and development or commercialization of potential products, such as Tcelna.

If third party patents or patent applications contain claims infringed by either our licensed technology or other technology required to make or use our potential products, such as Tcelna, and such claims are ultimately determined to be valid, there can be no assurance that we would be able to obtain licenses to these patents at a reasonable cost, if at all, or be able to develop or obtain alternative technology. If we are unable to obtain such licenses at a reasonable cost, we (or, in the event the Option is exercised, Merck Serono with respect to Tcelna) may not be able to develop any affected product candidate commercially. There can be no assurance that we will not be obliged to defend ourselves (or, in the event the Option is exercised, Merck Serono with respect to Tcelna) in court against allegations of infringement of third party patents. Patent litigation is very expensive and could consume substantial resources and create significant uncertainties. An adverse outcome in such a suit could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties, or require us to cease using such technology.

If we are unable to obtain patent protection and other proprietary rights, our operations will be significantly harmed.

Our ability to compete effectively is dependent upon obtaining patent protection relating to our technologies. The patent positions of pharmaceutical and biotechnology companies, including ours, are uncertain and involve complex and evolving legal and factual questions. The coverage sought in a patent application can be denied or significantly reduced before or after the patent is issued. Consequently, we do not know whether pending patent applications for our technology will result in the issuance of patents, or if any issued patents will provide significant protection or commercial advantage or will be circumvented by others. Since patent applications are secret until the applications are published (usually 18 months after the earliest effective filing date), and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain that the inventors of our owned or licensed intellectual property rights were the first to make the inventions at issue or that any patent applications at issue were the first to be filed for such inventions. There can be no assurance that patents will issue from pending patent applications or, if issued, that such patents will be of commercial benefit to us, afford us adequate protection from competing products, or not be challenged or declared invalid.

Issued U.S. patents require the payment of maintenance fees to continue to be in force. We rely on a third party payor to do this and their failure to do so could result in the forfeiture of patents not timely maintained. Many foreign patent offices also require the payment of periodic annuities to keep patents and patent applications in good standing. As we may not maintain direct control over the payment of all such annuities, we cannot assure you that our third party payor will timely pay such annuities and that the granted patents and pending patent applications will not become abandoned. In addition, we or our licensors may have selected a limited amount of foreign patent protection, and therefore applications have not been filed in, and foreign patents may not have been perfected in, all commercially significant countries.

The patent protection of product candidates, such as Tcelna, involves complex legal and factual questions. To the extent that it would be necessary or advantageous for any of our licensors to cooperate or lead in the enforcement of our licensed intellectual property rights, we cannot control the amount or timing of resources such licensors devote on our behalf or the priority they place on enforcing such rights. We may not be able to protect our intellectual property rights against third party infringement, which may be difficult to detect. Additionally, challenges may be made to the ownership of our intellectual property rights, our ability to enforce them, or our underlying licenses.

We cannot be certain that any of the patents issued to us or to our licensors will provide adequate protection from competing products. Our success will depend, in part, on whether we or our licensors can:

- obtain and maintain patents to protect our product candidates such as Tcelna;
- obtain and maintain any required or desirable licenses to use certain technologies of third parties, which may be protected by patents;
- protect our trade secrets and know-how;
- operate without infringing the intellectual property and proprietary rights of others;
- enforce the issued patents under which we hold rights; and
- develop additional proprietary technologies that are patentable.

The degree of future protection for our proprietary rights (owned or licensed) is uncertain. For example:

- we or our licensor might not have been the first to make the inventions covered by pending patent applications or issued patents owned by, or licensed to, us;
- we or our licensor might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of the technologies owned by, or licensed to, us;
- it is possible that none of the pending patent applications owned by, or licensed to, us will result in issued patents;
- any patents under which we hold rights may not provide us with a basis for commercially viable products, may not provide us with any competitive advantages or may be challenged by third parties as invalid, or unenforceable under U.S. or foreign laws; or
- any of the issued patents under which we hold rights may not be valid or enforceable or may be circumvented successfully in light of the continuing evolution of domestic and foreign patent laws.

Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information and may not adequately protect our intellectual property, which could limit our ability to compete.

We rely in part on trade secret protection in order to protect our proprietary trade secrets and unpatented know-how. However, trade secrets are difficult to protect, and we cannot be certain that others will not develop the same or similar technologies on their own. We have taken steps, including entering into confidentiality agreements with our employees, consultants, outside scientific collaborators and other advisors, to protect our trade secrets and unpatented know-how. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party's relationship with us. We also typically obtain agreements from these parties which provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Further, we have limited control, if any, over the protection of trade secrets developed by our licensors. Enforcing a claim that a party illegally obtained and is using our trade secrets or know-how is difficult, expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets or know-how. The failure to obtain or maintain trade secret protection could adversely affect our competitive position.

A dispute concerning the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be time consuming and costly, and an unfavorable outcome could harm our business.

A number of pharmaceutical, biotechnology and other companies, universities and research institutions have filed patent applications or have been issued patents relating to cell therapy, T-cells, and other technologies potentially relevant to or required by our product candidates such as Tcelna. We cannot predict which, if any, of such applications will issue as patents or the claims that might be allowed. We are aware of a number of patent applications and patents claiming use of modified cells to treat disease, disorder or injury.

There is significant litigation in our industry regarding patent and other intellectual property rights. While we are not currently subject to any pending intellectual property litigation, and are not aware of any such threatened litigation, we may be exposed to future litigation by third parties based on claims that our product candidates, such as Tcelna, or their methods of use, manufacturing or other technologies or activities infringe the intellectual property rights of such third parties. If our product candidates, such as Tcelna, or their methods of manufacture are found to infringe any such patents, we may have to pay significant damages or seek licenses under such patents. We have not conducted comprehensive searches of patents issued to third parties relating to Tcelna or OPX-212. Consequently, no assurance can be given that third-party patents containing claims covering Tcelna or OPX-212, their methods of use or manufacture do not exist or have not been filed and will not be issued in the future. Because some patent applications in the United States may be maintained in secrecy until the patents are issued, and because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, we cannot be certain that others have not filed patent applications that will mature into issued patents that relate to our current or future product candidates that could have a material effect in developing and commercializing one or more of our product candidates. A patent holder could prevent us from importing, making, using or selling the patented compounds. We may need to resort to litigation to enforce our intellectual property rights or to determine the scope and validity of third-party proprietary rights. Similarly, we may be subject to claims that we have inappropriately used or disclosed trade secrets or other proprietary information of third parties. If we become involved in litigation, it could consume a substantial portion of our managerial and financial resources, regardless of whether we win or lose. Some of our competitors may be able to sustain the costs of complex intellectual property litigation more effectively than we can because they have substantially greater resources. We may not be able to afford the costs of litigation. Any legal action against us or our collaborators could lead to:

- payment of actual damages, royalties, lost profits, potentially treble damages and attorneys' fees, if we are found to have willfully infringed a third party's patent rights;
- injunctive or other equitable relief that may effectively block our ability to further develop, commercialize and sell our products;
- we or our collaborators having to enter into license arrangements that may not be available on commercially acceptable terms if at all; or
- significant cost and expense, as well as distraction of our management from our business.

As a result, we could be prevented from commercializing current or future product candidates.

Risks Related to Our Industry

We are subject to stringent regulation of our product candidates, such as Tcelna, which could delay development and commercialization.

We, our third-party contractors, suppliers and partners (such as Merck Serono, in the event the Option is exercised, with respect to Tcelna), and our product candidates, such as Tcelna, are subject to stringent regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. None of our product candidates can be marketed in the United States until it has been approved by the FDA. No product candidate of ours has been approved, and we may never receive FDA approval for any product candidate. Obtaining FDA approval typically takes many years and requires substantial resources. Even if regulatory approval is obtained, the FDA may impose significant restrictions on the indicated uses, conditions for use and labeling of such products. Additionally, the FDA may require post-approval studies, including additional research and development and clinical trials. These regulatory requirements may limit the size of the market for the product or result in the incurrence of additional costs. Any delay or failure in obtaining required approvals could substantially reduce our ability to generate revenues.

In addition, both before and after regulatory approval, we, our partners and our product candidates, such as Tcelna, are subject to numerous FDA requirements covering, among other things, testing, manufacturing, quality control, labeling, advertising, promotion, distribution and export. The FDA's requirements may change and additional government regulations may be promulgated that could affect us, our partners and our product candidates, such as Tcelna. Given the number of recent high profile adverse safety events with certain drug products, the FDA may require, as a condition of approval, costly risk management programs, which may include safety surveillance, restricted distribution and use, patient education, enhanced labeling, special packaging or labeling, expedited reporting of certain adverse events, preapproval of promotional materials and restrictions on direct-to-consumer advertising. Furthermore, heightened Congressional scrutiny on the adequacy of the FDA's drug approval process and the agency's efforts to assure the safety of marketed drugs resulted in the enactment of legislation addressing drug safety issues, the FDA Amendments Act of 2007. This legislation provides the FDA with expanded authority over drug products after approval and the FDA's exercise of this authority could result in delays or increased costs during the period of product development, clinical trials and regulatory review and approval, and increased costs to assure compliance with new post-approval regulatory requirements. We cannot predict the likelihood, nature or extent of government regulation that may arise from this or future legislation or administrative action, either in the United States or abroad.

In order to market any of our products outside of the United States, we and our strategic partners and licensees must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods and 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. Approval by the FDA does not automatically lead to the approval of authorities outside of the United States and, similarly, approval by other regulatory authorities outside the United States will not automatically lead to FDA approval. In addition, 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 negatively impact the regulatory process in others. Our product candidates, such as Tcelna, may not be approved for all indications that we request, which would limit uses and adversely impact our potential royalties and product sales. Such approval may be subject to limitations on the indicated uses for which any potential product may be marketed or require costly, post-marketing follow-up studies.

If we fail to comply with applicable regulatory requirements in the United States and other countries, among other things, we may be subject to fines and other civil penalties, delays in approving or failure to approve a product, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions, interruption of manufacturing or clinical trials, injunctions and criminal prosecution, any of which would harm our business.

We may need to change our business practices to comply with health care fraud and abuse regulations, and our failure to comply with such laws could adversely affect our business, financial condition and results of operations.

If Merck Serono exercises the Option, Merck Serono would be solely responsible for funding development, regulatory and commercialization activities for Tcelna in MS, although we would retain an option to co-fund certain development in exchange for increased royalty rates. Otherwise, if we are successful in achieving approval to market one or more of our product candidates, our operations will be directly, or indirectly through our customers, subject to various state and federal fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute and False Claims Act. These laws may impact, among other things, our proposed sales, marketing, and education programs.

The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing or arranging for a good or service, for which payment may be made under a federal healthcare program such as the Medicare and Medicaid programs. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated. The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Recognizing that the Anti-Kickback Statute is broad and may technically prohibit many innocuous or beneficial arrangements, Congress authorized the Department of Health and Human Services, Office of Inspector General, or OIG, to issue a series of regulations, known as the "safe harbors." These safe harbors set forth provisions that, if all their applicable requirements are met, will assure healthcare providers and other parties that they will not be prosecuted under the Anti-Kickback Statute. The failure of a transaction or arrangement to fit precisely within one or more safe harbors does not necessarily mean that it is illegal or that prosecution will be pursued. However, conduct and business arrangements that do not fully satisfy each applicable safe harbor may result in increased scrutiny by government enforcement authorities such as the OIG. Penalties for violations of the federal Anti-Kickback Statute include criminal penalties and civil sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other federal healthcare programs. Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs.

The federal False Claims Act prohibits persons from knowingly filing or causing to be filed a false claim to, or the knowing use of false statements to obtain payment from, the federal government. Suits filed under the False Claims Act, known as "qui tam" actions, can be brought by any individual on behalf of the government and such individuals, sometimes known as "relators" or, more commonly, as "whistleblowers," may share in any amounts paid by the entity to the government in fines or settlement. The frequency of filing of qui tam actions has increased significantly in recent years, causing greater numbers of healthcare companies to have to defend a False Claims Act action. When an entity is determined to have violated the federal False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties. Various states have also enacted laws modeled after the federal False Claims Act.

In addition to the laws described above, the Health Insurance Portability and Accountability Act of 1996 created two new federal crimes: healthcare fraud and false statements relating to healthcare matters. The healthcare fraud statute prohibits knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private payors. A violation of this statute is a felony and may result in fines, imprisonment or exclusion from government sponsored programs. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. A violation of this statute is a felony and may result in fines or imprisonment.

Beginning August 1, 2013, the Physician Payments Sunshine Act (the "Sunshine Act"), which is part of the Patient Protection and Affordable Care Act, requires manufacturers of drugs, medical devices, biologicals or medical supplies that participate in U.S. federal health care programs to track and then report certain payments and items of value given to U.S. physicians and U.S. teaching hospitals (defined as "Covered Recipients"). The Sunshine Act requires that manufacturers collect this information on a yearly basis and then report it to Centers for Medicare & Medicaid Services by the 90th day of each subsequent year.

If our operations are found to be in violation of any of the laws described above and other applicable state and federal fraud and abuse laws, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from government healthcare programs, and the curtailment or restructuring of our operations.

If our competitors develop and market products that are more effective than our product candidates, they may reduce or eliminate our commercial opportunities.

Competition in the pharmaceutical industry, particularly the market for MS products, is intense, and we expect such competition to continue to increase. We face competition from pharmaceutical and biotechnology companies, as well as numerous academic and research institutions and governmental agencies, in the United States and abroad. Our competitors have products that have been approved or are in advanced development and may succeed in developing drugs that are more effective, safer and more affordable or more easily administered than ours, or that achieve patent protection or commercialization sooner than our products. Our most significant competitors are fully integrated pharmaceutical companies and more established biotechnology companies. These companies have significantly greater capital resources and expertise in research and development, manufacturing, testing, obtaining regulatory approvals, and marketing than we currently do. However, smaller companies also may prove to be significant competitors, particularly through proprietary research discoveries and collaboration arrangements with large pharmaceutical and established biotechnology companies. In addition to the competitors with existing products that have been approved, many of our competitors are further along in the process of product development and also operate large, company-funded research and development programs. As a result, our competitors may develop more competitive or affordable products, or achieve earlier patent protection or further product commercialization than we are able to achieve. Competitive products may render any products or product candidates that we develop obsolete.

Our competitors may also develop alternative therapies that could further limit the market for any products that we may develop.

Rapid technological change could make our products obsolete.

Biopharmaceutical technologies have undergone rapid and significant change, and we expect that they will continue to do so. As a result, there is significant risk that our product candidates, such as Tcelna, may be rendered obsolete or uneconomical by new discoveries before we recover any expenses incurred in connection with their development. If our product candidates, such as Tcelna, are rendered obsolete by advancements in biopharmaceutical technologies, our future prospects will suffer.

Consumers may sue us for product liability, which could result in substantial liabilities that exceed our available resources and damage our reputation.

Developing and commercializing drug products entails significant product liability risks. Liability claims may arise from our and our collaborators' use of products in clinical trials and the commercial sale of those products.

In the event that any of our product candidates becomes an approved product and is commercialized, consumers may make product liability claims directly against us and/or our partners (such as Merck Serono, in the event the Option is exercised, with respect to Tcelna), and our partners or others selling these products may seek contribution from us if they incur any loss or expenses related to such claims. We have insurance that covers clinical trial activities. We believe our insurance coverage as of the date hereof is reasonably adequate at this time. However, we will need to increase and expand this coverage as we commence additional clinical trials, as well as larger scale trials, and if any product candidate is approved for commercial sale. This insurance may be prohibitively expensive or may not fully cover our potential liabilities. Our inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the regulatory approval or commercialization of products that we or one of our collaborators develop. Product liability claims could have a material adverse effect on our business and results of operations. Liability from such claims could exceed our total assets if we do not prevail in any lawsuit brought by a third party alleging that an injury was caused by one or more of our products.

