

**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

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

For the transition period from to _____ to _____

Commission File Number: 001-35076

NAVIDEA BIOPHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

31-1080091

(IRS Employer Identification No.)

5600 Blazer Parkway, Suite 200, Dublin, Ohio

(Address of principal executive offices)

43017-7550

(Zip Code)

(614) 793-7500

(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

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 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

Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12-b-2 of the Act.)

Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: 150,730,438 shares of common stock, par value \$.001 per share (as of the close of business on May 1, 2015).

NAVIDEA BIOPHARMACEUTICALS, INC. and SUBSIDIARIES

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

Navidea Biopharmaceuticals, Inc. and Subsidiaries Consolidated Balance Sheets

ASSETS	March 31, 2015 (unaudited)	December 31, 2014
Current assets:		
Cash	\$ 4,884,189	\$ 5,479,006
Accounts receivable	1,211,015	816,544
Inventory, net	571,605	932,385
Prepaid expenses and other	1,350,969	1,371,210
	<u>8,017,778</u>	<u>8,599,145</u>
Property and equipment	3,980,470	4,124,028
Less accumulated depreciation and amortization	1,631,190	1,614,320
	<u>2,349,280</u>	<u>2,509,708</u>
Patents and trademarks	212,147	219,558
Less accumulated amortization	41,091	38,725
	<u>171,056</u>	<u>180,833</u>
Investment in R-NAV, LLC	—	241,575
Other assets	379,795	388,919
	<u>10,917,909</u>	<u>11,920,180</u>
Total assets	<u>\$ 10,917,909</u>	<u>\$ 11,920,180</u>

Continued

Navidea Biopharmaceuticals, Inc. and Subsidiaries
Consolidated Balance Sheets, continued

LIABILITIES AND STOCKHOLDERS' DEFICIT	March 31, 2015 (unaudited)	December 31, 2014
Current liabilities:		
Accounts payable	\$ 1,905,957	\$ 1,477,499
Accrued liabilities and other	3,898,019	3,234,120
Deferred revenue, current	1,000,000	—
Notes payable, current, net of discounts of \$816,539 and \$829,019, respectively	6,092,442	4,383,472
Total current liabilities	12,896,418	9,095,091
Deferred revenue	916,667	—
Notes payable, net of discounts of \$1,339,596 and \$1,530,804, respectively	29,306,751	29,539,135
Other liabilities	3,161,885	3,089,420
Total liabilities	46,281,721	41,723,646
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock; \$.001 par value; 5,000,000 shares authorized; 4,519 Series B shares issued and outstanding at March 31, 2015 and December 31, 2014, respectively	4	4
Common stock; \$.001 par value; 200,000,000 shares authorized; 150,610,860 and 150,200,259 shares issued and outstanding at March 31, 2015 and December 31, 2014, respectively	150,611	150,200
Additional paid-in capital	324,277,768	323,030,301
Accumulated deficit	(360,275,096)	(352,983,971)
Total Navidea stockholders' deficit	(35,846,713)	(29,803,466)
Noncontrolling interest	482,901	—
Total stockholders' deficit	(35,363,812)	(29,803,466)
Total liabilities and stockholders' deficit	\$ 10,917,909	\$ 11,920,180

See accompanying notes to consolidated financial statements (unaudited).

Navidea Biopharmaceuticals, Inc. and Subsidiaries
Consolidated Statements of Operations
(unaudited)

	Three Months Ended	
	March 31,	
	2015	2014
Revenue:		
Lymphoseek sales revenue	\$ 1,835,422	\$ 626,631
Lymphoseek license revenue	83,333	—
Grant and other revenue	189,701	125,173
Total revenue	<u>2,108,456</u>	<u>751,804</u>
Cost of goods sold	449,057	193,220
Gross profit	<u>1,659,399</u>	<u>558,584</u>
Operating expenses:		
Research and development	3,981,288	5,226,794
Selling, general and administrative	5,494,168	3,910,833
Total operating expenses	<u>9,475,456</u>	<u>9,137,627</u>
Loss from operations	<u>(7,816,057)</u>	<u>(8,579,043)</u>
Other income (expense):		
Interest expense, net	(966,576)	(937,045)
Equity in loss of R-NAV, LLC	(262,227)	—
Change in fair value of financial instruments	1,727,103	392,483
Loss on extinguishment of debt	—	(2,610,196)
Other, net	26,532	(6,752)
Total other income (expense), net	<u>524,832</u>	<u>(3,161,510)</u>
Net loss	(7,291,225)	(11,740,553)
Net loss attributable to noncontrolling interest	(100)	—
Deemed dividend on beneficial conversion feature of MT Preferred Stock	(46,000)	—
Net loss attributable to common stockholders	<u>\$ (7,337,125)</u>	<u>\$ (11,740,553)</u>
Loss per common share (basic and diluted)	\$ (0.05)	\$ (0.08)
Weighted average shares outstanding (basic and diluted)	149,794,331	144,783,351

See accompanying notes to consolidated financial statements (unaudited).

Navidea Biopharmaceuticals, Inc. and Subsidiaries
Consolidated Statement of Stockholders' Deficit
(unaudited)

	Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Non- controlling Interest	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance, December 31, 2014	4,519	\$ 4	150,200,259	\$150,200	\$ 323,030,301	\$ (352,983,971)	\$ —	\$ (29,803,466)
Issued restricted stock	—	—	332,000	332	—	—	—	332
Canceled forfeited restricted stock	—	—	(18,750)	(19)	19	—	—	—
Canceled stock to pay employee tax obligations	—	—	(7,645)	(7)	7	—	—	—
Issued stock in payment of Board retainers	—	—	36,839	37	69,586	—	—	69,623
Issued stock to 401(k) plan	—	—	68,157	68	117,031	—	—	117,099
Stock compensation expense	—	—	—	—	1,106,824	—	—	1,106,824
Net loss	—	—	—	—	—	(7,291,125)	(100)	(7,291,225)
Issuance of MT Preferred Stock, net of deemed dividend on beneficial conversion feature	—	—	—	—	(46,000)	—	483,001	437,001
Balance, March 31, 2015	4,519	\$ 4	150,610,860	\$150,611	\$ 324,277,768	\$ (360,275,096)	\$ 482,901	\$ (35,363,812)

See accompanying notes to consolidated financial statements (unaudited).

Navidea Biopharmaceuticals, Inc. and Subsidiaries
Consolidated Statements of Cash Flows
(unaudited)

	Three Months Ended March 31,	
	2015	2014
Cash flows from operating activities:		
Net loss	\$ (7,291,225)	\$ (11,740,553)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	149,822	111,270
Loss on disposal and abandonment of assets	5,726	10,866
Change in inventory reserve	120,302	—
Amortization of debt discount and issuance costs	212,813	241,827
Stock compensation expense	1,106,824	693,203
Equity in loss of R-NAV, LLC	262,227	—
Change in fair value of financial instruments	(1,727,103)	(392,483)
Loss on extinguishment of debt	—	2,610,196
Issued stock to 401(k) plan for employer matching contributions	117,099	—
Other	48,971	—
Changes in operating assets and liabilities:		
Accounts receivable	(394,471)	563,888
Inventory	240,478	118,521
Prepaid expenses and other assets	20,241	78,533
Accounts payable	428,458	3,901
Accrued and other liabilities	673,969	(1,471,562)
Deferred revenue	1,916,667	—
Net cash used in operating activities	<u>(4,109,202)</u>	<u>(9,172,393)</u>
Cash flows from investing activities:		
Purchases of equipment	—	(985,578)
Proceeds from sales of equipment	20,300	—
Patent and trademark costs	(5,643)	(7,055)
Net cash provided by (used in) investing activities	<u>14,657</u>	<u>(992,633)</u>
Cash flows from financing activities:		
Proceeds from issuance of MT Preferred Stock and warrants	500,000	—
Proceeds from issuance of common stock and short swing profits	332	54,674
Payment of tax withholdings related to stock-based compensation	—	(70,914)
Proceeds from notes payable	3,000,000	30,000,000
Payment of debt-related costs	—	(1,750,770)
Principal payments on notes payable	—	(25,000,000)
Payments under capital leases	(604)	(527)
Net cash provided by financing activities	<u>3,499,728</u>	<u>3,232,463</u>
Net decrease in cash	(594,817)	(6,932,563)
Cash, beginning of period	5,479,006	32,939,026
Cash, end of period	<u>\$ 4,884,189</u>	<u>\$ 26,006,463</u>

See accompanying notes to consolidated financial statements (unaudited).

Notes to the Consolidated Financial Statements (unaudited)

1. Summary of Significant Accounting Policies

- a. **Basis of Presentation:** The information presented as of March 31, 2015 and for the three-month periods ended March 31, 2015 and 2014 is unaudited, but includes all adjustments (which consist only of normal recurring adjustments) that the management of Navidea Biopharmaceuticals, Inc. (Navidea, the Company, or we) believes to be necessary for the fair presentation of results for the periods presented. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to the rules and regulations of the U.S. Securities and Exchange Commission. The balances as of March 31, 2015 and the results for the interim periods are not necessarily indicative of results to be expected for the year. The consolidated financial statements should be read in conjunction with Navidea's audited consolidated financial statements for the year ended December 31, 2014, which were included as part of our Annual Report on Form 10-K.

Our consolidated financial statements include the accounts of Navidea and our wholly owned subsidiaries, Navidea Biopharmaceuticals Limited and Cardiosonix Ltd, as well as those of our majority-owned subsidiary, Macrophage Therapeutics, Inc. (MT). All significant inter-company accounts were eliminated in consolidation. Navidea's investment in R-NAV is being accounted for using the equity method of accounting and is therefore not consolidated.

- b. **Financial Instruments and Fair Value:** In accordance with current accounting standards, the fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value, giving the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Level 1 – Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 – Quoted prices in markets that are not active or financial instruments for which all significant inputs are observable, either directly or indirectly; and

Level 3 – Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. In determining the appropriate levels, we perform a detailed analysis of the assets and liabilities whose fair value is measured on a recurring basis. At each reporting period, all assets and liabilities for which the fair value measurement is based on significant unobservable inputs or instruments which trade infrequently and therefore have little or no price transparency are classified as Level 3. See Note 2.

The following methods and assumptions were used to estimate the fair value of each class of financial instruments:

- (1) Cash, accounts receivable, accounts payable, and accrued liabilities: The carrying amounts approximate fair value because of the short maturity of these instruments.
- (2) Notes payable: The carrying value of our debt at March 31, 2015 and December 31, 2014 primarily consists of the face amount of the notes less unamortized discounts. See Note 8. At March 31, 2015 and December 31, 2014, certain notes payable were also required to be recorded at fair value. The estimated fair value of our debt was calculated using a discounted cash flow analysis as well as a probability-weighted Monte Carlo simulation. These valuation methods include Level 3 inputs such as the estimated current market interest rate for similar instruments with similar creditworthiness. For the debt recorded at fair value, unrealized gains and losses on the fair value of the debt are classified in other expenses as a change in the fair value of financial instruments in the consolidated statements of operations. At March 31, 2015, the fair value of our notes payable is approximately \$39.3 million.
- (3) Derivative liabilities: Derivative liabilities are related to certain outstanding warrants which are recorded at fair value. Derivative liabilities totaling \$63,000 as of March 31, 2015 were included in other liabilities on the consolidated balance sheets. No derivative liabilities were outstanding as of December 31, 2014. The assumptions used to calculate fair value as of March 31, 2015 included volatility, a risk-free rate and expected

dividends. In addition, we considered non-performance risk and determined that such risk is minimal. Unrealized gains and losses on the derivatives are classified in other expenses as a change in the fair value of financial instruments in the statements of operations. See Note 9.

- c. **Revenue Recognition:** We currently generate revenue primarily from sales of Lymphoseek. Our standard shipping terms are FOB shipping point, and title and risk of loss passes to the customer upon delivery to a carrier for shipment from Cardinal Health's national distribution center to another point of destination. We generally recognize sales revenue related to sales of our products when the products are shipped. Our customers have no right to return products purchased in the ordinary course of business.

We earn additional revenues based on a percentage of the actual net revenues achieved by Cardinal Health on sales to end customers made during each fiscal year. The amount we charge Cardinal Health related to end customer sales of Lymphoseek are subject to a retroactive annual adjustment. To the extent that we can reasonably estimate the end-customer prices received by Cardinal Health, we record sales based upon these estimates at the time of sale. If we are unable to reasonably estimate end customer sales prices related to products sold, we record revenue related to these product sales at the minimum (i.e., floor) price provided for under our distribution agreement with Cardinal Health.

We also earn revenues related to our licensing and distribution agreements. The terms of these agreements may include payment to us of non-refundable upfront license fees, funding or reimbursement of research and development efforts, milestone payments if specified objectives are achieved, and/or royalties on product sales. We evaluate all deliverables within an arrangement to determine whether or not they provide value on a stand-alone basis. We recognize a contingent milestone payment as revenue in its entirety upon our achievement of a substantive milestone if the consideration earned from the achievement of the milestone (i) is consistent with performance required to achieve the milestone or the increase in value to the delivered item, (ii) relates solely to past performance and (iii) is reasonable relative to all of the other deliverables and payments within the arrangement. We received a non-refundable upfront cash payment of \$2.0 million from SpePharm AG upon execution of the SpePharm License Agreement in March 2015. We have determined that the license and other non-contingent deliverables do not have stand-alone value because the license could not be deemed to be fully delivered for its intended purpose unless we perform our other obligations, including specified development work. Accordingly, they do not meet the separation criteria, resulting in these deliverables being considered a single unit of account. As a result, revenue relating to the upfront cash payment was deferred and is being recognized on a straight-line basis over the estimated obligation period of two years.

We generate additional revenue from grants to support various product development initiatives. We generally recognize grant revenue when expenses reimbursable under the grants have been paid and payments under the grants become contractually due. Lastly, we recognize revenues from the provision of services to R-NAV, LLC and its subsidiaries. See Note 7.

- d. **Recent Accounting Pronouncements:** In February 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-02, *Amendments to the Consolidation Analysis*. ASU 2015-02 affects reporting entities that are required to evaluate whether they should consolidate certain legal entities. All legal entities are subject to reevaluation under the revised consolidation model. Specifically, the amendments: (i) modify the evaluation of whether limited partnerships and similar legal entities are variable interest entities (VIEs) or voting interest entities, (ii) eliminate the presumption that a general partner should consolidate a limited partnership, and (iii) affect the consolidation analysis of reporting entities that are involved with VIEs, particularly those that have fee arrangements and related party relationships. ASU 2015-02 is effective for public entities for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2015. The amendments may be applied using a modified retrospective approach or a full retrospective approach. Early adoption is permitted, including adoption in an interim period. We are currently evaluating the impact of our adoption of ASU 2015-02, however we do not expect the adoption of ASU 2015-02 to have a material effect on our consolidated financial statements upon adoption.

In April 2015, the FASB issued ASU No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs*. ASU 2015-03 requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability rather than as an asset. The recognition and measurement guidance for debt issuance costs are not affected by ASU 2015-03. ASU 2015-03 is effective for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years. Early adoption is permitted. Entities must apply the amendments in ASU 2015-03 on a retrospective basis. We do not expect the adoption of ASU 2015-03 to have a material effect on our consolidated financial statements upon adoption.

2. Fair Value

Platinum-Montaur Life Sciences, LLC (Platinum) has the right to convert all or any portion of the unpaid principal or unpaid interest accrued on any draws subsequent to the second quarter of 2013 under the Platinum credit facility, under certain circumstances. Platinum's option to convert such subsequent draws into common stock was determined to meet the definition of a liability and is included as part of the value of the related notes payable on the consolidated balance sheets. The estimated fair value of the Platinum notes payable is \$6.9 million at March 31, 2015, and will continue to be measured on a recurring basis. See Note 8.

MT issued warrants to purchase 300 shares of MT Common Stock in connection with the sale of 10 shares of MT Preferred Stock in March 2015. In accordance with current accounting guidance, the warrants are required to be accounted for as a derivative liability at fair value, with subsequent changes in fair value included in earnings. The estimated fair value of the MT warrants is \$63,000 at March 31, 2015, and will continue to be measured on a recurring basis. See Notes 6 and 9.

The following tables set forth, by level, financial liabilities measured at fair value on a recurring basis:

Liabilities Measured at Fair Value on a Recurring Basis as of March 31, 2015

Description	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Platinum notes payable	\$ —	\$ —	\$ 6,888,661	\$ 6,888,661
Liability related to warrants	—	—	63,000	63,000

Liabilities Measured at Fair Value on a Recurring Basis as of December 31, 2014

Description	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Platinum notes payable	\$ —	\$ —	\$ 5,615,764	\$ 5,615,764

- a. **Valuation Processes-Level 3 Measurements:** Depending on the instrument, the Company utilizes discounted cash flows, option pricing models, or third-party valuation services to estimate the value of their financial assets and liabilities. Valuations using discounted cash flow methods and certain option pricing models such as Black-Scholes are generally conducted by the Company or by third-party valuation experts. Valuations using complex models such as a Monte Carlo simulation are generally provided to the Company by third-party valuation experts. Each reporting period, the Company provides significant unobservable inputs to the third-party valuation experts based on current internal estimates and forecasts.
- b. **Sensitivity Analysis-Level 3 Measurements:** Changes in the Company's current internal estimates and forecasts are likely to cause material changes in the fair value of certain liabilities. The significant unobservable inputs used in the fair value measurement of the liabilities include the amount and timing of future draws expected to be taken under the Platinum Loan Agreement based on current internal forecasts, management's estimate of the likelihood of actually making those draws as opposed to obtaining other sources of financing, and management's estimate of the likelihood of those draws ultimately resulting in Platinum exercising their conversion option under the Platinum Loan Agreement. Significant increases (decreases) in any of the significant unobservable inputs would result in a higher (lower) fair value measurement. A change in one of the inputs would not necessarily result in a directionally similar change in the others.

There were no Level 1 liabilities outstanding at any time during the three-month periods ended March 31, 2015 and 2014. There were no transfers in or out of our Level 2 liabilities during the three-month periods ended March 31, 2015 or 2014. The change in the estimated fair value of our Level 3 liabilities relating to unrealized gains was \$1.7 million and \$394,000, respectively, which were recorded as changes in fair value of financial instruments during the three-month periods ended March 31, 2015 and 2014.

3. Stock-Based Compensation

At March 31, 2015, we have instruments outstanding under two stock-based compensation plans; the Fourth Amended and Restated 2002 Stock Incentive Plan (the 2002 Plan) and the Amended and Restated 2014 Stock Incentive Plan (the 2014 Plan). In addition, we have stock options outstanding that were awarded as an employment inducement in connection with the appointment of our new CEO in October 2014. Currently, under the 2014 Plan, we may grant incentive stock options, nonqualified stock options, and restricted stock awards to full-time employees and directors, and nonqualified stock options and restricted stock awards may be granted to our consultants and agents. Total shares authorized under each plan are 12 million shares and 5 million shares, respectively. Although instruments are still outstanding under the 2002 Plan, the plan has expired and no new grants may be made from it. Under both plans, the exercise price of each option is greater than or equal to the closing market price of our common stock on the date of the grant.

Stock options granted under the 2002 Plan and the 2014 Plan generally vest on an annual basis over one to four years. The stock options that were awarded as an employment inducement in connection with the appointment of our new CEO will vest in three tranches based on certain service and market conditions as defined in the agreement. Outstanding stock options under the plans, if not exercised, generally expire ten years from their date of grant or up to 90 days following the date of an optionee's separation from employment with the Company. We issue new shares of our common stock upon exercise of stock options.

Stock-based payments to employees and directors, including grants of stock options, are recognized in the consolidated statements of operations based on their estimated fair values. The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model. Expected volatilities are based on the Company's historical volatility, which management believes represents the most accurate basis for estimating expected future volatility under the current circumstances. Navidea uses historical data to estimate forfeiture rates. The expected term of stock options granted is based on the vesting period and the contractual life of the options. The risk-free rate is based on the U.S. Treasury yield in effect at the time of the grant.

The portion of the fair value of stock-based awards that is ultimately expected to vest is recognized as compensation expense over either (1) the requisite service period or (2) the estimated performance period. Restricted stock awards are valued based on the closing stock price on the date of grant and amortized ratably over the estimated life of the award. Restricted stock may vest based on the passage of time, or upon occurrence of a specific event or achievement of goals as defined in the grant agreements. In such cases, we record compensation expense related to grants of restricted stock based on management's estimates of the probable dates of the vesting events. Stock-based awards that do not vest because the requisite service period is not met prior to termination result in reversal of previously recognized compensation cost.

For the three-month periods ended March 31, 2015 and 2014, our total stock-based compensation expense was approximately \$1.1 million and \$693,000, respectively. We have not recorded any income tax benefit related to stock-based compensation in either of the three-month periods ended March 31, 2015 and 2014.

A summary of the status of our stock options as of March 31, 2015, and changes during the three-month period then ended, is presented below:

	Three Months Ended March 31, 2015			
	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at beginning of period	5,345,764	\$ 2.16		
Granted	1,169,100	1.69		
Outstanding at end of period	6,514,864	\$ 2.07	7.7 years	\$ 877,344
Exercisable at end of period	2,880,199	\$ 2.31	5.9 years	\$ 534,643

A summary of the status of our unvested restricted stock as of March 31, 2015, and changes during the three-month period then ended, is presented below:

	Three Months Ended March 31, 2015	
	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested at beginning of period	498,250	\$ 1.91
Granted	332,000	1.73
Vested	(140,000)	2.28
Forfeited	(18,750)	1.26
Unvested at end of period	<u>671,500</u>	<u>\$ 1.76</u>

In February 2015, 120,000 shares of restricted stock held by non-employee directors with an aggregate fair value of \$193,000 vested as scheduled according to the terms of the restricted stock agreements. In March 2015, 20,000 shares of restricted stock held by an employee with an aggregate fair value of \$33,000 vested as scheduled according to the terms of a restricted stock agreement.

As of March 31, 2015, there was approximately \$2.1 million of total unrecognized compensation expense related to unvested stock-based awards, which we expect to recognize over the remaining weighted average vesting term of 2.1 years.

