

**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 June 30, 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 31-1080091
(State or other jurisdiction of incorporation or organization) (IRS Employer Identification No.)

5600 Blazer Parkway, Suite 200, Dublin, Ohio 43017-7550
(Address of principal executive offices) (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: 150,699,681 shares of common stock, par value \$.001 per share (as of the close of business on July 31, 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	June 30, 2015 (unaudited)	December 31, 2014
Current assets:		
Cash	\$ 15,790,235	\$ 5,479,006
Accounts receivable	1,829,590	816,544
Inventory, net	1,195,109	932,385
Prepaid expenses and other	716,118	1,371,210
Total current assets	19,531,052	8,599,145
Property and equipment	3,969,677	4,124,028
Less accumulated depreciation and amortization	1,748,487	1,614,320
	2,221,190	2,509,708
Patents and trademarks	216,497	219,558
Less accumulated amortization	43,723	38,725
	172,774	180,833
Investment in R-NAV, LLC	—	241,575
Other assets	273,573	299,047
Total assets	\$ 22,198,589	\$ 11,830,308

Continued

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

LIABILITIES AND STOCKHOLDERS' DEFICIT	June 30, 2015 (unaudited)	December 31, 2014
Current liabilities:		
Accounts payable	\$ 1,357,661	\$ 1,477,499
Accrued liabilities and other	2,897,698	3,234,120
Deferred revenue, current	1,000,000	—
Notes payable, current, net of discounts of \$0 and \$863,813, respectively	333,333	4,348,678
Total current liabilities	5,588,692	9,060,297
Deferred revenue	666,667	—
Notes payable, net of discounts of \$2,167,545 and \$1,585,882, respectively	58,836,254	29,484,057
Other liabilities	1,725,477	3,089,420
Total liabilities	66,817,090	41,633,774
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock; \$.001 par value; 5,000,000 shares authorized; 4,519 Series B shares issued and outstanding at June 30, 2015 and December 31, 2014, respectively	4	4
Common stock; \$.001 par value; 200,000,000 shares authorized; 150,711,593 and 150,200,259 shares issued and outstanding at June 30, 2015 and December 31, 2014, respectively	150,712	150,200
Additional paid-in capital	324,726,485	323,030,301
Accumulated deficit	(369,965,774)	(352,983,971)
Total Navidea stockholders' deficit	(45,088,573)	(29,803,466)
Noncontrolling interest	470,072	—
Total stockholders' deficit	(44,618,501)	(29,803,466)
Total liabilities and stockholders' deficit	\$ 22,198,589	\$ 11,830,308

See accompanying notes to consolidated financial statements (unaudited).

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2015	2014	2015	2014
Revenue:				
Lymphoseek sales revenue	\$ 1,963,548	\$ 1,046,257	\$ 3,798,970	\$ 1,672,888
Lymphoseek license revenue	250,000	—	333,333	—
Grant and other revenue	654,360	28,433	844,061	153,606
Total revenue	<u>2,867,908</u>	<u>1,074,690</u>	<u>4,976,364</u>	<u>1,826,494</u>
Cost of goods sold	332,730	270,498	781,787	463,718
Gross profit	<u>2,535,178</u>	<u>804,192</u>	<u>4,194,577</u>	<u>1,362,776</u>
Operating expenses:				
Research and development	2,297,074	5,112,098	6,278,362	10,338,892
Selling, general and administrative	4,048,799	4,907,652	9,542,967	8,818,485
Total operating expenses	<u>6,345,873</u>	<u>10,019,750</u>	<u>15,821,329</u>	<u>19,157,377</u>
Loss from operations	<u>(3,810,695)</u>	<u>(9,215,558)</u>	<u>(11,626,752)</u>	<u>(17,794,601)</u>
Other income (expense):				
Interest expense, net	(1,575,741)	(909,051)	(2,542,317)	(1,846,096)
Equity in loss of R-NAV, LLC	(6,205)	—	(268,432)	—
Change in fair value of financial instruments	(1,852,730)	(92,332)	(125,627)	300,151
Loss on extinguishment of debt	(2,440,714)	—	(2,440,714)	(2,610,196)
Other, net	(4,834)	(5,293)	21,698	(12,045)
Total other income (expense), net	<u>(5,880,224)</u>	<u>(1,006,676)</u>	<u>(5,355,392)</u>	<u>(4,168,186)</u>
Net loss	(9,690,919)	(10,222,234)	(16,982,144)	(21,962,787)
Less loss attributable to noncontrolling interest	(241)	—	(341)	—
Deemed dividend on beneficial conversion feature of MT Preferred Stock	—	—	(46,000)	—
Net loss attributable to common stockholders	<u>\$ (9,690,678)</u>	<u>\$ (10,222,234)</u>	<u>\$ (17,027,803)</u>	<u>\$ (21,962,787)</u>
Loss per common share (basic and diluted)	\$ (0.06)	\$ (0.07)	\$ (0.11)	\$ (0.15)
Weighted average shares outstanding (basic and diluted)	150,107,148	150,019,939	149,951,603	147,416,111

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 stock upon exercise of stock options, net	—	—	120,733	121	49,115	—	—	49,236
Issued restricted stock	—	—	332,000	332	—	—	—	332
Canceled forfeited restricted stock	—	—	(38,750)	(39)	39	—	—	—
Canceled stock to pay employee tax obligations	—	—	(7,645)	(7)	(12,607)	—	—	(12,614)
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	—	—	—	—	1,519,020	—	—	1,519,020
Net loss	—	—	—	—	—	(16,981,803)	(341)	(16,982,144)
Issuance of MT Preferred Stock, net of deemed dividend on beneficial conversion feature	—	—	—	—	(46,000)	—	470,413	424,413
Balance, June 30, 2015	4,519	\$ 4	150,711,593	\$150,712	\$ 324,726,485	\$ (369,965,774)	\$ 470,072	\$ (44,618,501)

See accompanying notes to consolidated financial statements (unaudited).

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

	Six Months Ended June 30,	
	2015	2014
Cash flows from operating activities:		
Net loss	\$ (16,982,144)	\$ (21,962,787)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	299,139	235,356
Loss on disposal and abandonment of assets	14,749	28,681
Change in inventory reserve	92,751	—
Amortization of debt discount and issuance costs	358,924	436,824
Compounded interest on long term debt	429,074	—
Stock compensation expense	1,519,020	1,559,935
Equity in loss of R-NAV, LLC	268,432	—
Change in fair value of financial instruments	125,627	(300,151)
Loss on extinguishment of debt	2,440,714	2,610,196
Issued stock to 401(k) plan for employer matching contributions	117,099	100,044
Other	42,765	—
Changes in operating assets and liabilities:		
Accounts receivable	(1,013,046)	663,477
Inventory	(355,475)	326,673
Prepaid expenses and other assets	680,566	194,694
Accounts payable	(119,838)	(748,278)
Accrued and other liabilities	(377,132)	(737,089)
Deferred revenue	1,666,667	—
Net cash used in operating activities	<u>(10,792,108)</u>	<u>(17,592,425)</u>
Cash flows from investing activities:		
Purchases of equipment	(27,618)	(1,108,164)
Proceeds from sales of equipment	20,300	—
Patent and trademark costs	(9,993)	(14,361)
Net cash used in investing activities	<u>(17,311)</u>	<u>(1,122,525)</u>
Cash flows from financing activities:		
Proceeds from issuance of MT Preferred Stock and warrants	500,000	—
Payment of preferred stock issuance costs	(12,587)	—
Proceeds from issuance of common stock and short swing profits	60,422	88,064
Payment of tax withholdings related to stock-based compensation	(23,468)	(75,759)
Proceeds from notes payable	54,500,000	30,000,000
Payment of debt-related costs	(3,902,487)	(1,763,526)
Principal payments on notes payable	(30,000,000)	(25,000,000)
Payments under capital leases	(1,232)	(1,075)
Net cash provided by financing activities	<u>21,120,648</u>	<u>3,247,704</u>
Net increase (decrease) in cash	10,311,229	(15,467,246)
Cash, beginning of period	5,479,006	32,939,026
Cash, end of period	<u>\$ 15,790,235</u>	<u>\$ 17,471,780</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 June 30, 2015 and for the three-month and six-month periods ended June 30, 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 June 30, 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, LLC (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 June 30, 2015 and December 31, 2014 primarily consists of the face amount of the notes less unamortized discounts. See Note 8. At June 30, 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 June 30, 2015, the fair value of our notes payable is approximately \$68.0 million, compared to the carrying value of \$59.2 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 June 30, 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 June 30, 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® (technetium Tc 99m tilmanocept) injection. 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. 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, however, we may allow returns in certain circumstances based on specific agreements.

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 and its subsidiaries. See Note 7.

- d. **Change in Accounting Principle:** In April 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (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.