Government controls and health care reform measures could adversely affect our business.

The business and financial condition of pharmaceutical and biotechnology companies are affected by the efforts of governmental and third-party payors to contain or reduce the costs of health care. In the United States and in foreign jurisdictions, there have been, and we expect that there will continue to be, a number of legislative and regulatory proposals aimed at changing the health care system. For example, in some foreign countries, particularly in Europe, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product candidate. To obtain reimbursement or pricing approval in some countries, we may be required to conduct additional clinical trials that compare the cost-effectiveness of any product candidate, such as Tcelna, to other available therapies. If reimbursement of any product candidate such as Tcelna, if approved, is unavailable or limited in scope or amount in a particular country, or if pricing is set at unsatisfactory levels, we may be unable to achieve or sustain profitability in such country. In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) changed the way Medicare covers and pays for pharmaceutical products. The legislation established Medicare Part D, which expanded Medicare coverage for outpatient prescription drug purchases by the elderly but provided authority for limiting the number of drugs that will be covered in any therapeutic class. The MMA also introduced a new reimbursement methodology based on average sales prices for physician-administered drugs. Any negotiated prices for any product candidate such as Tcelna, if approved, covered by a Part D prescription drug plan will likely be lower than the prices that might otherwise be obtained outside of the Medicare Part D prescription drug plan. Moreover, while Medicare Part D applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment under Medicare Part D may result in a similar reduction in payments from non-governmental payors.

The United States and several other jurisdictions are considering, or have already enacted, a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell any product candidate such as Tcelna, if approved. Among policy-makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access to healthcare. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. There have been, and likely will continue to be, legislative and regulatory proposals at the federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare may adversely affect: the demand for any product candidate such as Tcelna, if approved; the ability to set a price that we believe is fair for any product candidate such as Tcelna, if approved; our ability to generate revenues and achieve or maintain profitability; the level of taxes that we are required to pay; and the availability of capital.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act (collectively, the ACA), became law in the United States. The goal of the ACA is to reduce the cost of healthcare and substantially change the way healthcare is financed by both governmental and private insurers. The ACA may result in downward pressure on pharmaceutical reimbursement, which could negatively affect market acceptance of any product candidate such as Tcelna, if approved. Provisions of the ACA relevant to the pharmaceutical industry include the following: an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs; an increase in the rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for branded and generic drugs, respectively; a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts on negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations; expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the Federal Poverty Level beginning in 2014, thereby potentially increasing manufacturers' Medicaid rebate liability; expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; new requirements under the federal Open Payments program and its implementing regulations; and expansion of healthcare fraud and abuse laws, including the federal False Claims Act and the federal Anti-Kickback Statute, new government investigative powers and enhanced penalties for noncompliance. In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several types of providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding.

Another example of reform that could affect our business is drug reimportation into the United States (i.e., the reimportation of approved drugs originally manufactured in the United States back into the United States from other countries where the drugs were sold at lower prices). Initiatives in this regard could decrease the price we or any potential collaborators receive for our product candidates if they are ever approved for sale, adversely affecting our future revenue growth and potential profitability. Moreover, the pendency or approval of such proposals could result in a decrease in our stock price or adversely affect our ability to raise capital or to obtain strategic partnerships or licenses.

Risks Related to Our Securities

There is currently a limited market for our securities, and any trading market that exists in our securities may be highly illiquid and may not reflect the underlying value of our net assets or business prospects.

Although our common stock is traded on the NASDAQ Capital Market, there is currently a limited market for our securities and there can be no assurance that an active market will ever develop. Investors are cautioned not to rely on the possibility that an active trading market may develop.

Our stock may be delisted from NASDAQ, which could affect its market price and liquidity.

We are required to meet certain qualitative and financial tests (including a minimum bid price for our common stock of $1.00 per share and a minimum stockholders' equity of $2.5 million), as well as certain corporate governance standards, to maintain the listing of our common stock on the NASDAQ Capital Market. Since November 2014, our stock has continued to trade below the minimum bid price continued listing requirement, and our common stock is in jeopardy of being delisted. On December 5, 2014, we received a staff deficiency letter from NASDAQ indicating that our common stock failed to comply with the minimum bid price requirement because it closed below the $1.00 minimum closing bid price for 30 consecutive trading days. The notice further stated that we will be provided a period of 180 calendar days to regain compliance. If our common stock maintains a closing bid price of $1.00 per share or more for a minimum of 10 consecutive business days (or such longer period of time as the NASDAQ staff may require in some circumstances, but generally not more than 20 consecutive business days) before June 3, 2015, we will achieve compliance with the listing standards. If our common stock does not achieve compliance with the minimum bid price by June 3, 2015, we may be eligible for an additional 180 day grace period so long as we continue to meet the other listing standards and provide timely notice of our intention to cure the deficiency. However, if it appears to the NASDAQ staff that we will not be able to cure the deficiency, or if we do not meet the other listing standards, NASDAQ could provide notice that our stock will become subject to delisting.

We previously received a similar staff deficiency letter in February 2012 indicating that our common stock failed to comply with the minimum bid price requirement because it traded below the $1.00 minimum closing bid price for 30 consecutive trading days, and after an initial and an extended grace period, and implementation of a one-for-four reverse stock split of our common stock on December 14, 2012, we regained compliance with the $1.00 minimum closing bid price listing standard and NASDAQ notified us that the matter was closed in January 2013. We also received a staff deficiency letter in November 2012 notifying us that the stockholders' equity of $2,339,285 as reported in our Quarterly Report on Form 10-Q for the period ended September 30, 2012 was below the minimum stockholders' equity of $2.5 million required for continued listing on NASDAQ. We were provided 45 calendar days, or until January 10, 2013, to submit a plan to regain compliance with the minimum stockholders' equity standard. We submitted such a plan and it was accepted, with NASDAQ thus granting us an extension until May 15, 2013 to evidence compliance with the minimum stockholders' equity standard. Upon executing the plan, we attained the necessary stockholders' equity level and subsequently received notice from NASDAQ that we had regained compliance with the listing standard and the matter was closed in May 2013.

While we are exercising diligent efforts to maintain the listing of our common stock on NASDAQ, there can be no assurance that we will be able to maintain compliance with the minimum bid price, stockholder's equity or other listing standards in the future. We may receive additional future notices from NASDAQ that we have failed to meet its requirements, and proceedings to delist our stock could be commenced. In such event, NASDAQ rules permit us to appeal any delisting determination to a NASDAQ Hearings Panel. If we are unable to maintain or regain compliance in a timely manner and our common stock is delisted, it could be more difficult to buy or sell our common stock and obtain accurate quotations, and the price of our stock could suffer a material decline. Delisting may also impair our ability to raise capital.

Our share price is volatile, and you may not be able to resell our shares at a profit or at all.

The market prices for securities of biopharmaceutical and biotechnology companies, and early-stage drug discovery and development companies like us in particular, have historically been highly volatile and may continue to be highly volatile in the future. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- the development status of any drug candidates, such as Tcelna, including clinical study results and determinations by regulatory authorities with respect thereto;
- the initiation, termination, or reduction in the scope of any collaboration arrangements (such as developments involving Merck Serono and the Option, including a decision by Merck Serono to exercise or not exercise the Option) or any disputes or developments regarding such collaborations;
- announcements of technological innovations, new commercial products or other material events by our competitors or us;
- disputes or other developments concerning our proprietary rights;
- changes in, or failure to meet, securities analysts' or investors' expectations of our financial performance;
- additions or departures of key personnel;
- discussions of our business, products, financial performance, prospects or stock price by the financial and scientific press and online investor communities;
- public concern as to, and legislative action with respect to, the pricing and availability of prescription drugs or the safety of drugs and drug delivery techniques;
- regulatory developments in the United States and in foreign countries; or
- dilutive effects of sales of shares of common stock by us or our shareholders, and sales of common stock acquired upon exercise or conversion by the holders of warrants, options or convertible notes.

Broad market and industry factors, as well as economic and political factors, also may materially adversely affect the market price of our common stock.

We may be or become the target of securities litigation, which is costly and time-consuming to defend.

In the past, following periods of market volatility in the price of a company's securities or the reporting of unfavorable news, security holders have often instituted class action litigation. If the market value of our securities experience adverse fluctuations and we become involved in this type of litigation, regardless of the outcome, we could incur substantial legal costs and our management's attention could be diverted from the operation of our business, causing our business to suffer.

Our "blank check" preferred stock could be issued to prevent a business combination not desired by management or our majority shareholders.

Our charter authorizes the issuance of "blank check" preferred stock with such designations, rights and preferences as may be determined by our Board of Directors without shareholder approval. Our preferred stock could be utilized as a method of discouraging, delaying, or preventing a change in our control and as a method of preventing shareholders from receiving a premium for their shares in connection with a change of control.

Future sales of our securities could cause dilution, and the sale of such securities, or the perception that such sales may occur, could cause the price of our stock to fall.

Between March 5, 2014 and March 31, 2015, we generated gross and net proceeds including amortization of deferred financing costs of $674,126 and $648,175, respectively, on sales of an aggregate of 518,412 shares of our common stock under the new ATM Agreement. Subsequent to March 31, 2015, we raised $13,804,140 in gross proceeds, before expenses, through subscriptions for 25,098,437 units in a Rights Offering to holders of our common stock and holders of our outstanding Series L warrants who were entitled to participate. Each unit was composed of one share of common stock and a Series M warrant to purchase an additional share of common stock. The Rights Offering was completed on April 9, 2015. We issued an aggregate of 25,098,437 shares of common stock and Series M warrants for a like number of shares. Net proceeds, after deduction of fees and expenses, including dealer-manager fees, are expected to be approximately $12 million.

Sales of additional shares of our common stock, as well as securities convertible into or exercisable for common stock, could result in substantial dilution to our shareholders and cause the market price of our common stock to decline. An aggregate of 28,255,205 shares of common stock were outstanding as of March 31, 2015 (which was prior to the Rights Offering). As of such date, another (i) 3,423,779 shares of common stock were issuable upon exercise of outstanding options and (ii) 3,046,801 shares of common stock were issuable upon the exercise of outstanding warrants. A substantial majority of the outstanding shares of our common stock are freely tradable without restriction or further registration under the Securities Act of 1933.

We may sell additional shares of common stock, as well as securities convertible into or exercisable for common stock, in subsequent public or private offerings. We may also issue additional shares of common stock, as well as securities convertible into or exercisable for common stock, to finance future acquisitions. Among other requirements, we will need to raise additional capital in order to initiate and complete a Phase 1/2 proof-of-concept study of OPX-212 in NMO, as well as to support our operations during the course of the trial, or to pursue additional disease indications for our T-cell technology, and this may require us to issue a substantial amount of securities (including common stock as well as securities convertible into or exercisable for common stock). There can be no assurance that our capital raising efforts will be able to attract the capital needed to execute on our business plan and sustain our operations. Moreover, we cannot predict the size of future issuances of our common stock, as well as securities convertible into or exercisable for common stock, or the effect, if any, that future issuances and sales of our securities will have on the market price of our common stock. Sales of substantial amounts of our common stock, as well as securities convertible into or exercisable for common stock, including shares issued in connection with an acquisition or securing funds to complete our clinical trial plans, or the perception that such sales could occur, may result in substantial dilution and may adversely affect prevailing market prices for our common stock.

Under the $1.5 million purchase agreement and $15.0 million purchase agreement with Lincoln Park, we may direct Lincoln Park to purchase up to $16.5 million of shares of common stock, subject to certain limitations and conditions, over a 30-month period. We have sold an aggregate of 390,000 shares to date under the $1.5 million purchase agreement. Additionally, we issued Lincoln Park 56,507 shares of common stock as initial commitment shares and have issued an aggregate of 3,585 additional commitment shares, and may in the future issue up to an additional 109,428 shares of common stock as additional commitment shares, as a fee for its commitment to purchase the shares under the $1.5 million purchase agreement and the $15.0 million purchase agreement. The purchase price for the shares that we may sell to Lincoln Park will fluctuate based on the price of our common stock and other factors determined by us. As such, Lincoln Park may ultimately purchase all, some or none of the shares of our common stock issuable pursuant to the purchase agreements after the date hereof and, after it has acquired shares, Lincoln Park may sell all, some or none of those shares. Therefore, sales to Lincoln Park by us pursuant to either or both of the purchase agreements could result in substantial dilution to the interests of other holders of our common stock. Additionally, the sale of a substantial number of shares of our common stock to Lincoln Park, or the anticipation of such sales, could cause the trading price of our common stock to decline and could make it more difficult for us to sell equity or equity-related securities in the future.

We presently do not intend to pay cash dividends on our common stock.

We currently anticipate that no cash dividends will be paid on the common stock in the foreseeable future. While our dividend policy will be based on the operating results and capital needs of the business, it is anticipated that all earnings, if any, will be retained to finance the future expansion of our business.

Our shareholders may experience substantial dilution in the value of their investment if we issue additional shares of our capital stock.

Our charter allows us to issue up to 100,000,000 shares of our common stock and to issue and designate the rights of, without shareholder approval, up to 10,000,000 shares of preferred stock. In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share paid by other investors, and dilution to our shareholders could result. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors, and investors purchasing shares or other securities in the future could have rights superior to existing shareholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by other investors.

We may issue debt and equity securities or securities convertible into equity securities, any of which may be senior to our common stock as to distributions and in liquidation, which could negatively affect the value of our common stock.

In the future, we may attempt to increase our capital resources by entering into debt or debt-like financing that is unsecured or secured by up to all of our assets, or by issuing additional debt or equity securities, which could include issuances of secured or unsecured commercial paper, medium-term notes, senior notes, subordinated notes, guarantees, preferred stock, hybrid securities, or securities convertible into or exchangeable for equity securities. In the event of our liquidation, our lenders and holders of our debt and preferred securities would receive distributions of our available assets before distributions to the holders of our common stock. Because our decision to incur debt and issue securities in future offerings may be influenced by market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings or debt financings. Further, market conditions could require us to accept less favorable terms for the issuance of our securities in the future.

Our management has significant flexibility in using our current available cash.

In addition to general corporate purposes (including working capital, research and development, business development and operational purposes), we currently intend to use our available cash (i) to continue funding the ongoing Abili-T clinical study of Tcelna in patients with SPMS, and (ii) to continue preclinical and manufacturing activities for OPX-212 in patients with NMO, and if such activities are successful, to file an IND application with the FDA to initiate a Phase 1/2 proof-of-concept study. We reached our enrollment target for the Abili-T trial in June 2014, and a total of 190 patients have been enrolled in this two-year study. We expect top-line data for Tcelna to be available in the second half of 2016. While we believe we have sufficient resources to complete the trial and support our operations during the pendency of the trial, if our projections prove to be inaccurate or we encounter additional costs to complete the trial or to sustain our operations, we may need to raise additional capital or modify the Abili-T clinical study or our current business plan. Our existing resources are not adequate to permit us to conduct a Phase 1/2 proof-of-concept study of OPX-212 in NMO. We will need to secure additional resources to conduct a Phase 1/2 proof-of-concept study of OPX-212 in NMO and to support our operations during the course of the trial.