4. Earnings (Loss) Per Share

Basic earnings (loss) per share is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average number of common shares and, except for periods with a loss from operations, participating securities outstanding during the period. Diluted earnings (loss) per share reflects additional common shares that would have been outstanding if dilutive potential common shares had been issued. Potential common shares that may be issued by the Company include convertible debt, convertible preferred stock, options and warrants.

Diluted earnings (loss) per common share for the three-month periods ended March 31, 2015 and 2014 excludes the effects of 20.1 million and 19.2 million common share equivalents, respectively, since such inclusion would be anti-dilutive. The excluded shares consist of common shares issuable upon exercise of outstanding stock options and warrants, and upon the conversion of convertible debt and convertible preferred stock.

The Company's unvested stock awards contain nonforfeitable rights to dividends or dividend equivalents, whether paid or unpaid (referred to as "participating securities"). Therefore, the unvested stock awards are required to be included in the number of shares outstanding for both basic and diluted earnings per share calculations. However, due to our loss from continuing operations, approximately 672,000 and 605,000 shares of unvested restricted stock were excluded in determining basic and diluted loss per share for the three-month periods ended March 31, 2015 and 2014, respectively, because such inclusion would be anti-dilutive.

5. Inventory

All components of inventory are valued at the lower of cost (first-in, first-out) or market. We adjust inventory to market value when the net realizable value is lower than the carrying cost of the inventory. Market value is determined based on estimated sales activity and margins.

The components of inventory as of March 31, 2015 and December 31, 2014, net of reserves of \$659,000 and \$539,000, respectively, are as follows:

	March 31, 2015	December 31,
	(unaudited)	2014
Work-in-process	\$ 360,442	\$ 495,449
Finished goods	211,163	436,936
Total	<u>\$ 571,605</u>	<u>\$ 932,385</u>

During the three-month period ended March 31, 2015, we reserved an additional \$120,000 of materials related to production issues. During the three-month periods ended March 31, 2015 and 2014, we wrote off \$37,000 and \$10,000, respectively, of previously capitalized Lymphoseek inventory due to the consumption of the Lymphoseek material for product testing and development purposes.

We estimate a reserve for obsolete inventory based on management's judgment of probable future commercial use, which is based on an analysis of current inventory levels, estimated future sales and production rates, and estimated shelf lives.

6. Investment in Macrophage Therapeutics, Inc.

In March 2015, MT, our previously wholly-owned subsidiary, entered into a Securities Purchase Agreement to sell up to 50 shares of its Series A Convertible Preferred Stock (MT Preferred Stock) and warrants to purchase up to 1,500 common shares of MT (MT Common Stock) to Platinum-Montaur Life Sciences, LLC (Platinum) and Dr. Michael Goldberg for a purchase price of \$50,000 per unit. A unit consists of one share of MT Preferred Stock and 30 warrants to purchase MT Common Stock. Under the agreement, 40% of the MT Preferred Stock and warrants are committed to be purchased by Dr. Goldberg, and the balance by Platinum. The full 50 shares of MT Preferred Stock and warrants to be sold under the agreement are convertible into, and exercisable for, MT Common Stock representing an aggregate 1% interest on a fully converted and exercised basis. Navidea owns the remainder of the MT Common Stock. On March 11, 2015, definitive agreements with the investors were signed for the sale of the first tranche of 10 shares of MT Preferred Stock and warrants to purchase 300 shares of MT Common Stock to these investors, with gross proceeds to MT of \$500,000. The MT Common Stock held by parties other than Navidea is reflected on the consolidated balance sheets as a noncontrolling interest.

In accordance with current accounting guidance, the warrants are required to be accounted for separately as a derivative liability at fair value, with subsequent changes in fair value to be included in earnings. The fair value of the warrants was estimated to be \$63,000 at issuance and at March 31, 2015. In addition, the conversion option within the MT Preferred Stock was determined to be a beneficial conversion feature. The conversion option was immediately convertible upon issuance, resulting in a deemed dividend of \$46,000 related to the beneficial conversion feature. Finally, certain provisions of the Securities Purchase Agreement obligate the investors to acquire the remaining MT Preferred Stock and related warrants for \$2.0 million at the option of MT. The estimated relative fair value of this put option was \$113,000 at issuance based on the Black-Scholes option pricing model and is classified within stockholders' equity.

In addition, we entered into a Securities Exchange Agreement with the investors providing them an option to exchange their MT Preferred Stock for our common stock in the event that MT has not completed a public offering with gross proceeds to MT of at least \$50 million by the second anniversary of the closing of the initial sale of MT Preferred Stock, at an exchange rate per share obtained by dividing \$50,000 by the greater of (i) 80% of the twenty-day volume weighted average price per share of our common stock on the second anniversary of the initial closing or (ii) \$3.00. To the extent that the investors do not timely exercise their exchange right, MT has the right to redeem their MT Preferred Stock for a price equal to \$58,320 per share. We also granted MT an exclusive license for certain therapeutic applications of the Manocept technology.

7. Investment in R-NAV, LLC

Navidea's investment in R-NAV, LLC (R-NAV) of approximately 33% is being accounted for using the equity method of accounting. Navidea's equity in the loss of R-NAV was \$262,227 for the three-month period ended March 31, 2015. The Company's obligation to provide \$500,000 of in-kind services to R-NAV is being recognized as those services are provided. The Company provided \$21,000 of in-kind services during the three-month period ended March 31, 2015. As of March 31, 2015, the Company has \$441,000 of in-kind services remaining to provide under this obligation.

8. Notes Payable

In March 2014, we executed a Loan and Security Agreement (the Oxford Loan Agreement) with Oxford Finance, LLC (Oxford), providing for a loan to the Company of \$30 million. Pursuant to the Oxford Loan Agreement, we issued Oxford: (1) Term Notes in the aggregate principal amount of \$30 million, bearing interest at 8.5% (the Oxford Notes), and (2) Series KK warrants to purchase an aggregate of 391,032 shares of our common stock at an exercise price of \$1.918 per share, expiring in March 2021 (the Series KK warrants). We began making monthly payments of interest only on April 1, 2014, and monthly payments of principal and interest beginning April 1, 2015. As of March 31, 2015, the outstanding principal balance of the Oxford Loan Notes was \$30 million, and we were in compliance with all covenants of the Oxford Loan Agreement.

In connection with the Oxford Loan Agreement, the Company recorded a debt discount related to the issuance of the Series KK Warrants and other fees to the lenders totaling \$3.0 million. Debt issuance costs directly attributable to the Oxford Loan Agreement, totaling \$120,000, were recorded as a non-current asset on the consolidated balance sheet on the closing date. The debt discount and debt offering costs are being amortized as non-cash interest expense using the effective interest method over the term of the Oxford Loan Agreement. As of March 31, 2015, the balance of the debt discount was \$2.2 million, and the balance of the debt issuance costs was \$81,000.

Our loan agreement with Platinum, as amended, provides us with a credit facility of up to \$50 million (the Second Amended Platinum Note). The Company borrowed an additional \$3.0 million under the Second Amended Platinum Note during the three months ended March 31, 2015. The Second Amended Platinum Note is reflected on the consolidated balance sheets at its estimated fair value, which includes the estimated fair value of an embedded conversion option. A net decrease in the estimated fair value of the Second Amended Platinum Note of \$1.7 million was recorded as a non-cash change in fair value of financial instruments during the three-month period ended March 31, 2015. The estimated fair value of the Second Amended Platinum Note was \$6.9 million as of March 31, 2015. As of March 31, 2015, the outstanding principal balance of the Second Amended Platinum Note was approximately \$6.2 million, with \$28.8 million still available under the credit facility.

As of March 31, 2015, the outstanding principal balance of the Note Payable to R-NAV was \$666,666.

During the three-month periods ended March 31, 2015 and 2014, we recorded interest expense of \$967,000 and \$944,000, respectively, related to our notes payable. Of these amounts, \$213,000 and \$242,000, respectively, related to amortization of the debt discounts and deferred financing costs related to our notes payable.

9. Derivative Instruments

Certain embedded features of our convertible securities, notes payable, or warrants to purchase our common stock, may be treated as derivative liabilities. The estimated fair values of the derivative liabilities are recorded as non-current liabilities on the consolidated balance sheet. Changes in the estimated fair values of the derivative liabilities are recorded in the consolidated statement of operations as non-cash income (expense). We do not use derivative instruments for hedging of market risks or for trading or speculative purposes.

At March 31, 2015, derivative liabilities consist of warrants to purchase MT Common Stock, issued to Platinum and Dr. Michael Goldberg. Derivative liabilities outstanding during the three-month period ended March 31, 2014 consisted of a Series JJ warrant issued to Crede CG III, Ltd. related to a 2013 registered direct public offering. The Series JJ warrant was exchanged for common stock during the fourth quarter of 2014. The net effect of marking the Company's derivative liabilities to market during the three-month period ended March 31, 2014 resulted in changes in the estimated fair value of the derivative liabilities relating to unrealized losses of approximately \$1,000 which were recorded as changes in the fair value of financial instruments. The total estimated fair value of our derivative liabilities was \$63,000 as of March 31, 2015. See Note 1b(3).

10. Equity

During the three-month period ended March 31, 2015, we issued 36,839 shares of our common stock valued at \$70,000 to certain members of our Board of Directors as payment in lieu of cash for a portion of their fourth quarter 2014 compensation.

As of March 31, 2015, there are 4,519 shares of Series B Preferred Stock outstanding which are convertible into 14,777,130 shares of our common stock.

11. Stock Warrants

At March 31, 2015, there are 1.8 million warrants outstanding to purchase Navidea's common stock. The warrants are exercisable at prices ranging from \$1.918 to \$3.04 per share with a weighted average exercise price of \$2.27 per share.

In addition, at March 31, 2015, there are 300 warrants outstanding to purchase MT Common Stock. The warrants are exercisable at \$2,000 per share.

12. Reduction in Force

In March 2015, the Company initiated a reduction in force that will include seven staff members and four executives. Three of the executives will continue as employees during transition periods of varying lengths, depending upon the nature and extent of responsibilities to be transitioned or wound down. As of March 31, 2015, the specific terms of the transition and separation of two of the executives were still being determined.

During the three-month period ended March 31, 2015, the Company recognized approximately \$1.4 million of net expense as a result of the reduction in force, which includes actual and estimated separation costs as well as the impact of accelerated vesting or forfeiture of certain equity awards resulting from the separation of \$372,000.

A summary of changes in accrued separation costs during the three-month period ended March 31, 2015 is presented below:

Accrued separation costs, beginning of period	\$ 449,351
Payments related to May 2014 reduction in force	(405,187)
Charges incurred with March 2015 reduction in force	1,039,598
Payments related to March 2015 reduction in force	(28,630)
Accrued separation costs, end of period	<u>\$ 1,055,132</u>

The following table summarizes the remaining accrued separation costs, including estimated employer payroll tax obligations, related to the Company's reduction in force, which are included in accrued liabilities and other on the consolidated balance sheet as of March 31, 2015:

	As of March 31, 2015
Separation payments, including payroll taxes	\$ 964,013
Estimated cost of continuing healthcare coverage	91,119
	<u>\$ 1,055,132</u>

13. Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Due to the uncertainty surrounding the realization of the deferred tax assets in future tax returns, all of the deferred tax assets have been fully offset by a valuation allowance at March 31, 2015 and December 31, 2014.

Current accounting standards include guidance on the accounting for uncertainty in income taxes recognized in the financial statements. Such standards also prescribe a recognition threshold and measurement model for the financial statement recognition of a tax position taken, or expected to be taken, and provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Company believes that

the ultimate deductibility of all tax positions is highly certain, although there is uncertainty about the timing of such deductibility. As a result, no liability for uncertain tax positions was recorded as of March 31, 2015 or December 31, 2014 and we do not expect any significant changes in the next twelve months. Should we need to accrue interest or penalties on uncertain tax positions, we would recognize the interest as interest expense and the penalties as a selling, general and administrative expense. As of March 31, 2015, tax years 2011-2014 remained subject to examination by federal and state tax authorities.

14. Segments

We report information about our operating segments using the “management approach” in accordance with current accounting standards. This information is based on the way management organizes and reports the segments within the enterprise for making operating decisions and assessing performance. Our reportable segments are identified based on differences in products, services and markets served. There were no inter-segment sales. Prior to 2015, our products and development programs were all related to diagnostic substances. Our majority-owned subsidiary, Macrophage Therapeutics, Inc., was formed and received initial funding during the first quarter of 2015, which resulted in a re-evaluation of the Company's segment determination. We now manage our business based on two primary types of drug products: (i) diagnostic substances, including Lymphoseek and our Manocept platform, our R-NAV subsidiary, NAV4694 and NAV5001, and (ii) therapeutic development programs, including all development programs undertaken by Macrophage Therapeutics, Inc.

The information in the following table is derived directly from each reportable segment's financial reporting.

<i>(\$ amounts in thousands)</i>				
Three Months Ended March 31, 2015	Diagnostics	Therapeutics	Corporate	Total
Lymphoseek sales revenue:				
United States ¹	\$ 1,831	\$ —	\$ —	\$ 1,831
International	6	—	—	6
Lymphoseek license revenue	83	—	—	83
Grant and other revenue	190	—	—	190
Total revenue	2,108	—	—	2,108
Research and development expenses	3,895	86	—	3,981
Selling, general and administrative expenses, excluding depreciation and amortization ²	2,042	14	3,324	5,380
Depreciation and amortization	72	—	78	150
Loss from operations ³	(4,315)	(100)	(3,401)	(7,816)
Other income (expense), excluding equity in the loss of R-NAV, LLC ⁴	—	—	787	787
Equity in the loss of R-NAV, LLC	—	—	(262)	(262)
Loss attributable to common stockholders	(4,315)	(146)	(2,876)	(7,337)
Total assets, net of depreciation and amortization:				
United States	3,334	7	7,078	10,419
International	496	—	3	499
Capital expenditures	—	—	—	—

¹ All sales to Cardinal Health are made in the United States; Cardinal distributes the product throughout the U.S. through its network of nuclear pharmacies.

² General and administrative expenses, excluding depreciation and amortization, represent costs that relate to the general administration of the Company and as such are not currently allocated to our individual reportable segments. Marketing and selling expenses are allocated to our individual reportable segments.

³ Loss from operations does not reflect the allocation of certain selling, general and administrative expenses, excluding depreciation and amortization, to our individual reportable segments.

⁴ Amounts consist primarily of interest income, interest expense and changes in fair value of financial instruments, which are not currently allocated to our individual reportable segments.

15. Supplemental Disclosure for Statements of Cash Flows

During the three-month periods ended March 31, 2015 and 2014, we paid interest aggregating \$701,000 and \$907,000, respectively. During the three-month period ended March 31, 2015, we issued 68,157 shares of our common stock as employer matching contributions to our 401(k) plan valued at \$117,000.

In connection with their initial investment in March 2015, the investors in MT were issued warrants that have been determined to be derivative liabilities with an estimated fair value of \$63,000. A \$46,000 deemed dividend related to the beneficial conversion feature within the MT Preferred Stock was also recorded at the time of the initial investment in MT.

16. Subsequent Events

a. Debt Refinancing: In May 2015, we executed a Loan Agreement (the CRG Loan Agreement) with Capital Royalty Group (CRG) providing for an initial funding of \$50 million and bearing interest at 14.0% (the CRG Note). The initial funding is expected to be received by the end of May 2015. We will make quarterly payments of interest only beginning three months after initial funding. Commencing four years after initial funding, the Company will make 24 consecutive equal monthly payments of principal and interest. All unpaid principal, and accrued and unpaid interest, along with an end-of-term final payment fee of \$2.5 million, will be due and payable in full six years after the closing date. The CRG Note will be collateralized by a security interest in substantially all of the Company's assets. The CRG Loan Agreement requires that the Company adhere to certain affirmative and negative covenants, including, without limitation, financial reporting requirements and a prohibition against the incurrence of indebtedness, or creation of additional liens, other than as specifically permitted by the terms of the CRG Loan Agreement. The majority of the proceeds from the CRG Note will be used to repay all amounts outstanding under the Oxford Loan Agreement of approximately \$31.6 million, including payments of \$300,000 as a pre-payment fee and \$2.4 million as an end-of-term final payment fee. The remaining proceeds will be used to support the growth of the Company's Manoccept technology and for general operating purposes.

b. Platinum Credit Facility: The Company drew a total of \$1.5 million under the Platinum credit facility in April 2015. In May 2015, in connection with the execution of the CRG Loan Agreement, the Company also amended the existing Platinum credit facility to allow this facility to remain in place in a subordinated role to the CRG Loan. The amendment will become effective upon initial funding of the CRG Loan Agreement and will allow Platinum to convert the entire \$7.7 million currently outstanding under the credit facility during a time period in which the Company's stock price exceeds \$2.53 per share for 10 consecutive trading days.

c. Sublicense Termination Agreement: In April 2015, the Company entered into an agreement with Alseres Pharmaceuticals, Inc. (Alseres) to terminate the sub-license agreement dated July 31, 2012 for research, development and commercialization of NAV5001. Under the terms of this agreement, Navidea will transfer all regulatory, clinical and manufacturing-related data related to NAV5001 to Alseres. Alseres will reimburse Navidea for any incurred maintenance costs of the contract manufacturer retroactive to March 1, 2015. In addition, as requested by Alseres, Navidea will supply clinical support services for NAV5001 on a cost-plus reimbursement basis. In consideration for the rights granted to Alseres, Navidea will also receive a milestone payment upon clearance to market NAV5001 by the U.S. FDA and a royalty on subsequent net sales of NAV5001.

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

Forward-Looking Statements

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, among other things:

- general economic and business conditions, both nationally and in our markets;
- our history of losses, negative net worth and uncertainty of future profitability;
- our ability to successfully complete research and further development of our drug candidates;
- the timing, cost and uncertainty of obtaining regulatory approvals of our drug candidates;
- our ability to successfully commercialize our drug candidates;

- our expectations and estimates concerning future financial performance, financing plans and the impact of competition;
- our ability to raise capital sufficient to fund our development and commercialization programs;
- our ability to implement our growth strategy;
- anticipated trends in our business;
- advances in technologies;
- and
- other risk factors set forth in this report and detailed in our most recent Annual Report on Form 10-K and other SEC filings.

In addition, in this report, we use words such as “anticipate,” “believe,” “plan,” “expect,” “future,” “intend,” and similar expressions to identify forward-looking statements.

We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this report. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this report may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements.

The Company

Navidea Biopharmaceuticals, Inc., a Delaware corporation, is a precision medicine company focused on the development and commercialization of precision diagnostic and therapeutic agents. Navidea is developing multiple precision-targeted products based on the Manocept™ platform to help identify the sites and pathways of undetected disease and enable better diagnostic accuracy, clinical decision-making, targeted treatment and, ultimately, patient care.

Navidea’s Manocept platform is predicated on the ability of the chemical backbone of the tilmanocept molecule to specifically target the CD206 mannose receptor expressed on over-activated macrophages. The Manocept platform serves as the molecular backbone of Lymphoseek® (technetium Tc 99m tilmanocept) injection, the first product developed by Navidea based on the platform. Lymphoseek is a novel, state-of-the-art, receptor-targeted, small-molecule radiopharmaceutical used in the evaluation of lymphatic basins that may have cancer involvement in patients. Lymphoseek is designed for the precise identification of lymph nodes that drain from a primary tumor, which have the highest probability of harboring cancer. Lymphoseek is approved by the U.S. Food and Drug Administration (FDA) for use in solid tumor cancers where lymphatic mapping is a component of surgical management and for guiding sentinel lymph node biopsy in patients with clinically node negative breast cancer, melanoma or squamous cell carcinoma of the oral cavity. Lymphoseek has also received European approval in imaging and intraoperative detection of sentinel lymph nodes in patients with melanoma, breast cancer or localized squamous cell carcinoma of the oral cavity.

Building on the success of Lymphoseek, the flexible and versatile Manocept platform acts as an engine for the design of purpose-built molecules offering the potential to be utilized across a range of diagnostic modalities, including single photon emission computed tomography (SPECT), positron emission tomography (PET), intra-operative and/or optical-fluorescence detection in a variety of disease states.

Recent preclinical data being developed by the Company using tilmanocept linked to various therapeutic agents also suggest that tilmanocept’s binding affinity to CD206 receptors demonstrates the potential for this technology to be useful in treating diseases linked to the over-activation of macrophages. This includes various cancers as well as autoimmune, infectious, cardiovascular, and central nervous system diseases. Thus, in January 2015, the Company formed a new subsidiary, Macrophage Therapeutics, Inc., to further explore therapeutic applications for the Manocept platform.

In addition, over the last year, the company’s Board of Directors made the decision to reduce our support while seeking to partner or out-license two of our development programs:

- NAV4694 is a fluorine-18 (F-18) radiolabeled PET imaging agent being developed as an aid in the diagnosis of patients with signs or symptoms of Alzheimer’s disease (AD) and mild cognitive impairment (MCI). NAV4694 is in Phase 3 clinical development. The Company is currently engaged in evaluating term sheets related to NAV4694.
- NAV5001 is an iodine-123 (I-123) radiolabeled SPECT imaging agent being developed as an aid in the diagnosis of Parkinson’s disease (PD) and other movement disorders, with potential use as a diagnostic aid in dementia. NAV5001 is in Phase 3 clinical development. In April 2015, the Company entered into an agreement with Alseres Pharmaceuticals, Inc. (Alseres) to terminate the sub-license agreement dated July 31, 2012 for research, development and commercialization of NAV5001. Under the terms of this agreement, Navidea will transfer all regulatory, clinical

and manufacturing-related data related to NAV5001 to Alseres. Alseres will reimburse Navidea for any incurred maintenance costs of the contract manufacturer retroactive to March 1, 2015. In addition, as requested by Alseres, Navidea will supply clinical support services for NAV5001 on a cost-plus reimbursement basis. In consideration for the rights granted to Alseres, Navidea will also receive a milestone payment upon clearance to market NAV5001 by the U.S. FDA and a royalty on subsequent net sales of NAV5001.

Other than Lymphoseek, none of the Company's drug product candidates have been approved for sale in any market.