During the second quarter of 2015, the Company elected early adoption of ASU 2015-03. The consolidated balance sheet as of December 31, 2014 has been adjusted to reflect retrospective application of the new method of presentation. Deferred debt issuance costs totaling \$90,000 that were included in other assets as of December 31, 2014 were reclassified as discounts on notes payable, current, of \$35,000 and discounts on notes payable, long term, of \$55,000. We have reflected these costs as a reduction of the debt on the balance sheet as of June 30, 2015 and will continue to do so in future periods. The adoption of ASU 2015-03 had no impact on the consolidated statements of operations, stockholders' equity (deficit) or cash flows.

- e. **Recent Accounting Pronouncements:** In February 2015, the FASB issued 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 July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*. ASU 2015-11 applies to all inventory that is measured using methods other than last-in, first-out or the retail inventory method, including inventory that is measured using first-in, first-out or average cost. ASU 2015-11 requires entities to measure inventory at the lower of cost and net realizable value, defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. ASU 2015-11 is effective for public entities for fiscal years beginning after December 15, 2016, and interim periods with fiscal years beginning after December 15, 2017. The amendments in ASU 2015-11 should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. We do not expect the adoption of ASU 2015-11 to have a material effect on our consolidated financial statements upon adoption.

2. Fair Value

As discussed in Note 8, under the First and Second Amended Platinum Notes, Platinum-Montaur Life Sciences, LLC (Platinum) had 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 into Navidea common stock, under certain circumstances. In May 2015, Navidea and Platinum executed a Third Amended Platinum Note, which extends Platinum's right to convert any portion of the unpaid principal or unpaid interest to all draws under the credit facility, including those made prior to the second quarter of 2013. The Third Amended Platinum Note also changed other provisions of the Platinum Loan Agreement as discussed further in Note 8. Platinum's debt instrument, including the embedded option to convert such debt into common stock, is recorded at fair value on the consolidated balance sheets. The estimated fair value of the Platinum notes payable is \$10.4 million at June 30, 2015.

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 June 30, 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 June 30, 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	\$ —	\$ —	\$ 10,414,909	\$ 10,414,909
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 additional draws, and management's estimate of the likelihood of conversion. 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 and six-month periods ended June 30, 2015 and 2014. There were no transfers in or out of our Level 2 liabilities during the three-month and six-month periods ended June 30, 2015 or 2014. Changes in the estimated fair value of our Level 3 liabilities relating to unrealized gains (losses) are recorded as changes in fair value of financial instruments in the consolidated statements of operations. The change in the estimated fair value of our Level 3 liabilities during the three-month periods ended June 30, 2015 and 2014 was \$(1.9) million and \$(92,000), respectively. The change in the estimated fair value of our Level 3 liabilities during the six-month periods ended June 30, 2015 and 2014 was \$(126,000) and \$300,000, respectively.

3. Stock-Based Compensation

At June 30, 2015, we have instruments outstanding under two stock-based compensation plans; the Amended and Restated 2002 Stock Incentive Plan (the 2002 Plan) and the Amended and Restated 2014 Stock Incentive Plan (the 2014 Plan). Total shares authorized under each plan are 12 million shares and 5 million shares, respectively. 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. 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 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 June 30, 2015 and 2014, our total stock-based compensation expense was approximately \$412,000 and \$867,000, respectively. For the six-month periods ended June 30, 2015 and 2014, our total stock-based compensation expense was approximately \$1.5 million and \$1.6 million, respectively. We have not recorded any income tax benefit related to stock-based compensation in either of the three-month and six-month periods ended June 30, 2015 and 2014.

A summary of the status of our stock options as of June 30, 2015, and changes during the six-month period then ended, is presented below:

	Six Months Ended June 30, 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	1,365,400	1.67		
Exercised	(141,250)	0.57		
Canceled and Forfeited	(99,900)	2.29		
Expired	(5,750)	1.26		
Outstanding at end of period	6,464,264	\$ 2.09	7.6 years	\$ 774,822
Exercisable at end of period	3,169,487	\$ 2.42	6.2 years	\$ 409,459

A summary of the status of our unvested restricted stock as of June 30, 2015, and changes during the six-month period then ended, is presented below:

	Six Months Ended June 30, 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	(240,750)	1.85
Forfeited	(38,750)	3.15
Unvested at end of period	550,750	\$ 1.74

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. In May 2015, 100,750 shares of restricted stock held by employees with an aggregate fair value of \$130,000 vested as scheduled according to the terms of the restricted stock agreements.

As of June 30, 2015, there was approximately \$1.9 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 1.8 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 and six-month periods ended June 30, 2015 and 2014 excludes the effects of 20.3 million and 18.3 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 551,000 and 470,000 shares of unvested restricted stock were excluded in determining basic and diluted loss per share for the three-month and six-month periods ended June 30, 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 June 30, 2015 and December 31, 2014, net of reserves of \$465,000 and \$539,000, respectively, are as follows:

	June 30, 2015	December 31,
	(unaudited)	2014
Materials	\$ 510,000	\$ —
Work-in-process	284,453	1,034,476
Finished goods	865,349	436,936
Reserves	(464,693)	(539,027)
Total	<u>\$ 1,195,109</u>	<u>\$ 932,385</u>

During the six-month period ended June 30, 2015, we capitalized \$791,000 of inventory costs associated with our Lymphoseek product. The Company capitalized no such costs during the same period in 2014. During the six-month period ended June 30, 2015, we wrote off \$120,000 of materials related to production issues. During the six-month periods ended June 30, 2015 and 2014, we wrote off \$123,000 and \$45,000, 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 (collectively, the Investors) 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 that may 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 the 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 June 30, 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 Manoccept 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 \$6,205 and \$268,432, respectively, for the three-month and six-month periods ended June 30, 2015.

The Company is obligated to provide \$500,000 of in-kind services to R-NAV is being recognized as those services are provided. The Company provided \$6,000 and \$27,000, respectively, of in-kind services during the three-month and six-month periods ended June 30, 2015. As of June 30, 2015, the Company has \$434,000 of in-kind services remaining to provide under this obligation.

8. Notes Payable

Capital Royalty Group Debt

In May 2015, Navidea and its subsidiary Macrophage Therapeutics, Inc., as guarantor, executed a Term Loan Agreement (the CRG Loan Agreement) with Capital Royalty Partners II L.P. in its capacity as a lender and as control agent for other affiliated lenders party to the CRG Loan Agreement (collectively, the Lenders) in which the Lenders agreed to make a term loan to the Company in the aggregate principal amount of \$50 million (the CRG Term Loan), with an additional \$10 million in loans to be made available upon the satisfaction of certain conditions stated in the CRG Loan Agreement. Closing and funding of the CRG Term Loan occurred on May 15, 2015 (the Effective Date). The principal balance of the CRG Term Loan will bear interest from the Effective Date at a per annum rate of interest equal to 14.0%. The Company will make quarterly payments of interest only in arrears commencing on June 30, 2015. Through March 31, 2019, the Company has the option of paying (i) 10.00% of the per annum interest in cash and (ii) 4.00% of the per annum interest as compounded interest which is added to the aggregate principal amount of the CRG Term Loan. Principal is repayable in eight equal quarterly installments during the final two years of the term. All unpaid principal, and accrued and unpaid interest, is due and payable in full on March 31, 2021. In addition, \$255,000 of interest was compounded and added to the balance of the CRG Term Loan during the quarter ended June 30, 2015. As of June 30, 2015, the outstanding principal balance of the CRG Term Loan was \$50.3 million.

The Company may voluntarily prepay the CRG Term Loan in full, upon fifteen business days' prior written notice to the Lenders, with a prepayment premium beginning at 5% and declining by 1% annually thereafter, with no premium being payable if prepayment occurs after the fifth year of the term. The CRG Term Loan required the payment on the borrowing date of a financing fee of \$625,000 which was recorded as a discount to the debt. In addition, a facility fee of \$1.0 million is payable at the end of the term or when the loan is repaid in full. A long-term liability has been recorded for the \$1.0 million facility fee with a corresponding discount to the debt. The CRG Term Loan is 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 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 Lenders may accelerate the payment terms of the CRG Loan Agreement upon the occurrence of certain events of default set forth therein, which include the failure of the Company to make timely payments of amounts due under the CRG Loan Agreement, the failure of the Company to adhere to the covenants set forth in the CRG Loan Agreement, and the insolvency of the Company. The covenants of the CRG Loan Agreement include a covenant that the Company shall have EBITDA of no less than \$5 million in each calendar year during the term or revenues from sales of Lymphoseek in each calendar year during the term of at least \$11 million in 2015, with the target minimum revenue increasing in each year thereafter until reaching \$45 million in 2020. If the Company fails to meet the applicable minimum EBITDA or revenue target in any calendar year, the CRG Loan Agreement provides the Company a cure right if it raises 2.5 times the EBITDA or revenue shortfall in equity or subordinated debt and deposits such funds in a separate blocked account. Additionally, the Company must maintain liquidity, defined as the balance of unencumbered cash and permitted cash equivalent investments, of at least \$5 million during the term of the CRG Term Loan. The events of default under the CRG Loan Agreement also include a failure of Platinum to perform its funding obligations under the Platinum Loan Agreement (as defined below) at any time as to which the Company had negative EBITDA for the most recent fiscal quarter, as a result either of Platinum's repudiation of its obligations under the Platinum Loan Agreement, or the occurrence of an insolvency event with respect to Platinum. As of June 30, 2015, we were in compliance with all applicable covenants of the CRG Loan Agreement.