Depending on future developments and circumstances, we may use some of our available cash for other purposes which may have the potential to decrease the forecasted cash runway. Notwithstanding our current intentions regarding use of our available cash, our management will have significant flexibility with respect to such use. The actual amounts and timing of expenditures will vary significantly depending on a number of factors, including the amount and timing of cash used in our operations and our research and development efforts. Management's failure to use these funds effectively would have an adverse effect on the value of our common stock and could make it more difficult and costly to raise funds in the future.

An active trading market may never develop for the Series M warrants issued in the Rights Offering, which may limit the ability to resell the warrants.

There is no established trading market for the Series M warrants we issued in April 2015 pursuant to the Rights Offering. While the warrants have listing for trading on NASDAQ under the symbol "OPXAW," there can be no assurance that that a market will develop for the warrants. Even if a market for the warrants does develop, the price of the warrants may fluctuate and liquidity may be limited. If a market for the warrants does not develop, then holders of the warrants may be unable to resell the warrants or be able to sell them only at an unfavorable price for an extended period of time, if at all. Future trading prices of the warrants will depend on many factors, including our operating performance and financial condition, our ability to continue the effectiveness of the registration statement covering the warrants and the common stock issuable upon exercise of the warrants, the interest of securities dealers in making a market and the market for similar securities.

The market price of our common stock may not exceed the exercise price of the Series M warrants issued in connection with the Rights Offering.

The Series M warrants issued in April 2015 in connection with the Rights Offering will expire on April 9, 2018. The warrants entitle the holder to purchase one share of common stock at an exercise price of (i) $0.50 per share from the date of issuance through June 30, 2016 and (ii) $1.50 per share from July 1, 2016 through their expiration three years from the date of issuance. There can be no assurance that the market price of our common stock will exceed the exercise price of the warrants at any or all times prior to their expiration. Any warrants not exercised by their expiration date will expire worthless and we will be under no further obligation to the warrant holder.

The Series M warrants issued in connection with the Rights Offering may be redeemed on short notice. This may have an adverse impact on their price.

We may redeem the Series M warrants issued in the Rights Offering for $0.01 per warrant once the closing price of our common stock has equaled or exceeded $2.50 per share, subject to adjustment, for 10 consecutive trading days. If we give notice of redemption, holders will be forced to sell or exercise their warrants or accept the redemption price. The notice of redemption could come at a time when it is not advisable or possible to exercise the warrants. As a result, holders would be unable to benefit from owning the warrants being redeemed.

Our ability to use net operating loss carryovers to reduce future tax payments may be limited.

As of December 31, 2014, we had net operating loss carryforwards (NOLs) for federal income tax purposes of approximately $70 million. We generally are able to carry NOLs forward to reduce taxable income in future years. These NOLs begin to expire at December 31, 2025. However, our ability to utilize the NOLs is subject to the rules of Section 382 of the Internal Revenue Code. Section 382 generally restricts the use of NOLs after an "ownership change." An ownership change occurs if, among other things, the stockholders (or specified groups of stockholders) who own or have owned, directly or indirectly, five (5%) percent or more of our common stock or are otherwise treated as five (5%) percent stockholders under Section 382 and the regulations promulgated thereunder increase their aggregate percentage ownership of our stock by more than 50 percentage points over the lowest percentage of the stock owned by these stockholders over a three-year rolling period. In the event of an ownership change, Section 382 imposes an annual limitation on the amount of taxable income a corporation may offset with NOL carryforwards. This annual limitation is generally equal to the product of the value of our stock on the date of the ownership change, multiplied by the long-term tax-exempt rate published monthly by the Internal Revenue Service. Any unused annual limitation may be carried over to later years until the applicable expiration date for the respective NOL carryforwards.

The rules of Section 382 are complex and subject to varying interpretations. Because of our numerous capital raises, which have included the issuance of various classes of convertible securities and warrants, uncertainty exists as to whether we may have undergone an ownership change in the past or will undergo one as a result of the recently completed Rights Offering. Even if the Rights Offering does not cause an ownership change, it may increase the likelihood that we may undergo an ownership change in the future. Based on our recent stock prices, we believe any ownership change would severely limit our ability to utilize the NOLs. Accordingly, no assurance can be given that our NOLs will be fully available. As a result, we could pay taxes earlier and in larger amounts than would be the case if the NOLs were available to reduce the federal income taxes without restriction.

Item 5. Other Information

On May 11, 2015, we entered into a First Amendment to Lease Agreement to amend the Lease Agreement dated August 19, 2005 for our headquarters facility to (i) renew the Lease Agreement for an additional 60 months commencing October 1, 2015, (ii) set the monthly base rent at $16,666.67 for the first 36 months of the renewal period, with an increase in the monthly base rent to $17,083.33 during months 37 to 48, and $17,500.00 during months 49 to 60, and (iii) provide for two 60-month renewal options at the then current fair market value.

Item 6. Exhibits

Exhibit No.	Description
4.1	Form of Series M Warrant issued on April 9, 2015 (incorporated by reference to Exhibit 4.11 to the Company's Registration Statement on Form S-1, as amended (File No. 333-201731), originally filed on January 28, 2015).
4.2 *	Warrant Agreement, dated February 25, 2015, by and between Opexa Therapeutics, Inc. and Continental Stock Transfer & Trust Company.
4.3 *	Subscription Agent Agreement, dated February 25, 2015, by and between Opexa Therapeutics, Inc. and Continental Stock Transfer & Trust Company.
10.1	First Amendment of Option and License Agreement, dated March 9, 2015, by and between Opexa Therapeutics, Inc. and Ares Trading S.A. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 9, 2015).
10.2 *	First Amendment to Lease Agreement, dated May 11, 2015, by and between Opexa Therapeutics, Inc. and Dirk D. Laukien.
10.3 *	Form of restricted stock agreement for awards to be made under the Opexa Therapeutics, Inc. 2010 Stock Incentive Plan.
31.1 *	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2 *	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1 *	Certification of Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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101*	Financial statements from the Quarterly Report on Form 10-Q of the Company for the period ended March 31, 2015, formatted in

	Extensible Business Reporting Language (XBRL): (i) Consolidated Balance Sheets; (ii) Consolidated Statements of Operations; (iii) Consolidated Statements of Changes in Stockholders' Equity; (iv) Consolidated Statements of Cash Flows; and (v) Notes to Consolidated Financial Statements.

* Filed herewith.

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.

OPEXA THERAPEUTICS, INC.

Date: May 12, 2015

By: /s/ Neil K. Warma
Neil K. Warma
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 12, 2015

By: /s/ Karthik Radhakrishnan
Karthik Radhakrishnan
Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

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* Filed herewith.

OPEXA THERAPEUTICS, INC.

and

CONTINENTAL STOCK TRANSFER & TRUST COMPANY

WARRANT AGREEMENT

Dated as of February 25, 2015

THIS WARRANT AGREEMENT (this " ***Agreement*** "), dated as of February 25, 2015 is by and between Opexa Therapeutics, Inc., a Texas corporation (the " ***Company*** "), and Continental Stock Transfer & Trust Company, a New York corporation, as warrant agent (the " ***Warrant Agent,*** " also referred to herein as the " ***Transfer Agent*** ," and subject to the appointment of a successor Warrant Agent pursuant to Section 8.3).

WHEREAS, the Company is engaged in a public rights offering (the " ***Offering*** ") of the Company's Common Stock (as defined below) together with Warrants (as defined below) to purchase Common Stock and, in connection therewith, will distribute to holders of its common stock, par value $0.01 per share (" ***Common Stock*** "), and holders of certain of its outstanding warrants (the " ***Series L Warrants*** ") rights to subscribe to purchase units in the Offering (the " ***Units*** "). Each Unit consists of one share of Common Stock (the ***"Shares"***) and one " **Series M** " warrant representing the right to purchase one share of Common Stock (the " ***Warrants*** " and, together with the Units, the Shares and the shares of Common Stock underlying the Warrants, the " ***Securities*** "). Each Warrant entitles the holder thereof to purchase one share of Common Stock at an exercise price of (i) $0.50 per share from the date of issuance through June 30, 2016 and (ii) $1.50 per share from July 1, 2016 through the Expiration Date (as defined below), subject to adjustment as described herein; and

WHEREAS, the Company has filed with the Securities and Exchange Commission (the " ***Commission*** ") a registration statement on Form S-1, No. 333-201731, as amended (the " ***Registration Statement*** "), and prospectus (the " ***Prospectus*** "), for the registration, under the Securities Act of 1933, as amended (the " ***Securities Act*** "), of the Securities; and

WHEREAS, the Company desires the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing to so act, in connection with the issuance, registration, transfer, exchange, redemption and exercise of the Warrants; and

WHEREAS, the Company desires to provide for the form and provisions of the Warrants, the terms upon which they shall be issued and exercised, and the respective rights, limitation of rights, and immunities of the Company, the Warrant Agent, and the holders of the Warrants; and

WHEREAS, all acts and things have been done and performed which are necessary to make the Warrants, when executed on behalf of the Company and countersigned by or on behalf of the Warrant Agent, as provided herein, the valid, binding and legal obligations of the Company, and to authorize the execution and delivery of this Agreement.

NOW, THEREFORE, in consideration of the mutual agreements herein contained, the parties hereto agree as follows:

1. Appointment of Warrant Agent . The Company hereby appoints the Warrant Agent to act as agent for the Company for the Warrants, and the Warrant Agent hereby accepts such appointment and agrees to perform the same in accordance with the terms and conditions set forth in this Agreement.

2. Warrants .

2.1 Form of Warrant . Notwithstanding any provision herein to the contrary, all of the Warrants shall be represented by one or more book-entry certificates (each a " ***Book-Entry Warrant Certificate*** "). Each Warrant shall be issued in registered form only and shall be in substantially the form of Exhibit A hereto, the provisions of which are incorporated herein, and shall be signed by, or bear the facsimile signature of, the Chairman of the Board, President, Chief Executive Officer, Chief Financial Officer, Secretary or other authorized officer of the Company. In the event the person whose facsimile signature has been placed upon any Warrant shall have ceased to serve in the capacity in which such person signed the Warrant before such Warrant is issued, it may be issued with the same effect as if he or she had not ceased to be such at the date of issuance.

2.2 Effect of Countersignature . Unless and until countersigned by, or bearing the facsimile signature of, the Warrant Agent pursuant to this Agreement, a Warrant shall be invalid and of no effect and may not be exercised by the holder thereof.

2.3 Registration .

2.3.1 Warrant Register . The Warrant Agent shall maintain books (the " ***Warrant Register*** ") for the registration of original issuance and the registration of transfer of the Warrants. Upon the initial issuance of the Warrants, the Warrant Agent shall issue and register the Warrants in the names of the respective holders thereof in such denominations and otherwise in accordance with instructions delivered to the Warrant Agent by the Company or its representatives. To the extent the Warrants are "DTC Eligible" as of the issuance date, all of the Warrants shall be represented by one or more Book-Entry Warrant Certificates deposited with the Depository Trust Company (the " ***Depository*** ") and registered in the name of Cede & Co., a nominee of the Depository. Notwithstanding any provision herein to the contrary, ownership of beneficial interests in the Book-Entry Warrant Certificates shall be shown on, and the transfer of such ownership shall be effected through, records maintained (i) by the Depository or its nominee for each Book-Entry Warrant Certificate; (ii) by institutions that have accounts with the Depository (such institution, with respect to a Warrant in its account, a " ***Participant*** "); or (iii) directly on the book-entry direct registration system (DRS) records of the Warrant Agent, as evidenced by statements issued by the Warrant Agent from time to time to the holders of direct registration securities reflecting such book-entry direct registration ownership.

If the Warrants are not "DTC Eligible" as of the issuance date or the Depository subsequently ceases to make its book-entry settlement system available for the Warrants, the Company may instruct the Warrant Agent to make other arrangements for book-entry settlement within ten (10) days after the Depository ceases to make its book-entry settlement available. In the event that the Company does not make alternative arrangements for book-entry settlement within ten (10) days or the Warrants are not eligible for, or it is no longer necessary to have the Warrants available in, book-entry form, the Warrant Agent shall provide written instructions to the Depository to deliver to the Warrant Agent for cancellation each Book-Entry Warrant Certificate, and the Company shall instruct the Warrant Agent to deliver to the Depository definitive Warrant Certificates in physical form evidencing such Warrants. Such definitive Warrant Certificates shall be in substantially the form attached hereto as Exhibit A.

2.3.2 Registered Holder; Beneficial Owners . Prior to due presentment to the Warrant Agent for registration of transfer of any Warrant, the Company and the Warrant Agent may deem and treat the person in whose name such Warrant is registered in the Warrant Register (the " ***Registered Holder*** ") as the absolute owner of such Warrant and of each Warrant represented thereby (notwithstanding any notation of ownership or other writing on the Warrant Certificate made by anyone other than the Company or the Warrant Agent), for the purpose of any exercise thereof and for all other purposes, and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary. Any person in whose name ownership of a beneficial interest in the Warrants evidenced by a Book-Entry Warrant Certificate is recorded in the records maintained by the Depository or its nominee shall be deemed the "beneficial owner" thereof.

2.3.3 Uncertificated Warrants . Notwithstanding the foregoing and anything else herein to the contrary, the Warrants may be issued in uncertificated form.

3. Terms and Exercise of Warrants .

3.1 Warrant Price . Each Warrant shall, when countersigned by the Warrant Agent, entitle the Registered Holder thereof, subject to the provisions of such Warrant and of this Agreement, to purchase from the Company the number of shares of Common Stock stated therein, at the price of (i) $0.50 per share from the date of issuance through June 30, 2016 and (ii) $1.50 per share from July 1, 2016 through the Expiration Date, subject to the adjustments provided in Section 4 hereof and in the second to last sentence of this Section 3.1 . The term ***" Warrant Price "*** as used in this Agreement shall mean the price per share at which shares of Common Stock may be purchased at the time a Warrant is exercised. The Company in its sole discretion may lower the Warrant Price at any time prior to the Expiration Date (as defined below) for a period of not less than twenty (20) Business Days; provided , that the Company shall provide at least twenty (20) days prior written notice of such reduction to Registered Holders of the Warrants and provided further that any such reduction shall be identical among all of the Warrants. For purposes of the Agreement, "Business Day" shall mean any day other than a Saturday, Sunday or a day on which banking institutions in the City of New York are authorized or obligated by law or executive order to close.

3.2 Duration of Warrants . A Warrant may be exercised only during the period (the " ***Exercise Period*** ") commencing immediately following the closing of the Offering and terminating at 5:00 p.m. New York City time on the Expiration Date; provided , however , that the exercise of any Warrant shall be subject to the satisfaction of any applicable conditions set forth in subsection 3.3.3. below with respect to an effective registration statement. For purposes of this Agreement, the " ***Expiration Date*** " shall mean the date that is three (3) years after the closing of the Offering; provided , however , that upon a merger, consolidation, sale of substantially all assets or similar transaction involving the Company, at the option of the Company and upon at least ten (10) days prior written notice to Registered Holders of the Warrants, the Warrants must be exercised no later than immediately prior to the closing of any such transaction or they shall automatically expire upon such closing (in which event such closing shall be the Expiration Date). Each Warrant not exercised on or before the Expiration Date shall become void, and all rights thereunder and all rights in respect thereof under this Agreement shall cease at 5:00 p.m. New York City time on the Expiration Date. The Company in its sole discretion may extend the duration of the Warrants by delaying the Expiration Date; provided , that the Company shall provide at least twenty (20) days prior written notice of any such extension to Registered Holders of the Warrants and provided further that any such extension shall be identical in duration among all of the Warrants.