Product Line Overview

Our primary development efforts over the last few years have been focused on diagnostic products including our now-approved Lymphoseek product, as well as more recently on our other pipeline programs, including NAV4694, NAV5001, and our Manocept platform. In May 2014, the Board of Directors made the decision to refocus the Company's resources to better align the funding of our pipeline programs with the expected growth in Lymphoseek revenue. This realignment has primarily involved reducing our near-term support for our two neurological product candidates, NAV4694 and NAV5001, as we seek to secure a development partner or partners for these programs.

Navidea remains committed to realizing the full potential of Lymphoseek. We intend to deploy our own sales team and strategy to accelerate the strong growth of this important product. The Company believes that the resources being devoted to drive Lymphoseek sales will lead to positive cash flows and profitability. The Company is focused on expanding the market for Lymphoseek in all relevant markets.

The Company is also working to establish new sources of non-dilutive funding, including collaborations and grant funding that can augment the balance sheet as the Company works to reduce spending to levels that can be increasingly offset by growing Lymphoseek revenue. In particular, substantial progress on the Manocept platform has resulted in several promising opportunities, including our R-NAV venture which began in July 2014, and the formation of Macrophage Therapeutics, Inc. in January 2015, which we believe may further expand the Company's pipeline but which require less near-term funding from Navidea than the two ongoing Phase 3 neurological development programs.

Lymphoseek - Regulatory Background

Lymphoseek is a lymph node targeting radiopharmaceutical agent intended for use in intraoperative lymphatic mapping procedures and lymphoscintigraphy employed in the overall diagnostic assessment of certain solid tumor cancers. Lymphoseek has the potential to provide oncology surgeons with information to identify key predictive lymph nodes that may harbor cancer and to help avoid the unnecessary removal of non-cancerous lymph nodes and the surrounding tissue in patients with a variety of solid tumor cancers. Lymphoseek was approved and indicated for use in lymphatic mapping for breast cancer and melanoma by the FDA in March 2013. In June 2014, the FDA approved a supplemental New Drug Application (sNDA) for the expanded use of Lymphoseek indicated for guiding sentinel lymph node biopsy in head and neck cancer patients with squamous cell carcinoma of the oral cavity. In September 2014, the FDA granted Orphan Drug Designation for use in sentinel lymph node detection in patients with cancer of the head and neck. This designation provides for a seven-year market exclusivity period in this indication as well as certain incentives, including federal grants, tax credits and a waiver of PDUFA filing fees. In October 2014, the FDA approved a second sNDA for lymphatic mapping in solid tumors and added sentinel lymph node detection for breast cancer and melanoma to the approved indications. The FDA also allowed expanded utilization of Lymphoseek with or without scintigraphic imaging, known as lymphoscintigraphy, to enable pre-operative imaging and mapping of lymph nodes to facilitate node localization during surgical procedures. Lymphoseek is now the first and only FDA-approved radiopharmaceutical agent for sentinel lymph node detection and is the only FDA-approved agent for lymphatic mapping of solid tumors. Additional trials, including an ongoing trial in colorectal cancer, and others in various stages of execution, planning or consideration, are anticipated to provide additional data to potentially support expansion of the Lymphoseek opportunity.

We submitted our Marketing Authorization Application (MAA) for Lymphoseek to the European Medicines Agency (EMA) in December 2012. In September 2014, the Committee for Medicinal Products for Human Use (CHMP) adopted a positive opinion recommending marketing authorization for Lymphoseek for use in the EU in imaging and intraoperative detection of sentinel lymph nodes draining a primary tumor in adult patients with breast cancer, melanoma, or localized squamous cell carcinoma of the oral cavity. The CHMP's positive opinion was reviewed by the European Commission (EC), which has the authority to approve medicinal products for use in the 28 countries of the EU and generally follows the recommendations of the CHMP. The EC granted marketing authorization for Lymphoseek in the EU in November 2014.

Lymphoseek - Clinical Data Background

In January 2015, we announced that an analysis comparing sentinel lymph node (SLN) biopsy procedures using Lymphoseek (TcTM) + vital blue dye (VDB) to filtered [99mTc] sulfur colloid (fTcSC) + VDB in breast cancer patients was published in the *Annals of Surgical Oncology*. Results demonstrated that (i) Lymphoseek patients had significantly fewer SLNs removed per procedure (mean TcTM: 1.85 vs. fTcSC: 3.24, $p < 0.0001$); (ii) proportionally fewer nodes were necessary to detect cancer spread; and (iii) nodes removed using Lymphoseek held greater predictive value for diagnosing the spread of breast cancer to lymph nodes. The study, “*Comparison of [99mTc]Tilmanocept and Filtered [99mTc]Sulfur Colloid for Identification of SLNs in Breast Cancer Patients*,” authored by Anne Wallace, M.D., et. al., at the UC San Diego School of Medicine was published in the January print issue of the journal *Annals of Surgical Oncology*.

In February 2015, we announced the peer-reviewed publication of results from a Phase 3 clinical trial of Lymphoseek in patients with certain head and neck cancer in the journal *Annals of Surgical Oncology*. The trial assessed the performance of Lymphoseek-guided sentinel node biopsy against the standard of care, nodal pathology, in planned elective neck dissection. Results demonstrated that Lymphoseek met the primary efficacy endpoint of accurately identifying sentinel lymph nodes in subjects with node-negative squamous cell carcinoma of the oral cavity, as compared to the removal of all lymph nodes during multiple level nodal dissection surgery of the head and neck. Pathology assessment of lymph nodes from the multiple-level nodal dissection surgery is considered the “gold standard” to determine the presence and extent of cancer spread. The study, “[99mTc]Tilmanocept Accurately Detects Sentinel Lymph Nodes and Predicts Pathology Status in Patients with Oral Squamous Cell Carcinoma of the Head and Neck: Results of a Phase III Multi-Institutional Trial” was published as an *Online First* article in the journal *Annals of Surgical Oncology*. Data from this study were previously presented in part at the 2013 Society of Nuclear Medicine and Molecular Imaging Annual Meeting (Vancouver, British Columbia), at the 2013 American College of Surgeons Clinical Congress (Washington, DC), and at the 6th European Congress on Head and Neck Oncology-2014 (Liverpool, UK).

An investigator-initiated study is currently underway at the University of California, San Diego (UCSD) to evaluate injection site pain between Lymphoseek and an alternative radiopharmaceutical that is commonly used in lymphatic mapping procedures. The study is designed to determine if patients receiving Lymphoseek experience the same or less pain following injection compared to radiolabeled sulfur colloid, and to measure the amount of discomfort that patients report during and after injection, as well as other characteristics of performance.

Manocept Platform - Diagnostics and Therapeutics Background

Navidea’s Manocept platform is predicated on the ability to specifically target the CD206 mannose receptor expressed on over-activated macrophages. Over-activated macrophages play important roles in many disease states and are an emerging target in many diseases where diagnostic uncertainty exists. This flexible and versatile platform serves as an engine for purpose-built molecules that may enhance diagnostic accuracy, clinical decision-making and ultimately patient care, while offering the potential to utilize a breadth of diagnostic modalities, including SPECT, PET, intra-operative and/or optical-fluorescence detection, as well as the potential delivery of therapeutic compounds targeting macrophages and their role in a variety of immune- and inflammation-based disorders. The Company’s FDA-approved sentinel node/lymphatic mapping agent, Lymphoseek, is representative of the ability to successfully exploit this mechanism to develop powerful new products.

Impairment of the macrophage-driven disease mechanisms is an area of increasing focus in medicine. The number of people affected by all the inflammatory diseases combined is estimated at more than 40 million in the United States and perhaps 700 million worldwide, making these macrophage-mediated diseases an area of remarkable clinical importance. There are many recognized disorders having macrophage involvement, including rheumatoid arthritis (RA), atherosclerosis/vulnerable plaque, Crohn’s disease, tuberculosis (TB), systemic lupus erythematosus, Kaposi’s Sarcoma (KS), and others that span clinical areas in oncology, autoimmunity, infectious diseases, cardiology, and inflammation. Data from studies using agents from the Manocept platform in RA, KS and TB were published in a special supplement, *Nature Outlook: Medical Imaging*, in *Nature’s* October 31, 2013 issue. The supplement included a White Paper by Navidea entitled “*Innovations in receptor-targeted precision imaging at Navidea: Diagnosis up close and personal*,” focused on the Manocept platform.

Over the course of the last few years, management has provided periodic updates regarding the status of the NAV1800 development program we previously referred to as the RIGS program, or radio-immuno-guided surgery. RIGS was originally intended to use a monoclonal antibody as an aid in identifying a primary tumor, ascertaining tumor margins, or determining the extent and location of occult and metastatic tumor in patients with solid tumor cancers, such as colorectal cancer, ovarian cancer, prostate cancer, lung cancer and other cancers of epithelial origin. The detection of clinically occult tumor is intended to provide the surgeon with a more accurate assessment of the extent and location of disease, and therefore may impact the surgical and therapeutic management of the patient.

Our most recent comments regarding our RIGS[®] (radioimmunoguided surgery) program had indicated the lower prioritization of this program relative to our other development activities and comments to the effect that we would not be spending on this program beyond the boundaries of the \$1.5 million grant we were awarded in September 2012. Part of our ongoing consideration of the RIGS program has involved an evaluation of the manufacturability of the monoclonal antibody known as CC49 and its humanized derivative, and ultimately their clinical and commercial viability. In recent years, these evaluations have caused us to question the viability of the monoclonal antibody initiative as it was originally envisioned. During the same time period, we've learned more about tilmanocept, the underlying Manocept backbone, and the potential utility of tilmanocept in identifying tumor-associated macrophages (TAMs), and their consequent potential utility in identifying tumor itself. To that end, we petitioned the NIH to repurpose the grant we were previously awarded towards the study of TAMs in colorectal cancer. We recently received confirmation of the acceptance of this repurposing. We expect this repurposed grant will now support the collaboration we entered into in November 2013 with investigators at the University of Alabama at Birmingham (UAB) to assess diagnostic approaches in colorectal cancer patients. We recognize this repurposing represents a major refocusing of the original RIGS initiative, but we are confident that this change represents the best course of action at this time towards benefiting patients afflicted with colorectal cancer and is one which is consistent with the excitement we're seeing on many fronts related to our work on the Manocept platform. However, we cannot assure you that if further clinical trials for this product proceed, that they will be successful, that the product will achieve regulatory approval, or if approved, that it will achieve market acceptance.

Macrophage Therapeutics Background

In December 2014, the Company formed a new business unit, Macrophage Therapeutics, to further explore therapeutic applications for the Manocept platform. In January 2015, we incorporated the business unit as Macrophage Therapeutics, Inc. (MT), initially a wholly-owned subsidiary of Navidea.

Also in December 2014, MT hosted a conference where data was presented using the Manocept platform compound, tilmanocept, that was generated by independent academic collaborators with expertise in the HIV/AIDS, cancer, TB, RA and cardiovascular disease therapeutic areas. The technical presentations highlighted tilmanocept's ability to target activated macrophages implicated in pathology.

In February 2015, we announced the appointment of leading experts to a newly formed scientific advisory board (SAB) to serve as a strategic resource to MT as it looks to develop therapeutic applications for Navidea's Manocept platform. The inaugural SAB consortium is comprised of world-renowned scientists and clinicians in the areas of oncology, immunology, autoimmune diseases and macrophage biology. The SAB will serve as an ongoing resource to provide management with counsel and guidance pertaining to the research, development, and clinical use of our Manocept technology in therapeutic applications.

In March 2015, MT entered into a Securities Purchase Agreement to sell up to 50 shares of its Series A Convertible Preferred Stock (MT Preferred Stock) and warrants to purchase up to 1,500 common shares of Macrophage Therapeutics, Inc. (MT Common Stock) to Platinum-Montaur Life Sciences, LLC (Platinum) and Dr. Michael Goldberg for a purchase price of \$50,000 per unit. On March 13, 2015, we announced that definitive agreements with the investors had been signed for the sale of the first tranche of 10 shares of MT Preferred Stock and warrants to purchase 300 shares of MT Common Stock to these investors, with gross proceeds to MT of \$500,000. Under the agreement, 40% of the MT Preferred Stock and warrants are committed to be purchased by Dr. Goldberg, and the balance by Platinum. The full 50 shares of MT Preferred Stock and warrants to be sold under the agreement are convertible into and exercisable for MT Common Stock representing an aggregate 1% interest on a fully converted and exercised basis. The Company owns the remainder of the MT Common Stock.

In addition, we entered into a Securities Exchange Agreement with the investors providing them an option to exchange their MT Preferred Stock for our common stock in the event that MT has not completed a public offering with gross proceeds to MT of at least \$50 million by the second anniversary of the closing of the initial sale of MT Preferred Stock, at an exchange rate per share obtained by dividing \$50,000 by the greater of (i) 80% of the twenty-day volume weighted average price per share of our common stock on the second anniversary of the initial closing or (ii) \$3.00. To the extent that the investors do not timely exercise their exchange right, MT has the right to redeem their MT Preferred Stock for a price equal to \$58,320 per share. We also granted MT an exclusive license for certain therapeutic applications of the Manocept technology.

In March 2015, MT announced that data from an ongoing human study indicates that the Manocept technology platform has the ability to safely cross the blood brain barrier without losing its ability to deliver its payload to the intended target. Based on this data and on the advice of the Company's SAB, MT will expand the SAB to include members with specific expertise in central nervous system (CNS) disease. The blood brain barrier has proven to be a significant obstacle to treating many diseases

of the central nervous system. In an imaging study using the Manocept targeted delivery system, lesions on the other side of the blood brain barrier were observed. Many of the leading diseases of the central nervous system such as Alzheimer's and Parkinson's diseases as well as autoimmune CNS diseases such as Multiple Sclerosis and ALS have pathologies that can in part be attributed to over active macrophages, the target for Manocept delivery technology.

In April 2015, MT reported data at the American Association of Cancer Research Annual Meeting demonstrating that the Manocept molecule selectively binds to, and is continuously internalized by, TAMs and KS tumor cells in a preclinical model. Preliminary results from a clinical study also demonstrated that a single, subcutaneous injection of Lymphoseek detects and localizes in KS tumors and the lymph nodes involved in draining the KS tumor fields. Collectively, the data demonstrate the potential for Manocept-based molecules to be used therapeutically to treat Kaposi's sarcoma. Modulation, including killing or modification of macrophage and KS expression profiles, represents a potential for a paradigm-shifting immunotherapeutic strategy.

The Company continues to evaluate emerging data in other disease states to define areas of focus, development pathways and partnering options to capitalize on the Manocept platform, including ongoing studies in KS and RA. The immune-inflammatory process is remarkably complex and tightly regulated with indicators that initiate, maintain and shut down the process. Macrophages are immune cells that play a critical role in the initiation, maintenance, and resolution of inflammation. They are activated and deactivated in the inflammatory process. Because macrophages may promote dysregulation that accelerates or enhances disease progression, diagnostic and therapeutic interventions that target macrophages may open new avenues for controlling inflammatory diseases. We cannot assure you that further evaluation or development will be successful, that any Manocept platform product candidate will ultimately achieve regulatory approval, or if approved, the extent to which it will achieve market acceptance.

NAV4694 (Candidate for Out-License)

NAV4694 is a Fluorine-18 labeled precision radiopharmaceutical candidate for use in the imaging and evaluation of patients with signs or symptoms of AD and potentially also MCI. NAV4694 binds to beta-amyloid deposits in the brain that can then be imaged in PET scans. Amyloid plaque pathology is a required feature of AD and the presence of amyloid pathology is a supportive feature for diagnosis of probable AD. Patients who are negative for amyloid pathology do not have AD.

NAV4694 has been studied in rigorous pre-clinical studies and clinical trials in humans. Clinical studies through Phase 3 have included subjects with MCI, suspected AD patients, and healthy volunteers. Results suggest that NAV4694 has the potential ability to image patients quickly and safely with high sensitivity and specificity.

In May 2014, the Board of Directors made the decision to refocus the Company's resources to better align the funding of our pipeline programs with the expected growth in Lymphoseek revenue. This realignment primarily involved reducing our near-term support for our neurological product candidates, including NAV4694, as we sought a development partner or partners for these programs. The Company is currently engaged in evaluating term sheets related to NAV4694.

NAV5001

NAV5001 is a patented Iodine-123 labeled small molecule radiopharmaceutical used with SPECT imaging to identify the status of specific regions in the brains of patients suspected of having PD. The agent binds to the dopamine transporter (DAT) on the cell surface of dopaminergic neurons in the striatum and substantia nigra regions of the brain. Loss of these neurons is a hallmark of PD. In addition to its potential use as an aid in the differential diagnosis of PD and movement disorders, NAV5001 may also be useful in the diagnosis of Dementia with Lewy Bodies, one of the most common forms of dementia after AD.

In May 2014, the Board of Directors made the decision to refocus the Company's resources to better align the funding of our pipeline programs with the expected growth in Lymphoseek revenue. This realignment primarily involved reducing our near-term support for our neurological product candidates, including NAV5001.

In April 2015, the Company entered into an agreement with Alseres to terminate the sub-license agreement dated July 31, 2012 for research, development and commercialization of NAV5001. Under the terms of this agreement, Navidea will transfer all regulatory, clinical and manufacturing-related data related to NAV5001 to Alseres. Alseres will reimburse Navidea for any incurred maintenance costs of the contract manufacturer retroactive to March 1, 2015. In addition, as requested by Alseres, Navidea will supply clinical support services for NAV5001 on a cost-plus reimbursement basis. In consideration for the rights granted to Alseres, Navidea will also receive a milestone payment upon clearance to market NAV5001 by the U.S. FDA and a royalty on subsequent net sales of NAV5001.

Outlook

Following the U.S. approval of Lymphoseek in March 2013, the Company undertook the initial stages of product launch in the U.S. with our commercialization partner, Cardinal Health, in May 2013. We have begun the process of launching Navidea's direct sales personnel as part of our effort to accelerate Lymphoseek revenue growth in the remainder of 2015 and beyond. Our strategy for increasing Lymphoseek revenue focuses on a new brand strategy reflective of the most recently expanded product label that allows the delivery of a compelling clinical value proposition message targeting the oncology treatment team including surgical oncologists and nuclear medicine physicians, focusing on areas where the concentration of cancer diagnosis occurs to increase the total number of hospitals using Lymphoseek, and increasing the number of doses utilized per account, while continuing to evolve the brand.

Our operating expenses in recent years have been focused primarily on support of Lymphoseek, our Manocept platform, and NAV4694 and NAV5001 product development. We incurred approximately \$4.0 million and \$5.2 million in total on research and development activities during the three-month periods ended March 31, 2015 and 2014, respectively. Of the total amounts we spent on research and development during those periods, excluding costs related to our internal research and development headcount and our general and administrative staff which we do not currently allocate among the various development programs that we have underway, we incurred out-of-pocket charges by program as follows:

Development Program	Three Months Ended March 31,	
	2015	2014
Lymphoseek	\$ 639,796	\$ 625,583
Manocept Platform	164,671	167,013
Macrophage Therapeutics	28,027	—
NAV4694	1,206,333	1,618,128
NAV5001	139,677	519,158
NAV1800	—	27,865

We expect to continue the advancement of our efforts with Lymphoseek and our Manocept platform during the remainder of 2015, however, we expect the cost of these advances to be more than offset by reductions in development costs of NAV4694 and NAV5001, and as a result, we expect our total research and development expenses for the remainder of 2015 to decrease significantly from 2014.

Lymphoseek was approved and indicated for use in lymphatic mapping in patients with breast cancer and melanoma by the FDA in March 2013, with expanded use of Lymphoseek indicated for guiding sentinel lymph node biopsy in head and neck cancer patients with squamous cell carcinoma of the oral cavity approval in June 2014, and for lymphatic mapping in solid tumors and sentinel lymph node detection for breast cancer and melanoma as well as with or without scintigraphic imaging, known as lymphoscintigraphy, in October 2014. Lymphoseek was also approved by the EMA for use in imaging and intraoperative detection of sentinel lymph nodes draining a primary tumor in adult patients with breast cancer, melanoma, or localized squamous cell carcinoma of the oral cavity in the EU in November 2014.

Although our marketing partners share a portion of the direct marketing, sales and distribution costs related to the sale of Lymphoseek, we expect to incur ongoing costs to support product marketing efforts targeting surgical oncologists at the core of the oncology treatment team, as well as medical education-related and market outreach activities associated with Lymphoseek commercialization. Additionally, we anticipate that we will incur costs related to supporting the other product, regulatory, manufacturing and commercial activities related to the potential marketing registration and sale of Lymphoseek in other markets. We also expect to incur costs related to ongoing clinical development efforts to support the use of Lymphoseek in additional cancer types. We cannot assure you that Lymphoseek will achieve regulatory approval in any other market outside the U.S. or EU, or if approved in those markets, that it will achieve market acceptance in the U.S., EU or any other market.

We are currently evaluating existing and emerging data on the potential use of Manocept-related agents in the diagnosis and disease-staging of disorders in which macrophages are involved, such as KS, RA, vulnerable plaque/atherosclerosis, TB and other disease states, to define areas of focus, development pathways and partnering options to capitalize on the Manocept platform. In the near-term, our more active development efforts with respect to the Manocept platform will likely be limited to such evaluations. We will also be evaluating potential funding and other resources required for continued development, regulatory approval and commercialization of any Manocept platform product candidates that we identify for further development, and potential options for advancing development. We cannot assure you that further evaluation or development

will be successful, that any Manocept platform product candidate will ultimately achieve regulatory approval, or if approved, the extent to which it will achieve market acceptance.

In March 2015, the Company initiated a reduction in force that will include seven staff members and four executives. Three of the executives will continue as employees during transition periods of varying lengths, depending upon the nature and extent of responsibilities to be transitioned or wound down. As of the filing date of this document, the specific terms of the executive transition and separation were still being determined. During the three-month period ended March 31, 2015, the Company recognized approximately \$1.4 million of net expense as a result of the reduction in force, which includes actual and estimated separation costs as well as the impact of accelerated vesting and the forfeiture of certain equity awards resulting from the separation. We anticipate that the initial cost of the reduction in force will be offset with savings on compensation expense in the longer term.