In connection with the CRG Loan Agreement, the Company recorded a debt discount related to lender fees and other costs directly attributable to the CRG Loan Agreement totaling \$2.2 million. The debt discount is being amortized as non-cash interest expense using the effective interest method over the term of the CRG Loan Agreement. As of June 30, 2015, the balance of the debt discount was \$2.2 million.

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 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. In May 2015, in connection with the consummation of the CRG Loan Agreement, the Company repaid all amounts outstanding under the Oxford Loan Agreement. The payoff amount of \$31.6 million included payments of \$289,000 as a pre-payment fee and \$2.4 million as an end-of-term final payment fee. The carrying value of the Oxford Notes was \$26.9 million prior to payoff. We recorded a loss on extinguishment of the Oxford Notes of \$2.4 million.

Platinum Credit Facility

In connection with the Company entering into the CRG Loan Agreement, the Company and Platinum entered into a Third Amendment (the Third Platinum Amendment) to the Loan Agreement between the Company and Platinum, dated July 25, 2012, as amended June 25, 2013 and March 4, 2014 (the Platinum Loan Agreement). Platinum and the Lenders also entered into a Subordination Agreement (the Subordination Agreement), which the Company consented to and acknowledged, providing for the subordination of the Company's indebtedness to Platinum under the Platinum Loan Agreement to the Company's indebtedness under the CRG Loan Agreement, among other customary terms and conditions. Contemporaneously with the execution of the Third Platinum Amendment, the Company delivered a Third Amended and Restated Promissory Note, dated the Effective Date (the Third Amended Platinum Note), which amends and restates the Second Amended Promissory Note, dated March 4, 2014, made by the Company in favor of Platinum in the original principal amount of up to \$35 million. Among other things, the Third Platinum Amendment (i) extends the term of the Platinum Loan Agreement until September 30, 2021 or six months following an early repayment of the CRG Term Loan; (ii) changes the interest rate to the greater of (a) the United States prime rate as reported in The Wall Street Journal plus 6.75%, (b) 10.0% or (c) the highest rate of interest then payable pursuant to the CRG Term Loan plus 0.125% (the effective interest rate as of June 30, 2015 was 14.125%); (iii) requires such interest to compound monthly; and (iv) changes the provisions of the Platinum Loan Agreement governing Platinum's right to convert advances into common stock of the Company. The Platinum Loan Agreement formerly provided for the optional conversion of advances made on or after June 25, 2013 beginning two years from the date of the advance at a conversion price equal to the lesser of (i) 90% of the lowest volume weighted average price for the 10 trading days preceding the date of such conversion request, or (ii) the average volume weighted average trading price for the 10 trading days preceding the date of such conversion request. Under the Third Platinum Amendment, the conversion right now applies to all advances made under the Platinum Loan Agreement, but not until such time as the average daily volume weighted average price of the Company's common stock for the ten preceding trading days exceeds \$2.53 per share. As of the Effective Date, the net advances to the Company under the Platinum Loan Agreement were \$7.7 million.

The Platinum Loan Agreement provides us with a credit facility of up to \$50 million. The Company borrowed an additional \$4.5 million under the Platinum Loan Agreement during the six-month period ended June 30, 2015. In addition, \$174,000 of interest was compounded and added to the balance of the Third Amended Platinum Note during the quarter ended June 30, 2015. The Third Amended Platinum Note is reflected on the consolidated balance sheets at its estimated fair value, which includes the estimated fair value of the embedded conversion option of \$2.5 million. Changes in the estimated fair value of the Third Amended Platinum Note of \$1.9 million and \$96,000, respectively, were recorded as non-cash changes in fair value of financial instruments during the three-month periods ended June 30, 2015 and 2014. Changes in the estimated fair value of the Third Amended Platinum Note of \$126,000 and \$(298,000), respectively, were recorded as non-cash changes in fair value of financial instruments during the six-month periods ended June 30, 2015 and 2014. The estimated fair value of the Third Amended Platinum Note was \$10.4 million as of June 30, 2015. As of June 30, 2015, the outstanding principal balance of the Third Amended Platinum Note was approximately \$7.9 million, with \$27.3 million currently available under the credit facility. An additional \$15 million is potentially available under the credit facility on terms to be negotiated.

R-NAV Debt

As of June 30, 2015, the outstanding principal balance of the note payable to R-NAV was \$666,666 consisting of two payments of \$333,333 each due in July 2015 and July 2016, respectively.

Interest on our Debt

During the three-month periods ended June 30, 2015 and 2014, we recorded interest expense of \$1.6 million and \$914,000, respectively, related to our notes payable. Of these amounts, \$146,000 and \$195,000, respectively, related to amortization of the debt discounts related to our notes payable. An additional \$429,000 of total interest expense was compounded and added to the balance of our notes payable during the three-month period ended June 30, 2015. During the six-month periods ended June 30, 2015 and 2014, we recorded interest expense of \$2.5 million and \$1.9 million, respectively, related to our notes payable. Of these amounts, \$359,000 and \$437,000, respectively, related to amortization of the debt discounts related to our notes payable. An additional \$429,000 of total interest expense was compounded and added to the balance of our notes payable during the six-month period ended June 30, 2015.

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 June 30, 2015, derivative liabilities consist of warrants to purchase MT Common Stock, issued to Platinum and Dr. Michael Goldberg. The total estimated fair value of our derivative liabilities was \$63,000 as of June 30, 2015. See Note 1b(3).

10. Equity

During the six-month period ended June 30, 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 June 30, 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 June 30, 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. The warrants have remaining outstanding terms ranging from 0 to 8 years.

In addition, at June 30, 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 included seven staff members and three executives. The executives continued as employees during transition periods of varying lengths, depending upon the nature and extent of responsibilities transitioned or wound down.

During the six-month period ended June 30, 2015, the Company recognized approximately \$1.3 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 \$273,000.

A summary of changes in accrued separation costs during the six-month period ended June 30, 2015 is presented below:

Accrued separation costs, December 31, 2014	\$	449,351
Payments related to May 2014 reduction in force		(405,187)
Charges incurred with March 2015 reduction in force		994,572
Payments related to March 2015 reduction in force		(984,072)
Accrued separation costs, June 30, 2015	\$	<u>54,664</u>

The remaining accrued separation costs related to the Company's reductions in force represent the estimated cost of continuing healthcare coverage, and are included in accrued liabilities and other on the consolidated balance sheet as of June 30, 2015.

13. Termination of Sublicense

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.

14. 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 June 30, 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 June 30, 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 June 30, 2015, tax years 2011-2014 remained subject to examination by federal and state tax authorities.

15. 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 other diagnostic applications of our Manocept platform, our R-NAV subsidiary, NAV4694 and NAV5001, and (ii) therapeutic development programs, including therapeutic applications of our Manocept platform and all development programs undertaken by Macrophage Therapeutics, Inc.

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

Three Months Ended June 30, 2015	Diagnostics	Therapeutics	Corporate	Total
Lymphoseek sales revenue:				
United States ¹	\$ 1,963,273	\$ —	\$ —	\$ 1,963,273
International	275	—	—	275
Lymphoseek license revenue	250,000	—	—	250,000
Grant and other revenue	654,360	—	—	654,360
Total revenue	2,867,908	—	—	2,867,908
Cost of goods sold	332,730	—	—	332,730
Research and development expenses	2,120,336	176,738	—	2,297,074
Selling, general and administrative expenses, excluding depreciation and amortization ²	1,529,042	64,018	2,341,838	3,934,898
Depreciation and amortization	72,289	—	77,058	149,347
Loss from operations ³	(1,151,043)	(240,756)	(2,418,896)	(3,810,695)
Other income (expense), excluding equity in the loss of R-NAV, LLC ⁴	—	—	(5,874,019)	(5,874,019)
Equity in the loss of R-NAV, LLC	—	—	(6,205)	(6,205)
Net loss	(1,151,043)	(240,756)	(8,299,120)	(9,690,919)
Total assets, net of depreciation and amortization:				
United States	4,035,926	—	17,690,779	21,726,705
International	470,033	—	1,851	471,884
Capital expenditures	25,492	—	2,126	27,618

Six Months Ended June 30, 2015	Diagnostics	Therapeutics	Corporate	Total
Lymphoseek sales revenue:				
United States ¹	\$ 3,793,920	\$ —	\$ —	\$ 3,793,920
International	5,050	—	—	5,050
Lymphoseek license revenue	333,333	—	—	333,333
Grant and other revenue	844,061	—	—	844,061
Total revenue	4,976,364	—	—	4,976,364
Cost of goods sold	781,787	—	—	781,787
Research and development expenses	6,015,610	262,752	—	6,278,362
Selling, general and administrative expenses, excluding depreciation and amortization ²	3,571,217	78,384	5,665,304	9,314,905
Depreciation and amortization	144,397	—	154,742	299,139
Loss from operations ³	(5,465,571)	(341,136)	(5,820,045)	(11,626,752)
Other income (expense), excluding equity in the loss of R-NAV, LLC ⁴	—	—	(5,086,960)	(5,086,960)
Equity in the loss of R-NAV, LLC	—	—	(268,432)	(268,432)
Net loss	(5,465,571)	(341,136)	(11,175,437)	(16,982,144)
Total assets, net of depreciation and amortization:				
United States	4,035,926	—	17,690,779	21,726,705
International	470,033	—	1,851	471,884
Capital expenditures	25,492	—	2,126	27,618

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, changes in fair value of financial instruments, and losses on debt extinguishment, which are not currently allocated to our individual reportable segments.