3.3 Exercise of Warrants .

3.3.1 Cash Exercise . If an effective registration statement is available for the issuance of the Warrant Shares (as defined below), a Registered Holder may exercise the Warrants through a cash exercise (a " ***Cash Exercise*** ") by delivering, not later than 5:00 p.m., New York City Time, on any business day during the Exercise Period (the " ***Exercise Date ")*** to the Warrant Agent at its corporate trust department, (i) the Warrant Certificate evidencing the Warrants to be exercised, or in the case of a Book-Entry Warrant Certificate, the Warrants to be exercised shown on the records of the Depository (the " ***Book-Entry Warrants*** ") to an account of the Warrant Agent at the Depository designated for such purpose in writing by the Warrant Agent to the Depository from time to time, (ii) an election to purchase the Warrant Shares underlying the Warrants to be exercised (" ***Exercise Notice*** "), properly completed and executed by the Registered Holder on the reverse of the Warrant Certificate and indicating that the Registered Holder wishes to effect a Cash Exercise, or, in the case of a Book-Entry Warrant Certificate, properly delivered by the Participant in accordance with the Depository's procedures, and (iii) the Warrant Price for each full share of Common Stock as to which the Warrant is exercised and any and all applicable taxes due in connection with the exercise of the Warrant. The aggregate Warrant Price shall be paid in lawful money of the United States by certified check or official bank check or by bank wire transfer in immediately available funds, in ease case payable to the order of the Warrant Agent.

3.3.2 Cashless Exercise . Notwithstanding anything contained herein to the contrary, if and only if an effective registration statement covering the issuance of the Warrant Shares is not available, the Registered Holder may exercise this Warrant in whole or in part through a cashless exercise (a " ***Cashless Exercise*** ") by delivering, not later than 5:00 p.m., New York City Time, on the Exercise Date to the Warrant Agent at its corporate trust department, (i) the Warrant Certificate evidencing the Warrants to be exercised, or in the case of a Book-Entry Warrant Certificate, the Book-Entry Warrants to an account of the Warrant Agent at the Depository designated for such purpose in writing by the Warrant Agent to the Depository from time to time, and (ii) an Exercise Notice, properly completed and executed by the Registered Holder on the reverse side of the Warrant Certificate and indicating that the Registered Holder wishes to effect a Cashless Exercise, or, in the case of a Book-Entry Warrant Certificate, properly delivered by the Participant in accordance with the Depository's procedures. In lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the aggregate Warrant Price, the holder may elect instead to receive upon such exercise the " ***Net Number*** " of shares of Common Stock determined according to formula below. In no event shall the Company be required to net cash settle the Warrant exercise. In case of a Cashless Exercise, the following formula applies:

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A = the total number of shares with respect to which this Warrant is then being exercised.

B = the arithmetic average of the Closing Sale Prices (as defined below) of the Common Stock for the five (5) consecutive trading days ending on the date immediately preceding the date of the Exercise Notice.

C = the Warrant Price then in effect for the applicable shares of Common Stock at the time of such exercise.

The term " ***Closing Sale Price*** " means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the NASDAQ Capital Market, as reported by Bloomberg, or, if the NASDAQ Capital Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the NASDAQ Capital Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as determined in good faith by the Company. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

Upon receipt of an Exercise Notice for a Cashless Exercise, the Warrant Agent will promptly deliver a copy of the Exercise Notice to the Company to confirm the number of Warrant Shares issuable in connection with the Cashless Exercise. The Company shall calculate and transmit to the Warrant Agent, and the Warrant Agent shall have no obligation under this section to calculate, the number of Warrant Shares issuable in connection with a cashless exercise.

3.3.3 Issuance of Shares of Common Stock on Exercise . As soon as practicable after the exercise of any Warrant and the clearance of the funds in payment of the Warrant Price (if payment is pursuant to subsection 3.3.1) , the Company shall issue to the Registered Holder or Participant, as the case may be, of such Warrant a certificate or certificates for the number of full shares of Common Stock to which he, she or it is entitled, registered in such name or names as may be directed by him, her or it, and if such Warrant shall not have been exercised in full, a new countersigned Warrant for the number of shares as to which such Warrant shall not have been exercised. If fewer than all of the Warrants evidenced by a Book-Entry Warrant Certificate are exercised, a notation shall be made to the records made by the Depository, its nominee for each Book-Entry Warrant Certificate, or a Participant, as appropriate, evidencing the balance of the Warrants remaining after such exercise. Notwithstanding the foregoing, the Company shall not be obligated to deliver any shares of Common Stock pursuant to the exercise of a Warrant, or to settle such Warrant exercise, if payment is pursuant to subsection 3.3.1 unless a registration statement under the Securities Act with respect to the shares of Common Stock underlying the Warrants (the " ***Warrant Shares*** ") is then effective and a prospectus relating thereto is current. No Warrant shall be exercisable and the Company shall not be obligated to issue shares of Common Stock upon exercise of a Warrant if payment is pursuant to subsection 3.3.1 unless the Common Stock issuable upon such Warrant exercise has been registered, qualified or deemed to be exempt under the securities laws of the state of residence of the Registered Holder of the Warrants. In the event that the conditions in the two (2) immediately preceding sentences are not satisfied with respect to a Warrant (unless payment is pursuant to subsection 3.3.2), the holder of such Warrant shall not be entitled to exercise such Warrant and such Warrant may have no value and expire worthless. Subject to Section 4.5 of this Agreement, a Registered Holder of Warrants may exercise its Warrants only for a whole number of shares of Common Stock. In no event will the Company be required to net cash settle the Warrant. If, by reason of any exercise of Warrants, the holder of any Warrant would be entitled, upon the exercise of such Warrant, to receive a fractional interest in a share, the Company shall either (i) round up to the nearest whole number the number of shares to be issued to such holder or (ii) pay such holder cash for such fractional share in the Company's sole discretion. In the event of a cash exercise, the Company hereby instructs the Transfer Agent to record cost basis for newly issued shares as the Warrant Price paid for the share(s).

In lieu of delivering physical certificates representing the Warrant Shares upon exercise of any Warrants, (i) the Company shall cause its transfer agent to electronically issue the Warrant Shares to the Registered Holder in uncertificated, book-entry form through the direct registration system and to send the Registered Holder an account statement evidencing such ownership, or (ii) provided the Company's transfer agent is participating in the Depository's Fast Automated Securities Transfer program, the Company shall use its commercially reasonable efforts to cause its transfer agent to electronically transmit the Warrant Shares issuable upon exercise to the Depository by crediting the account of the Depository or of the Participant, as the case may be, through its Deposit Withdrawal Agent Commission system.

3.3.4 Valid Issuance . All shares of Common Stock issued upon the proper exercise of a Warrant in conformity with this Agreement shall be validly issued, fully paid and nonassessable.

3.3.5 Date of Issuance . Each person in whose name any certificate for shares of Common Stock is issued shall for all purposes be deemed to have become the holder of record of such shares of Common Stock on the date on which the Notice of Exercise and Book-Entry Warrant is received by the Warrant Agent and payment of the Warrant Price was made, irrespective of the date of delivery of such Notice of Exercise and Book-Entry Warrant, except that, if the date of such surrender and payment is a date when the share transfer books of the Company are closed, such person shall be deemed to have become the holder of such shares at the close of business on the next succeeding date on which the share transfer books are open.

3.3.6 Share Delivery Failure. If the Company shall fail, for any reason or for no reason, to issue to the Registered Holder within three (3) trading days after receipt of the applicable Exercise Notice (the " ***Share Delivery Deadline*** "), a certificate for the number of Warrant Shares to which the Registered Holder is entitled upon such Registered Holder's exercise of a Warrant or credit such Registered Holder's balance account with the Depository for such number of Warrant Shares to which such Registered Holder is entitled upon such Registered Holder's exercise of the Warrant (as the case may be, but in each case without a restrictive legend) (a " ***Delivery Failure*** "), and if on such or after such Share Delivery Deadline the Registered Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Registered Holder of all or any portion of the number of Warrant Shares issuable upon such exercise that the Registered Holder so anticipated receiving from the Company, then, in addition to all other remedies available to it, the Company shall, within three (3) Business Days after the Registered Holder's request and in the Registered Holder's discretion, either (i) pay cash to the Registered Holder in an amount equal to 100% of the Registered Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including, without limitation, by any other person in respect, or on behalf, of the Registered Holder) (the " ***Buy-In Price*** "), at which point the Company's obligation to so issue and deliver such certificate or credit the Registered Holder's balance account with the Depository for the number of Warrant Shares to which the Registered Holder is entitled upon the Holder's exercise hereunder (as the case may be) (and to issue such Warrant Shares) shall terminate, or (ii) promptly honor its obligation to so issue and deliver to the Registered Holder a certificate or certificates representing such Warrant Shares or credit the Registered Holder's balance account with the Depository for the number of Warrant Shares to which the Registered Holder is entitled upon the Registered Holder's exercise hereunder (as the case may be) and pay cash to the Registered Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock multiplied by (B) the lowest Closing Sale Price of the shares of Common Stock on any trading day during the period commencing on the date of the applicable Exercise Notice and ending on the date immediately preceding the date of such issuance and payment under this clause (ii). The Warrant Agent shall have no duties, responsibilities or obligations to take any action under this paragraph without clear and precise instructions from the Company.

3.3.7 Maximum Percentage . A holder of a Warrant may notify the Company in writing in the event such holder elects to be subject to the provisions contained in this subsection 3.3.7. ; however , no holder of a Warrant shall be subject to this subsection 3.3.7. unless he, she or it makes such election. If the election is made by a holder, the Warrant Agent shall not effect the exercise of the holder's Warrant, and such holder shall not have the right to exercise such Warrant, to the extent that after giving effect to such exercise, such person (together with such person's affiliates), to the Warrant Agent's actual knowledge, would beneficially own in excess of 9.9% (the " ***Maximum Percentage*** ") of the shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such person and its affiliates shall include the number of shares of Common Stock issuable upon exercise of the Warrant with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock that would be issuable upon (x) exercise of the remaining, unexercised portion of the Warrant beneficially owned by such person and its affiliates and (y) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company beneficially owned by such person and its affiliates (including, without limitation, any convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this paragraph, beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the " ***Exchange Act*** "). Solely the holder of the Warrant shall determine the extent to which the Warrant is exercisable in accordance with this Section 3.3.7. , and neither the Company nor the Transfer Agent shall have any obligation to verify or confirm the accuracy of such determination. For purposes of the Warrant, in determining the number of outstanding shares of Common Stock, the holder may rely on the number of outstanding shares of Common Stock as reflected in (1) the Company's most recent annual report on Form 10-K, quarterly report on Form 10-Q, current report on Form 8-K or other public filing with the Commission as the case may be, (2) a more recent public announcement by the Company or (3) any other notice by the Company or the Transfer Agent (or its successor) setting forth the number of shares of Common Stock outstanding. For any reason at any time, upon the written request of the holder of the Warrant, the Company shall, within two (2) Business Days, confirm orally and in writing to such holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of equity securities of the Company by the holder and its affiliates since the date as of which such number of outstanding shares of Common Stock was reported. By written notice to the Company, the holder of a Warrant may from time to time increase or decrease the Maximum Percentage applicable to such holder to any other percentage specified in such notice; provided , however , that any such increase shall not be effective until the sixty-first (61st) day after such notice is delivered to the Company.

4. Adjustments .

4.1 Stock Dividends .

4.1.1 Split-Ups . If after the date hereof, and subject to the provisions of Section 4.5 below, the number of outstanding shares of Common Stock is increased by a stock dividend payable in shares of Common Stock on Common Stock, or by a split-up of shares of Common Stock or other similar event, then, on the effective date of such stock dividend, split-up or similar event, the number of shares of Common Stock issuable on exercise of each Warrant shall be increased in proportion to such increase in the outstanding shares of Common Stock. A rights offering to holders of the Common Stock entitling holders to purchase shares of Common Stock at a price less than the "Fair Market Value" (as defined below) shall be deemed a stock dividend of a number of shares of Common Stock equal to the product of (i) the number of shares of Common Stock actually sold in such rights offering (or issuable under any other equity securities sold in such rights offering that are convertible into or exercisable for the Common Stock) multiplied by (ii) one (1) minus the quotient of (x) the price per share of Common Stock paid in such rights offering divided by (y) the Fair Market Value. For purposes of this subsection 4.1.1 , (i) if the rights offering is for securities convertible into or exercisable for Common Stock, in determining the price payable for Common Stock, there shall be taken into account any consideration received for such rights, as well as any additional amount payable upon exercise or conversion and (ii) "Fair Market Value" means the volume weighted average price of the Common Stock as reported during the ten (10) trading day period ending on the trading day prior to the first date on which the shares of Common Stock trade on the applicable exchange or in the applicable market, regular way, without the right to receive such rights.

4.1.2 Extraordinary Dividends . If the Company, at any time while the Warrants are outstanding and unexpired, shall pay a dividend or make a distribution in cash, securities or other assets to the holders of the Common Stock as a class on account of such shares of Common Stock (or other shares of the Company's capital stock into which the Warrants are convertible), other than as described in subsection 4.1.1 (any such non-excluded event being referred to herein as an " ***Extraordinary Dividend*** "), then the Warrant Price shall be decreased, effective immediately after the effective date of such Extraordinary Dividend, by the amount of cash and/or the fair market value (as determined by the Board, in good faith) of any securities or other assets paid on each share of Common Stock (or other shares of the Company's capital stock into which the Warrants are convertible) in respect of such Extraordinary Dividend.

4.2 Aggregation of Shares . If after the date hereof, and subject to the provisions of Section 4.5 hereof, the number of outstanding shares of Common Stock is decreased by a consolidation, combination, reverse stock split or reclassification of shares of Common Stock or other similar event, then, on the effective date of such consolidation, combination, reverse stock split, reclassification or similar event, the number of shares of Common Stock issuable on exercise of each Warrant shall be decreased in proportion to such decrease in outstanding shares of Common Stock.

4.3 Adjustments in Warrant Price . Whenever the number of shares of Common Stock purchasable upon the exercise of the Warrants is adjusted, as provided in subsection 4.1.1 or 4.2 above, the Warrant Price shall be adjusted (to the nearest cent) by multiplying such Warrant Price immediately prior to such adjustment by a fraction (x) the numerator of which shall be the number of shares of Common Stock purchasable upon the exercise of the Warrants immediately prior to such adjustment, and (y) the denominator of which shall be the number of shares of Common Stock so purchasable immediately thereafter.

4.4 Notices of Changes in Warrant . Upon every adjustment of the Warrant Price or the number of shares issuable upon exercise of a Warrant, the Company shall give reasonable written notice thereof to the Warrant Agent, which notice shall state the Warrant Price and any new or amended terms resulting from such adjustment and the increase or decrease, if any, in the number of shares purchasable at such price upon the exercise of a Warrant, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based. Upon every adjustment of the Warrant Price or the number of shares issuable upon exercise of a Warrant, the Company shall give written notice of the occurrence of such event to each holder of a Warrant, at the last address set forth for such holder in the Warrant Register, of the record date or the effective date of the event. Failure to give such notice, or any defect therein, shall not affect the legality or validity of such event. The Warrant Agent shall have no duty or obligation under this Agreement to determine whether any event requiring adjustment under this Section 4 has occurred or are scheduled or contemplated to occur or to calculate any of the adjustments set forth herein.