The Company reiterates its 2015 Lymphoseek product revenue estimate of \$10 million to \$12 million. Additionally, margins on Lymphoseek product sales are expected to approach and possibly exceed 80% in the coming quarters. The Company also expects, following completion of the partnering activities for NAV4694, that cash operating expenses on a quarterly basis will continue to decrease to the point necessary for the Company to achieve its goals of cash flow break-even from operations. This guidance excludes therapeutic-related research and development costs for the Manocept platform which are expected to be funded separately by Macrophage Therapeutics, Inc.

Results of Operations

Three Months Ended March 31, 2015 and 2014

Lymphoseek Sales and Margins. Net sales of Lymphoseek were \$1.8 million during the first quarter of 2015, compared to \$627,000 during the same period of 2014. The increase was primarily the result of continued efforts to increase sales following the initial product launch in late April of 2013. Gross margins on net sales were 76% and 69% for the first quarters of 2015 and 2014, respectively. Cost of goods sold in the first quarter of 2015 included net inventory losses of \$80,000 related to a production matter. Excluding the one-time inventory charge, gross margin for the first quarter of 2015 would have been 80%. Cost of goods sold in both periods included post-production testing activities required by regulatory authorities, which are charged as one-time period costs, and a royalty on net sales payable under our license agreement with UCSD.

Lymphoseek License Revenue. During the first quarter of 2015, we recognized \$83,000 of the \$2.0 million non-refundable upfront payment received by the Company related to the recent Lymphoseek license and distribution agreement for Europe, which the Company is recognizing on a straight-line basis over two years. No Lymphoseek license revenue was recognized during the first quarter of 2014.

Grant and Other Revenue. During the first quarter of 2015, we recognized \$139,000 of grant revenue as compared to \$125,000 in the first quarter of 2014, primarily related to Small Business Innovation Research grants from the National Institutes of Health supporting NAV4694, Lymphoseek and Manocept platform development. The net increase was primarily due to higher NAV4694 and Lymphoseek grants offset by lower Manocept platform grants. Grant and other revenue for the first quarter of 2015 also included \$51,000 of revenue related to services provided to R-NAV for Manocept development.

Research and Development Expenses. Research and development expenses decreased \$1.2 million, or 24%, to \$4.0 million during the first quarter of 2015 from \$5.2 million during the same period in 2014. The decrease was primarily due to net decreases in drug project expenses related to (i) decreased NAV4694 development costs of \$412,000 including decreased manufacturing-related activities and regulatory costs, offset by increased clinical trial costs; and (ii) decreased NAV5001 development costs of \$379,000 including decreased clinical trial costs and decreased manufacturing-related activities. The net decrease in research and development expenses also included decreased travel, office and other support costs of \$331,000 coupled with decreased compensation including incentive-based awards and other expenses related to net decreased headcount of \$135,000 following the first quarter 2015 and second quarter 2014 reductions in force.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased \$1.6 million, or 40%, to \$5.5 million during the first quarter of 2015 from \$3.9 million during the same period in 2014. The net increase was primarily due to increased compensation including incentive-based awards and other expenses related to the first quarter 2015 reduction in force coupled with increased commercial and medical headcount. The net increase in selling, general and administrative expenses also included a milestone fee due to UCSD related to the license agreement with SpePharm AG, increased investor relations costs, and increased out-of-pocket marketing expenses related to NAV4694.

Other Income (Expense). Other income, net, was \$525,000 during the first quarter of 2015 as compared to other expense, net of \$3.2 million during the same period in 2014. Interest expense increased \$23,000 to \$967,000 during the first quarter of 2015 from \$944,000 for the same period in 2014, primarily due to the higher interest related to the Oxford Note in 2015 versus the GECC/MidCap Notes in 2014, coupled with higher outstanding balances of the Platinum Note in 2015 compared to 2014. Of this interest expense, \$213,000 and \$242,000 in the first quarter of 2015 and 2014, respectively, was non-cash in nature related to the amortization of debt issuance costs and debt discounts related to the Oxford and GECC/MidCap Notes. For the first quarters of 2015 and 2014, we recorded non-cash income of \$1.7 million and \$392,000, respectively, related to changes in the estimated fair value of financial instruments. During the first quarter of 2014, we recorded a \$2.6 million loss on the extinguishment of the GECC/MidCap Notes. During the first quarter of 2015, we recorded non-cash expense from our equity in the loss of R-NAV of \$262,000.

Liquidity and Capital Resources

Cash balances decreased to \$4.9 million at March 31, 2015 from \$5.5 million at December 31, 2014. The net decrease was primarily due to cash used to fund our operations, mainly for research and development activities, of \$4.1 million, offset by draws under the Platinum credit facility of \$3.0 million and the issuance of MT Preferred Stock of \$500,000.

Operating Activities. Cash used in operations decreased \$5.1 million to \$4.1 million during the first quarter of 2015 compared to \$9.2 million used during the same period in 2014.

Accounts receivable increased to \$1.2 million at March 31, 2015 from \$817,000 at December 31, 2014, primarily due to increased receivables due from Cardinal Health resulting from the increase in sales of Lymphoseek.

Inventory levels decreased to \$572,000 at March 31, 2015 from \$932,000 at December 31, 2014, primarily due to finished goods inventory sold and materials inventory consumed for process development purposes coupled with a reserve for inventory losses related to materials for a specific lot which was unsuccessful due to equipment failure during the production process. We expect inventory levels to increase over the remainder of 2015 as we produce additional Lymphoseek inventory to meet increasing demand.

Accounts payable increased to \$1.9 million at March 31, 2015 from \$1.5 million at December 31, 2014, primarily due to net increased payables due to NAV4694, professional services, and Lymphoseek development vendors, offset by net decreased payables due to regulatory and Lymphoseek marketing vendors. Accrued liabilities and other current liabilities increased to \$3.9 million at March 31, 2015 from \$3.2 million at December 31, 2014, primarily due to increased accruals for the first quarter 2015 reduction in force, NAV4694 development costs, and a milestone payment due to UCSD resulting from the license agreement with SpePharm AG, offset by decreased accruals for medical education costs and Lymphoseek development costs. Our payable and accrual balances will continue to fluctuate but will likely decrease overall as we decrease our level of development activity related to NAV4694 and NAV5001, offset by planned increases in commercial activity related to Lymphoseek and development activity related to the Manocept platform.

Investing Activities. Investing activities provided \$15,000 during the first quarter of 2015 compared to using \$993,000 during the same period in 2014. Proceeds from sales of equipment of \$20,000 were offset by patent and trademark costs of \$6,000 during the first quarter of 2015. Capital expenditures of \$986,000 during the first quarter of 2014 were primarily for leasehold improvements, office furniture and NAV4694 production equipment. We expect our overall capital expenditures for the remainder of 2015 will be lower than for the same period in 2014.

Financing Activities. Financing activities provided \$3.5 million during the first quarter of 2015 compared to \$3.2 million provided during the same period in 2014. The \$3.5 million provided by financing activities in the first quarter of 2015 consisted primarily of proceeds from draws under the Platinum credit facility of \$3.0 million and proceeds from issuance of MT Preferred Stock of \$500,000. The \$3.2 million provided by financing activities in the first quarter of 2014 consisted primarily of proceeds from the Oxford Notes of \$30.0 million, offset by payment of the principal and fees related to the extinguishment of the GECC/MidCap Notes as well as issuance costs related to the Oxford Notes of \$26.7 million.

Investment in Macrophage Therapeutics, Inc.

In March 2015, MT entered into a Securities Purchase Agreement to sell up to 50 shares of its Series A Convertible Preferred Stock (MT Preferred Stock) and warrants to purchase up to 1,500 common shares of Macrophage Therapeutics, Inc. (MT Common Stock) to Platinum-Montaur Life Sciences, LLC (Platinum) and Dr. Michael Goldberg for a purchase price of \$50,000 per unit. Under the agreement, 40% of the MT Preferred Stock and warrants are committed to be purchased by Dr. Goldberg, and the balance by Platinum. The full 50 shares of MT Preferred Stock and warrants to be sold under the agreement

are convertible into and exercisable for MT Common Stock representing an aggregate 1% interest on a fully converted and exercised basis. The Company owns the remainder of the MT Common Stock. On March 11, 2015, definitive agreements with the investors were signed for the sale of the first tranche of 10 shares of MT Preferred Stock and warrants to purchase 300 shares of MT Common Stock to these investors, with gross proceeds to MT of \$500,000.

In addition, we entered into a Securities Exchange Agreement with the investors providing them an option to exchange their MT Preferred Stock for our common stock in the event that MT has not completed a public offering with gross proceeds to MT of at least \$50 million by the second anniversary of the closing of the initial sale of MT Preferred Stock, at an exchange rate per share obtained by dividing \$50,000 by the greater of (i) 80% of the twenty-day volume weighted average price per share of our common stock on the second anniversary of the initial closing or (ii) \$3.00. To the extent that the investors do not timely exercise their exchange right, we have the right to redeem their MT Preferred Stock for a price equal to \$58,320 per share. We also granted MT an exclusive license for certain therapeutic applications of the Manocept technology.

Investment in R-NAV, LLC

Navidea's investment in R-NAV, LLC (R-NAV) is being accounted for using the equity method of accounting. Navidea's equity in the loss of R-NAV was \$262,000 for the three-month period ended March 31, 2015. The Company's obligation to provide \$500,000 of in-kind services to R-NAV is being recognized as those services are provided. The Company provided \$21,000 of in-kind services during the three-month period ended March 31, 2015. As of March 31, 2015, the Company has \$441,000 of in-kind services remaining to provide under this obligation. As of March 31, 2015, the outstanding principal balance of the Note Payable to R-NAV was \$666,666.

Capital Royalty Group Debt

In May 2015, we executed a Loan Agreement (the CRG Loan Agreement) with Capital Royalty Group (CRG) providing for an initial funding of \$50 million and bearing interest at 14.0% (the CRG Note). The initial funding is expected to be received by the end of May 2015. We will make quarterly payments of interest only beginning three months after initial funding. Commencing four years after initial funding, the Company will make 24 consecutive equal monthly payments of principal and interest. All unpaid principal, and accrued and unpaid interest, along with an end-of-term final payment fee of \$2.5 million, will be due and payable in full six years after the closing date. The CRG Note will be collateralized by a security interest in substantially all of the Company's assets. The CRG Loan Agreement requires that the Company adhere to certain affirmative and negative covenants, including, without limitation, financial reporting requirements and a prohibition against the incurrence of indebtedness, or creation of additional liens, other than as specifically permitted by the terms of the CRG Loan Agreement. The majority of the proceeds from the CRG Note will be used to repay all amounts outstanding under the Oxford Loan Agreement. The remaining proceeds will be used to support the growth of the Company's Manocept technology and for general operating purposes.

Oxford Debt

In March 2014, we executed a Loan and Security Agreement (the Oxford Loan Agreement) with Oxford Finance, LLC (Oxford), providing for a loan to the Company of \$30 million. Pursuant to the Oxford Loan Agreement, we issued Oxford: (1) Term Notes in the aggregate principal amount of \$30,000,000, bearing interest at 8.5% (the Oxford Notes), and (2) Series KK warrants to purchase an aggregate of 391,032 shares of our common stock at an exercise price of \$1.918 per share, expiring in March 2021 (the Series KK warrants). We began making monthly payments of interest only on April 1, 2014, and monthly payments of principal and interest beginning April 1, 2015. As of March 31, 2015, the outstanding principal balance of the Oxford Loan Notes was \$30 million, and we were in compliance with all covenants of the Oxford Loan Agreement.

We will use the majority of the proceeds from the CRG Note to repay all amounts outstanding under the Oxford Loan Agreement totaling approximately \$31.6 million, including payments of \$300,000 as a pre-payment fee and \$2.4 million million as an end-of-term final payment fee.

Platinum Credit Facility

Our loan agreement with Platinum, as amended, provides us with a credit facility of up to \$50 million (the Second Amended Platinum Note). The Company borrowed an additional \$3.0 million under the Second Amended Platinum Note during the three months ended March 31, 2015. As of March 31, 2015, the outstanding principal balance of the Second Amended Platinum Note was approximately \$6.2 million, with \$28.8 million still available under the credit facility.

The Company drew a total of \$1.5 million under the Platinum credit facility in April 2015. In May 2015, in connection with the execution of the CRG Loan Agreement, the Company also amended the existing Platinum credit facility to allow this facility to remain in place in a subordinated role to the CRG Loan. The amendment will become effective upon initial funding of the CRG Loan Agreement and will allow Platinum to convert the entire \$7.7 million currently outstanding under the credit facility during a time period in which the Company's stock price exceeds \$2.53 per share for 10 consecutive trading days. Following the April 2015 draw and the May 2015 amendment, \$27.3 million will still be available under the credit facility.

Summary

Our future liquidity and capital requirements will depend on a number of factors, including our ability to achieve market acceptance of our products, our ability to complete the development and commercialization of new products, our ability to monetize our investment in non-core technologies, our ability to obtain milestone or development funds from potential development and distribution partners, regulatory actions by the FDA and international regulatory bodies, the ability to procure required financial resources, and intellectual property protection.

In May 2014, the Board of Directors made the decision to refocus the Company's resources to better align the funding of our pipeline programs with the expected growth in Lymphoseek revenue. This realignment primarily involved reducing our near-term support for our two neurological product candidates, NAV4694 and NAV5001, as we sought to secure a development partner or partners for these programs. In April 2015, the Company entered into an agreement with Alseres to terminate the sub-license agreement dated July 31, 2012 for research, development and commercialization of NAV5001. Under the terms of this agreement, Navidea will transfer all regulatory, clinical and manufacturing-related data related to NAV5001 to Alseres. Alseres will reimburse Navidea for any incurred maintenance costs of the contract manufacturer retroactive to March 1, 2015. In addition, as requested by Alseres, Navidea will supply clinical support services for NAV5001 on a cost-plus reimbursement basis. In consideration for the rights granted to Alseres, Navidea will also receive a milestone payment upon clearance to market NAV5001 by the U.S. FDA and a royalty on subsequent net sales of NAV5001. The Company is currently engaged in evaluating term sheets related to NAV4694.

The Company is also working to establish new sources of non-dilutive funding, including collaborations and grant funding that can augment the balance sheet as the Company works to reduce spending to levels that can be increasingly offset by growing Lymphoseek revenue. In particular, substantial progress on the Manocept platform has resulted in several promising opportunities, including our R-NAV venture, which we believe may further expand the Company's pipeline but requires less near-term funding from Navidea than the two temporarily suspended Phase 3 neurological development programs. We plan to focus our resources in 2015 primarily on increasing sales of Lymphoseek and development of products based on the Manocept platform. Although management believes that it will be able to achieve these objectives, they are subject to a number of variables beyond our control, including the nature and timing of any partnering opportunities, the ability to modify contractual commitments made in connection with these programs, and the timing and expense associated with suspension or alteration of clinical trials, and consequently we cannot assure you that we will be able to achieve our objective of bringing our expenses in line with our revenues, and we may need to seek additional debt or equity financing if we cannot achieve that objective in a timely manner.

As stated above, we believe that our current cash balance, as augmented by our recent financing with CRG, and in conjunction with projected revenue growth derived from sales of Lymphoseek, provides us with a solid foundation with which to build our business. Our capital position is further supported by the continuing availability of capital under the credit facility with Platinum, our ability to control expenses, the potential for partnership funding, and the potential to access capital markets through our shelf registration, provide us with adequate financial resources to continue to fund our business plan for the foreseeable future and enable us to reach break-even cash flow from operations in the first quarter of 2016. However, we cannot assure you that Lymphoseek will generate our expected levels of sales and cash flow. We will continue to evaluate our time lines, strategic needs, and balance sheet requirements. We cannot assure you that if we attempt to raise additional capital through debt, royalty, equity or otherwise, we will be successful in doing so on terms acceptable to the Company, or at all. We also cannot assure you that we will be able to gain access and/or be able to execute on securing new development opportunities, successfully obtain regulatory approval for and commercialize new products, achieve significant product revenues from our products, or achieve or sustain profitability in the future.

Recent Accounting Developments

In February 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-02, *Amendments to the Consolidation Analysis*. ASU 2015-02 affects reporting entities that are required to evaluate whether they should consolidate certain legal entities. All legal entities are subject to reevaluation under the revised consolidation model. Specifically, the amendments: (i) modify the evaluation of whether limited partnerships and similar legal entities are variable

interest entities (VIEs) or voting interest entities, (ii) eliminate the presumption that a general partner should consolidate a limited partnership, and (iii) affect the consolidation analysis of reporting entities that are involved with VIEs, particularly those that have fee arrangements and related party relationships. ASU 2015-02 is effective for public entities for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2015. The amendments may be applied using a modified retrospective approach or a full retrospective approach. Early adoption is permitted, including adoption in an interim period. We are currently evaluating the impact of our adoption of ASU 2015-02, however we do not expect the adoption of ASU 2015-02 to have a material effect on our consolidated financial statements upon adoption.

In April 2015, the FASB issued ASU No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs*. ASU 2015-003 requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability rather than as an asset. The recognition and measurement guidance for debt issuance costs are not affected by ASU 2015-03. ASU 2015-03 is effective for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years. Early adoption is permitted. Entities must apply the amendments in ASU 2015-03 on a retrospective basis. We do not expect the adoption of ASU 2015-03 to have a material effect on our consolidated financial statements upon adoption.

Critical Accounting Policies

We base our management's discussion and analysis of financial condition and results of operations, as well as disclosures included elsewhere in this Quarterly Report on Form 10-Q, upon our consolidated financial statements, which we have prepared in accordance with U.S. generally accepted accounting principles. We describe our significant accounting policies in the notes to the audited consolidated financial statements contained in our Annual Report on Form 10-K. We include within these policies our "critical accounting policies." Critical accounting policies are those policies that are most important to the preparation of our consolidated financial statements and require management's most subjective and complex judgment due to the need to make estimates about matters that are inherently uncertain. Changes in estimates and assumptions based upon actual results may have a material impact on our results of operations and/or financial condition.

Revenue Recognition. We currently generate revenue primarily from sales of Lymphoseek. Our standard shipping terms are FOB shipping point, and title and risk of loss passes to the customer upon delivery to a carrier for shipment from Cardinal Health's national distribution center to another point of destination. We generally recognize sales revenue related to sales of our products when the products are shipped. Our customers have no right to return products purchased in the ordinary course of business.

We earn additional revenues based on a percentage of the actual net revenues achieved by Cardinal Health on sales to end customers made during each fiscal year. The amount we charge Cardinal Health related to end customer sales of Lymphoseek are subject to a retroactive annual adjustment. To the extent that we can reasonably estimate the end-customer prices received by Cardinal Health, we record sales based upon these estimates at the time of sale. If we are unable to reasonably estimate end customer sales prices related to products sold, we record revenue related to these product sales at the minimum (i.e., floor) price provided for under our distribution agreement with Cardinal Health.

We also earn revenues related to our licensing and distribution agreements. The terms of these agreements may include payment to us of non-refundable upfront license fees, funding or reimbursement of research and development efforts, milestone payments if specified objectives are achieved, and/or royalties on product sales. We evaluate all deliverables within an arrangement to determine whether or not they provide value on a stand-alone basis. We recognize a contingent milestone payment as revenue in its entirety upon our achievement of a substantive milestone if the consideration earned from the achievement of the milestone (i) is consistent with performance required to achieve the milestone or the increase in value to the delivered item, (ii) relates solely to past performance and (iii) is reasonable relative to all of the other deliverables and payments within the arrangement.

We generate additional revenue from grants to support various product development initiatives. We generally recognize grant revenue when expenses reimbursable under the grants have been paid and payments under the grants become contractually due. Lastly, we recognize revenues from the provision of services to R-NAV, LLC and its subsidiaries.

Research and Development. Research and development (R&D) expenses include both internal R&D activities and external contracted services. Internal R&D activity expenses include salaries, benefits, and stock-based compensation, as well as travel, supplies, and other costs to support our R&D staff. External contracted services include clinical trial activities, chemistry, manufacturing and control-related activities, and regulatory costs. R&D expenses are charged to operations as incurred. We review and accrue R&D expenses based on services performed and rely upon estimates of those costs applicable to the stage of completion of each project.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We base these estimates and assumptions upon historical experience and existing, known circumstances. Actual results could differ from those estimates. Specifically, management may make significant estimates in the following areas:

- *Stock-Based Compensation.* Stock-based payments to employees and directors, including grants of stock options and restricted stock, are recognized in the statements of operations based on their estimated fair values on the date of grant. The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model to value share-based payments and the portion that is ultimately expected to vest is recognized as compensation expense over either (1) the requisite service period or (2) the estimated performance period. The determination of fair value using the Black-Scholes option pricing model is affected by our stock price as well as assumptions regarding a number of complex and subjective variables, including expected stock price volatility, risk-free interest rate, expected dividends and projected employee stock option behaviors. We estimate the expected term based on the contractual term of the awards and employees' exercise and expected post-vesting termination behavior. The restricted stock awards are valued based on the closing stock price on the date of grant and amortized ratably over the estimated life of the award.

Since stock-based compensation is recognized only for those awards that are ultimately expected to vest, we have applied an estimated forfeiture rate to unvested awards for the purpose of calculating compensation cost. These estimates will be revised, if necessary, in future periods if actual forfeitures differ from estimates. Changes in forfeiture estimates impact compensation cost in the period in which the change in estimate occurs.

- *Inventory Valuation.* We record our inventory at the lower of cost (first-in, first-out method) or market. Our valuation reflects our estimates of excess and obsolete inventory as well as inventory with a carrying value in excess of its net realizable value. Write-offs are recorded when product is removed from saleable inventory. We review inventory on hand at least quarterly and record provisions for excess and obsolete inventory based on several factors, including current assessment of future product demand, anticipated release of new products into the market and product expiration. Our industry is characterized by rapid product development and frequent new product introductions. Regulations regarding use and shelf life, product recalls and variation in product utilization all impact the estimates related to excess and obsolete inventory.
- *Fair Value of Derivative Instruments.* Derivative instruments embedded in contracts, to the extent not already a free-standing contract, are bifurcated and accounted for separately. All derivatives are recorded on the consolidated balance sheets at fair value in accordance with current accounting guidelines for such complex financial instruments. Unrealized gains and losses on the derivatives are classified in other expenses as a change in derivative liabilities in the consolidated statements of operations. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk. As of March 31, 2015, our \$4.9 million in cash was primarily invested in interest-bearing money market accounts. Due to the low interest rates being realized on these accounts, we believe that a hypothetical 10% increase or decrease in market interest rates would not have a material impact on our consolidated financial position, results of operations or cash flows.