16. Supplemental Disclosure for Statements of Cash Flows

During the six-month periods ended June 30, 2015 and 2014, we paid interest aggregating \$2.0 million and \$1.4 million, respectively. During the six-month periods ended June 30, 2015 and 2014, we recorded \$1.0 million and \$2.4 million, respectively, of end-of-term fees associated with our notes payable to CRG and Oxford.

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.

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 to specifically target the CD206 mannose receptor expressed on 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 a therapeutic agent 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 discussions related to the potential partnering or divestiture of 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. In April 2015, the Company entered into an agreement with Alseres to terminate the NAV5001 sub-license agreement. We continue to seek partnership or divestiture for NAV4694.

Navidea remains committed to realizing the full potential of Lymphoseek. We have deployed our own field sales force and are implementing a new strategy to accelerate the strong growth of this product. The Company believes that the resources being devoted to drive Lymphoseek sales will lead to positive cash flows and profitability. We are 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, the formation of Macrophage Therapeutics, Inc. in January 2015, and Macrophage Therapeutics' research collaboration agreement with BIND Therapeutics executed in June 2015, which we believe may further expand the Company's pipeline but which require less near-term funding from Navidea than the 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 trials in anal/rectal, endometrial, and cervical cancers, 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

In January 2015, we announced that an analysis comparing sentinel lymph node (SLN) biopsy procedures using Lymphoseek (TcTM) + vital blue dye (VDB) to filtered [^{99m}Tc] 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 [^{99m}Tc]Tilmanocept and Filtered [^{99m}Tc]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, “*[^{99m}Tc]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).

In June 2015, results of an investigator-initiated, comparative study of Lymphoseek versus filtered Tc-99m Sulfur Colloid (fTcSC) measuring injection site pain in patients with breast cancer undergoing lymphoscintigraphy were presented at the 2015 Society of Nuclear Medicine and Molecular Imaging (SNMMI) conference. The results of the trial, led by Anne Wallace, M.D., professor of surgery at University of California, San Diego (UCSD) School of Medicine, highlighted that fTcSC caused statistically significant greater levels of pain after injection compared to Lymphoseek. The randomized, double-blind clinical trial compared post-injection site pain using fTcSC versus Lymphoseek in 52 [(27) fTcSC and (25) Lymphoseek] breast cancer patients undergoing lymphoscintigraphy. Pain was evaluated with a visual analogue scale and short form McGill Pain Questionnaire at 1, 2, 3, 4, 5, 15 and 30 minutes post-injection. Analysis of the data indicates baseline pain scores were similar between groups. At one minute post-injection, patients receiving fTcSC experienced a mean change in pain of 16.8mm (standard deviation (SD) 19.5) compared to 0.2mm (SD 7.3) in the Lymphoseek group ($p = 0.0002$). Overall, patients receiving Lymphoseek experienced statistically significant less change in pain scores compared to patients receiving fTcSC at 1-3 minutes post-injection.

In July 2015, we announced the peer-reviewed publication of data verifying the Lymphoseek CD206-binding mechanism of action in the *Journal of Immunology*. Strong evidence-based studies demonstrate macrophages are the major target cell and identify CD206, the mannose receptor, as the tilmanocept-binding receptor. CD206 is highly expressed on the surface of tissue macrophages that are known to reside in the sentinel lymph nodes (SLNs) draining a primary tumor.

Manocept Platform - Diagnostics and Therapeutics Background

Navidea’s Manocept platform is predicated on the ability to specifically target the CD206 mannose receptor expressed on activated macrophages. 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, targeted treatment 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, central nervous system (CNS) diseases, 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.

Manocept Platform - Diagnostics Clinical Data

In June 2015, results from several pre-clinical Manocept studies in RA were presented at the EULAR 2015 European Congress of Rheumatology. The results of the studies, led by Wael Jarjour, Thomas J. Rosol and Larry S. Schlesinger of The Ohio State University Wexner Medical Center, highlighted the potential of CD206-targeting Manocept constructs to detect immune-mediated inflammation in RA which could be used diagnostically, to monitor therapeutic efficacy, or as a potential therapeutic platform. The presentation showed results from synovial fluid and tissue acquired from RA patients for comparison to normal frozen archival tissue and synovial tissue procured from patients with osteoarthritis (OA). Tissues were probed with Manocept-Cy3, DAPI nuclear stain, and anti CD206-cyanine. Mononuclear cells were isolated from RA synovial fluid and analyzed by flow cytometry. Results demonstrated that archival synovial tissue and synovial fluid obtained from patients diagnosed with RA contain a significant population of macrophages that express high levels of the CD206 receptor. It was shown that these macrophages strongly co-localize Manocept-Cy3 and CD206 receptors. The degree of macrophage infiltration in tissue from healthy or osteoarthritic patients was significantly lower than in RA tissues. Additionally, in an *in-vivo* animal study, arthritis was induced in mice and was followed with intravenous injection of Manocept-Cy3 and epi-fluorescent imaging. Imaging results indicated that Manocept can be detected in inflamed joints in an *in vivo* animal model of RA.

In July 2015, imaging results from the Manocept clinical trial in KS and other preclinical studies were presented at the 18th International Workshop on Kaposi's Sarcoma Herpesvirus (KSHV) and Related Agents. The clinical imaging study, using Tc 99m tilmanocept in both HIV+ and HIV- patients suggests that KS tumor lesions, both cutaneous and suspected extra-cutaneous sites, can be easily visualized and mapped, demonstrating that this technique may potentially provide a means for routine patient assessment. The results also show that use of Manocept represents a potential therapeutic pathway for targeting tumor-associated macrophages (TAMs). Manocept agents are designed to target CD206, which is highly expressed on TAMs and the KS tumor itself. As a potential therapeutic, Manocept could be used as a precision vehicle to deliver payloads to tumor sites throughout the body. Five Human Herpes Virus8 positive (HHV8+) patients (4 HIV+, 1 HIV-) were enrolled in the NAV3-12 study. Patients received a single subcutaneous injection of Tc 99m tilmanocept in the region of a cutaneous KS lesion and imaging was performed at 1, 4 and 24 hours post-injection to visualize localization of tilmanocept. Results represented by whole body SPECT/CT imaging scans from study patients were presented. Collectively, the scans show localization of tilmanocept and detected multiple cutaneous lesions in the extremities, face and genitalia, as well as extra-cutaneous localization found in the nasopharynx, lymph nodes and brain. Results also indicate that KS lesions are anatomically linked in chains by and within the lymph ducts. The study concludes that both HIV+ and HIV- patients have pan-tumor expression of CD206, strongly suggests tilmanocept crosses the blood-brain barrier and that a Manocept-drug conjugate may have the potential as a therapeutic with high target effect and low off-target concerns. The data from these studies also suggest a novel theory on the genesis of KS in which KS arises from an HHV8 infected macrophage type cell and its interaction with the lymphatic system. This interaction provides the means for access of the KS through CD206 receptor for diagnosis, evaluation, and potential therapy using the Manocept platform.