4.5 No Fractional Shares or Scrip . Notwithstanding any provision contained in this Agreement to the contrary, the Company shall not issue fractional shares or scrip representing fractional shares upon the exercise of Warrants. As to any fraction of a share which the holder of any Warrant would be entitled to purchase upon exercise of such Warrant, the Company shall, at its sole election, either (i) pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Warrant Price, or (ii) round up to the nearest whole number the number of shares of Common Stock to be issued to such holder.

4.6 Form of Warrant . The form of Warrant need not be changed because of any adjustment pursuant to this Section 4 , and Warrants issued after such adjustment may state the same Warrant Price and the same number of shares as is stated in the Warrants initially issued pursuant to this Agreement; provided , however , that the Company may at any time in its sole discretion make any change in the form of Warrant that the Company may deem appropriate and that does not affect the substance thereof, and any Warrant thereafter issued or countersigned, whether in exchange or substitution for an outstanding Warrant or otherwise, may be in the form as so changed.

5. Transfer and Exchange of Warrants.

5.1 Registration of Transfer . The Warrant Agent shall register the transfer, from time to time, of any outstanding Warrant upon the Warrant Register, upon surrender of such Warrant for transfer, properly endorsed with signatures properly guaranteed by an eligible guarantor institution participating in a signature guarantee program approved by the Securities Transfer Association, and accompanied by appropriate instructions for transfer. Upon any such transfer, a new Warrant representing an equal aggregate number of Warrants shall be issued and the old Warrant shall be cancelled by the Warrant Agent. The Warrants so cancelled shall be delivered by the Warrant Agent to the Company from time to time upon request.

5.2 Procedure for Surrender of Warrants . Warrants may be surrendered to the Warrant Agent, together with a written request for exchange or transfer, and thereupon the Warrant Agent shall issue in exchange therefor one or more new Warrants as requested by the Registered Holder of the Warrants so surrendered, representing an equal aggregate number of Warrants; provided, however, that except as otherwise provided herein or in any Book-Entry Warrant Certificate, each Book-Entry Warrant Certificate may be transferred only in whole and only to the Depository, to another nominee of the Depository, to a successor depository, or to a nominee of a successor depository.

5.3 Fractional Warrants . The Warrant Agent shall not be required to effect any registration of transfer or exchange which shall result in the issuance of a warrant certificate for a fraction of a warrant.

5.4 Service Charges . No service charge shall be made for any exchange or registration of transfer of Warrants.

5.5 Warrant Execution and Countersignature . The Warrant Agent is hereby authorized to countersign and to deliver, in accordance with the terms of this Agreement, the Warrants required to be issued pursuant to the provisions of this Section 5 , and the Company, whenever required by the Warrant Agent, shall supply the Warrant Agent with Warrants duly executed on behalf of the Company for such purpose.

6. Other Provisions Relating to Rights of Holders of Warrants .

6.1 No Rights as Stockholder . A Warrant does not entitle the Registered Holder thereof to any of the rights of a stockholder of the Company, including, without limitation, the right to receive dividends, or other distributions, exercise any preemptive rights to vote or to consent or to receive notice as stockholders in respect of the meetings of stockholders or the election of directors of the Company or any other matter.

6.2 Lost, Stolen, Mutilated, or Destroyed Warrants . If any Warrant is lost, stolen, mutilated or destroyed, absent notice to the Company or Warrant Agent that such certificates have been acquired by a protected purchaser, the Company may, upon receipt by Warrant Agent of an open penalty surety bond satisfactory to the Warrant Agent and holding it and Company harmless, issue, in a form mutually agreed to by Warrant Agent and the Company, a new Warrant of like denomination, tenor and date as the Warrant so lost, stolen, mutilated or destroyed, and countersigned by the Warrant Agent. Any such new Warrant shall constitute a substitute contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated or destroyed Warrant shall be at any time enforceable by anyone. The Warrant Agent may, at its option, countersign replacement Warrants for mutilated certificates upon presentation thereof without such indemnity.

6.3 Reservation of Common Stock . The Company shall at all times reserve and keep available a number of its authorized but unissued shares of Common Stock that shall be sufficient to permit the exercise in full of all outstanding Warrants issued pursuant to this Agreement. The Company further covenants that its issuance of Warrants shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary Warrant Shares upon the exercise of the purchase rights under the Warrants. The Company will take all such commercially reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the trading market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by the Warrants will, upon exercise of the purchase rights represented by the Warrants and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

6.4 Registration of Common Stock . The Company will use commercially reasonable efforts to maintain the effectiveness of the Registration Statement and the current status of the Prospectus or to file and maintain the effectiveness of another registration statement and another current prospectus covering the Warrants and the Warrant Shares until all Warrant Shares covered by such registration statement may be sold without restriction or limitation pursuant to Rule 144 and without the requirement to be in compliance with Rule 144(c)(1).

7. Redemption .

7.1 Right of Redemption . Not less than all of the outstanding Warrants may be redeemed, at the option of the Company, at any time after they become exercisable and prior to the Expiration Date, at the office of the Warrant Agent, upon the notice referred to in Section 7.2 , at the price of $0.01 per Warrant (subject to adjustment proportionate to any adjustment to the Warrant Price pursuant to Section 4.3) (the " ***Redemption Price*** "), provided, however, that the last reported sales price of the Common Stock has been equal to or greater than the $2.50 per share (subject to adjustment proportionate to any adjustment to the Warrant Price pursuant to Section 4.3) for any period of 10 consecutive trading days ending prior to the notice of redemption to the Registered Holders and there is an effective registration statement covering the shares of Common Stock issuable upon exercise of the Warrants current and available.

7.2 Date Fixed for, and Notice of, Redemption . In the event the Company shall elect to redeem all of the Warrants pursuant to Section 7.1 (the " ***Redeemable Warrants*** "), the Company shall fix a date for the redemption. Notice of redemption shall be mailed by first class mail, postage prepaid, by the Company not less than 30 days prior to the date fixed for redemption to the Registered Holders of the Redeemable Warrants at their last addresses as they shall appear on the registration books. Any notice mailed in the manner herein provided shall be conclusively presumed to have been duly given on the date sent whether or not the Registered Holder received such notice.

7.3 Exercise After Notice of Redemption . The Redeemable Warrants may be exercised for cash in accordance with Section 3.3.1 of this Warrant Agreement at any time after notice of redemption shall have been given by the Company pursuant to Section 7.2 hereof and prior to the time and date fixed for redemption. On and after the redemption date, the record holders of the Redeemable Warrants shall have no further rights except to receive the Redemption Price upon surrender of the Redeemable Warrants.

8. Concerning the Warrant Agent and Other Matters .

8.1 Bank Accounts . All funds received by Warrant Agent under this Agreement that are to be distributed or applied by Warrant Agent in the performance of services to be provided hereunder (the " **Funds** ") shall be held by Continental Stock Transfer & Trust Company as agent for the Company and deposited in one or more bank accounts to be maintained by Continental Stock Transfer & Trust Company in its name as agent for the Company. Until paid pursuant to the terms of this Agreement, Continental Stock Transfer & Trust Company will hold the Funds through such accounts in: deposit accounts of commercial banks with Tier 1 capital exceeding $1 billion or with an average rating above investment grade by S&P (LT Local Issuer Credit Rating), Moody's (Long Term Rating) and Fitch Ratings, Inc. (LT Issuer Default Rating) (each as reported by Bloomberg Finance L.P.). Continental Stock Transfer & Trust Company shall have no responsibility or liability for any diminution of the Funds that may result from any deposit made by Continental Stock Transfer & Trust Company in accordance with this paragraph, including any losses resulting from a default by any bank, financial institution or other third party. Continental Stock Transfer & Trust Company may from time to time receive interest, dividends or other earnings in connection with such deposits. Continental Stock Transfer & Trust Company shall not be obligated to pay such interest, dividends or earnings to the Company, any holder or any other party.

8.2 Payment of Taxes . The Company shall from time to time promptly pay all taxes and charges that may be imposed upon the Company or the Warrant Agent in respect of the issuance or delivery of the Warrant Shares, but neither the Company nor the Warrant Agent shall be obligated to pay any transfer taxes in respect of the Warrants or Warrant Shares. The Warrant Agent shall not register any transfer or issue or deliver any Warrants or Warrant Shares unless or until the persons requesting the registration or issuance shall have paid to the Warrant Agent for the account of the Company the amount of such tax, if any, or shall have established to the reasonable satisfaction of the Company and the Warrant Agent that such tax, if any, has been paid.

8.3 Resignation, Consolidation, or Merger of Warrant Agent .

8.3.1 Appointment of Successor Warrant Agent . The Warrant Agent, or any successor to it hereafter appointed, may resign its duties and be discharged from all further duties and liabilities hereunder after giving thirty (30) days' notice in writing to the Company. If the office of the Warrant Agent becomes vacant by resignation or incapacity to act or otherwise, the Company shall appoint in writing a successor Warrant Agent in place of the Warrant Agent. If the Company shall fail to make such appointment within a period of thirty (30) days after it has been notified in writing of such resignation or incapacity by the Warrant Agent or by the holder of a Warrant (who shall, with such notice, submit his Warrant for inspection by the Company), then the holder of any Warrant may apply to the Supreme Court of the State of New York for the County of New York for the appointment of a successor Warrant Agent at the Company's cost. Any successor Warrant Agent, whether appointed by the Company or by such applicable court, shall be a corporation organized and existing under the laws of the State of New York, in good standing and having its principal office in the City and State of New York, and authorized under such laws to exercise the powers of a transfer agent and subject to supervision or examination by federal or state authority. After appointment, any successor Warrant Agent shall be vested with all the authority, powers, rights, immunities, duties, and obligations of its predecessor Warrant Agent with like effect as if originally named as Warrant Agent hereunder, without any further act or deed; but, if for any reason it becomes necessary or appropriate, at the expense of the Company, the predecessor Warrant Agent shall deliver and transfer to the successor Warrant Agent any property at the time held by it hereunder, and execute and deliver any further assurance, conveyance, act or deed necessary for such purpose.

8.3.2 Notice of Successor Warrant Agent . In the event a successor Warrant Agent shall be appointed, the Company shall give notice thereof to the predecessor Warrant Agent and the Transfer Agent for the Common Stock not later than the effective date of any such appointment.

8.3.3 Merger or Consolidation of Warrant Agent . Any entity into which the Warrant Agent may be merged or with which it may be consolidated or any entity resulting from any merger or consolidation to which the Warrant Agent shall be a party shall be the successor Warrant Agent under this Agreement without any further act.

8.4 Fees and Expenses of Warrant Agent .

8.4.1 Remuneration . The Company agrees to pay the Warrant Agent reasonable remuneration for its services as such Warrant Agent hereunder and shall, pursuant to its obligations under this Agreement, reimburse the Warrant Agent upon demand for all expenditures that the Warrant Agent may reasonably incur in the execution of its duties hereunder.

8.4.2 Further Assurances . The Company agrees to perform, execute, acknowledge, and deliver or cause to be performed, executed, acknowledged, and delivered all such further and other acts, instruments, and assurances as may reasonably be required by the Warrant Agent for the carrying out or performing of the provisions of this Agreement.

8.4.3 Cash Reserve . The Company shall provide an initial funding of $100 for the purpose of issuing cash in lieu of fractional shares. From time to time thereafter, the Warrant Agent may request additional funding to cover fractional payments in writing. The Warrant Agent shall have no obligation to make such fractional payments unless the Company shall have provided the necessary funds to pay in full all amounts due and payable with respect thereto.

8.5 Liability of Warrant Agent .

8.5.1 Reliance on Company Statement . Whenever in the performance of its duties under this Agreement, the Warrant Agent shall deem it necessary or desirable that any fact or matter be proved or established by the Company prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a statement signed by the Chief Executive Officer or other authorized officer of the Company and delivered to the Warrant Agent. The Warrant Agent may rely upon such statement for any action taken or suffered in good faith by it pursuant to the provisions of this Agreement.

8.5.2 Indemnity . The Company covenants and agrees to indemnify and to hold the Warrant Agent harmless against any costs, expenses (including reasonable fees of its legal counsel), losses or damages, which may be paid, incurred or suffered by or to which it may become subject, arising from or out of, directly or indirectly, any claims or liability resulting from its actions or omissions as Warrant Agent pursuant hereto; provided , that such covenant and agreement does not extend to, and the Warrant Agent shall not be indemnified with respect to, such costs, expenses, losses and damages incurred or suffered by the Warrant Agent as a result of, or arising out of, its gross negligence, bad faith, or willful misconduct (each as determined in a final judgment by a court of competent jurisdiction).

8.5.3 Exclusions . The Warrant Agent shall have no responsibility with respect to the validity of this Agreement or with respect to the validity or execution of any Warrant (except its countersignature thereof). The Warrant Agent shall not be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Warrant. The Warrant Agent shall not be responsible to make any adjustments required under the provisions of Section 4 hereof or responsible for the manner, method, or amount of any such adjustment or the ascertaining of the existence of facts that would require any such adjustment; nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any shares of Common Stock to be issued pursuant to this Agreement or any Warrant or as to whether any Warrant Shares, when issued, be valid and fully paid and nonassessable.

8.5.4 Limitation of Liability . Notwithstanding anything contained herein to the contrary, the Warrant Agent's aggregate liability during any term of this Agreement with respect to, arising from, or arising in connection with this Agreement, or from all services provided or omitted to be provided under this Agreement, whether in contract, or in tort, or otherwise, is limited to, and shall not exceed, the amounts paid hereunder by the Company to the Warrant Agent as fees and charges, but not including reimbursable expenses, during the twelve (12) months immediately preceding the event for which recovery from Warrant Agent is being sought.

8.6 Instructions; Certifications . From time to time, the Company may provide the Warrant Agent with instructions or certifications concerning or related to the services performed by the Warrant Agent hereunder. In addition, at any time the Warrant Agent may apply to any officer of the Company for instruction, and may consult with legal counsel for the Warrant Agent or the Company with respect to any matter arising in connection with the services to be performed by the Warrant Agent under this Agreement. The Warrant Agent and its employees, agents and subcontractors shall not be liable and shall be indemnified by the Company for any action taken or omitted by Warrant Agent, its employees, agents and subcontractors in reliance upon any Company instructions, certifications or upon the advice or opinion of such counsel. The Warrant Agent shall not be held to have notice of any change of authority of any person, until receipt of written notice thereof from the Company.

8.7 Rights and Duties of Warrant Agent .

(a) The Warrant Agent may consult with legal counsel (who may be legal counsel for the Company), and the opinion of such counsel shall be full and complete authorization and protection to the Warrant Agent as to any action taken or omitted by it in accordance with such opinion.

(b) The Warrant Agent shall not be liable for or by reason of any of the statements of fact or recitals contained in this Agreement or in the Warrants (except its countersignature thereof) or be required to verify the same, and all such statements and recitals are and shall be deemed to have been made by the Company only.

(c) The Warrant Agent shall not have any duty or responsibility in the case of the receipt of any written demand from any holder of Warrants with respect to any action or default by the Company, including, without limiting the generality of the foregoing, any duty or responsibility to initiate or attempt to initiate any proceedings at law or otherwise or to make any demand upon the Company.

(d) The Warrant Agent and any stockholder, director, officer or employee of the Warrant Agent may buy, sell or deal in any of the Warrants or other securities of the Company or become pecuniarily interested in any transaction in which the Company may be interested, or contract with or lend money to the Company or otherwise act as fully and freely as though it were not Warrant Agent under this Agreement. Nothing herein shall preclude the Warrant Agent from acting in any other capacity for the Company or for any other legal entity.