We also have exposure to changes in interest rates on our variable-rate debt obligations. As of March 31, 2015, the interest rate on certain of our debt obligations was based on the U.S. prime rate. Based on the amount of our variable-rate borrowings at March 31, 2015, which totaled approximately \$6.2 million, an immediate one percentage point increase in the U.S. prime rate would increase our annual interest expense by approximately \$62,000. This estimate assumes that the amount of variable rate borrowings remains constant for an annual period and that the interest rate change occurs at the beginning of the period. Because our debt obligations are currently subject to the minimum interest rates defined in the loan agreements, a decrease in the U.S. prime rate would not affect our annual interest expense.

Foreign Currency Exchange Rate Risk. We do not currently have material foreign currency exposure related to our assets as the majority are denominated in U.S. currency and our foreign-currency based transaction exchange risk is not material. For

the three months ended March 31, 2015 and 2014, we recorded foreign currency transaction gains of approximately \$28,000 and \$2,000, respectively.

Equity Price Risk. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes. Derivative instruments embedded in contracts, to the extent not already a free-standing contract, are bifurcated and accounted for separately. All derivatives are recorded on the consolidated balance sheet at fair value in accordance with current accounting guidelines for such complex financial instruments. The fair value of our warrant liabilities is determined using various inputs and assumptions, several of which are based on a survey of peer group companies since the warrants are exercisable for common stock of a non-public subsidiary company. As of March 31, 2015, we had approximately \$63,000 of derivative liabilities recorded on our balance sheet related to outstanding MT warrants. Due to the relatively low valuation of the MT warrants, a hypothetical 50% change in our stock price would not have a material effect on the consolidated financial statements.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized, and reported within the specified time periods. As a part of these controls, our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of March 31, 2015. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. Based on our evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures are adequately designed and are effective.

Our management, including our Chief Executive Officer and Chief Financial Officer, understands that our disclosure controls and procedures do not guarantee that all errors and all improper conduct will be prevented. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute assurance that the objectives of the control system are met. Further, a design of a control system must reflect the fact that there are resource constraints, and the benefit of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of improper conduct, if any, have been detected. These inherent limitations include the realities that judgments and decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more persons, or by management override of the control. Further, the design of any system of controls is also based in part upon assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations of a cost-effective control system, misstatements due to error or fraud may occur and may not be detected.

Our internal control over financial reporting is a process designed 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, and includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that receipts and expenditures of the Company are being made only in accordance with authorization of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Changes in Control Over Financial Reporting

During the quarter ended March 31, 2015, there were no changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1A. Risk Factors

There have been no material changes to the Company's risk factors as previously reported in the Company's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 16, 2015.

Item 2. Unregistered Sales of Equity Securities

During the three-month period ended March 31, 2015, we issued 36,839 shares of our common stock to certain members of our Board of Directors as payment in lieu of a portion of their fourth quarter 2014 compensation. The issuance of these securities was exempt from registration under Section 4(2) of the Securities Act and Regulation D promulgated thereunder.

On March 11, 2015 our subsidiary Macrophage Therapeutics, Inc. (MT) issued ten shares of its Series A Convertible Preferred Stock (MT Preferred Stock) and warrants to purchase 300 shares of its common stock (MT Warrants) to two investors. Each share of MT Preferred Stock is convertible at the option of the holder into 30 shares of the common stock of MT, subject to adjustment for stock splits, combinations, recapitalizations, dividends or other distributions, and certain reorganizations. Pursuant to the terms of a Securities Exchange Agreement between the Company and the investors, the investors have an option to exchange their MT Preferred Stock for common stock of the Company in the event that MT has not completed a public offering with gross proceeds to MT of at least \$50 million by the second anniversary of the closing of the initial sale of MT Preferred Stock, at an exchange rate per share obtained by dividing \$50,000 by the greater of (i) 80% of the twenty-day volume weighted average price per share of our common stock on the second anniversary of the initial closing or (ii) \$3.00. To the extent that the investors do not timely exercise their exchange right, MT has the right to redeem their MT Preferred Stock for a price equal to \$58,320 per share. Proceeds of \$500,000 from the sale of these securities are to be used for MT's development programs and general working capital. The issuance of these securities was exempt from registration under Section 4(2) of the Securities Act and Regulation D promulgated thereunder.

Item 6. Exhibits

- 10.1 Navidea Biopharmaceuticals, Inc. 2014 Stock Incentive Plan (as amended March 3, 2015).*
- 10.2 Securities Exchange Agreement dated as of March 11, 2015 among Macrophage Therapeutics, Inc., Platinum-Montaur Life Sciences, LLC and Michael Goldberg, M.D.*
- 31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
- 31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
- 32.1 Certification of Chief Executive Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.**
- 32.2 Certification of Chief Financial Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.**
- 101.INS XBRL Instance Document*
- 101.SCH XBRL Taxonomy Extension Schema Document*
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document*
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document*
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document*
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document*

* Filed herewith.

** Furnished herewith.

Items 1, 3, 4 and 5 are not applicable and have been omitted.

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.

NAVIDEA BIOPHARMACEUTICALS, INC.
(the Company)
May 11, 2015

By: /s/ Ricardo J. Gonzalez

Ricardo J. Gonzalez
President and Chief Executive Officer
(duly authorized officer; principal executive officer)

By: /s/ Brent L. Larson

Brent L. Larson
Executive Vice President and Chief Financial Officer
(principal financial and accounting officer)

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* Filed herewith.

** Furnished herewith.

NAVIDEA BIOPHARMACEUTICALS, INC.
2014 Stock Incentive Plan
(as amended March 3, 2015)

Article I
Establishment, Purpose, Duration

Section 1.1 Establishment of the Plan. Navidea Biopharmaceuticals, Inc. (the “Company”) desires to adopt the Navidea Biopharmaceuticals, Inc. 2014 Stock Incentive Plan.

Section 1.2 Purpose. The Plan is designed to promote the achievement of both short-term and long-term objectives of the Company by (a) aligning compensation of Participants with the interests of Company shareholders, (b) enhancing the interest of Participants in the growth and success of the Company, and (c) attracting and retaining Participants of outstanding competence.

Section 1.3 Effective Date and Duration. This Plan, if approved by a majority of the votes cast by Company shareholders at the 2014 annual meeting shall become effective at such date. If such shareholder approval is not obtained, no Awards will be granted under this Plan. If approved, the Plan shall remain in effect, subject to the right of the Board or the Committee to amend and terminate the Plan at any time as provided in this Plan, until all Shares subject to it shall have been purchased or acquired according to the Plan’s provisions. In no event, however, may an ISO be granted under the Plan more than ten years after the date the Plan was approved by the shareholders.

Article II
Definitions

Whenever used in the Plan, the following terms shall have the meanings set forth below and, when the meaning is intended, the initial letter of the word is capitalized:

Section 2.1 162(m) Award. “162(m) Award” means an Award that is intended to be deductible as “performance-based compensation” under Code Section 162(m).

Section 2.2 1934 Act. “1934 Act” means the Securities Exchange Act of 1934, as amended.

Section 2.3 Affiliate. “Affiliate” means any entity that is a Subsidiary or a parent corporation, as defined in Code Section 424(e), of the Company, or any other entity designated by the Committee as covered by the Plan in which the Company has, directly or indirectly, at least a 20% voting interest.

Section 2.4 Award. “Award” means any Option, SAR, Restricted Stock, Restricted Stock Unit, Performance Share, Performance Unit, or other Article XII stock-based award granted to a Participant under the Plan.

Section 2.5 Award Agreement. “Award Agreement” means a written or electronic statement or agreement prepared by the Company that sets forth the terms, conditions and restrictions applicable to Awards granted under the Plan.

Section 2.6 Board or Board of Directors. “Board” or “Board of Directors” means the Board of Directors of the Company.

Section 2.7 Cash-Based Award. “Cash-Based Award” means an Award granted to a Participant, as described in Article XI herein.

Section 2.8 Cause. “Cause,” unless such term or an equivalent term is otherwise defined with respect to an Award by the Participant’s Award Agreement, shall be as defined in any employment agreement between the Company and a Participant; provided however, that if there is no such employment agreement, “Cause” shall mean any of the following: (a) the Participant’s conviction of any criminal violation involving dishonesty, fraud or breach of trust; (b) the Participant’s willful engagement in any misconduct in the performance of his or her duty that materially injures the Company; (c) the Participant’s performance of any act which would materially and adversely impact the business of the Company; or (d) the Participant’s willful and substantial nonperformance of assigned duties. Notwithstanding the foregoing, the Committee shall have sole discretion with respect to the application of the provisions of subsections (a)-(d) above, and such exercise of discretion shall be conclusive and binding upon the Participant and all other persons.

Section 2.9 Change in Control. A "Change in Control" will be deemed to have occurred if and when (i) a person, partnership, corporation, trust or other entity ("Person") acquires or combines with the Company, or 50 percent or more of its assets or earning power, in one or more transactions, and after such acquisition or combination, less than a majority of the outstanding voting shares of the Person surviving such transaction (or the ultimate parent of the surviving Person) is owned by the owners of the voting shares of the Company outstanding immediately prior to such acquisition or combination, unless the Change in Control transaction or transactions have been approved in advance by Board members representing at least two-thirds of the Board members; or (ii) during any period of two consecutive years during the term of this Plan, individuals who at the beginning of such period are members of the Board ("Original Board Members") cease for any reason to constitute at least a majority of the Board, unless the election of each Board member who was not an Original Board Member has been approved in advance by Board members representing at least two-thirds of the Board members then in office who were Original Board Members. This definition shall be interpreted in accordance with the guidance under Code Section 409A, that describes a change in control, change in effective control, and change in ownership of a substantial portion of the assets of a corporation.

Section 2.10 Code. "Code" means the Internal Revenue Code of 1986, as amended from time to time.

Section 2.11 Committee. "Committee" means the Compensation, Nominating and Governance Committee of the Board of Directors, or such other committee as the Board shall appoint from time to time, which shall consist of two or more directors, all of whom are intended to satisfy the requirements for an "outside director" under Code Section 162(m), a "nonemployee director" within the meaning of Rule 16b-3, and an "independent director" under the rules of NYSE MKT (or any other national securities exchange which is the principal exchange on which the Shares may then be traded); provided, however, that as to any Award intended to be a 162(m) Award, if any member of the Committee shall not satisfy such "outside director" requirements, "Committee" means a subcommittee (of two or more persons) of the Committee consisting of all members thereof who satisfy such "outside director" requirement; and further provided that any action taken by the Committee shall be valid and effective whether or not members of the Committee at the time of such action are later determined not to have satisfied the requirements for membership specified above.

Section 2.12 Company. "Company" means Navidea Biopharmaceuticals, Inc., a Delaware corporation, and any current or future parent or subsidiary, or any successor thereto.

Section 2.13 Consultant. "Consultant" means any person who provides services to the Company or any Subsidiary (other than in connection with the offer or sale of securities of the Company or any Subsidiary, in a capital raising transaction), who is neither an Employee nor a Director and who is a consultant or advisor to the Company or any Subsidiary within the meaning of General Instruction A.1 to Form S-8 promulgated by the SEC under the Securities Act of 1933.

Section 2.14 Covered Officer. "Covered Officer" means a Participant who, in the sole judgment of the Committee, may be treated as a "covered employee" under Code Section 162(m) at the time income is recognized by such Participant in connection with an Award that is intended to qualify as a 162(m) Award.

Section 2.15 Disability or Disabled. "Disability" or "Disabled" means a condition that (a) causes the Participant to be unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, (b) causes the Participant, by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, to receive income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Company or its Affiliates or (c) causes the Participant to be eligible to receive Social Security disability payments. The Committee, in its sole discretion, shall determine the date of any Disability.

Section 2.16 Employee. "Employee" means any person who is an employee of the Company or any Affiliate; provided, however, that with respect to ISOs, "Employee" means any person who is considered an employee of the Company or any Affiliate for purposes of Treasury Regulation Section 1.421-1(h).

Section 2.17 Fair Market Value. "Fair Market Value" means, on any given date and as may be specified in an Award Agreement, (a) the closing sales price per share (or, if otherwise specified by the Committee, a price that is based on the opening, actual, high, low, or average sales prices per Share) of the Company's common stock as reported on the NYSE MKT or such other established securities market on which the Shares are traded, or, if there were no reported sales of Shares on such date, then, unless otherwise required under the Code, the business day immediately preceding such date; or (b) if (a) does not apply, the price that the Committee in good faith determines through any reasonable valuation method that a Share might change hands between a willing buyer and a willing seller, neither being under compulsion to buy or to sell and both having reasonable knowledge of the relevant facts. Notwithstanding the above, for purposes of broker-facilitated cashless exercises of Awards involving Shares under the Plan, "Fair

Market Value” shall mean the real-time selling price of such Shares as reported by the broker facilitating such exercises.

Section 2.18 Grant Price. “Grant Price” means the price established at the time of grant of a SAR pursuant to Article VII (Stock Appreciation Rights), used to determine whether there is any payment due upon exercise of the SAR, which shall not be less than 100% of the Fair Market Value of the Shares at the time the SAR was granted.

Section 2.19 Incentive Stock Option or ISO. “Incentive Stock Option” or “ISO” means an Option that is an “incentive stock option” within the meaning of Code Section 422.

Section 2.20 Nonemployee Director. “Nonemployee Director” means a member of the Board who is not an Employee.

Section 2.21 Nonqualified Stock Option or NQSO. “Nonqualified Stock Option” or “NQSO” means an option to purchase Shares that does not constitute an Incentive Stock Option under Code Section 422 (or any successor Code Section).

Section 2.22 Option. “Option” means a right to purchase Shares in accordance with the terms and conditions of the Plan.

Section 2.23 Option Exercise Price. “Option Exercise Price” means the price at which a Share may be purchased by a Participant pursuant to an Option.

Section 2.24 Participant. “Participant” means an Employee, Nonemployee Director, or Consultant who is selected to receive an Award or who has an outstanding Award granted under the Plan.

Section 2.25 Performance Measure. “Performance Measure” means one or more business criteria to be used by the Committee in establishing Performance Targets for 162(m) Awards under the Plan.

Section 2.26 Performance Shares. “Performance Shares” means an Award designated as Performance Shares and granted to a Participant in accordance with Article IX of the Plan.

Section 2.27 Performance Target. “Performance Target” means the specific, objective goal or goals that are timely set forth in writing by the Committee for grants of 162(m) Awards under the Plan with respect to any one or more Performance Measures.

Section 2.28 Performance Unit. “Performance Unit” means an Award designated as a Performance Unit and granted to a Participant in accordance with Article X of this Plan.

Section 2.29 Period of Restriction. “Period of Restriction” means the period during which the transfer of Shares underlying an Award is limited in some way, or the Shares are subject to a substantial risk of forfeiture.

Section 2.30 Plan. “Plan” means the Navidea Biopharmaceuticals, Inc. 2014 Stock Incentive Plan, as may be amended from time to time.

Section 2.31 Prior Plan. “Prior Plan” means the Navidea Biopharmaceuticals, Inc. Fourth Amended and Restated 2002 Stock Incentive Plan.

Section 2.32 Restricted Stock. “Restricted Stock” means an Award that is a grant of Shares delivered to a Participant, subject to restrictions described in Article VIII of this Plan.

Section 2.33 Restricted Stock Unit or RSU. “Restricted Stock Unit” or “RSU” means an Award that is subject to the restrictions described in Article VIII of this Plan and is a promise of the Company to deliver at the end of a Period of Restrictions (a) one Share for each RSU, (b) cash in an amount equal to the Fair Market Value of one Share for each RSU, or (c) a combination of (a) and (b), as determined by the Committee.

Section 2.34 Retirement. “Retirement” means, with respect to Employees, termination of Service by reason of the Employee’s retirement at or after his or her having satisfied the requirements for retirement under the applicable Company qualified retirement plan, or in such other termination of Service determined to be a retirement by the Committee. With respect to a Nonemployee Director, “Retirement” means a termination of Service on the Board that is to qualify as a retirement with the consent of the remaining Nonemployee Directors. With respect to a Consultant, no termination of Service shall be deemed to be on account of Retirement.

Section 2.35 Rule 16b-3. “Rule 16b-3” means rule 16b-3 promulgated under the 1934 Act, as amended, and

any future determination amending, supplementing, or superseding such regulation.

Section 2.36 Section 16 Person. “Section 16 Person” means a person who, with respect to shares, is subject to Section 16 of the 1934 Act.

Section 2.37 Service. “Service” means a Participant’s work for the Company or an Affiliate, either as an Employee, Nonemployee Director, or Consultant.

Section 2.38 Shares. “Shares” means the shares of common stock of the Company, \$0.001 par value per share.

Section 2.39 Stock Appreciation Right or SAR. “Stock Appreciation Right” or “SAR” means an Award designated as a SAR in accordance with the terms of Article VII of the Plan.

Section 2.40 Subsidiary. “Subsidiary” means any corporation, partnership, joint venture, or other entity in which the Company has a majority voting interest; provided, however, that with respect to ISOs, the term “Subsidiary” shall include only an entity that qualifies under Code Section 424(f) as a “subsidiary corporation” with respect to the Company.

Section 2.41 Tandem SAR. “Tandem SAR” means a SAR that is granted in connection with a related Option, the exercise of which shall require forfeiture of the right to purchase a Share under the related Option (with a similar cancellation of the Tandem SAR when a Share is purchased under the Option). Except for the medium of payment, the terms of a Tandem SAR shall be identical in all material respects to the terms of the related Option.

Article III **Administration**

Section 3.1 Administration by the Committee. The Plan shall be administered by the Committee. All questions of interpretation of the Plan, of any Award Agreement, or of any other form of agreement or other document employed by the Company in the administration of the Plan or of any Award, shall be determined by the Committee, and such determinations shall be final, binding and conclusive upon all persons having an interest in the Plan or such Award, unless fraudulent or made in bad faith. Any and all actions, decisions and determinations taken or made by the Committee in the exercise of its discretion pursuant to the Plan or Award Agreement or other agreement thereunder (other than determining questions of interpretation pursuant to the preceding sentence) shall be final, binding and conclusive upon all persons having an interest therein. Notwithstanding the foregoing, the Board shall perform the functions of the Committee for purposes of granting Awards under the Plan to Nonemployee Directors.

Section 3.2 Powers of the Committee. In addition to any other powers set forth in the Plan and subject to the provisions of the Plan, the Committee shall have the full and final power and authority, in its discretion:

- (a) to determine the persons to whom, and the time or times at which, Awards shall be granted and the number of Shares to be subject to each Award;
- (b) to determine the type of Award granted;
- (c) to determine the Fair Market Value of Shares or other property where applicable;
- (d) to determine the terms, conditions and restrictions applicable to each Award (which need not be identical) and any Shares acquired pursuant thereto (other than the Options granted to Nonemployee Directors, as described under the Plan), including, without limitation, (i) the exercise or purchase price of Shares pursuant to any Award, (ii) the method of payment for Shares purchased pursuant to any Award, (iii) the method for satisfaction of any tax withholding obligation arising in connection with Award, including by the withholding or delivery of Shares, (iv) the timing, terms and conditions of the exercisability or vesting of any Award or any Shares acquired pursuant thereto, (v) the time of the expiration of any Award, (vi) the effect of the Participants termination of Service on any of the foregoing, (vii) adopt procedures and subplans as are necessary or appropriate to permit participation in the Plan by Employees, Consultants, and Nonemployee Directors who are foreign nationals or employed outside of the United States, and (viii) all other terms, conditions and restrictions applicable to any Award or Shares acquired pursuant thereto not inconsistent with the terms of the Plan;
- (e) to determine how an Award will be settled, as provided under an Award Agreement;
- (f) to approve one or more forms of Award Agreement;
- (g) to amend, modify, extend, cancel or renew any Award or to waive any restrictions or conditions

applicable to any Award or any Shares acquired upon the exercise thereof;

- (h) to accelerate, continue, extend or defer the exercisability of any Award or the vesting of any Shares acquired upon the exercise thereof, including with respect to the period following a Participants termination of Service;
- (i) to prescribe, amend or rescind rules, guidelines and policies relating to the Plan, or to adopt sub-plans or supplements to, or alternative versions of, the Plan, including, without limitation, as the Committee deems necessary or desirable to comply with the laws or regulations of or to accommodate the tax policy, accounting principles or custom of, foreign jurisdictions whose citizens may be granted Awards; and
- (j) to correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award Agreement and to make all other determinations and take such other actions with respect to the Plan or any Award as the Committee may deem advisable to the extent not inconsistent with the provisions of the Plan or applicable law.

Section 3.3 Action by the Committee. A majority of the members of the Committee shall constitute a quorum for any meeting of the Committee, and the act of a majority of the members present at any meeting at which a quorum is present or the act approved in writing by a majority of all the members of the Committee shall be the act of the Committee. In the performance of their duties under this Plan, the Committee members shall be entitled to rely upon information and advice furnished by the Company's officers, employees, accountants or counsel, or any executive compensation consultant or other professional retained by the Company or the Committee to assist in the administration of this Plan.

Section 3.4 Delegation by the Committee. The Committee, in its sole discretion and on such terms and conditions it may provide, may delegate all or any part of its authority and powers under the Plan to one or more officers or Nonemployee Directors; provided, however, that the Committee may not delegate its authority and powers (a) with respect to Section 16 Persons, or (b) in any way that would jeopardize the qualification of 162(m) Awards under Code Section 162(m) or the Plan's qualification under Rule 16b-3.

Section 3.5 Nonemployee Directors. Notwithstanding any provisions of the Plan to the contrary, the Board shall administer Section 6.8 of the Plan, and the Committee shall exercise no discretion with respect to Section 6.8. In the Board's administration of Section 6.8 are the Options and Shares granted to Nonemployee Directors, the Board shall have all of the authority and discretion otherwise granted to the Committee with respect to the administration of the Plan.