In July 2015, we received a notice of award for a Phase 1 Small Business Innovation Research (SBIR) grant providing \$322,000 from the National Heart Lung and Blood Institute (NHLBI), National Institutes of Health (NIH). The study, to be done in collaboration with Massachusetts General Hospital (MGH) and Harvard Medical School, will examine the ability of Tc 99m tilmanocept to localize in high-risk atherosclerotic plaques. These specific plaques are rich in CD206 expressing macrophages and are at high risk for near term rupture resulting in myocardial infarctions, sudden cardiac death and strokes. The consequences of atherosclerosis and the cardiovascular disease (CVD) that atherosclerosis causes, while severe in all populations of people, are particularly concentrated in HIV+ patients. Recently, it has been observed that CD206 expressing macrophages densely populate vulnerable plaques or thin cap fibroatheromas (TCFA) but not other kinds (i.e., stable) of atherosclerotic plaques. A primary goal for this grant involves an approved clinical investigation of up to 18 individuals with and without aortic and high risk coronary atherosclerotic plaques and with and without HIV infection to determine the feasibility of Tc 99m tilmanocept to image high risk plaque by SPECT/CT. Results have the potential to provide evidence of the potential of Tc 99m tilmanocept to accumulate in high risk morphology plaques, the ability to make preliminary comparisons of aortic Tc 99m tilmanocept uptake by SPECT/CT in each group, and to evaluate the ability of Tc 99m

tilmanocept to identify the same aortic atherosclerotic plaques that are identified by contrast enhanced coronary computed tomography angiography (CCTA) and/or PET/CT.

Also in July 2015, we received an initial notice of award for a Fast Track SBIR grant providing for up to \$1.7 million from the NIH's National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMD), to fund preclinical animal studies and a Phase 1/2 human clinical study examining the ability of Tc 99m tilmanocept to identify skeletal joints that are inflamed due to RA. RA is a chronic, progressive, systemic autoimmune disease characterized by inflammation of numerous skeletal joints. If not treated successfully, RA can lead to disability, disfigurement and premature death. The funds for this Fast Track grant will be released in two parts, which together have the potential to provide a total of \$1.7 million in resources over 2.5 years to achieve the specific aims and objectives of the grant. The first part will provide \$225,000 to support preclinical animal studies and to support activities needed to prepare for the Phase 1/2 clinical study. The second part of the award will support the Phase 1/2 study, the results from which are expected to confirm the safety and effectiveness of Tc 99m tilmanocept to identify skeletal joint inflammation due to RA.

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® (radioimmunoguided surgery) program. NAV1800 was originally intended to use a monoclonal antibody as an aid in identifying TAG-72, a specific factor associated with 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, or endometrial cancer. 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 NAV1800 program have 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. A key part of our ongoing consideration of the NAV1800 program involved an evaluation of the manufacturability of the humanized monoclonal antibody known as CC49, and ultimately the clinical and commercial viability. In recent years, these evaluations and new clinical data have caused us to question the viability of the monoclonal antibody initiative as it was originally envisioned. During the same time period, we learned significantly more about tilmanocept, the underlying Manocept backbone, and the potential utility of tilmanocept in identifying TAMs, and their consequent potential utility in identifying multifocal tumor disease itself. To that end, we petitioned the NIH to repurpose the grant we were previously awarded towards the study of TAMs in colorectal cancer, and subsequently received confirmation of the acceptance of this repurposing. We anticipate this repurposed grant will now support a diagnostic approach in patients with anal/rectal cancer and possibly colon cancer. We recognize this repurposing represents a major refocusing of the original NAV1800 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 are 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 (collectively, the Investors) 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 the 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 that may 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 June 2015, BIND Therapeutics, Inc. (BIND), a clinical-stage nanomedicine company developing targeted and programmable therapeutics called Accurins™, and MT entered into a research collaboration to engineer Accurins with the Manocept targeting platform. Disease-associated macrophages generally play a pro-tumoral role and are immunosuppressive, preventing the immune system from mounting an attack on tumor cells. Based on the expression of CD206 mannose receptors on disease-associated macrophages, BIND and MT plan to conduct joint research to develop a CD206 targeted Accurin nanoparticle that is capable of concentrating various therapeutic payloads to the tumor microenvironment.

Manocept Platform - Therapeutics Clinical Data

In March 2015, MT announced that data from an ongoing human study indicated 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 these data and on the advice of the Company's SAB, MT will expand the SAB to include members with specific expertise in CNS diseases. 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, foci on the other side of the blood brain barrier were observed that strongly and specifically localized tilmanocept. 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.

In July 2015, MT announced that preclinical results in KS demonstrated that a cytotoxic drug, doxorubicin, linked to Manocept was targeted to and dose-dependently taken up in CD206+ KS tumor cells and TAMs and caused apoptotic death of the KS tumor cells and TAMs. The results were presented at the 18th International Workshop on KSHV and Related Agents by Michael S. McGrath, M.D., Ph.D., Professor, Departments of Laboratory Medicine, Pathology, and Medicine at the University of California, San Francisco (UCSF). The study also shows that Cy3-Manocept and a Cy3-Manocept-doxorubicin conjugate quantitatively permitted the evaluation of tumor burden, tissue uptake of Manocept and tumor response to therapy *in vitro* and *ex vivo*, supporting the potential for the Manocept platform to be used not only diagnostically but as a precision targeted molecule to deliver payloads to tumor sites throughout the body. In summary, the data presented include evidence that:

- KS tissue based cells take up Cy3-Manocept or Cy3-Manocept-doxorubicin into both KS tumor cells and TAMs.
- Manocept conjugate uptake is dose and time dependent in CD206+ macrophages.
- Cy3-Manocept and Cy3-Manocept-doxorubicin bind to CD206 positive macrophages equivalently indicating that the linkage of a drug conjugate did not lessen the CD206 binding ability.

- Manocept-doxorubicin killed CD206 expressing macrophages. After 24 hours, Cy3-Manocept-doxorubicin killed 70% of CD206 positive macrophages in tissue cultures. Doxorubicin alone showed no toxicity.
- KS organ culture treated with Manocept-doxorubicin resulted in the loss of macrophages and induced programmed tumor cell death and apoptosis in KS HHV8+ spindle cells, and showed anti-HIV activity in HIV infected macrophage cultures.

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 discussions related to the potential partnering or divestiture of 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. During the second quarter of 2015, we successfully deployed 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 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 \$6.3 million and \$10.3 million in total on research and development activities during the six-month periods ended June 30, 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	Six Months Ended June 30,	
	2015	2014
Lymphoseek	\$ 896,244	\$ 1,047,298
Manocept Platform	359,523	345,794
Macrophage Therapeutics	181,918	—
NAV4694	1,590,246	3,705,056
NAV5001	159,845	920,722
NAV1800	—	31,393

We expect to continue the advancement of our efforts with Lymphoseek and our Manocept platform during the remainder of 2015, however, we expect the development of therapeutic advances will be funded through Macrophage Therapeutics and that costs incurred by Navidea in support of Manocept development will 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 included seven staff members and three executives. The executives continued as employees during transition periods of varying lengths, depending upon the nature and extent of responsibilities transitioned or wound down. During the six-month period ended June 30, 2015, the Company recognized approximately \$1.3 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 continue to remain at approximately 80% in the coming quarters. The Company also expects that, following completion of partnering or divestiture of NAV4694, 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 breakeven 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 June 30, 2015 and 2014

Lymphoseek Sales and Margins. Net sales of Lymphoseek were \$2.0 million during the second quarter of 2015, compared to \$1.0 million during the same period of 2014. The increase was primarily the result of continued efforts to increase sales. Gross margins on net sales were 83% and 74% for the second quarters of 2015 and 2014, respectively. Cost of goods sold in the second quarter of 2015 included a net benefit of \$65,000 related to our ability to sell certain previously reserved inventory. 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 second quarter of 2015, we recognized \$250,000 of the \$2.0 million non-refundable upfront payment received by the Company related to the 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 second quarter of 2014.

Grant and Other Revenue. During the second quarter of 2015, we recognized \$602,000 of grant revenue as compared to \$28,000 in the second quarter of 2014. Grant revenue during the second quarter of 2015 was primarily related to the receipt of approval for phase 3 of two SBIR grants from the NIH supporting NAV4694, coupled with grants for the development of certain aspects of Manocept platform and Lymphoseek. Grant and other revenue for the second quarter of 2015 also included \$27,000 of revenue related to services provided to R-NAV for Manocept development. Grant and other revenue during the second quarter of 2014 was primarily from one of the SBIR grants from the NIH supporting NAV4694.

Research and Development Expenses. Research and development expenses decreased \$2.8 million, or 55%, to \$2.3 million during the second quarter of 2015 from \$5.1 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 \$1.7 million including decreased clinical trial costs and manufacturing-related activities; (ii) decreased NAV5001 development costs of \$381,000 including decreased manufacturing-related activities and clinical trial costs; and (iii) decreased Lymphoseek development costs of \$165,000 including decreased manufacturing-related activities, European regulatory costs, and life cycle management, offset by increased clinical trial costs; offset by (iv) increased therapeutics development costs of \$154,000 including increased manufacturing-related activities and scientific advisory board fees. The net decrease in research and development expenses also included decreased compensation including incentive-based awards and other expenses related to net decreased headcount of \$437,000 following the first quarter 2015 and second quarter 2014 reductions in force coupled with decreased travel, office and other support costs of \$293,000.