(e) The Warrant Agent may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorney or agents, and the Warrant Agent shall not be answerable or accountable for any act, default, neglect or misconduct of any such attorney or agents or for any loss to the Company resulting from any such act, default, neglect or misconduct, absent gross negligence, bad faith or willful misconduct (each as determined by a final judgment of a court of competent jurisdiction) in the selection and continued employment thereof.

(f) The Warrant Agent may rely on and shall be held harmless and protected and shall incur no liability for or in respect of any action taken, suffered or omitted to be taken by it in reliance upon any certificate, statement, instrument, opinion, notice, letter, facsimile transmission, telegram or other document, or any security delivered to it, and believed by it to be genuine and to have been made or signed by the proper party or parties, or upon any written or oral instructions or statements from the Company with respect to any matter relating to its acting as Warrant Agent hereunder.

(g) The Warrant Agent shall not be obligated to expend or risk its own funds or to take any action that it believes would expose or subject it to expense or liability or to a risk of incurring expense or liability, unless it has been furnished with assurances of repayment or indemnity satisfactory to it.

(h) The Warrant Agent shall not be liable or responsible for any failure of the Company to comply with any of its obligations relating to any registration statement filed with the Commission or this Agreement, including without limitation obligations under applicable regulation or law.

(i) The Warrant Agent shall not be accountable or under any duty or responsibility for the use by the Company of any Warrants authenticated by the Warrant Agent and delivered by it to the Company pursuant to this Agreement or for the application by the Company of the proceeds of the issue and sale, or exercise, of the Warrants.

(j) The Warrant Agent shall act hereunder solely as agent for the Company, and its duties shall be determined solely by the express provisions hereof (and no duties or obligations shall be inferred or implied). The Warrant Agent shall not assume any obligations or relationship of agency or trust with any of the owners or holders of the Warrants.

(k) The Warrant Agent may rely on and be fully authorized and protected in acting or failing to act upon (a) any guaranty of signature by an "eligible guarantor institution" that is a member or participant in the Securities Transfer Agents Medallion Program or other comparable "signature guarantee program" or insurance program in addition to, or in substitution for, the foregoing; or (b) any law, act, regulation or any interpretation of the same even though such law, act, or regulation may thereafter have been altered, changed, amended or repealed.

(l) In the event the Warrant Agent believes any ambiguity or uncertainty exists hereunder or in any notice, instruction, direction, request or other communication, paper or document received by the Warrant Agent hereunder, the Warrant Agent, may, in its sole discretion, refrain from taking any action, and shall be fully protected and shall not be liable in any way to Company, the holder of any Warrant or any other person or entity for refraining from taking such action, unless the Warrant Agent receives written instructions signed by the Company which eliminates such ambiguity or uncertainty to the satisfaction of Warrant Agent.

8.8 Delivery of Exercise Price . The Warrant Agent shall forward funds received for warrant exercises under this Agreement by the 5th Business Day following receipt to an account designated by the Company.

8.9 Acceptance of Agency . The Warrant Agent hereby accepts the agency established by this Agreement and agrees to perform the same upon the express terms and conditions herein set forth and among other things, shall account to the Company with respect to Warrants exercised and concurrently account for, and pay to the Company, all monies received by the Warrant Agent for the purchase of Warrant Shares.

8.10 Opinion of Counsel . The Company shall provide an opinion of counsel prior to the effective date of this Agreement to set up a reserve of warrants and related Common Stock. The opinion shall state that all such warrants or Common Stock, as applicable, are: (1) registered under the Securities Act or are exempt from such registration; and (2) validly issued, fully paid and non-assessable.

8.11 Confidentiality . The Warrant Agent and the Company agree that all books, records, information and data pertaining to the business of the other party, including *inter alia* , personal, non-public Warrant holder information, which are exchanged or received pursuant to the negotiation or the carrying out of this Agreement including the compensation for services performed hereunder shall remain confidential, and shall not be voluntarily disclosed to any other person, except as may be required by law, including, without limitation, pursuant to subpoenas from state or federal government authorities (e.g., in divorce and criminal actions).

8.12 Consequential Damages . Neither party to this Agreement shall be liable to the other party for any consequential, indirect, punitive, special or incidental damages under any provisions of this Agreement or for any consequential, indirect, punitive, special or incidental damages arising out of any act or failure to act hereunder even if that party has been advised of or has foreseen the possibility of such damages.

9. Miscellaneous Provisions .

9.1 Successors . All the covenants and provisions of this Agreement by or for the benefit of the Company or the Warrant Agent shall bind and inure to the benefit of their respective successors and assigns.

9.2 Notices . All notices, requests, demands and other communications from the Company to the Warrant Agent or vice-versa, or the holders of warrants to the Warrant Agent or the Company made under or by reason of the provisions of this Agreement shall be in writing and shall be given by hand delivery, certified or registered mail, return receipt requested, or nationally recognized overnight courier, addressed as follows:

If to the Company:
Opexa Therapeutics, Inc.
Attn.: Chief Executive Officer
2635 Technology Forest Blvd.
The Woodlands, TX 77381

If to the Warrant Agent:
Continental Stock Transfer & Trust Company
17 Battery Place
New York, NY 10004
Attention: Compliance Dept.

All notices, requests, demands and other communications made under or by reason of the provisions of this Agreement shall be effective when sent.

9.3 Applicable Law, Submission to Jurisdiction, Trial by Jury . The validity, interpretation, and performance of this Agreement and of the Warrants shall be governed in all respects by the laws of the State of New York, without giving effect to conflicts of law principles that would result in the application of the substantive laws of another jurisdiction. Each of the Company and the holders hereby agrees that any action, proceeding or claim against it arising out of or relating in any way to this Agreement shall be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Warrant Agent hereby agrees that any action, proceeding or claim against it arising out of or relating in any way to this Agreement shall be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. Each of the Company and the Warrant Agent hereby waives any objection to such exclusive jurisdiction, as applicable, and that such courts represent an inconvenient forum. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates), the Warrant Agent and the Holders hereby irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

9.4 Persons Having Rights under this Agreement . Nothing in this Agreement shall be construed to confer upon, or give to, any person or entity other than the parties hereto and the Registered Holders of the Warrants any right, remedy, or claim under or by reason of this Agreement or of any covenant, condition, stipulation, promise, or agreement hereof. All covenants, conditions, stipulations, promises, and agreements contained in this Agreement shall be for the sole and exclusive benefit of the parties hereto and their successors and assigns and of the Registered Holders of the Warrants.

9.5 Examination of the Warrant Agreement . A copy of this Agreement shall be available at all reasonable times at the office of the Warrant Agent designated for such purpose, for inspection by the Registered Holder of any Warrant. The Warrant Agent may require any such holder to submit his Warrant for inspection by it.

9.6 Counterparts . This Agreement may be executed in any number of original or facsimile counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument. A signature to this Agreement transmitted electronically shall have the same authority, effect, and enforceability as an original signature.

9.7 Effect of Headings . The section headings herein are for convenience only and are not part of this Agreement and shall not affect the interpretation thereof.

9.8 Amendments . This Agreement may be amended by the parties hereto without the consent of any Registered Holder for the purpose of curing any ambiguity, or curing, correcting or supplementing any defective provision contained herein or adding or changing any other provisions with respect to matters or questions arising under this Agreement as the parties may deem necessary or desirable and that the parties deem shall not adversely affect the interest of the Registered Holders. All other modifications or amendments, including any amendment to increase the Warrant Price or shorten the Exercise Period, shall require the vote or written consent of the Registered Holders of at least a majority of the then outstanding Warrants. Notwithstanding the foregoing, the Company may lower the Warrant Price or extend the duration of the Exercise Period pursuant to Sections 3.1 and 3.2 , respectively, without the consent of the Registered Holders. No consideration shall be offered by the Company to any Registered Holder in connection with a modification, amendment or waiver of this Agreement or any Warrant without also offering the same consideration to all Registered Holders. As a condition precedent to the Warrant Agent's execution of any amendment, the Company shall deliver to the Warrant Agent a certificate from a duly authorized officer of the Company that states that the proposed amendment is in compliance with the terms of this Section 9.8 .

9.9 Severability . This Agreement shall be deemed severable, and the invalidity or unenforceability of any term or provision hereof shall not affect the validity or enforceability of this Agreement or of any other term or provision hereof. Furthermore, in lieu of any such invalid or unenforceable term or provision, the parties hereto intend that there shall be added as a part of this Agreement a provision as similar in terms to such invalid or unenforceable provision as may be possible and be valid and enforceable.

9.10 Survival . The provisions of Sections 8 shall survive any termination of this Agreement and the resignation, removal or replacement of the Warrant Agent.

9.11 Force Majeure . Notwithstanding anything to the contrary contained herein, the Warrant Agent will not be liable for any delays or failures in performance resulting from acts beyond its reasonable control including, without limitation, acts of God, terrorist acts, shortage of supply, breakdowns or malfunctions, interruptions or malfunction of computer facilities, or loss of data due to power failures or mechanical difficulties with information storage or retrieval systems, labor difficulties, war, or civil unrest.

9.12 USA PATRIOT Act Notice . The Warrant Agent hereby notifies the Company that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "Patriot Act"), it must obtain, verify and record certain information that identifies the Company, which information includes the name and address of the Company and other information that will allow the Warrant Agent to identify the Company in accordance with the Patriot Act.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date first above written.

OPEXA THERAPEUTICS, INC.

By: /s/ Neil K. Warma
Name: Neil K. Warma
Title: President & Chief Executive Officer

CONTINENTAL STOCK TRANSFER & TRUST COMPANY

as Warrant Agent

By: /s/ Mark Zimkind
Name: Mark Zimkind
Title: Vice President & Director of Shareholder Services

[Signature Page to Warrant Agreement]

EXHIBIT A

[Form of Warrant Certificate]

[FACE]

Number: M-_____ Series M Warrants to purchase _____ shares

THIS WARRANT SHALL BE VOID IF NOT EXERCISED PRIOR TO THE EXPIRATION OF THE EXERCISE PERIOD PROVIDED FOR IN THE WARRANT AGREEMENT DESCRIBED BELOW

OPEXA THERAPEUTICS, INC.

Incorporated Under the Laws of the State of Texas

CUSIP 68372T 129

Series M Warrant Certificate

This Warrant Certificate certifies that _____, or registered assigns, is the registered holder of warrant(s) (the " ***Warrants*** " and each, a " ***Warrant*** ") to purchase shares of Common Stock, $0.01 par value per share (" ***Common Stock*** "), of Opexa Therapeutics, Inc., a Texas corporation (the " ***Company*** "). Each Warrant entitles the holder, upon exercise during the period set forth in the Warrant Agreement referred to below, to receive from the Company that number of fully paid and nonassessable shares of Common Stock as set forth above, at the exercise price (the " ***Exercise Price*** ") set forth below, payable in lawful money (or through " ***cashless exercise*** " as provided for in the Warrant Agreement) of the United States of America upon surrender of this Warrant Certificate and payment of the Exercise Price at the office or agency of the Warrant Agent referred to below, subject to the conditions set forth herein and in the Warrant Agreement. Defined terms used in this Warrant Certificate but not defined herein shall have the meanings given to them in the Warrant Agreement (as defined on the reverse hereof).

Each Warrant is initially exercisable for one fully paid and non-assessable share of Common Stock. The number of the shares of Common Stock issuable upon exercise of the Warrants is subject to adjustment upon the occurrence of certain events set forth in the Warrant Agreement.

The initial Exercise Price per share of Common Stock for any Warrant is equal to (i) $0.50 per share from the date of issuance through June 30, 2016 and (ii) $1.50 per share from July 1, 2016 through the Expiration Date. The Exercise Price is subject to adjustment upon the occurrence of certain events set forth in the Warrant Agreement.

Subject to the conditions set forth in the Warrant Agreement, the Warrants may be exercised only during the Exercise Period and to the extent not exercised by the end of such Exercise Period, such Warrants shall become void.

Reference is hereby made to the further provisions of this Warrant Certificate set forth on the reverse hereof and such further provisions shall for all purposes have the same effect as though fully set forth at this place.

This Warrant Certificate shall not be valid unless countersigned by the Warrant Agent, as such term is used in the Warrant Agreement.

This Warrant Certificate shall be governed by and construed in accordance with the internal laws of the State of New York, without regard to conflicts of laws principles thereof.

OPEXA THERAPEUTICS, INC.

By: _____
Name: Neil K. Warma
Title: President & Chief Executive Officer

CONTINENTAL STOCK TRANSFER & TRUST COMPANY

as Warrant Agent

By: _____
Name:
Title:

[Form of Warrant Certificate]

[REVERSE]

The Warrants evidenced by this Warrant Certificate are part of a duly authorized issue of Warrants entitling the holder on exercise to receive shares of Common Stock and are issued or to be issued pursuant to a Warrant Agreement dated as of February 25, 2015 (the " ***Warrant Agreement*** "), duly executed and delivered by the Company to Continental Stock Transfer & Trust Company, a New York corporation, as warrant agent (the " ***Warrant Agent*** "), which Warrant Agreement is hereby incorporated by reference in and made a part of this instrument and is hereby referred to for a description of the rights, limitation of rights, obligations, duties and immunities thereunder of the Warrant Agent, the Company and the holders (the words " ***holders*** " or " ***holder*** " meaning the Registered Holders or Registered Holder) of the Warrants. A copy of the Warrant Agreement may be obtained by the holder hereof upon written request to the Company. Defined terms used in this Warrant Certificate but not defined herein shall have the meanings given to them in the Warrant Agreement.

Warrants may be exercised at any time during the Exercise Period set forth in the Warrant Agreement. The holder of Warrants evidenced by this Warrant Certificate may exercise them by delivering (i) this Warrant Certificate, or, in the case of a Book-Entry Warrant Certificate (as defined in the Warrant Agreement), the Warrants to be exercised (the " ***Book-Entry Warrants*** ") as shown on the records of The Depository Trust Company (the " ***Depository*** ") to an account of the Warrant Agent at the Depository designated for such purpose in writing by the Warrant Agent to the Depository, (ii) an election to purchase (" ***Exercise Notice*** "), properly executed by the holder hereof on the reverse of this Warrant Certificate or properly executed by the institution in whose account the Warrant is recorded on the records of the Depository (the " ***Participant*** "), and substantially in the form included on the reverse of this Warrant Certificate and (iii) the Warrant Price for each Warrant to be exercised in lawful money of the United States by certified or official bank check or by bank wire transfer in immediately available funds, in each case payable to the Warrant Agent, unless a " ***cashless exercise*** " is permitted under the Warrant Agreement.

In the event that upon any exercise of Warrants evidenced hereby the number of Warrants exercised shall be less than the total number of Warrants evidenced hereby, there shall be issued to the holder hereof or his, her or its assignee, a new Warrant Certificate evidencing the number of Warrants not exercised. If fewer than all the Warrants evidenced by a Book-Entry Warrant Certificate are exercised, a notation shall be made to the records maintained by the Depository, its nominee for each Book-Entry Warrant Certificate, or a Participant, as appropriate, evidencing the balance of the Warrants remaining after such exercise.

Notwithstanding anything else in this Warrant Certificate or the Warrant Agreement, no Warrant may be exercised unless at the time of exercise (i) a registration statement covering the shares of Common Stock to be issued upon exercise is effective under the Securities Act and (ii) a prospectus thereunder relating to the shares of Common Stock is current, except through " ***cashless exercise*** " as provided for in the Warrant Agreement.