Section 3.6 Indemnification. The Company will indemnify each member of the Committee against costs, expenses and liabilities (other than amounts paid in settlements to which the Company does not consent, which consent will not be unreasonably withheld) reasonably incurred by such member in connection with any action to which he or she may be a party by reason of service as a member of the Committee, except in relation to matters as to which he or she is adjudged in such action to be personally guilty of negligence or willful misconduct in the performance of his or her duties. The foregoing right to indemnification is in addition to such other rights as the Committee member may enjoy as a matter of law, by reason of insurance coverage of any kind, or otherwise.

Article IV

Stock Subject to the Plan

Section 4.1 Aggregate Shares. Subject to adjustment as provided under the Plan, the total number of Shares that are available for Awards under the Plan shall not exceed in the aggregate 5,000,000 Shares, plus any Shares subject to outstanding awards granted under the Prior Plan and that expire or terminate for any reason, shall be available under this Plan. Such Shares may be authorized and unissued Shares, treasury Shares, or Shares acquired on the open market.

Section 4.2 Individual Award Limitations. Subject to adjustments as provided in herein, the maximum number of Shares for which Awards may be granted under the Plan during the term of the Plan to any one individual in any calendar year may not exceed 750,000 shares. The maximum aggregate Cash-Based Award shall be \$2,000,000 per year.

Section 4.3 Share Counting. The following Shares related to Awards will be available for issuance again under the Plan: (a) Shares related to Awards paid in cash (b) Shares related to Awards that expire, are forfeited, are cancelled, or terminate for any other reason without the delivery of the Shares, (c) Shares equal in number to the Shares withheld, surrendered or tendered in payment of the exercise price of an Award, and (d) Shares tendered or withheld in order to satisfy tax withholding obligations.

Section 4.4 Adjustment to Number of Shares.

- (a) Appropriate adjustments in the aggregate number of Shares issuable pursuant to the Plan, the number of Shares subject to each outstanding award granted under the Plan, the Option price with respect to Options and Tandem SARs, the specified price of SARs not connected to Options, and the value for Performance Units, shall be made to give effect to any increase or decrease in the number of issued Shares resulting from a subdivision or consolidation of Shares, whether through recapitalization, stock split, reverse stock split, spin-off, spin-out or other distribution of assets to shareholders, stock distributions or combinations of Shares, payment of stock dividends, other increase or decrease in the number of such Shares outstanding effected without receipt of consideration by the Company, or any other occurrence for which the Committee determines an adjustment is appropriate.
- (b) In the event of any merger, consolidation or reorganization of the Company with any other corporation or corporations, or an acquisition by the Company of the stock or assets of any other corporation or corporations, there shall be substituted on an equitable basis, as determined by the Committee in its sole discretion, for each Share then subject to the Plan, and for each Share then subject to an Award granted under the Plan, the number and kind of Shares of stock, other securities, cash or other property to which the holders of Shares of the Company are entitled pursuant to such transaction.
- (c) Without limiting the generality of the foregoing provisions of this paragraph, any such adjustment shall be deemed to have prevented any dilution or enlargement of a Participant's rights, if such Participant receives in any such adjustment, rights that are substantially similar (after taking into account the fact that the Participant has not paid the applicable option price) to the rights the Participant would have received had he exercised his outstanding Award and become a shareholder of the Company immediately prior to the event giving rise to such adjustment. Adjustments under this paragraph shall be made by the Committee, whose decision as to the amount and timing of any such adjustment shall be conclusive and binding on all persons.

Article V

Eligibility and Participation

Section 5.1 Eligibility to Receive Awards. Persons eligible to receive Awards under the Plan are Employees, Nonemployee Directors, and Consultants.

Section 5.2 Participation in the Plan. Subject to the other provisions of this Plan, the Committee has the full discretion to grant Awards to eligible persons described in Section 5.1. Eligible persons may be granted more than one Award. Eligibility in accordance with this Section, however, shall not entitle any person to be granted an Award, or, having been granted an Award, to be granted an additional Award.

Article VI

Options

Section 6.1 Grant of Options. Options shall be evidenced by Award Agreements in such form and not inconsistent with the Plan as the Committee shall approve from time to time. Award Agreements shall specify the Option Exercise Price, the duration of the Option, the number of Shares to which the Option pertains, provisions for vesting and exercisability, whether the Option is an ISO or NQSO, and such other provisions as the Committee shall determine. Award Agreements may incorporate all or any of the terms of the Plan by reference and shall comply with the following terms and conditions. Except in accordance with equitable adjustments as provided in Section 4.4 of this Plan, no Option granted under the Plan shall at any time be repriced or subject to cancellation and replacement without shareholder approval.

Section 6.2 Option Exercise Price. The Option Exercise Price shall not be less than 100% of the Fair Market Value of a Share on the day the Option is granted.

Section 6.3 Exercise of Options. Each Award Agreement shall state the period or periods of time within which the Option may be exercised by the optionee, in whole or in part, which shall be such period or periods of time as may be determined by the Committee, provided that the Option exercise period shall not end later than ten years after the date of the grant for any ISO. The Committee shall have the power to permit in its discretion an acceleration of the previously determined exercise terms, within the terms of the Plan, under such circumstances and upon such terms and conditions as it deems appropriate.

Section 6.4 Payment of Option Exercise Price. Except as otherwise provided in the Plan, or in any Award Agreement, the optionee shall pay the Option Exercise Price upon the exercise of any Option (i) in cash, (ii) by authorizing a third party with which the optionee has a brokerage or similar account to sell the Shares (or a sufficient portion of such Shares) acquired upon the exercise of the Option and remit to the Company a portion of the sale proceeds sufficient to pay the entire Option Exercise Price to the Company, (iii) by delivering Shares that have an aggregate Fair Market Value on the date of exercise equal to the Option Exercise Price; (iv) by authorizing the Company to withhold from the total number of Shares as to which the Option is being exercised the number of Shares having a Fair Market Value on the date of exercise equal to the aggregate Option Exercise Price for the total number of Shares as to which the Option is being exercised, (v) by such other means by which the Committee determines to be consistent with the purpose of the Plan and applicable law, or (vi) by any combination of (i), (ii), (iii), (iv), and (v). In the case of an election pursuant to (i) above, cash shall mean cash or check issued by a federally insured bank or savings and loan association and made payable to Navidea Biopharmaceuticals, Inc. In the case of payment pursuant to (ii) or (iii) above, the optionee's authorization must be made on or prior to the date of exercise and shall be irrevocable. In lieu of a separate election governing each exercise of an Option, an optionee may file a blanket election with the Committee, which shall govern all future exercises of Options until revoked by the optionee.

Section 6.5 Transfer of Shares. The Committee may impose such restrictions on any Shares acquired pursuant to the exercise of an Option as it may deem advisable, including, without limitation, restrictions under applicable federal securities laws, under the requirements of any stock exchange or market upon which such Shares are then listed and/or traded, and under any blue sky or state securities laws applicable to such Shares.

Section 6.6 Rights Upon Termination of Service. Unless otherwise provided by the Committee in an Option Agreement, in the event that an optionee terminates Service for any reason other than death, Disability or Retirement, the right of the optionee to exercise the Option will terminate immediately, unless the Committee in its sole discretion elects to extend the exercisability of an Option during its term to not more than three (3) months from the date of the termination of service. In the event that an optionee dies, Retires, or becomes Disabled prior to termination of his option without having fully exercised his option, the optionee or his successor shall have the right to exercise the option during its term within a period of one year after the date of such termination due to death, Disability or Retirement, to the extent that the option was exercisable at the date of termination due to death, Disability or retirement, or during such other period and subject to such terms, including accelerated vesting, as may be determined by the Committee.

Section 6.7 Additional Rules for Incentive Stock Options.

- (a) Employees. Incentive Stock Options may be granted only to Employees of the Company or a Subsidiary and not to Employees of any Affiliate unless such entity is classified as a "disregarded entity" of the Company or the applicable Subsidiary under the Code. Incentive Stock Options may not be granted to Nonemployee Directors.
- (b) Exercise Limitations. The Committee, in its sole discretion, may provide in each Award Agreement the period or periods of time within which the Option may be exercised by the optionee, in whole or in part, provided that the Option period shall not end later than ten years after the date of the grant of the Option. The aggregate Fair Market Value (determined with respect to each Incentive Stock Option at the time of grant) of the Shares with respect to which Incentive Stock Options are exercisable for the first time by an individual during any calendar year (under all incentive stock option plans of the Company and its Subsidiaries) shall not exceed \$100,000. If the aggregate Fair Market Value (determined at the time of grant) of the Shares subject to an Option, which first becomes exercisable in any calendar year, exceeds this limitation, so much of the Option that does not exceed the applicable dollar limit shall be an Incentive Stock Option and the remainder shall be a Nonqualified Stock Option; but in all other respects, the original Award Agreement shall remain in full force and effect. Notwithstanding anything herein to the contrary, if an Incentive Stock Option is granted to an individual who owns stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or of its parent or subsidiary corporations, within the meaning of Code Section 422(b)(6), (i) the purchase price of each Share subject to the Incentive Stock Option shall be not less than one hundred ten percent (110%) of the Fair Market Value of the Share on the date the Incentive Stock Option is granted, and (ii) the Incentive Stock Option shall expire, and all rights to purchase Shares thereunder shall cease, no later than the fifth anniversary of the date the Incentive Stock Option was granted.
- (c) Rights Upon Termination of Service. The rules under Section 6.6 of this Plan generally shall apply when an optionee holding an ISO terminates Service. Notwithstanding the foregoing, in accordance with Code Section 422, if an Incentive Stock Option is exercised more than ninety days after termination of Service, that portion of the Option exercised after such date shall automatically be a Nonqualified Stock Option, but, in all other respects, the original Award Agreement shall remain in full force and effect.

Section 6.8 Additional Rules for Options Granted to Nonemployee Directors.

- (a) Granting of Options. Subject to the terms and provisions of the Plan, the Board may grant Nonqualified Stock Options to purchase shares to Nonemployee Directors.
- (b) Terms of Options. The Board, in its sole discretion, shall determine the number of shares subject to each Option granted to a Nonemployee Director.
- (c) Option Agreement. Each Award granted pursuant to this subsection 9 shall be evidenced by a written Award Agreement which shall be executed by the Participant and the Company.
- (d) Exercise Price. The Grant Price for the Shares subject to each Option granted pursuant to this subsection shall be not less than one hundred percent (100%) of the Fair Market Value of a Share on the day of grant.
- (e) Exercisability. Each Option granted pursuant to this Section 6.8 shall become exercisable in full one year after the date the Option is granted. If a Nonemployee Director incurs a termination of Service for a reason other than Retirement, death or Disability, his or her Options which are not exercisable on the date of such termination of service shall never become exercisable. If the termination of Service is on account of Retirement, death or Disability, the Option shall become exercisable in full on the date of the termination of Service.
- (f) Expiration of Options. Each Option shall terminate upon the first to occur of the following events:
 - (1) The expiration of ten (10) years from the date of grant; or
 - (2) The expiration of three (3) months from the date of the Participant's termination of Service for a reason other than death, Disability or Retirement; or
 - (3) The expiration of one (1) year from the date of the Participant's Termination of Service by reason of Disability or Retirement.
- (g) Death of Director. Notwithstanding subsection (e), if a Nonemployee Director dies prior to the expiration of his or her options in accordance with subsection (e), his or her Options shall terminate one (1) year after the date of his or her death.
- (h) Special Rule for Retirement. Notwithstanding the provisions of subsection (e), if the exercisability of an Option is accelerated under subsection (d) on account of the Participant's Retirement, such Option shall terminate upon the first to occur of: (a) the expiration of ten (10) years from the date the Option was granted; or (b) the expiration of one year from the date of the Participant's death.
- (i) Not Incentive Stock Options. Options granted pursuant to this Section 9 shall not be designated as Incentive Stock Options.
- (j) Other Terms. All provisions of the Plan not inconsistent with this Section 6.8, shall apply to Options granted to Nonemployee Directors.
- (k) Elections by Nonemployee Directors. Pursuant to such procedures as the Board (in its discretion) may adopt from time to time, each Nonemployee Director may elect to forego receipt of all or a portion of fees for service as a Director otherwise due to the Nonemployee Director in exchange for Shares. The number of Shares received by any Nonemployee Director shall equal the amount of foregone compensation divided by the Fair Market Value of a Share on the date that the compensation otherwise would have been paid to the Nonemployee Director, rounded up to the nearest whole number of Shares. The procedures adopted by the Board for elections under this subsection shall be designed to ensure that any such election by a Nonemployee Director will not disqualify him or her as a "nonemployee director" under Rule 16b-3.

Article VII Stock Appreciation Rights

Section 7.1 Grant of SARs. Stock Appreciation Rights shall be evidenced by Award Agreements in such form and not inconsistent with the Plan as the Committee shall approve from time to time. Award Agreements shall specify the Grant Price of the SAR, the duration of the SAR, the number of Shares to which the SAR pertains, provisions for vesting and exercisability, and such other provisions as the Committee shall determine. Award Agreements may incorporate all or any of the terms of the Plan by reference and shall comply with the following terms

and conditions.

Section 7.2 Awards. A SAR shall entitle the grantee to receive upon exercise the excess of (i) the Fair Market Value of a specified number of Shares at the time of exercise over (ii) the Grant Price, or, if connected with a previously issued Option, not less than 100% of the Fair Market Value of Shares at the time such Option was granted. A SAR may be a Tandem SAR or may not be granted in connection with an Option.

Section 7.3 Term of SAR. SARs shall be granted for a period of not more than ten years, and shall be exercisable in whole or in part, at such time or times and subject to such other terms and conditions, as shall be prescribed by the Committee at the time of grant, subject to the provisions of this Plan.

Section 7.4 Termination of Service. SARs shall be exercisable only during a grantee's period of Service, except that in the discretion of the Committee a SAR may be made exercisable for up to ninety days after the grantee's Service is terminated for any reason other than death, Disability or Retirement. In the event that a grantee dies, Retires, or becomes Disabled without having fully exercised his SARs, the grantee or his successor shall have the right to exercise the SARs during their term within a period of one year after the date of such termination due to death, Disability or Retirement to the extent that the right was exercisable at the date of such termination or during such other period and subject to such terms as may be determined by the Committee. Notwithstanding the foregoing, the Committee shall have the power to permit in its discretion an acceleration of previously determined exercise terms, within the terms of the Plan, under such circumstances and upon such terms and conditions as it deems appropriate.

Section 7.5 Special Rules for Exercise of Tandem SARs. Tandem SARs may be exercised for all or part of the Shares subject to the related Option upon the surrender of the right to exercise the equivalent portion of the related Option. A Tandem SAR may be exercised only with respect to Shares for which its related Option is then exercisable. Notwithstanding any other provision of this Plan to the contrary, with respect to a Tandem SAR granted in connection with an ISO: (i) the Tandem SAR will expire no later than the expiration of the underlying ISO; (ii) the value of the payout with respect to the Tandem SAR may be for no more than one hundred percent (100%) of the difference between the Option Price of the underlying ISO and the Fair Market Value of the Shares subject to the underlying ISO at the time the Tandem SAR is exercised; and (iii) the Tandem SAR may be exercised only when the Fair Market Value of the Shares subject to the ISO exceeds the Option Price of the ISO.

Section 7.6 Payment. Upon exercise of a Stock Appreciation Right, the Participant shall be entitled to receive payment from the Company in an amount determined by multiplying: (i) the difference between the Fair Market Value of a Share on the date of exercise over the Grant Price; by (ii) the number of Shares with respect to which the SAR is exercised. At the discretion of the Committee, payment shall be made in cash, in the form of Shares at Fair Market Value, or in a combination thereof, as the Committee may determine.

Article VIII

Restricted Stock and Restricted Stock Units

Section 8.1 Grants. The Committee, at any time and from time to time, may grant Shares of Restricted Stock or grant Restricted Stock Units to Participants in such amounts as the Committee shall determine. Each Restricted Stock or Restricted Stock Unit grant shall be evidenced by an Award Agreement that shall specify the Period(s) of Restriction, the number of Shares of Restricted Stock or the number of Restricted Stock Units issued to the Participant, and such other provisions as the Committee shall determine. Such Award Agreements shall be consistent with the provisions of this Article VIII.

Section 8.2 Period of Restriction. The end of any Period of Restriction for Restricted Stock or Restricted Stock Units may be conditioned upon the satisfaction of such conditions as are satisfied by the Committee in its sole discretion and set forth in an applicable Award Agreement. Such conditions include, without limitation, restrictions based upon the continued Service of the Participant, the achievement of specific performance goals, time-based restrictions on vesting following the attainment of the performance goals, and/or restrictions under applicable federal or state securities laws, prohibitions against transfer, and repurchase by the Company or right of first refusal. The Committee shall have the power to permit in its discretion, an acceleration of the expiration of the applicable Period of Restriction with respect to any part or all of the Shares or number of Restricted Stock Units awarded to a Participant.

Section 8.3 Certificates. If a certificate is issued in respect of Shares awarded to a Participant, each certificate shall be deposited with the Company, or its designee, and shall bear the following legend:

“This certificate and the shares represented hereby are subject to the terms and conditions (including forfeiture and restrictions against transfer) contained in the Navidea Biopharmaceuticals, Inc. 2014 Stock Incentive Plan and an Award Agreement entered into by the registered owner. Release from such terms and conditions shall be obtained only in accordance with the provisions of the Plan and Award Agreement, a copy of each of which is on file in the office of the Secretary of said Company.”

Section 8.4 Lapse of Restrictions. A Restricted Stock Award Agreement or Restricted Stock Unit Award Agreement shall specify the terms and conditions upon which any restrictions upon Shares awarded or RSUs awarded under the Plan shall lapse, as determined by the Committee. Upon the lapse of such restrictions, any Shares that have been awarded, free of the previously described restrictive legend, shall be issued to the Participant or his legal representative.

Section 8.5 Termination of Service. Each Restricted Stock Award Agreement and Restricted Stock Unit Award Agreement shall set forth the extent, if any, to which the Participant shall have the right to continued or accelerated vesting of Shares of Restricted Stock or Restricted Stock Units following termination of the Participant's Service. Such provisions shall be determined in the sole discretion of the Committee, shall be included in the Award Agreement entered into with each Participant, need not be uniform among all Awards granted pursuant to the Plan, and may reflect distinctions based on the reasons for termination.

Section 8.6 Code Section 83(b) Election. If a Participant makes an election pursuant to Code Section 83(b) with respect to a Restricted Stock Award, the Participant shall be required to promptly file a copy of such election with the Company.

Article IX **Performance Shares Awards**

Section 9.1 Grants of Performance Shares. The Committee, at any time and from time to time, may grant Awards of Performance Shares to Participants in such amounts as the Committee shall determine. Each Performance Shares grant shall be evidenced by an Award Agreement that shall specify the applicable performance period, the number of Shares subject to a Performance Shares Award that are to be delivered to the Participant upon satisfaction of the performance targets by the expiration of the performance period, and such other provisions as the Committee shall determine. Such Award Agreements shall be consistent with the provisions of this Article IX.

Section 9.2 Performance Period and Performance Goals. At the time of award, the Committee, in its sole discretion shall establish a performance period and the performance goals to be achieved during the applicable performance period with respect to an Award of Performance Shares.

Section 9.3 Delivery of Shares. Following the conclusion of each performance period, the Committee shall determine the extent to which performance goals have been attained for such period as well as the other terms and conditions established by the Committee. The Committee shall determine the amount of Shares, if any, to be delivered to the Participant in satisfaction of the Award.

Section 9.4 Termination of Service. Each Performance Shares Award Agreement shall set forth the extent, if any, to which the Participant shall have the right to continued or accelerated vesting of Performance Shares following termination of the Participant's Service. Such provisions shall be determined in the sole discretion of the Committee, shall be included in the Award Agreement entered into with each Participant, need not be uniform among all Performance Shares Awards granted pursuant to the Plan, and may reflect distinctions based on the reasons for termination.

Section 9.5 Code Section 162(m). If any Performance Shares are intended to be 162(m) Awards, the Committee shall follow the procedures set forth in Section 13.1 with respect to such Performance Shares.

Article X **Performance Units**

Section 10.1 Grant of Performance Units. Subject to the terms of the Plan, Performance Units may be granted to Participants in such amounts and upon such terms, and at any time and from time to time, as shall be determined by the Committee. Performance Units shall be evidenced by Award Agreements that are subject to the terms of this Article X.

Section 10.2 Performance Period and Performance Goals. Unless otherwise determined by the Committee, at the time of award, the Committee shall establish with respect to each Performance Unit a performance period of not less than two years. At the time of award, the Committee also shall establish, in its sole discretion, the performance goals to be achieved during the applicable performance period with respect to an Award of Performance Units.

Section 10.3 Value of Performance Units. At the time Performance Units are granted, the Committee shall establish with respect to each such Award a value for each Performance Unit, which may vary thereafter determinable from criteria specified by the Committee at the time of Award.

Section 10.4 Code Section 162(m). If any Performance Units are intended to be 162(m) Awards, the Committee shall follow the procedures set forth in Section 13.1 with respect to such Performance Units.

Section 10.5 Payment of Performance Units. Following the conclusion of each performance period, the Committee shall determine the extent to which performance targets have been attained for such period as well as the other terms and conditions established by the Committee. The Committee shall determine what, if any, payment is due on the Performance Units. Payment shall be made as soon as practicable after the end of the applicable performance period, but no later than the March 15th of the year after the year in which such performance period ends, in cash, in the form of Shares, or in a combination thereof, as the Committee may determine.

Section 10.6 Termination of Service. Each Performance Unit Award Agreement shall set forth the extent, if any, to which the Participant shall have the right to continued or accelerated vesting of Performance Units following termination of the Participant's Service. Such provisions shall be determined in the sole discretion of the Committee, shall be included in the Award Agreement entered into with each Participant, need not be uniform among all Performance Units Awards granted pursuant to the Plan, and may reflect distinctions based on the reasons for termination.

Section 10.7 Other Terms. The Award Agreements with respect to Performance Units shall contain such other terms and provisions and conditions not inconsistent with the Plan as shall be determined by the Committee.