Selling, General and Administrative Expenses. Selling, general and administrative expenses decreased \$859,000, or 18%, to \$4.0 million during the second quarter of 2015 from \$4.9 million during the same period in 2014. The net decrease was primarily due to decreased costs for contracted medical science liaisons and decreased compensation including incentive-based awards and other expenses related to the first quarter 2015 reduction in force coupled with increased commercial and medical headcount, offset by increased professional services and increased market development expenses related to NAV4694.

Other Income (Expense). Other expense, net, was \$5.9 million during the second quarter of 2015 as compared to other expense, net of \$1.0 million during the same period in 2014. Interest expense, net increased \$667,000 to \$1.6 million during the second quarter of 2015 from \$909,000 for the same period in 2014, primarily due to the higher interest related to the CRG Term Loan in 2015 versus the Oxford Notes in 2014, coupled with higher outstanding balances of the Platinum Note in 2015 compared to 2014. Of this interest expense, \$146,000 and \$195,000 in the second 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 CRG Term Loan and Oxford Notes. An additional \$429,000 of this interest expense was compounded and added to the balance of our notes payable during the second quarter of 2015. During the second quarter of 2015, we recorded a \$2.4 million loss on the extinguishment of the Oxford Notes. For the second quarters of 2015 and 2014, we recorded non-cash losses of \$1.9 million and \$92,000, respectively, related to changes in the estimated fair value of financial instruments.

Six Months Ended June 30, 2015 and 2014

Lymphoseek Sales and Margins. Net sales of Lymphoseek were \$3.8 million during the first six months of 2015, compared to \$1.7 million during the same period of 2014. The increase was primarily the result of continued efforts to increase sales. Gross margins on net sales were 79% and 72% for the first six months of 2015 and 2014, respectively. Cost of goods sold in the first six months of 2015 included net inventory losses of \$93,000 related to a production matter, which were offset by a net benefit of \$65,000 related to our ability to sell certain previously reserved inventory. 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 six months of 2015, we recognized \$333,000 of the \$2.0 million non-refundable upfront payment received by the Company related to the 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 six months of 2014.

Grant and Other Revenue. During the first six months of 2015, we recognized \$740,000 of grant revenue as compared to \$154,000 in the first six months of 2014, primarily related to SBIR grants from the NIH supporting NAV4694, Manocept platform development and Lymphoseek. The net increase was primarily due to higher NAV4694 and Lymphoseek grants. Grant and other revenue for the first six months of 2015 also included \$78,000 of revenue related to services provided to R-NAV for Manocept development.

Research and Development Expenses. Research and development expenses decreased \$4.0 million, or 39%, to \$6.3 million during the first six months of 2015 from \$10.3 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 \$2.1 million including decreased clinical trial costs and manufacturing-related activities; (ii) decreased NAV5001 development costs of \$761,000 including decreased manufacturing-related activities and clinical trial costs; and (iii) decreased Lymphoseek development costs of \$151,000 including decreased European regulatory costs offset by increased manufacturing-related activities; offset by (iv) increased therapeutics development costs of \$182,000 including increased scientific advisory board fees and manufacturing-related activities. The net decrease in research and development expenses also included decreased travel, office and other support costs of \$625,000 coupled with decreased compensation including incentive-based awards and other expenses related to net decreased headcount of \$572,000 following the first quarter 2015 and second quarter 2014 reductions in force.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased \$724,000, or 8%, to \$9.5 million during the first six months of 2015 from \$8.8 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 internal commercial and medical education headcount. The net increase in selling, general and administrative expenses also included increased market development expenses related to NAV4694, increased travel, office and other support costs, and increased investor relations costs, offset by decreased costs for contracted medical science liaisons.

Other Income (Expense). Other expense, net, was \$5.4 million during the first six months of 2015 as compared to other expense, net of \$4.2 million during the same period in 2014. Interest expense, net increased \$696,000 to \$2.5 million during the first six months of 2015 from \$1.8 million for the same period in 2014, primarily due to the higher interest related to the CRG Term Loan and Oxford Notes in 2015 versus the Oxford Notes and GECC/MidCap Notes in 2014, coupled with higher outstanding balances of the Platinum Note in 2015 compared to 2014. Of this interest expense, \$359,000 and \$437,000 in the first six months of 2015 and 2014, respectively, was non-cash in nature related to the amortization of debt discounts related to the CRG Term Loan, Oxford Notes and GECC/MidCap Notes. An additional \$429,000 of this interest expense was compounded and added to the balance of our notes payable during the first six months of 2015. For the first six months of 2015 and 2014, we recorded non-cash (expense) income of \$(126,000) and \$300,000, respectively, related to changes in the

estimated fair value of financial instruments. During the first six months of 2015 and 2014, we recorded \$2.4 million and \$2.6 million, respectively, of losses on the extinguishment of the Oxford Notes and GECC/MidCap Notes. During the first six months of 2015, we recorded non-cash expense from our equity in the loss of R-NAV of \$268,000.

Liquidity and Capital Resources

Cash balances increased to \$15.8 million at June 30, 2015 from \$5.5 million at December 31, 2014. The net increase was primarily due to cash received from the CRG Term Loan of \$50.0 million, draws under the Platinum credit facility of \$4.5 million and the issuance of MT Preferred Stock of \$500,000, offset by principal payments on the Oxford Notes of \$30.0 million, payment of debt-related costs of \$3.9 million and cash used to fund our operations, mainly for research and development activities, of \$10.8 million.

Operating Activities. Cash used in operations decreased \$6.8 million to \$10.8 million during the first six months of 2015 compared to \$17.6 million used during the same period in 2014.

Accounts receivable increased to \$1.8 million at June 30, 2015 from \$817,000 at December 31, 2014, primarily due to increased receivables due from the NIH for SBIR grants and from Cardinal Health resulting from the increase in sales of Lymphoseek.

Inventory levels increased to \$1.2 million at June 30, 2015 from \$932,000 at December 31, 2014, primarily due to materials and finished goods inventory produced, offset by finished goods inventory sold and materials inventory consumed for process development. We expect inventory levels to increase modestly over the remainder of 2015 as we produce additional Lymphoseek inventory to meet increasing demand.

Prepaid expenses and other current assets decreased to \$716,000 at June 30, 2015 from \$1.4 million at December 31, 2014, primarily due to application of a prepaid deposit to a new lot of materials inventory coupled with amortization of prepaid insurance and annual FDA user fees.

Accounts payable decreased to \$1.4 million at June 30, 2015 from \$1.5 million at December 31, 2014, primarily due to net decreased payables due to medical education, NAV5001 and NAV4694 vendors, offset by net increased payables due to Lymphoseek manufacturing-related vendors and our board of directors. Accrued liabilities and other current liabilities decreased to \$2.9 million at June 30, 2015 from \$3.2 million at December 31, 2014, primarily due to decreased accruals for the first quarter 2015 reduction in force, Lymphoseek development costs, marketing and medical education costs, and accrued interest, offset by increased accruals for professional services, compensation-related costs, and NAV4694 development costs. Our payable and accrual balances will continue to fluctuate but will likely decrease overall as we continue to decrease our level of development activity related to NAV4694, offset by planned increases in commercial activity related to Lymphoseek and development activity related to the Manocept platform.

Investing Activities. Investing activities used \$17,000 during the first six months of 2015 compared to using \$1.1 million during the same period in 2014. Capital expenditures of \$28,000 during the first six months of 2015 were primarily for Lymphoseek production equipment. Proceeds from sales of equipment of \$20,000 were offset by patent and trademark costs of \$10,000 during the first six months of 2015. Capital expenditures of \$1.1 million during the first six months of 2014 were primarily for leasehold improvements, office furniture and NAV4694 production equipment. Investing activities in the first six months of 2014 also included patent and trademark costs of \$14,000. 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 \$21.1 million during the first six months of 2015 compared to \$3.2 million provided during the same period in 2014. The \$21.1 million provided by financing activities in the first six months of 2015 consisted primarily of proceeds from the CRG Term Loan of \$50.0 million, draws under the Platinum credit facility of \$4.5 million, and proceeds from issuance of MT Preferred Stock of \$500,000, offset by principal payments on the Oxford Notes of \$30.0 million and payment of debt-related costs of \$3.9 million. The \$3.2 million provided by financing activities in the first six months of 2014 consisted primarily of proceeds from the Oxford Notes of \$30.0 million, offset by principal payments on the GECC/MidCap Notes of \$25.0 million and payment of debt-related costs of \$1.8 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 (collectively, the Investors) 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 that may 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 the 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 \$268,000 for the six-month period ended June 30, 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 \$27,000 of in-kind services during the six-month period ended June 30, 2015. As of June 30, 2015, the Company has \$434,000 of in-kind services remaining to provide under this obligation. As of June 30, 2015, the outstanding principal balance of the note payable to R-NAV was \$666,666. A payment of \$333,333 was made in July 2015, and a final payment of \$333,333 is due in July 2016.