The Warrant Agreement provides that upon the occurrence of certain events the number of shares of Common Stock issuable upon exercise of the Warrants set forth on the face hereof may, subject to certain conditions, be adjusted. If, upon exercise of a Warrant, the holder thereof would be entitled to receive a fractional interest in a share of Common Stock, the Company shall, upon exercise, either round up to the nearest whole number of shares of Common Stock to be issued to the holder of the Warrant or pay such holder cash for such fractional share in the Company's sole discretion.

Warrant Certificates, when surrendered at the office of the Warrant Agent designated for such purposes by the Registered Holder thereof in person or by legal representative or attorney duly authorized in writing, may be exchanged, in the manner and subject to the limitations provided in the Warrant Agreement, but without payment of any service charge, for another Warrant Certificate or Warrant Certificates of like tenor evidencing in the aggregate a like number of Warrants.

Upon due presentation for registration of transfer of this Warrant Certificate at the office of the Warrant Agent, a new Warrant Certificate or Warrant Certificates of like tenor and evidencing in the aggregate a like number of Warrants shall be issued to the transferee(s) in exchange for this Warrant Certificate, subject to the limitations provided in the Warrant Agreement, without charge except for any tax or other governmental charge imposed in connection therewith.

The Company and the Warrant Agent may deem and treat the Registered Holder(s) hereof as the absolute owner(s) of this Warrant Certificate (notwithstanding any notation of ownership or other writing hereon made by anyone), for the purpose of any exercise hereof, of any distribution to the holder(s) hereof, and for all other purposes, and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary. Neither the Warrants nor this Warrant Certificate entitles any holder hereof to any rights of a stockholder of the Company.

NOTICE OF EXERCISE

(To Be Executed Upon Exercise of Warrant)

CASH EXERCISE:

The undersigned hereby irrevocably elects to exercise the rights represented by this Warrant Certificate to receive _____ shares of Common Stock and herewith tenders payment for such shares to the order of Opexa Therapeutics, Inc. (the " ***Company*** ") in the amount of $ in accordance with the terms hereof. The undersigned requests that a certificate for such shares be registered in the name of _, whose address is and that such shares be delivered to whose address is . If said number of shares is less than all of the shares of Common Stock purchasable hereunder, the undersigned requests that a new Warrant Certificate representing the remaining balance of such shares be registered in the name of _, whose address is _, and that such Warrant Certificate be delivered to , whose address is .

CASHLESS EXERCISE:

In the event that the Warrant may be exercised, to the extent allowed by the Warrant Agreement, through cashless exercise, (i) the number of shares that this Warrant is exercisable for would be determined in accordance with section 3.3.2 of the Warrant Agreement which allows for such cashless exercise and (ii) the holder hereof shall complete the following:

The undersigned hereby irrevocably elects to exercise the right, represented by this Warrant Certificate, through the cashless exercise provisions of the Warrant Agreement, to receive shares of Common Stock. If said number of shares is less than all of the shares of Common Stock purchasable hereunder (after giving effect to the cashless exercise), the undersigned requests that a new Warrant Certificate representing the remaining balance of such shares be registered in the name of __, whose address is __, and that such Warrant Certificate be delivered to __, whose address is .

Date:_____, 20____

_____
(Signature)

_____

_____
(Address)

_____
(Tax Identification Number)

Signature must conform in all respects to the name of the holder as specified on the face of this Warrant Certificate. If Warrant Shares, or a Warrant Certificate evidencing unexercised Warrants, are to be issued in a name other than that of the registered holder hereof or are to be delivered to an address other than the address of such holder as shown on the books of the Warrant Agent, the above signature must be guaranteed by a an Eligible Guarantor Institution (as that term is defined in Rule 17Ad-15 of the Securities Exchange Act of 1934, as amended).

Signature Guaranteed:

_____

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (BANKS, STOCKBROKERS, SAVINGS AND LOAN ASSOCIATIONS AND CREDIT UNIONS WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO RULE 17Ad-15).

ASSIGNMENT

(FORM OF ASSIGNMENT TO BE EXECUTED IF WARRANT HOLDER DESIRES TO TRANSFER WARRANTS EVIDENCED HEREBY)

FOR VALUE RECEIVED, _____ HEREBY SELL(S), ASSIGN(S) AND TRANSFER(S) UNTO

_____
_____
_____
(Please print name and address including zip code of assignee)

_____
(Please insert social security or other identifying number of assignee)

the rights represented by the within Warrant Certificate and does hereby irrevocably constitute and appoint _____ Attorney to transfer said Warrant Certificate on the books of the Warrant Agent with full power of substitution in the premises.

Date:_____, 20____

_____ (Signature)

_____
_____ (Address)

_____
(Tax Identification Number)

Signature must conform in all respects to the name of the holder as specified on the face of this Warrant Certificate and must bear a signature guarantee by an Eligible Guarantor Institution (as that term is defined in Rule 17Ad-15 of the Securities Exchange Act of 1934, as amended).

Signature Guaranteed:

_____

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (BANKS, STOCKBROKERS, SAVINGS AND LOAN ASSOCIATIONS AND CREDIT UNIONS WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO RULE 17Ad-15).

Exhibit 4.3

SUBSCRIPTION AGENT AGREEMENT

February 25, 2015

Continental Stock Transfer & Trust Company

17 Battery Place – 8 th Floor

New York, NY 10004

Ladies and Gentlemen:

In connection with your appointment as Subscription Agent in the transaction described herein, Opexa Therapeutics, Inc., a Texas corporation (the "Company"), hereby confirms its arrangements with you as follows:

1. **Rights Offering** - The Company is offering (the "Rights Offering") non-transferable rights (the "Subscription Rights") pursuant to which the holders thereof (the "Rights Holders") are entitled to subscribe for Units, (the "Units"), each Unit comprised of one share of the Company's common stock, $0.01 par value (the "Common Stock") and one warrant to purchase an additional share of Common Stock (the "Warrants"). Such Subscription Rights are being distributed to all shareholders of record of Common Stock ("Record Date Shareholders") as of 5:00 p.m., Eastern Time, on March 13, 2015 (the "Record Date"), as well as to Series L warrant holders of the Company who are entitled to participate in the Rights Offering pursuant to the terms of their warrants ("Participating Warrant Holders"). The Subscription Rights, Units, Common Stock and Warrants are described in a prospectus dated February 25, 2015 (the "Prospectus"). Capitalized terms not otherwise defined herein shall have the meaning given to them in the Prospectus.

As described in the Prospectus, the Company is issuing to Record Date Shareholders and the Participating Warrant Holders Rights to subscribe for up to 28,776,419 Units. Each Record Date Shareholder is being issued one Subscription Right for each share of Common Stock owned on the Record Date and each Participating Warrant Holder is being issued one Subscription Right for each share of Common Stock into which the warrants held by such Participating Warrant Holder are exercisable as of the Record Date. No fractional Subscription Rights will be issued, and any fractional Subscription Rights resulting from the issuance of the Subscription Rights will be rounded down to the next whole Subscription Right. The Subscription Rights entitle each Rights Holder to acquire one Unit for every Subscription Right held, which is referred to as the basic subscription right (the "Basic Subscription Right"). Subscription Rights may be exercised at any time during the subscription period (the "Subscription Period"), which commences on March 16, 2015 and ends at 5:00 p.m., Eastern Time, on April 8, 2015, the expiration date, unless extended by the Company (as may be so extended, the "Expiration Date").

The subscription price for the Units (the "Subscription Price") is $0.70.

Units not subscribed for by Rights Holders as part of the Basic Subscription Rights (the "Remaining Securities") will be offered, by means of the over-subscription privilege (the "Over-Subscription Privilege") to the Rights Holders, in each case only to the extent such Rights Holder has fully exercised the Subscription Rights issued to it and wishes to acquire more than the number of Units they are entitled to purchase pursuant to the Basic Subscription Right and on the terms and subject to the conditions set forth in the Prospectus, including as to proration and stock ownership limitations. The Subscription Rights will be evidenced by Subscription Rights certificates (the "Subscription Rights Certificates").

2. **Appointment of Subscription Agent** - You are hereby appointed as Subscription Agent to effect the Subscription Rights offering in accordance with the Prospectus. Each reference to you in this letter is to you in your capacity as Subscription Agent unless the context indicates otherwise.

3. **Delivery of Documents** - Enclosed herewith are the following, the receipt of which you acknowledge by your execution hereof:

a. the Prospectus
b. form of Subscription Rights Certificate
c. Instructions as to Use of Subscription Rights Certificate
d. Letter to Shareholders Who are Record Holders
e. Notice of Important Tax Information
f. resolutions adopted by the Board of Directors of the Company in connection with the Rights Offering, certified by the Secretary of the Company

As soon as is reasonably practical, you shall mail or cause to be mailed to each Record Date Shareholder and Participating Warrant Holder at the close of business on the Record Date a Subscription Rights Certificate evidencing the Subscription Rights to which such holder is entitled, a Prospectus, an Instruction as to Use of Subscription Rights Certificate, a Letter to Shareholders Who are Record Holders, a Notice of Important Tax Information, and an envelope addressed to you. Prior to mailing, the Company will provide you with blank Subscription Rights Certificates which you will prepare and issue in the names of the Record Date Shareholders and Participating Warrant Holders for the number of Subscription Rights to which they are entitled. The Company will also provide you with a sufficient number of copies of each of the documents to be mailed with the Subscription Rights Certificates.

4. **Subscription Procedure** -

(a) Upon your receipt prior to 5:00 p.m., Eastern Time, on the Expiration Date (by mail or delivery), as Subscription Agent, of (i) any Subscription Rights Certificate completed and endorsed for exercise, as provided on the reverse side of the Subscription Rights Certificate (except as provided in paragraph 5 hereof), and (ii) payment in full of the Subscription Price in U.S. funds by check, bank draft or money order (without deduction for bank service charges or otherwise) to the order of "Continental Stock Transfer & Trust Company, as Subscription Agent for Opexa Therapeutics, Inc.," you shall as soon as practicable after the Expiration Date, but after performing the procedures described in subparagraphs (b), (c) and (d) below, mail to the subscriber's registered address on the books of the Company certificates representing the securities underlying each Subscription Right duly subscribed for (pursuant to the Basic Subscription Right and the Over-Subscription Privilege) and furnish a list of all such information to the Company.

(b) As soon as practicable after the Expiration Date you shall calculate the number of shares of Units to which each subscriber is entitled pursuant to the Over-Subscription Privilege. The Over-Subscription Privilege may only be exercised by holders who subscribe to all the Units that can be subscribed for under the Basic Subscription Right. The remaining securities will be available for issuance pursuant to the Over-Subscription Privilege. Where there are sufficient Remaining Securities to satisfy all additional subscriptions by holders exercising their rights under the Over-Subscription Privilege, each holder shall be allotted the number of additional securities subscribed for. If Over-Subscription Privilege requests exceed the number of Units available, however, the available Units will be allocated pro rata among record holders exercising the Over-Subscription Privilege in proportion to the number of shares of Common Stock or underlying Series L warrants each of those record holders owned on the Record Date, relative to the number of shares owned or underlying Series L warrants on the Record Date by all record holders exercising the Over-Subscription Privilege. If this pro rata allocation results in any record holder receiving a greater number of shares than the record holder subscribed for pursuant to the exercise of the Over-Subscription Privilege, then such record holder will be allocated only that number of Units for which the record holder oversubscribed, and the remaining Units will be allocated among all other record holders exercising the Over-Subscription Privilege on the same pro rata basis described above. The proration process will be repeated until all Units have been allocated. Any fractional Remaining Securities to which persons exercising their Over-Subscription Privilege would otherwise be entitled pursuant to such allocation shall be rounded down to the next whole Unit.

(c) Upon calculating the number of Remaining Securities to which each subscriber is entitled pursuant to the Over-Subscription Privilege and the amount overpaid, if any, by each subscriber, you shall, as soon as practicable, furnish a list of all such information to the Company.

(d) Upon calculating the number of Remaining Securities to which each subscriber is entitled pursuant to the Over-Subscription Privilege and assuming payment for the additional Remaining Securities subscribed for has been delivered, you shall mail, as contemplated in subparagraph (a) above, the certificates representing the additional securities which the subscriber has been allotted. If a lesser number of Remaining Securities is allotted to a subscriber under the Over-Subscription Privilege than the subscriber has tendered payment for, you shall remit the difference to the subscriber without interest or deduction at the same time as certificates representing the securities allotted pursuant to the Over-Subscription Privilege are mailed.

(e) Funds received by you pursuant to the Basic Subscription Right and the Over-Subscription Privilege shall be held by you in a segregated account. Upon mailing certificates representing the securities and refunding subscribers for additional securities subscribed for but not allocated, if any, you shall promptly remit to the Company all funds received in payment of the Subscription Price for Units sold in the Rights Offering.

5. **Defective Exercise of Subscription Rights; Lost Subscription Rights Certificates** - The Company shall have the absolute right to reject any defective exercise of Subscription Rights or to waive any defect in exercise. Unless requested to do so by the Company, you shall not be under any duty to give notification to holders of Subscription Rights Certificates of any defects or irregularities in subscriptions. Subscriptions will not be deemed to have been made until any such defects or irregularities have been cured or waived within such time as the Company shall determine. You shall as soon as practicable return Subscription Rights Certificates with the defects or irregularities which have not been cured or waived to the holder of the Subscription Rights. If any Subscription Rights Certificate is alleged to have been lost, stolen or destroyed, you should follow the same procedures followed for lost stock certificates representing Common Stock you use in your capacity as transfer agent for the Company's Common Stock.

6. **Delivery** - You shall deliver to the Company the exercised Subscription Rights Certificates in accordance with written directions received from the Company and shall deliver to the subscribers who have duly exercised Subscription Rights at their registered addresses certificates representing the securities subscribed for as instructed on the reverse side of the Subscription Rights Certificates.

7. **Reports** - You shall notify the Company by telephone on or before the close of business on each business day during the period commencing 5 business days after the mailing of the Subscription Rights and ending at the Expiration Date (a "daily notice"), which notice shall thereafter be confirmed in writing, of (i) the number of Subscription Rights exercised on the day covered by such daily notice and the name and address of each such exercising Rights Holder, (ii) the number of Subscription Rights for which defective exercises have been received on the day covered by such daily notice, (iii) the cumulative total of the information set forth in clauses (i) through (iii) above, (iv) for each soliciting broker-dealer, the number of Subscription Rights exercised indicating such broker-dealer as the broker-dealer with respect to such exercise and the individuals identified as having solicited such exercise, and (v) such other information as the Company may reasonably request. At or before 5:00 p.m., Eastern Time, on the first trading day following the Expiration Date, you shall certify in writing to the Company the cumulative total through the Expiration Date of all the information set forth in clauses (i) through (v) above. You shall also maintain and update a listing of Rights Holders who have fully or partially exercised their Subscription Rights and Rights Holders who have not exercised their Subscription Rights. You shall provide the Company or its designees with such information compiled by you pursuant to this paragraph as any of them shall request.

8. **Future Instructions** – With respect to notices or instructions to be provided by the Company hereunder, you may rely and act on any written instruction signed by any one or more of the following authorized officers or employees of the Company:

Neil K. Warma - Chief Executive Officer

Karthik Radhakrishnan - Chief Financial Officer

9. **Payment of Expenses** - The Company will pay you compensation for acting in your capacity as Subscription Agent hereunder in the amount specified in the Fee Schedule attached hereto. The Company will pay an additional fee equal to one-third of the Subscription Agent fee for each extension of the Offering, plus any out-of-pocket expenses associated with such extension.