Article XI **Cash-Based Awards**

Section 11.1 Grant of Cash-Based Awards. Subject to the terms of the Plan, Cash-Based Awards may be granted to Participants in such amounts and upon such terms, and at any time and from time to time, as shall be determined by the Committee, subject to the terms of this Article XI. This Article does not limit the ability of the Committee or management to award bonuses or other cash-based awards other than under the terms of the Plan.

Section 11.2 Performance Period and Performance Goals. Unless otherwise determined by the Committee, the performance period for any Cash-Based Award shall be one year. At the time of award, the Committee also shall establish, in its sole discretion, the performance goals to be achieved during the applicable performance period with respect to Cash-Based Awards.

Section 11.3 Value of Cash-Based Awards. At the time Cash-Based Awards are granted, the Committee shall establish the value of such Awards, which may vary thereafter determinable from criteria specified by the Committee at the time of Award.

Section 11.4 Code Section 162(m). If the grant of any Cash-Based Awards are intended to be 162(m) Awards, the Committee shall follow the procedures set forth in Section 13.1 with respect to such Cash-Based Awards.

Section 11.5 Payment of Cash-Based Awards. If payable, the Participant's Cash-Based Award will be distributed to the Participant, or the Participant's estate in the event of the Participant's death before payment, in cash in a single sum as soon after the end of the applicable performance period as practicable, but no later than March 15th after the end of the performance period, in accordance with the Company's payroll practices.

Section 11.6 Termination of Service. With respect to Cash-Based Awards, the Committee shall set forth the extent, if any, to which the Participant shall have the right to continued or accelerated vesting of such Cash-Based Awards following termination of the Participant's Service. Such provisions shall be determined in the sole discretion of the Committee, need not be uniform among all Cash-Based Awards granted pursuant to the Plan, and may reflect distinctions based on the reasons for termination.

Article XII **Other Stock-Based Awards**

The Committee may from time to time grant Shares and other Awards under the Plan that are valued in whole or in part by reference to, or are otherwise based upon and/or payable in Shares. The Committee, in its sole discretion, shall determine the terms and conditions of such Awards, which shall be consistent with the terms and purposes of the Plan.

Article XIII
Awards Under the Plan; Code Section 162(m)

Section 13.1 Compliance with Code Section 162(m).

- (a) General. The Committee may grant Awards that are designed to qualify as 162(m) Awards and Awards that are not 162(m) Awards. In the case of Awards granted to Covered Officers that are intended to be 162(m) Awards, the Committee shall make in writing all determinations necessary to establish the terms of such 162(m) Awards within 90 days of the beginning of the applicable performance period (or such other time period required under Code Section 162(m)), including, without limitation, the designation of the Covered Officers to whom such 162(m) Awards are made, the Performance Measures applicable to the Awards and the Performance Targets that relate to such Performance Measures, and the dollar amounts or number of Shares payable upon achieving the applicable Performance Targets. To the extent required by Code Section 162(m), the provisions of such 162(m) Awards must state, in terms of an objective formula or standard, the method of computing the amount of compensation payable to the Covered Officer. The specific Performance Targets established by the Committee shall be made while the achievement of such Performance Targets remains substantially uncertain in accordance with Code Section 162(m). Subject to the terms of this Plan, after each applicable performance period has ended, the Committee shall determine the extent to which the Performance Targets have been attained or a degree of achievement between minimum and maximum levels with respect to 162(m) Awards in order to establish the level of payment to be made, if any, with respect to such 162(m) Awards, and shall certify the results in writing prior to payment of such 162(m) Awards.
- (b) Performance Targets and Performance Measures. With respect to 162(m) Awards, at the time of grant of a 162(m) Award, the Committee shall establish in writing maximum and minimum Performance Targets to be achieved with respect to each Award during the performance period. The Participant shall be entitled to payment of the entire amount awarded if the maximum Performance Target is achieved during the performance period, but shall be entitled to payment with respect to a portion of the Award according to the level of achievement of Performance Targets, as specified by the Committee, for performance during the performance period that meets or exceeds the minimum Performance Target but fails to meet the maximum Performance Target. With respect to Cash-Based Awards, the Committee may assign payout percentages based upon various potential Performance Targets to be applied if the Performance Targets are met. The Committee has full discretion and authority to determine the Performance Target payouts for Cash-Based Award's performance period.

The Performance Targets established by the Committee may relate to corporate, division, department, business unit, or individual performance and may be established in terms of any one or a combination of the following Performance Measures: price of Company Common Stock or the stock of any affiliate, shareholder return, return on equity, return on investment, return on capital, sales productivity, comparable store sales growth, economic profit, economic value added, net income, operating income, gross margin, sales, free cash flow, earnings per share, operating company contribution or market shares. Multiple Performance Targets may be used and may have the same or different weighting, and they may relate to absolute performance or relative performance as measured against other institutions or divisions or units thereof.

- (c) Calculation and Adjustments. The Committee may provide in any such Award that any evaluation of performance may include or exclude any of the following events that occur during a performance period: (a) asset write-downs, (b) litigation or claim judgments or settlements, (c) the effect of changes in tax laws, accounting principles or other laws or provisions affecting reported results, (d) any reorganization and restructuring programs, (e) mergers, acquisitions or divestitures, (f) foreign exchange gains and losses, and (g) extraordinary, unusual, or other nonrecurring items as described in U.S. Generally Accepted Accounting Principles or in management's discussion and analysis of financial condition and results of operations appearing in the Company's consolidated report to the investment community or investor letters. To the extent such inclusions or exclusions affect Awards to Covered Officers, they shall be prescribed in a form that meets the requirements of Code Section 162(m) for deductibility except as otherwise determined by the Committee in its sole discretion. Awards that are intended to qualify as 162(m) Awards may not be adjusted upward from the amount otherwise payable to a Covered Officer under the pre-established Performance Target. The Committee shall retain the discretion to adjust such Awards downward, either on a formulaic or discretionary basis or a combination of the two, as the Committee determines. If applicable tax and securities laws change to permit Committee discretion to alter the governing Performance Measures or Performance Targets without obtaining shareholder approval of such changes, the Committee shall have sole discretion to make such changes without obtaining shareholder approval.

Section 13.2 Non-Code Section 162(m) Awards. In the case of Awards that are not intended to be qualifying as “performance-based compensation” under Code Section 162(m), the Committee may designate performance targets from among the previously described Performance Measures in this Article or such other business criteria as it determines in its sole discretion. The Committee also may make adjustments to such Performance Measures or other business criteria in any manner it deems appropriate in its discretion.

Article XIV
Dividends and Dividend Equivalents

No dividends or dividend equivalents may be awarded with respect to any Options or SARs. An Award (other than Options or SARs) may, if so determined by the Committee, provide the Participant with the right to receive dividend payments, or, in the case of Awards that do not involve the issuance of Shares concurrently with the grant of the Award, dividend equivalent payments with respect to Shares subject to the Award (both before and after the Shares are earned, vested or acquired), which payments may be either made currently, credited to an account for the Participant, or deemed to have been reinvested in additional Shares which shall thereafter be deemed to be part of and subject to the underlying Award, including the same vesting and performance conditions. Notwithstanding the foregoing, with respect to Awards subject to performance conditions, any such dividend or dividend equivalent payments shall not be paid currently and instead shall either be credited to an account for the Participant or deemed to have been reinvested in additional Shares. Dividend or dividend equivalent amounts credited to an account for the Participant may be settled in cash or Shares or a combination of both, as determined by the Committee, and shall be subject to the same vesting and performance conditions as the underlying Award.

Article XV
Beneficiary Designation

Each Participant under the Plan may, from time to time, name any beneficiary or beneficiaries (who may be named contingently or successively) to whom any benefit under the Plan is to be paid in case of his or her death before he or she receives any or all of such benefit. Each such designation shall revoke all prior designations by the same Participant, shall be in a form prescribed by the Company, and will be effective only when filed by the Participant in writing with the Company during the Participant’s lifetime. In the absence of any such designation, benefits remaining unpaid at the Participant’s death shall be paid to the Participant’s estate.

Article XVI
Change in Control

Section 16.1 Effect of Change in Control. Except as otherwise provided in the Plan or any Award Agreement granted hereunder, upon a Change in Control, all outstanding Awards shall become fully exercisable and all restrictions thereon shall terminate; provided, however, that the Committee may determine and provide through an Award Agreement or other means the extent of vesting and the treatment of partially completed performance periods (if any) for any Awards outstanding upon a Change in Control. Further, the Committee, as constituted before such Change in Control, is authorized, and has sole discretion, as to any Award, either at the time such Award is granted hereunder or any time thereafter, to take any one or more of the following actions: (i) provide for the cancellation of any such Award for an amount of cash equal to the difference between the exercise price and the then Fair Market Value of the Shares covered thereby had such Award been currently exercisable; (ii) make such adjustment to any such Award then outstanding as the Committee deems appropriate to reflect such Change in Control; or (iii) cause any such Award then outstanding to be assumed, by the acquiring or surviving corporation, after such Change in Control.

Section 16.2 Participant Elections to Minimize Code Section 4999 Excise Tax.

- (a) **Excess Parachute Payment.** In the event that any acceleration of vesting pursuant to an Award and any other payment or benefit received or to be received by a Participant would subject the Participant to any excise tax pursuant to Code Section 4999 due to the characterization of such acceleration of vesting, payment or benefit as an excess parachute payment under Code Section 280G, the Participant may elect, in his or her sole discretion, to reduce the amount of any acceleration of vesting called for under the Award in order to avoid such characterization. Such an election, however, may not change the time and form of any payment in a manner that would cause the Participant to incur additional taxes or penalties under Code Section 409A.
- (b) **Determination by Independent Accountants.** To aid the Participant in making any election called for under part (a) above, no later than the date of the occurrence of any event that might reasonably be anticipated to result in an excess parachute payment to the Participant as described in part (a) above, the Company shall request a determination in writing by independent public accountants selected by the

Company (the “Accountants”). As soon as practicable thereafter, the Accountants shall determine and report to the Company and the Participant the amount of such acceleration of vesting, payments and benefits which would produce the greatest after-tax benefit to the Participant. For the purposes of such determination, the Accountants may rely on reasonable, good faith interpretations concerning the application of Code Sections 280G and 4999. The Company and the Participant shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make their required determination. The Company shall bear all fees and expenses the Accountants may reasonably charge in connection with their services contemplated by this subpart (b).

Article XVII **Deferrals**

The Committee may permit (upon timely election by the Participant) or require a Participant to defer such Participant’s receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant by virtue of the exercise of an Option or SAR, the lapse or waiver of restrictions with respect to Restricted Stock or Performance Shares, or the satisfaction of any requirements or goals with respect to Performance Units or Cash-Based Awards. If any such deferral election is required or permitted, the Committee may, in its sole discretion, establish rules and procedures for such payment deferrals in a manner consistent with Code Section 409A and the regulations thereunder.

Article XVIII **Withholding**

Section 18.1 Tax Withholding. The Company shall have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy Federal, state, and local taxes, domestic or foreign, required by law or regulation to be withheld with respect to any taxable event arising as a result of this Plan.

Section 18.2 Share Withholding. With respect to withholding required upon the exercise of Options or SARs, upon the lapse of restrictions on Restricted Stock, or upon any other taxable event arising as a result of Awards granted hereunder, Participants may elect, subject to the approval of the Committee, to satisfy the withholding requirement, in whole or in part, by having the Company withhold Shares having a Fair Market Value on the date the tax is to be determined equal to the minimum statutory total tax which could be imposed on the transaction. All such elections shall be irrevocable, made in writing before the date in which income is realized by the recipient in connection with the particular transaction, signed by the Participant, and shall be subject to any restrictions or limitations that the Committee, in its sole discretion, deems appropriate. The amount of required withholding shall be a specified rate not less than the statutory minimum federal, state and local (if any) withholding rate, and not greater than the maximum federal, state and local (if any) marginal tax rate applicable to the Participant and to the particular transaction.

Article XIX **Compliance with Code Section 409A**

Section 19.1 Awards Subject to Code Section 409A . The provisions of this Section 19.1 shall apply to any Award or portion thereof that is or becomes subject to Code Section 409A, notwithstanding any provision to the contrary contained in the Plan or the Award Agreement applicable to such Award. Awards subject to Code Section 409A include, without limitation:

- (a) Any Nonqualified Stock Option having an exercise price per share less than the Fair Market Value determined as of the date of grant of such Option or that permits the deferral of compensation other than the deferral of recognition of income until the exercise or transfer of the Option or the time the shares acquired pursuant to the exercise of the option first become substantially vested.
- (b) Any Award that either provides by its terms, or under which the Participant makes an election, for settlement of all or any portion of the Award either (i) on one or more dates following the end of the Short-Term Deferral Period (as defined below) or (ii) upon or after the occurrence of any event that will or may occur later than the end of the Short-Term Deferral Period.

Subject to U.S. Treasury Regulations promulgated pursuant to Code Section 409A (“Section 409A Regulations”) or other applicable guidance, the term “Short-Term Deferral Period” means the period ending on the later of (i) the 15th day of the third month following the end of the Company’s fiscal year in which the applicable portion of the Award is no longer subject to a substantial risk of forfeiture or (ii) the 15th day of the third month following the end of the Participant’s taxable year in which the applicable portion of the Award is no longer subject to a substantial risk of forfeiture. For this purpose, the term “substantial risk of forfeiture” shall have the meaning set forth in Section 409A Regulations or other applicable guidance.

Section 19.2 No Acceleration of Distributions. Notwithstanding anything to the contrary herein, this Plan does not permit the acceleration of the time or schedule of any distribution under this Plan pursuant to any Award subject to Code Section 409A, except as provided by Code Section 409A and Section 409A Regulations.

Section 19.3 Separation from Service. If any amount shall be payable with respect to any Award hereunder as a result of a Participant's termination of employment or other Service and such amount is subject to the provisions of Code Section 409A, then notwithstanding any other provision of this Plan, a termination of employment or other Service will be deemed to have occurred only at such time as the Participant has experienced a "separation from service" as such term is defined for purposes of Code Section 409A.

Section 19.4 Timing of Payment to a Specified Employee. If any amount shall be payable with respect to any Award hereunder as a result of a Participant's separation from Service at such time as the Participant is a "specified employee" and such amount is subject to the provisions of Code Section 409A, then notwithstanding any other provision of this Plan, no payment shall be made, except as permitted under Code Section 409A, prior to the first day of the seventh (7th) calendar month beginning after the Participant's separation from Service (or the date of his or her earlier death). The Company may adopt a specified employee policy that will apply to identify the specified employees for all deferred compensation plans subject to Code Section 409A; otherwise, specified employees will be identified using the default standards contained in the regulations under Code Section 409A.

Article XX **Amendment and Termination**

Section 20.1 Amendment, Modification, and Termination of the Plan. The Board or the Committee may at any time terminate, suspend or amend the Plan without the authorization of shareholders to the extent allowed by law, including without limitation any rules issued by the Securities and Exchange Commission under Section 16 of the 1934 Act, insofar as shareholder approval thereof is required in order for the Plan to continue to satisfy the requirements of Rule 16b-3 under the 1934 Act, or the rules of any applicable stock exchange. No termination, suspension or amendment of the Plan shall adversely affect any right acquired by any Participant under an Award granted before the date of such termination, suspension or amendment, unless such Participant shall consent; but it shall be conclusively presumed that any adjustment for changes in capitalization as provided for herein does not adversely affect any such right.

Section 20.2 Amendment of Awards. The Committee may unilaterally amend the terms of any Award Agreement previously granted, except that (i) no such amendment may materially impair the rights of any Participant under the applicable Award without the Participant's consent, unless such amendment is necessary to comply with applicable law, stock exchange rules or accounting rules; and (ii) in no event may an Option or SAR be amended or modified, other than as provided in Section 4.4, to decrease the Option or SAR exercise or base price thereof, or be cancelled in exchange for cash, a new Option or SAR with a lower exercise price or base price, or other Awards, or otherwise be subject to any action that would be treated for accounting purposes as a "repricing" of such Option or SAR, unless such action is approved by the Company's shareholders.

Article XXI **Miscellaneous**

Section 21.1 Approval Restrictions. Each Award under the Plan shall be subject to the requirement that, if at any time the Committee shall determine that (i) the listing, registration or qualification of the Shares subject or related thereto upon any securities exchange or under any state or federal law, or (ii) the consent or approval of any government regulatory body, or (iii) an agreement by the recipient of an Award with respect to the disposition of Shares is necessary or desirable as a condition of, or in connection with, the granting of such award or the issue or purchase of Shares thereunder, such Award may not be consummated in whole or in part unless such listing, registration, qualification, consent, approval or agreement shall have been effected or obtained, free of any conditions not acceptable to the Committee.

Section 21.2 Securities Law Compliance. With respect to Participants subject to Section 16 of the 1934 Act, transactions under this Plan are intended to comply with all applicable conditions of Rule 16b-3 or its successors under the 1934 Act. If any provision of this Plan or of any Award Agreement would otherwise frustrate or conflict with the intent expressed in the preceding sentence, that provision to the extent possible shall be interpreted and deemed amended in the manner determined by the Committee so as to avoid the conflict. To the extent of any remaining irreconcilable conflict with this intent, the provision shall be deemed void as applicable to Participants who are then subject to Section 16 of the 1934 Act. In addition, no Shares will be issued or transferred pursuant to an Award unless and until all then applicable requirements imposed by federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any stock exchanges upon which the Shares may be listed, have been fully met. As a condition precedent to the issuance of Shares pursuant to the grant, exercise, vesting or settlement of an Award, the Company may require the Participant to take any reasonable action to meet such

requirements. The Committee may impose such conditions on any Shares issuable under the Plan as it may deem advisable, including, without limitation, restrictions under the Securities Act of 1933, as amended, under the requirements of any stock exchange upon which such Shares of the same class are then listed, and under any blue sky or other securities laws applicable to such Shares.

Section 21.3 Gender and Number. Except where otherwise indicated by the context, any masculine term used herein also shall include the feminine, the plural shall include the singular and the singular shall include the plural.

Section 21.4 Rights as a Shareholder. The recipient of any Award under the Plan, unless otherwise provided by the Plan, shall have no rights as a shareholder with respect thereto unless and until certificates for Shares are issued to the recipient.

Section 21.5 Forfeiture. The Committee may specify in an Award Agreement that the Participant's rights, payments, and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events may include, but shall not be limited to, termination of Service for Cause or any act by a Participant, whether before or after termination of Service, that would constitute Cause for termination of Service.

Section 21.6 Rights as Employee, Nonemployee Director, Consultant, or Adviser . No person, even though eligible pursuant to Article V, shall have a right to be selected as a Participant, or, having been so selected, to be selected again as a Participant. Nothing in the Plan or any Award granted under the Plan shall confer on any Participant a right to remain an Employee, Nonemployee Director, consultant, or adviser or interfere with or limit in any way any right of the Company or Affiliate to terminate the Participant's Service at any time. To the extent that an Employee of an Affiliate receives an Award under the Plan, that Award shall in no event be understood or interpreted to mean that the Company is the Employee's employer or that the Employee has an employment relationship with the Company.

Section 21.7 Fractional Shares. The Company shall not be required to issue fractional shares upon the exercise or settlement of any Award.

Section 21.8 Effect on Other Plans. Unless otherwise specifically provided, participation in the Plan shall not preclude a Participant's eligibility to participate in any other benefit or incentive plan. Any Awards made pursuant to the Plan shall not be considered as compensation in determining the benefits provided under any other plan.

Section 21.9 No Constraint on Corporate Action. Nothing in this Plan shall be construed to: (a) limit, impair, or otherwise affect the Company's or an Affiliate's right or power to make adjustments, reclassifications, reorganizations, or changes of its capital or business structure, or to merge or consolidate, or dissolve, liquidate, sell, or transfer all or any part of its business or assets; or (b) limit the right or power of the Company or an Affiliate to take any action which such entity deems to be necessary or appropriate.

Section 21.10 Over/Under Payments. If any Participant or beneficiary receives an underpayment of Shares or cash payable under the terms of any Award, payment of any such shortfall shall be made as soon as administratively practicable. If any Participant or beneficiary receives an overpayment of Shares or cash payable under the terms of any Award for any reason, the Committee or its delegate shall have the right, in its sole discretion, to take whatever action it deems appropriate, including but not limited to the right to require repayment of such amount or to reduce future payments under this Plan, to recover any such overpayment. Notwithstanding the foregoing, if the Company is required to prepare an accounting restatement due to the material noncompliance of the Company, as a result of misconduct, with any financial reporting requirement under the securities laws, and if the Participant knowingly or through gross negligence engaged in the misconduct, or knowingly or through gross negligence failed to prevent the misconduct, or if the Participant is one of the individuals subject to automatic forfeiture under Section 304 of the Sarbanes-Oxley Act of 2002, the Participant shall reimburse the Company the amount of any payment in settlement of an Award earned or accrued during the twelve- (12-) month period following the first public issuance or filing with the United States Securities and Exchange Commission of the financial document embodying such financial reporting requirement.

Section 21.11 Unfunded Obligation. Participants shall have the status of general unsecured creditors of the Company. Any amounts payable to Participants pursuant to the Plan shall be unfunded and unsecured obligations for all purposes, including, without limitation, Title I of the Employee Retirement Income Security Act of 1974. No Affiliate shall be required to segregate any monies from its general funds, or to create any trusts, or establish any special accounts with respect to such obligations. The Company shall retain at all times beneficial ownership of any investments, including trust investments, which the Company may make to fulfill its payment obligations hereunder. Any investments or the creation or maintenance of any trust or any Participant account shall not create or constitute a trust or fiduciary relationship between the Committee or any Affiliate and a Participant, or otherwise create any vested or beneficial interest in any Participant or the Participant's creditors in any assets of any Affiliate. The Participants shall have no claim against any Affiliate for any changes in the value of any assets which may be invested or reinvested by

the Company with respect to the Plan.

Section 21.12 No Liability With Respect to Adverse Tax Treatment . Notwithstanding any provision of this Plan to the contrary, in no event shall the Company or any Affiliate be liable to a Participant on account of an Award's failure to (i) qualify for favorable U.S., foreign, state, local, or other tax treatment or (ii) avoid adverse tax treatment under U.S., foreign, state, local, or other law, including, without limitation, Code Section 409A.

Section 21.13 Severability. In the event any provision of the Plan shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Plan, and the Plan shall be construed and enforced as if the illegal or invalid provision had not been included.