Capital Royalty Group Debt

In May 2015, Navidea and its subsidiary Macrophage Therapeutics, Inc., as guarantor, executed a Term Loan Agreement (the CRG Loan Agreement) with Capital Royalty Partners II L.P. in its capacity as a lender and as control agent for other affiliated lenders party to the CRG Loan Agreement (collectively, the Lenders) in which the Lenders agreed to make a term loan to the Company in the aggregate principal amount of \$50 million (the CRG Term Loan), with an additional \$10 million in loans to be made available upon the satisfaction of certain conditions stated in the CRG Loan Agreement. Closing and funding of the CRG Term Loan occurred on May 15, 2015 (the Effective Date). The principal balance of the CRG Term Loan will bear interest from the Effective Date at a per annum rate of interest equal to 14.0%. The Company will make quarterly payments of interest only in arrears commencing on June 30, 2015. Through March 31, 2019, the Company has the option of paying (i) 10.00% of the per annum interest in cash and (ii) 4.00% of the per annum interest as compounded interest, added to the aggregate principal amount of the CRG Term Loan. Principal is repayable in eight equal quarterly installments during the final two years of the term. All unpaid principal, and accrued and unpaid interest, is due and payable in full on March 31, 2021. In addition, \$256,000 of interest was compounded and added to the balance of the CRG Term Loan during the quarter ended June 30, 2015. As of June 30, 2015, the outstanding principal balance of the CRG Term Loan was \$50.3 million, and we were in compliance with all covenants of the CRG Loan Agreement. The majority of the proceeds from the CRG Note were 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. In May 2015, in connection with the consummation of the CRG Loan Agreement, the Company repaid all amounts outstanding under the Oxford Loan Agreement. The payoff amount of \$31.6 million included payments of \$289,000 as a pre-payment fee and \$2.4 million as an end-of-term final payment fee.

Platinum Credit Facility

In May 2015, in connection with the execution of the CRG Loan Agreement, the Company amended the existing Platinum credit facility to allow this facility to remain in place in a subordinated role to the CRG Loan (the Third Platinum Amendment). Among other things, the Third Platinum Amendment (i) extends the term of the Platinum Loan Agreement until a date six months following the maturity date or earlier repayment of the CRG Term Loan; (ii) changes the interest rate to the greater of (a) the United States prime rate as reported in The Wall Street Journal plus 6.75%, (b) 10.0% and (c) the highest rate of interest then payable pursuant to the CRG Term Loan plus 0.125%; (iii) requires such interest to compound monthly; and (iv) changes the provisions of the Platinum Loan Agreement governing Platinum's right to convert advances into common stock of the Company. The Platinum Loan Agreement formerly provided for the optional conversion of advances made on or after June 25, 2013 beginning two years from the date of the advance at a conversion price equal to the lesser of (i) 90% of the lowest volume weighted average price for the 10 trading days preceding the date of such conversion request, or (ii) the average volume weighted average trading price for the 10 trading days preceding the date of such conversion request. Under the Third Platinum Amendment, the conversion right now applies to all advances made under the Platinum Loan Agreement, but not until such time as the average daily volume weighted average price of the Company's common stock for the ten preceding trading days exceeds \$2.53 per share. The amendment became effective upon initial funding of the CRG Loan Agreement and allows Platinum to convert the entire amount 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.

The Platinum Loan Agreement, as amended, provides us with a credit facility of up to \$50 million. The Company borrowed an additional \$4.5 million under the Platinum Loan Agreement during the six-month period ended June 30, 2015. In addition, \$174,000 of interest was compounded and added to the balance of the Third Amended Platinum Note during the quarter ended June 30, 2015. As of June 30, 2015, the outstanding principal balance of the Third Amended Platinum Note was approximately \$7.9 million, with \$27.3 million still 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 discussions related to the potential partnering or divestiture of NAV4694.

The Company is also working to establish additional 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 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 breakeven 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 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 Financial Accounting Standards Board (FASB) issued Accounting Standards Update (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. During the second quarter of 2015, the Company elected early adoption of ASU 2015-03. The consolidated balance sheet as of December 31, 2014 has been adjusted to reflect retrospective application of the new method of presentation. Deferred debt issuance costs totaling \$90,000 that were included in other assets as of December 31, 2014 were reclassified as discounts on notes payable, current, of \$35,000 and discounts on notes payable, long term, of \$55,000. We have reflected these costs as a reduction of the debt on the balance sheet as of June 30, 2015 and will continue to do so in future periods. The adoption of ASU 2015-03 had no impact on the consolidated statements of operations, stockholders' equity (deficit) or cash flows.

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*. ASU 2015-11 applies to all inventory that is measured using methods other than last-in, first-out or the retail inventory method, including inventory that is measured using first-in, first-out or average cost. ASU 2015-11 requires entities to measure inventory at the lower of cost and net realizable value, defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. ASU 2015-11 is effective for public entities for fiscal years beginning after December 15, 2016, and interim periods with fiscal years beginning after December 15, 2017. The amendments in ASU 2015-11 should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. We do not expect the adoption of ASU 2015-11 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. 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, however, we may allow returns in certain circumstances based on specific agreements.

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 June 30, 2015, our \$15.8 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 June 30, 2015, the interest rate on certain of our debt obligations was the greater of a stated rate or the U.S. prime rate plus 6.75%. Based on the effective rate of our variable-rate borrowings, which totaled approximately \$58.1 million and were subject to the stated rate at June 30, 2015, an immediate one percentage point increase in the U.S. prime rate would not affect our annual interest expense. 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 stated 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 six months ended June 30, 2015 and 2014, we recorded foreign currency transaction (losses) gains of approximately \$(26,000) and \$6,000, 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 June 30, 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 June 30, 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 June 30, 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 (the Form 10-K), filed with the SEC on March 16, 2015, except for the following.

Our indebtedness imposes significant restrictions on us, and a default could materially adversely affect our operations and financial condition.

As described in Note 8 to the Financial Statements contained in Item 1 of Part I of this Report, and in Item 2 of Part 2 of this Report under the captions "Capital Royalty Group Debt" and "Oxford Debt," the loan from Oxford Finance, LLC referenced in this risk factor in the Form 10-K was repaid in full in May 2015 with proceeds from borrowings under the CRG Loan Agreement. The risks associated with the Oxford Debt described in the Form 10-K also apply to our indebtedness under the CRG Loan Agreement.

Platinum may exercise its conversion right, and that could dilute your ownership and the net tangible book value per share of our common stock.

As described in Note 8 to the Financial Statements contained in Item 1 of Part I of this Report, and in Item 2 of Part 2 of this Report under the caption "Platinum Credit Facility," in connection with the CRG Loan Agreement the Platinum Loan Agreement referenced in this risk factor in the Form 10-K was amended. As part of the amendment, the conversion option was changed so that all advances under the Platinum Loan Agreement are now convertible at the option of Platinum. The amendment became effective upon initial funding of the CRG Loan Agreement and allows Platinum to convert the entire amount outstanding under the Platinum Loan Agreement (approximately \$7.9 million at June 30, 2015) during any time period in which the Company's stock price exceeds \$2.53 per share for 10 consecutive trading days. If Platinum exercises any or all of these conversion rights, the percentage ownership of our current stockholders will be reduced. The issuance of additional common stock may also result in dilution in the net tangible book value per share of our common stock.

Item 6. Exhibits

- 10.1 Employment Agreement between the Company and Thomas J. Klima, dated January 1, 2015.*
- 10.2 Employment Agreement between the Company and Michael Tomblyn, M.D., dated January 1, 2015.*
- 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)
August 10, 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)

INDEX TO EXHIBITS

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* Filed herewith.

** Furnished herewith.

The EMPLOYMENT AGREEMENT

This Employment Agreement is made and entered into effective as of January 1, 2015 (the "Effective Date"), by and between **Navidea Biopharmaceuticals, Inc.**, a Delaware corporation with a place of business at 5600 Blazer Parkway, Suite 200, Dublin, Ohio 43017-7550 (the "Company" or "Navidea") and **Thomas J. Klima**, an individual residing at 1833 Shell Ring Circle, Mount Pleasant, S.C. 29466 (the "Executive"). The Company and Executive are hereinafter sometimes individually referred to as a "Party" and collectively referred to as the "Parties."

WHEREAS, the Company has offered to employ Executive as its Chief Executive Officer, and the Executive desires to accept such employment; and

WHEREAS, the Parties wish to establish terms, covenants, and conditions for the Executive's employment with the Company through this Employment Agreement (the "Agreement").