10. **Counsel** - You may consult with counsel satisfactory to you, which may be counsel to the Company, and the advice or opinion of such counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by you hereunder in good faith and in accordance with such advice an opinion of such counsel.

11. **Indemnification** - The Company covenants and agrees to indemnify and hold you harmless against any costs, expenses (including reasonable fees of legal counsel), losses or damages, which may be paid, incurred or suffered by or to which you may become subject arising from or out of, directly or indirectly, any claim or liability resulting from your actions as Subscription Agent pursuant hereto; provided that such covenant and agreement does not extend to such costs, expenses, losses and damages incurred or suffered by you as a result of, or arising out of, your own gross negligence, misconduct or bad faith or that of any employees, agents or independent contractors used by you in connection with performance of your duties as Subscription Agent hereunder.

12. **Notices** - Unless otherwise provided herein, all reports, notices and other communications required or permitted to be given hereunder shall be in writing and delivered by hand or confirmed facsimile or by first class U.S. mail, postage prepaid, shall be deemed given if by hand or facsimile, upon receipt or if by U.S. mail, three business days after deposit in the U.S. mail and shall be addressed as follows

(a) If to the Company, to:

Opexa Therapeutics, Inc.
2635 Technology Forest Blvd.
The Woodlands, TX 77381
Attn: Karthik Radhakrishnan
Telephone: (281) 775-0624
Facsimile: (281) 272-1088

(b) If to you, to:

Continental Stock Transfer & Trust Company
17 Battery Place – 8th Floor
New York, NY 10004
Attn: Compliance Department
Telephone: (212) 845-3287
Facsimile: (212) 616-7616

13. Miscellaneous -

(a) This agreement shall be governed by and construed in accordance with the laws of the State of New York without giving effect to conflict of laws, rules, or principles.

(b) No provision of this agreement may be amended, modified, or waived, except in writing signed by all of the parties hereto.

(c) Except as expressly set forth elsewhere in this agreement, all notices, instructions, and communications under this agreement shall be in writing, shall be effective upon receipt and shall be addressed as provided in Section 12 to such other address as a party hereto shall notify the other parties in writing.

(d) In the event that any claim of inconsistency between this agreement and the terms of the Rights Offering arise, as they may from time to time be amended, the terms of the Rights Offering shall control, except with respect to Continental's duties, liabilities, and rights, including without limitation compensation and indemnification, which shall be controlled by the terms of this agreement.

(e) If any provision of this agreement shall be held illegal, invalid, or unenforceable by an court, this agreement shall be construed and enforced as if such provision had not been contained herein and shall be deemed an agreement among the parties hereto to the full extent permitted by applicable law.

(f) This agreement shall be binding upon, inure to the benefit of, and be enforceable by, the respective successors and assigns of the parties hereto.

(g) This agreement may not be assigned by any party without the prior written consent of all parties.

(h) This agreement may be executed in counterparts, each of which, when taken together, shall constitute one and the same agreement, and each of which may be delivered by the parties by facsimile or other electronic transmission, which shall not impair the validity of such counterparts.

OPEXA THERAPEUTICS, INC.

Date

By: /s/ Neil K. Warma
Neil K. Warma
President & Chief Executive Officer

OPEXA THERAPEUTICS, INC.

Agreed & Accepted:

CONTINENTAL STOCK TRANSFER & TRUST COMPANY

By: /s/ Mark Zimkind

Name: Mark Zimkind

Title: Vice President & Director of Shareholder Services

Fee Schedule

Flat fee of $15,000.00

Plus reasonable out-of-pocket expenses

Exhibit 10.2

FIRST AMENDMENT TO LEASE AGREEMENT

THIS AMENDMENT (the "First Amendment") is made effective the 11 th day of May, 2015 (the "Effective Date") by and between Dirk D. Laukien, an Individual (herein referred to as "Lessor") and Opexa Therapeutics, Inc. (herein referred to as "Lessee") of the following and conditions, and thus:

WITNESSETH

WHEREAS, Lessor, as Lessor therein, and Lessee, as Lessee there in known as Opexa Therapeutics, Inc. ("Lessee") entered into that certain Lease Agreement (the "Lease") effective August 19 th , 2005 containing 10,000 Square Feet of net rentable area in Suite 100 (the "Leased Premises") in that certain building known as 2635 Technology Forest Building (the "Building") located at 2635 Technology Forest, The Woodlands, Texas 77381; and

NOW THEREFORE , Lessor and lessee desire to further amend, modify, and supplement the Lease as hereinafter set forth:

1. Lease renewal for 60 months to be amended to reflect October 1, 2015.
2. Base Rent. Accordingly, the schedule of Base Rent in Paragraph 1 (h) of the Lease is deleted and replaced with the following:

Rental Period	PSF- Rent	Monthly Base Rent
CD to month 36	$20.00/PSF	$16,666.67
37 to month 48	$20.50/PSF	$17,083.33
49 to month 60	$21.00/PSF	$17,500.00

3. Renewal Option: Landlord to provide Tenant with two (2) 60 month renewal options at the current fair market rate value. Tenant to provide Landlord with nine (9) months prior written notice to renew.

EXCEPT as expressly hereby amended, all other terms and conditions of the Lease and Amendment's remain in full force and effect.

IN WITNESS THEREOF , the undersigned has caused this First Amendment to the Lease to be duly executed effective this 11 th day of May 2015.

LESSOR:
Dirk D. Laukien, an Individual

By: /s/ Dirk D. Laukien
Name:Dirk D. Laukien

LESSEE:
Opexa Therapeutics, Inc.

By: /s/ Neil K. Warma
Name:Neil K. Warma
Title: President & Chief Executive Officer

OPEXA THERAPEUTICS, INC.
AMENDED AND RESTATED 2010 STOCK INCENTIVE PLAN
NOTICE OF RESTRICTED STOCK AWARD

You have been granted the following Restricted Shares of Common Stock of Opexa Therapeutics, Inc. (the "Company") under the Company's Amended and Restated 2010 Stock Incentive Plan (the "Plan"):

Date of Grant:	[Date of Grant]
Name of Recipient:	[Name of Recipient]
Total Number of Shares Granted:	[Total Shares]
Fair Market Value per Share:	$[Value Per Share]
Total Fair Market Value Of Award:	$[Total Value]
Vesting Commencement Date:	[Date of vesting commencement]
Vesting Schedule:	[Vesting schedule]

By your signature and the signature of the Company's representative below, you and the Company agree that these Restricted Shares are granted under and governed by the term and conditions of the Plan and the Restricted Stock Agreement (the "Agreement"), both of which are attached to and made a part of this document.

By signing this document you further agree that the Company may deliver by e-mail all documents relating to the Plan or this Award (including without limitation, prospectuses required by the Securities and Exchange Commission) and all other documents that the Company is required to deliver to its security holders (including without limitation, annual reports and proxy statements). You also agree that the Company may deliver these documents by posting them on a website maintained by the Company or by a third party under contract with the Company. If the Company posts these documents on a website, it will notify you by e-mail.

RECIPIENT	**OPEXA THERAPEUTICS, INC.**
_____	By: _____
Printed Name: _____	Title: _____

OPEXA THERAPEUTICS, INC.
AMENDED AND RESTATED 2010 STOCK INCENTIVE PLAN
RESTRICTED STOCK AGREEMENT

Payment For Shares

No cash payment is required for the Shares you receive. You are receiving the Shares in consideration for Services rendered by you.

Vesting

The Shares that you are receiving will vest in installments, as shown in the Notice of Restricted Stock Award.

No additional Shares vest after your Service as an Employee or a Consultant has terminated for any reason.

Shares Restricted

Unvested Shares will be considered "Restricted Shares." Except to the extent permitted by the Committee, you may not sell, transfer, assign, pledge or otherwise dispose of Restricted Shares.

Forfeiture

If your Service terminates for any reason, then your Shares will be forfeited to the extent that they have not vested before the termination date and do not vest as a result of termination. This means that the Restricted Shares will immediately revert to the Company. You receive no payment for Restricted Shares that are forfeited. The Company determines when your Service terminates for this purpose and all purposes under the Plan and its determinations are conclusive and binding on all persons.

Leaves Of Absence

For purposes of this Award, your Service does not terminate when you go on a military leave, a sick leave or another *bona fide* leave of absence, if the leave was approved by the Company in writing and if continued crediting of Service is required by the terms of the leave or by applicable law. But your Service terminates when the approved leave ends, unless you immediately return to active work.

If you go on a leave of absence, then the vesting schedule specified in the Notice of Restricted Stock Award may be adjusted in accordance with the Company's leave of absence policy or the terms of your leave. If you commence working on a part-time basis, then the vesting schedule specified in the Notice of Restricted Stock Award may be adjusted in accordance with the Company's part-time work policy or the terms of an agreement between you and the Company pertaining to your part-time schedule.

Stock Certificates

The certificates for the Restricted Shares have stamped on them a special legend referring to the forfeiture restrictions. In addition to or in lieu of imposing the legend, the Company may hold the certificates in escrow. As your vested percentage increases, you may request (at reasonable intervals) that the Company release to you a non-legended certificate for your vested Shares.

Shareholder Rights

During the period of time between the date of grant and the date the Restricted Shares become vested, you shall have all the rights of a shareholder with respect to the Restricted Shares except for the right to transfer the Restricted Shares, as set forth above. Accordingly, you shall have the right to vote the Restricted Shares and to receive any cash dividends paid with respect to the Restricted Shares.

Withholding Taxes

Regardless of any action the Company or your employer (the "Employer") takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related withholding ("Tax-Related Items"), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Company and/or your Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the shares received under this Award, including the award or vesting of such shares, the subsequent sale of shares under this Award and the receipt of any dividends, and (2) do not commit to structure the terms of the award to reduce or eliminate your liability for Tax-Related Items.

No stock certificates will be released to you, unless you have paid or made adequate arrangements satisfactory to the Company and/or the Employer to satisfy all withholding and payment on account obligations of the Company and/or your Employer. In this regard, you authorize the Company and/or your Employer to withhold all applicable Tax-Related Items legally payable by you from your wages or other cash compensation paid to you by the Company and/or your Employer. With the Company's consent, these arrangements may also include, if permissible under local law, a) having the Company withhold taxes from the proceeds of the sale of the Shares, either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization), or (b) any other arrangement approved by the Company. Finally, you shall pay to the Company or your Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold as a result of your participation in the Plan or your acquisition of shares that cannot be satisfied by the means previously described. The Company may refuse to deliver the shares if you fail to comply with your obligations in connection with the Tax-Related Items as described in this section.

Restrictions On Resale

You agree not to sell any Shares at a time when applicable laws, Company policies or an agreement between the Company and its underwriters prohibit a sale. This restriction will apply as long as your Service continues and for such period of time after the termination of your Service as the Company may specify.

No Retention Rights

Neither your Award nor this Agreement gives you the right to be employed or retained by the Company or a

subsidiary of the Company in any capacity. The Company and its subsidiaries reserve the right to terminate your Service at any time, with or without cause.

Adjustments	In the event of a stock split, a stock dividend or a similar change in Company Shares, or an extraordinary dividend, or a merger or a reorganization of the Company, the forfeiture provisions described above will apply to all new, substitute or additional securities or other assets to which you are entitled by reason of your ownership of the Shares.
Successors and Assigns	Except as otherwise provided in the Plan or this Agreement, every term of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, legatees, legal representatives, successors, transferees and assigns.
Notice	Any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given upon the earliest of personal delivery, receipt or the third full day following mailing with postage and fees prepaid, addressed to the other party hereto at the address last known in the Company's records or at such other address as such party may designate by ten (10) days' advance written notice to the other party hereto.
Miscellaneous	You understand and acknowledge that (i) the Plan is entirely discretionary, (ii) the Company and your Employer have reserved the right to amend, suspend or terminate the Plan at any time, (iii) the grant of your Award does not in any way create any contractual or other right to receive additional grants of awards (or benefits in lieu of awards) at any time or in any amount and (iv) all determinations with respect to any additional grants, including (without limitation) the times when awards will be granted, the number of shares offered, the purchase price and the vesting schedule, will be at the sole discretion of the Company. The value of this Award shall be an extraordinary item of compensation outside the scope of your employment contract, if any, and shall not be considered a part of your normal or expected compensation for purposes of calculating severance, resignation, redundancy or end-of-service payments, bonuses, long-service awards, pension or retirement benefits or similar payments. You understand and acknowledge that participation in the Plan ceases upon termination of your Service for any reason, except as may explicitly be provided otherwise in the Plan or this Agreement. You hereby authorize and direct your Employer to disclose to the Company any information regarding your employment, the nature and amount of your compensation and the fact and conditions of your participation in the Plan, as your Employer deems necessary or appropriate to facilitate the administration of the Plan. You consent to the collection, use and transfer of personal data as described in this subsection. You understand and acknowledge that the Company and/or your Employer hold certain personal information regarding you for the purpose of managing and administering the Plan, including (without limitation) your name, home address, telephone number, date of birth, social insurance number, salary, nationality, job title, any shares or directorships held in the Company and details of all awards or any other entitlements to shares awarded, canceled, exercised, vested, unvested or outstanding in the your favor (the "Data"). You further understand and acknowledge that the Company may transfer Data to any third party assisting the Company in the implementation, administration and management of the Plan. You understand and acknowledge that the recipients of Data may be located in the United States or elsewhere. You authorize such recipients to receive, possess, use, retain and transfer Data, in electronic or other form, for the purpose of administering your participation in the Plan, including a transfer to any broker or other third party with whom you elect to deposit shares acquired under the Plan of such Data as may be required for the administration of the Plan and/or the subsequent holding of shares on your behalf. You may, at any time, view the Data, require any necessary modifications of Data or withdraw the consents set forth in this subsection by contacting the Human Resources Department of the Company in writing.
The Plan and Other Agreements	The text of the Plan is incorporated in this Agreement by reference. All capitalized terms in this Agreement shall have the meanings assigned to them in the Plan. This Agreement and the Plan constitute the entire understanding between you and the Company regarding this Award. Any prior agreements, commitments or negotiations concerning this Award are superseded. This Agreement may be amended by the Committee without your consent; however, if any such amendment would materially impair your rights or obligations under the Agreement, this Agreement may be amended only by another written agreement, signed by you and the Company.

BY SIGNING THE COVER SHEET OF THIS AGREEMENT, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

EXHIBIT 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT

I, Neil K. Warma, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Opexa 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(s) 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 fourth fiscal quarter 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(s) 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: May 12, 2015

By: /s/ Neil K. Warma
Neil K. Warma
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT

I, Karthik Radhakrishnan, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Opexa 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(s) 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 fourth fiscal quarter 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(s) 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: May 12, 2015

By: /s/ Karthik Radhakrishnan
Karthik Radhakrishnan
Chief Financial Officer

EXHIBIT 32.1

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 Opexa Therapeutics, Inc. (the "Company") on Form 10-Q for the period ending March 31, 2015 (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, I, Neil K. Warma, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; 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: May 12, 2015

By: /s/ Neil K. Warma
Neil K. Warma
President and Chief Executive Officer

EXHIBIT 32.2

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 Opexa Therapeutics, Inc. (the "Company") on Form 10-Q for the period ending March 31, 2015 (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, I, Karthik Radhakrishnan, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; 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: May 12, 2015

By: /s/ Karthik Radhakrishnan
Karthik Radhakrishnan
Chief Financial Officer