Section 21.14 Requirements of Law. The granting of Awards and the issuance of Shares under the Plan shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

Section 21.15 Governing Law. To the extent not preempted by federal law, the Plan, and all agreements hereunder, shall be construed in accordance with and governed by the laws of the state of Ohio.

Section 21.16 Successors. All obligations of the Company under the Plan with respect to Awards granted hereunder shall be binding on any successor to the Company.

Section 21.17 Provisions Regarding Transferability of Awards.

- (a) **General**. Except as otherwise provided below, Awards may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will or the laws of descent and distribution or pursuant to a qualified domestic relations order as defined in the Code or Title 1 of the Employee Retirement Income Security Act or the rules thereunder. Except as otherwise provided in the Plan, all rights with respect to an Award granted to a Participant shall be available during his or her lifetime only to such Participant.
- (b) **Nonqualified Stock Options and Stock Appreciation Rights**. No NQSO or SAR granted under the Plan may be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will or the laws of descent and distribution or pursuant to a qualified domestic relations order as defined in the Code or Title 1 of the Employee Retirement Income Security Act or the rules thereunder. Notwithstanding the foregoing or anything in part (a) above, a Participant, at any time prior to his death, may assign all or any portion of the NQSO or SAR to (i) his spouse or lineal descendant, (ii) the trustee of a trust for the primary benefit of his spouse or lineal descendant, or (iii) a tax-exempt organization as described in Code Section 501(c)(3). In such event the spouse, lineal descendant, trustee or tax-exempt organization shall be entitled to all of the rights of the Participant with respect to the assigned portion of such NQSO or SAR, and such portion of the NQSO or SAR shall continue to be subject to all of the terms, conditions and restrictions applicable to the NQSO or SAR as set forth herein, and in the related Award Agreement, immediately prior to the effective date of the assignment. Any such assignment shall be permitted only if (i) the Participant does not receive any consideration therefore, and (ii) the assignment is expressly approved by the Committee or its delegate. Any such assignment shall be evidenced by an appropriate written document executed by the Participant, and a copy thereof shall be delivered to the Committee or its delegate on or prior to the effective date of the assignment.
- (c) **Incentive Stock Options**. Notwithstanding anything in part (a) and (b) above, no ISO may be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will or the laws of descent or distribution.
- (d) **Nonemployee Directors**. Notwithstanding anything in parts (a), (b), or (c) to the contrary, a Nonemployee Director at any time prior to his or her death, may assign all or any portion of an Award granted to him or her under the Plan to (i) his or her spouse or lineal descendant, (ii) the trustee of a trust for the primary benefit of his or her spouse or lineal descendant or (iii) a tax-exempt organization as described in Code Section 501(c)(3). In such event, the spouse, lineal descendant, trustee, or tax-exempt organization shall be entitled to all of the rights of the Participant with respect to the assigned portion of such Award, and such portion of the Award shall continue to be subject to all of the terms, conditions and restrictions applicable to the Award as set forth herein, and in the related Award Agreement, immediately prior to the effective date of the assignment. Any such assignment shall be permitted only if (i) the Participant does not receive any consideration therefore, and (ii) the assignment is expressly approved by the Committee or its delegate. Any such assignment shall be evidenced by an appropriate written document executed by the Participant, and a copy thereof shall be delivered to the Committee or its delegate on or prior to the effective date of the assignment.

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SECURITIES EXCHANGE AGREEMENT

This SECURITIES EXCHANGE AGREEMENT dated as of March 11, 2015 (this “Agreement”) is made by and between Navidea Biopharmaceuticals, Inc., a Delaware corporation (the “Company”), Platinum-Montaur Life Sciences, LLC, a Delaware limited liability company Platinum-Montaur Life Sciences, LLC, a Delaware limited liability company (the “Lead Purchaser”) and the other investors set forth on Annex A hereto (each, including the Lead Purchaser, a “Purchaser” and collectively the “Purchasers”).

Recitals

A. Pursuant to the terms of a Securities Purchase Agreement of even date herewith (the “Purchase Agreement”), the Purchasers have agreed to purchase up to an aggregate of fifty (50) shares of the Series A Convertible Preferred Stock (the “Preferred Stock”), of the Company’s subsidiary, Macrophage Therapeutics, Inc. (“MTI”), along with warrants to purchase common stock of MTI.

B. As additional consideration for the purchase of the Securities, the Company and the Purchasers have agreed that the Purchasers shall have the right and option to exchange the Preferred Stock for common stock, \$.001 par value, of the Company (“Common Stock”) on the terms contained in this Agreement.

Statement of Agreement

In consideration of the foregoing, and of their mutual agreements set forth herein, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

Section 1. Definitions. For the purposes of this Agreement, the following terms have the following meanings:

“Certificate of Designations” means Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of the Preferred Stock.

“Public Offering” means a firm commitment underwritten public offering of common stock of MTI pursuant to an effective registration statement under Section 5 of the Securities Act in which the gross cash proceeds to MTI (before underwriting discounts, commissions and fees) from such public offering are at least \$50,000,000.

“SEC Reports” shall mean all forms, reports, statements and other documents (including, without limitation, exhibits, annexes, supplements and amendments to such documents) filed by the Company, or sent or made available by the Company to its security holders, under the Exchange Act or the Securities Act.

“Trading Day” means any day during which the principal exchange on which the Common Stock is traded shall be open for trading.

“VWAP” means, on the applicable date, the volume weighted average price per share of the Common Stock on the principal market where the Common Stock is listed or traded as reported by Bloomberg, L.P. using the AQR function for the twenty Trading Days preceding such date.

Capitalized terms used in this Agreement and not otherwise defined shall have the respective meanings defined in the Purchase Agreement.

Section 2. Exchange of Securities.

(a) Subject to the terms and conditions herein set forth, if a Public Offering has not closed on or before the second anniversary of the Initial Closing, for a period of thirty (30) days thereafter (the “Exercise Period”), a holder of Preferred Stock shall have the right and option to exchange each share of Preferred Stock held by such holder for the number of fully paid shares of Common Stock (the “Exchange Shares”) obtained by dividing \$50,000 by the greater of (i) 80% of VWAP on the second anniversary of the Initial Closing or (ii) \$3.00. In consideration of and in express reliance upon the representations, warranties, covenants, terms and conditions of this Agreement, the Company agrees to issue and deliver the Exchange Shares to the holders in exchange for their shares of Preferred Stock.

(b) A holder of Preferred Stock may exercise the exchange right provided under Section 1(a) as to all shares (and not less than all shares) of Preferred Stock held by such holder by delivering written notice to the Company that the holder wishes to exercise the exchange right on or before the last day of the Exercise Period, accompanied by the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Company to

indemnify the Company against any claim that may be made against the Company on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Company if the Company serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Company, certificates surrendered for exchange shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Company, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Company if the Company serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the effective time of the exchange, and the shares of Common Stock issuable upon exchange of the shares of Preferred Stock represented by such certificate shall be deemed to be outstanding of record as of such date the "Exchange Date").

(c) In the event of the exercise by a holder of Preferred Stock of the exchange right provided in this Section 2 in accordance with and subject to the terms and conditions hereof, (i) if the Common Stock is registered under Section 12 of the Exchange Act, the Exchange Shares shall be issued and delivered to the Depository Trust Company ("DTC") account designated by the holder via the Deposit Withdrawal Agent Commission System ("DWAC") within a reasonable time, not exceeding three (3) Trading Days after the Exchange Date, or (ii) if the Common Stock is not so registered, certificates for the Exchange Shares shall be dated the date of such exercise and delivered to the holder hereof within a reasonable time, not exceeding three (3) Trading Days after the Exchange Date, and the holder shall be deemed for all purposes to be the holder of the shares of Exchange Stock so purchased as of the date of such exercise.

Section 3. Redemption Right. In the event that any holder of Preferred Stock does not timely exercise the exchange right provided in Section 2, the Purchasers acknowledge that MTI shall have the right and option to redeem all shares of Preferred Stock held by such holders as provided in Section 10 of the Certificate of Designations.

Section 4. Representations and Warranties of the Company.

(a) The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has the corporate power and authority to execute, deliver and perform its obligations under this Agreement.

(b) The execution, delivery and performance by the Company of this Agreement, the issuance of the Exchange Shares, and the consummation of the transactions contemplated hereby and thereby (a) has been duly authorized by all necessary corporate action; (b) do not and will not contravene the terms of the Certificate of Incorporation or By-Laws of the Company or any amendment thereof or any federal, state, local or foreign statute, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations) applicable to the Company or any of its Subsidiaries or by which any property or asset of the Company or any of its Subsidiaries are bound or affected; (c) do not and will not (i) conflict with, contravene, result in any material violation or breach of or material default under (with or without the giving of notice or the lapse of time or both), (ii) create in any other Person a right or claim of termination or amendment, or (iii) require any material modification or acceleration or cancellation of, any Contractual Obligation of the Company or any of its Subsidiaries; and (d) do not and will not result in the creation of any Lien (or obligation to create a Lien) against any material property or asset of the Company or any of its, except, in all cases, for such conflicts, defaults, terminations, amendments, acceleration, cancellations and violations as would not, individually or in the aggregate, have a Material Adverse Effect.

(c) This Agreement has been duly executed and delivered by the Company, and this Agreement constitutes the legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, reorganization, moratorium, liquidation, conservatorship, receivership or similar laws relating to, or affecting generally the enforcement of, creditor's rights and remedies or by other equitable principles of general application.

(d) Neither the Company nor any of its Subsidiaries is required under federal, state, foreign or local law, rule or regulation to obtain any consent, authorization or order of, or make any filing or registration with, any court or Governmental Authority in order for it to execute, deliver or perform any of its obligations under this Agreement or issue and sell the Exchange Shares in accordance with the terms hereof (other than any filings, consents and approvals which may be required to be made by the Company under applicable state and federal securities laws, or rules).

(e) The Exchange Shares to be issued pursuant to Section 2 will, at the time of issuance, be validly issued, fully paid and non-assessable, free and clear of all liens, encumbrances and rights of first refusal or preemptive rights of any kind imposed by or through the Company, and the holders thereof shall be entitled to all rights accorded to a holder of Common Stock.

(f) The Company has authorized and reserved, and covenants to continue to reserve, free of preemptive

rights and other similar contractual rights of stockholders, shares of Common Stock sufficient to effect the exchange of the Preferred Stock as provided in Section 2 hereof.

Section 5. Representations and Warranties of Purchasers.

Each Purchaser, severally and not jointly, hereby represents and warrants to the Company, as of the date hereof and as of each Closing Date, as follows:

(a) If an entity, such Purchaser is a duly organized, validly existing and in good standing under the laws of its jurisdiction of organization.

(b) Such Purchaser has the requisite power and authority to enter into and perform its obligations under this. In the case of a Purchaser that is an entity, the execution, delivery and performance of this Agreement by such Purchaser and the consummation by it of the transactions contemplated hereby (a) have been duly authorized by all necessary corporate or limited liability company action, and (b) does not contravene the terms of the organizational or governing documents of such Purchaser. No further consent or authorization of such Purchaser, any board of directors or other governing body, or of its shareholders or members, is required for the execution, delivery or performance of this Agreement by such Purchaser. When executed and delivered by such Purchaser, this Agreement shall constitute the valid and binding obligation of such Purchaser enforceable against such Purchaser in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, liquidation, conservatorship, receivership or similar laws relating to, or affecting generally the enforcement of, creditor's rights and remedies or by other equitable principles of general application.

(c) Purchaser is, and on such date on which it exercises the exchange right provided in Section 2, will be, an "accredited investor" as defined in Rule 501(a) under the Securities Act. Such Purchaser has such experience in business and financial matters that it is capable of evaluating the merits and risks of an investment in the Common Stock. Such Purchaser is not required to be registered as a broker-dealer under Section 15 of the Exchange Act and such Purchaser is not a broker-dealer.

(d) Purchaser owns and holds, and on such date on which it exercises the exchange right provided in Section 2 it will own and hold, beneficially and of record, the entire right, title, and interest in and to the Preferred Stock, free and clear of any claim, restriction or Lien other than restrictions on transfer under the Securities Act and applicable state securities laws.

(e) Purchaser acknowledges that it has carefully reviewed the SEC Reports, and other publicly available information furnished by the Company, and has been afforded (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of this Agreement and the Common Stock and the merits and risks of investing in the Common Stock; (ii) access to information about the Company and Subsidiaries and their respective financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to verify the information that has been furnished by the Company.

(f) Purchaser understands that the Exchange Stock has not been registered under the Securities Act and must be held indefinitely unless registered under the Securities Act or an exemption from registration is available. Purchaser acknowledges that he or it is familiar with Rule 144, and that Purchaser has been advised that Rule 144 permits resales of unregistered securities only under certain circumstances, including that the securities be held for a minimum holding period, and that while "tacking" of the holding period of the Preferred Stock to the holding period of the Exchange Shares may be available, there is no assurance that such tacking will be available when Purchaser exercises the exchange right. Purchaser understands that to the extent that Rule 144 is not available, Purchaser will be unable to sell any Exchange Shares without either registration under the Securities Act or the existence of another exemption from such registration requirement.

(g) Purchaser understands that the Exchange Shares will be issued in reliance on a transactional exemption from the registration requirements of federal and state securities laws and the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of Purchaser set forth herein in order to determine the applicability of such exemptions.

(h) Purchaser has not employed any broker or finder or incurred any liability for any brokerage or investment banking fees, commissions, finders' structuring fees, financial advisory fees or other similar fees in connection with the transactions contemplated by this Agreement.

Section 6. Conditions Precedent to the Company's Obligations. The obligation hereunder of the Company to issue and deliver the Exchange Shares to a Purchaser in exchange for Preferred Stock is subject to the satisfaction or

waiver, at or before the Exchange Date, of each of the conditions set forth below. These conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion.

(a) The Purchaser shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Purchaser at or prior to the Exchange Date.

(b) The representations and warranties of the Purchaser shall be true and correct in all material respects as of the date when made and as of the Exchange Date as though made at that time, except for representations and warranties that are expressly made as of a particular date, which shall be true and correct in all material respects as of such date.

Section 7. Conditions Precedent to the Purchaser's Obligations. The obligation hereunder of a Purchaser to accept the Exchange Shares in exchange for the Preferred Stock is subject to the satisfaction or waiver, at or before the Exchange Date, of each of the conditions set forth below. These conditions are for the Investor's sole benefit and may be waived by the Purchaser at any time in his or its sole discretion.

(a) The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the Exchange Date.

(b) Each of the representations and warranties of the Company shall be true and correct in all material respects as of the date when made and as of the Exchange Date as though made at that time, except for representations and warranties that speak as of a particular date, which shall be true and correct in all material respects as of such date.

Section 8. Miscellaneous Provisions.

(a) Fees and Expenses. Each party shall pay the fees and expenses of its advisors, counsel, accountants and other experts, if any, and all other expenses, incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement.

(b) Specific Performance; Consent to Jurisdiction; Venue.

(i) The Company and the Purchasers acknowledge and agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent or cure breaches of the provisions of this Agreement and to enforce specifically the terms and provisions hereof or thereof, this being in addition to any other remedy to which any of them may be entitled by law or equity.

(ii) Each party to this Agreement hereby irrevocably agrees that the any legal action or proceeding arising out of or relating to this Agreement and any agreements or transactions contemplated hereby or thereby may be brought only in the Delaware Chancery Court or the United States District Court for the District of Delaware and hereby expressly submits to the personal jurisdiction and venue of such courts for the purposes thereof and expressly waives any claim of improper venue and any claim that such courts are an inconvenient forum. Each party hereby irrevocably consents to the service of process of any of the aforementioned courts in any such suit, action or proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, at the address in effect for notices to it under this Agreement, such service to become effective ten (10) days after such mailing. Nothing in this Section 8(b)(ii) shall affect or limit any right to serve process in any other manner permitted by law. The Company and the Purchasers hereby agree that the prevailing party in any suit, action or proceeding arising out of or relating to the Securities, this Agreement or the other Transaction Documents, shall be entitled to reimbursement for reasonable legal fees from the non-prevailing party. The parties hereby waive all rights to a trial by jury.

(c) Entire Agreement; Amendment. This Agreement and the Purchase Agreement contain the entire understanding and agreement of the parties with respect to the matters covered hereby and, except as specifically set forth herein or therein, neither the Company nor the Purchasers make any representation, warranty, covenant or undertaking with respect to such matters, and they supersede all prior understandings and agreements with respect to said subject matter, all of which are merged herein. No provision of this Agreement may be waived or amended other than by a written instrument signed by the Company and the holders of at least a majority of the shares of Preferred Stock then outstanding. Any amendment or waiver effected in accordance with this Section 8(c) shall be binding upon the Purchasers (and their permitted assigns) and the Company.

(d) Notices. Any notice, demand, request, waiver or other communication required or permitted to be given hereunder shall be in writing and shall be effective (a) upon hand delivery by telecopy or facsimile at the address or

number designated below (if delivered on a business day during normal business hours where such notice is to be received), or the first business day following such delivery (if delivered other than on a business day during normal business hours where such notice is to be received) or (b) on the second business day following the date of mailing by express courier service, fully prepaid, addressed to such address, or upon actual receipt of such mailing, whichever shall first occur. The addresses for such communications shall be:

If to the Company: Navidea Biopharmaceuticals, Inc..
425 Metro Place North, Suite 300
Dublin, Ohio 43017-1367
Facsimile No.: (614) 793-7520
Attention: Ricardo J. Gonzalez

with copies (which copies shall not constitute notice to the Company) to: Dickinson Wright PLLC
150 E. Gay Street
Suite 2400
Columbus OH 43215
Attention: William J. Kelly

If to the Purchasers: c/o Platinum-Montaur Life Sciences, LLC
250 West 55th Street
14th Floor, New York
New York 10019
Attention: David Steinberg

with copies (which copies shall not constitute notice to the Purchasers) to: Burak Anderson & Melloni, PLC
30 Main Street, PO Box 787
Burlington, Vermont 05402-0787
Facsimile No.: (802) 862-8176
Attention: Shane W. McCormack

Any party hereto may from time to time change its address for notices by giving written notice of such changed address to the other party hereto.

(e) Waivers. No waiver by any party of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right accruing to it thereafter.

(f) Headings. The article, section and subsection headings in this Agreement are for convenience only and shall not constitute a part of this Agreement for any other purpose and shall not be deemed to limit or affect any of the provisions hereof.

(g) Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the successors and permitted assigns of the parties hereto. Subject to applicable securities laws and any restrictions contained herein, a Purchaser may assign any of its rights under this Agreement to any Person, and any holder of shares of Preferred Stock may assign, in whole or in part, such shares of Preferred Stock to any Person. The Company may not assign any of its rights, or delegate any of its obligations, under this Agreement without the prior written consent of the Purchasers, and any such purported assignment by the Company without the written consent of the Purchasers shall be void and of no effect.

(h) No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

(i) Governing Law. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Delaware, without giving effect to any of the conflicts of law principles which would result in the application of the substantive law of another jurisdiction.

(j) Survival. The representations and warranties of the Company and the Purchasers contained in Sections 4 and 5 shall survive the execution and delivery hereof and the Closing until the third anniversary of the Closing Date.

The agreements and covenants set forth herein shall survive the execution and delivery hereof and Closing hereunder.

(k) Counterparts. Electronic transmissions or retransmissions of images of any executed original document shall be deemed to be the same as the delivery of an executed original. At the request of any party hereto, the other parties hereto shall confirm such electronic transmissions by executing duplicate original documents and delivering the same to the requesting party or parties. This Agreement may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement, it being understood that all parties need not sign the same counterpart.

(l) Publicity. The Company agrees that it will not disclose, and will not include in any public announcement, the name of the Purchasers without the consent of the Purchasers, which consent shall not be unreasonably withheld or delayed, or unless and until such disclosure is required by law, rule or applicable regulation, including without limitation any disclosure pursuant to the Registration Statement, and then only to the extent of such requirement. Notwithstanding the foregoing, the Purchasers consent to being identified in any filings the Company makes with the Commission to the extent required by law or the rules and regulations of the Commission.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their respective authorized persons as of the date first indicated above.

NAVIDEA BIOPHARMACEUTICALS, INC.

By: /s/ Brent L. Larson
Name: Brent L. Larson
Title: Executive Vice-President and CFO

PURCHASERS:

PLATINUM-MONTAUR LIFE SCIENCES, LLC

By: /s/ D. Steinberg
Name: David Steinberg
Title: Authorized Signatory

/s/ Michael Goldberg
Michael Goldberg

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

I, Ricardo J. Gonzalez, certify that:

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

May 11, 2015

/s/ Ricardo J. Gonzalez

Ricardo J. Gonzalez
Chief Executive Officer

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

I, Brent L. Larson, certify that:

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

May 11, 2015

/s/ Brent L. Larson

Brent L. Larson

Executive Vice President and Chief Financial Officer

**CERTIFICATION OF PERIODIC FINANCIAL REPORT PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350**

The undersigned hereby certifies that he is the duly appointed and acting Chief Executive Officer of Navidea Biopharmaceuticals, Inc. (the "Company") and hereby further certifies as follows:

(1) The periodic report containing financial statements to which this certificate is an exhibit 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 periodic report to which this certificate is an exhibit fairly presents, in all material respects, the financial condition and results of operations of the Company.

In witness whereof, the undersigned has executed and delivered this certificate as of the date set forth opposite his signature below.

May 11, 2015

/s/ Ricardo J. Gonzalez

Ricardo J. Gonzalez

Chief Executive Officer

**CERTIFICATION OF PERIODIC FINANCIAL REPORT PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350**

The undersigned hereby certifies that he is the duly appointed and acting Chief Financial Officer of Navidea Biopharmaceuticals, Inc. (the "Company") and hereby further certifies as follows:

(1) The periodic report containing financial statements to which this certificate is an exhibit 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 periodic report to which this certificate is an exhibit fairly presents, in all material respects, the financial condition and results of operations of the Company.

In witness whereof, the undersigned has executed and delivered this certificate as of the date set forth opposite his signature below.

May 11, 2015

/s/ Brent L. Larson

Brent L. Larson

Executive Vice President and Chief Financial Officer