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the Parties hereto agree as follows:

1. **Duties.** From and after the Effective Date, and based upon the terms and conditions set forth herein, the Company agrees to employ the Executive and the Executive agrees to be employed by the Company, as the Company's Senior Vice President and Chief Commercial Officer and in such additional executive level position or positions as shall be assigned to him by the Company from time to time. While serving in the SVP and CCO position, the Executive shall report directly to, be responsible to, and shall take direction from Mr. Ricardo Gonzalez, Chief Executive Officer of the Company. The Executive shall, if requested, also serve as an officer of any affiliate of the Company for no additional compensation. During the Term of this Agreement (as defined in Section 2 below), the Executive agrees to devote substantially all of his working time to the position he holds with the Company and to faithfully, industriously, and to the best of his ability, experience and talent, perform the duties that are assigned to him. The Executive shall also observe and abide by the corporate policies, personnel practices and rules, and decisions of the Company in all business matters.

The Executive represents and warrants to the Company that Exhibit A attached hereto sets forth a true and complete list of (a) all offices, directorships and other positions held by the Executive in corporations and firms other than the Company and its subsidiaries, and (b) any investment or ownership interest in any corporation or firm other than the Company beneficially owned by the Executive (excluding investments in life insurance policies, bank deposits, publicly traded securities that are less than five percent (5%) of their class and real estate). The Executive will promptly notify the Board of Directors of the Company of any additional positions undertaken or investments made by the Executive during the Term of this Agreement if they are of a type which, if they had existed on the date hereof, should have been listed on Exhibit A hereto. As long as the Executive's other positions or investments in other firms do not create a conflict of interest, violate the Executive's obligations under Section 6 below or cause the Executive to neglect his duties hereunder, such activities and positions shall not be deemed to be a breach of this Agreement.

2. **Term of this Agreement.** Subject to Section 4 hereof, the Term of this Agreement shall be for a period commencing on January 1, 2015 and terminating January 1, 2017 (the "Term"), unless terminated earlier pursuant to the termination provisions set forth in Section 4 of this Agreement. At the end of the Term, and at the end of each Term thereafter, the Term of this Agreement shall automatically renew for a like two-year Term, unless either Party to this Agreement provides sixty (60) calendar days advanced written notice to the other Party, prior to the end of any Term, of the Party's intent not to renew the Agreement for another Term. The Parties also understand and agree that any termination of this Agreement, whether at the end of a Term or as otherwise set forth in Section 4 of this Agreement, shall also terminate the Executive's employment with the Company, unless otherwise agreed to in writing by the Company.

3. **Compensation.** During the Term, the Company shall pay, and the Executive agrees to accept as full consideration for the services to be rendered by the Executive hereunder, compensation consisting of the following:

A. **Salary.** Beginning on the first day of the Term, the Company shall pay the Executive a salary of Three Hundred Thousand Dollars (\$270,000) per year (the "Base Salary"), subject to all applicable tax withholdings and deductions and payable in semi-monthly or monthly installments as requested by the Executive. The Compensation, Nominating and Governance Committee of the Board of Directors (the "Committee") shall review the Executive's Base Salary on an annual basis and may increase or decrease the Base Salary based on its business judgment.

B. **Bonus.** For each complete calendar year of the Term, the Executive shall have the opportunity to earn an annual bonus (the "Annual Bonus") equal to 30% of Base Salary (the "Target Bonus"), as in effect at the beginning of the applicable calendar year, based on achievement of annual corporate and individual target performance goals established by the Committee. The Committee will, on an annual basis, review the performance of the Company and of the Executive in relation to the target performance goals and will pay such Annual Bonus, as it deems appropriate, in its discretion, to the Executive based upon such review. Any bonus earned in any calendar year will be payable in the first calendar quarter of the following calendar year. In order to be eligible to receive payment of an Annual Bonus, the Executive must be employed by the Company as of the day of the applicable calendar year on which the Company pays the

Annual Bonuses.

- C. **Benefits.** During the Term of this Agreement, the Executive will receive such employee benefits as are generally available to all employees of the Company.
- D. **Stock Options and Incentives.** The Committee may, from time to time, grant to the Executive stock options, restricted stock purchase opportunities and such other forms of equity-based incentive compensation as it deems appropriate, in its discretion, under the Company's applicable plans which are then in effect. Additionally, in consideration of entering into this Agreement and as an inducement to Executive joining the Company, the Committee will grant Executive the stock options and shares of restricted stock as set forth in Exhibit A hereto and subject to the terms and conditions of the Company's applicable plans. All awards of equity incentives shall be governed by a separate equity incentive award agreement, the equity incentive terms of which shall govern the rights of the Executive and the Company in the event of any conflict between such agreement and this Agreement; otherwise, this Agreement shall control the Executive's employment with, termination from, and post-termination covenants owed to, the Company.
- E. **Vacation and Sick/Personal Leave.** The Executive shall be entitled to four (4) weeks of vacation and up to eighty (80) hours of sick/personal leave during each calendar year (prorated for partial years) during the Term of this Agreement, in accordance with the Company's vacation policies, as in effect from time to time.
- F. **Expenses.** The Company shall reimburse the Executive for all reasonable out-of-pocket expenses incurred by him in the performance of his duties hereunder, including expenses for travel, entertainment and similar items, promptly after the timely presentation (preferably within no longer than two weeks of incurring the expense) by the Executive of an itemized account of such expenses.
- G. **Clawback Policy.** The Company's obligation to pay any bonus or stock-based incentive compensation under paragraphs B. or D. of this Section 3, and the Executive's right to receive or retain such compensation, shall be subject to any policy adopted by the Board of Directors or the Committee (or any successor committee of the Board of Directors with authority over executive compensation) pursuant to the "clawback" provisions of Section 304 of the Sarbanes-Oxley Act of 2002, Section 10D of the Securities Exchange Act of 1934, or regulations promulgated thereunder, or pursuant to any rule of any national securities exchange on which the equity securities of the Company are listed implementing Section 10D of the Securities Exchange Act of 1934, or regulations promulgated thereunder.

4. Termination.

- A. **For Cause.** The Company may terminate the employment of the Executive prior to the end of the Term of this Agreement "for cause." Termination "for cause" shall be defined as a termination by the Company of the employment of the Executive occasioned by:
 - i. the failure by the Executive to cure a breach of a material duty imposed on the Executive under this Agreement or any other written agreement between Executive and the Company within 15 days after written notice thereof by the Company;
 - ii. the continuation by the Executive after written notice by the Company of a violation of any Company personnel policy, work rule or directive, or continued neglect of a duty imposed on the Executive under this Agreement;
 - iii. acts by Executive of fraud, embezzlement, theft or other material dishonesty directed against Navidea;
 - iv. the Executive is formally charged with a felony (other than a traffic offense), or a crime involving moral turpitude, that in the reasonable good faith judgment of the Board of Directors, may result in material damage to the Company or its reputation, or would materially interfere with the performance of Executive's obligations under this Agreement; or
 - v. any condition which either results from the Executive's substantial dependence, as reasonably determined in good faith by the Board of Directors, on alcohol, or on any narcotic drug or other controlled or illegal substance.

In the event of termination by the Company "for cause," all of the Company's payments of salary, benefits, and any other payments shall cease at the time of termination, and the Company shall have no further payment obligations to the Executive.

- B. **Resignation.** If the Executive resigns for any reason (except as otherwise defined in paragraph G of this Section 4), all salary, benefits, and any other payments by the Company shall cease at the time such resignation becomes effective. At the time of any such resignation, the Company shall pay the Executive the value of any accrued but unused vacation time, and the amount of all accrued but previously unpaid base salary through the date of such termination. The Company shall promptly reimburse the Executive for the amount of any expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3 above.
- C. **Disability, Death.** The Company may terminate the employment of the Executive prior to the end of the Term of this Agreement if the Executive has been unable to perform his duties hereunder or a similar job for a continuous period of six (6) months due to a physical or mental condition that, in the opinion of a licensed physician, will be of indefinite duration or is without a reasonable probability of recovery for a period of at

least six (6) months. The Executive agrees to submit to an examination by a licensed physician of his choice in order to obtain such opinion, at the request of the Company, made after the Executive has been absent from his place of employment for at least six (6) months. The Company shall pay for any requested examination. However, this provision does not abrogate either the Company's or the Executive's rights and obligations pursuant to the Family and Medical Leave Act of 1993, and a termination of employment under this paragraph C shall not be deemed to be a termination "for cause."

If during the Term of this Agreement, the Executive dies or the Executive's employment is terminated because of the Executive's disability, all salary, benefits and any other payments shall cease at the time of death or termination due to disability, provided, however, that the Company shall pay such other amounts or provide such other benefits required to be paid or provided to the Executive or the Executive's estate under any plan, program, policy, practice, contract, or arrangement in which the Executive or the Executive's estate is eligible to receive such payments or benefits from the Company, for the longer of twelve (12) months after such death or termination or the full unexpired Term of this Agreement on the same terms and conditions (including cost) as were applicable before such death or termination. In addition, for the first six (6) months of any disability, as defined under Section 409A of the Internal Revenue Code of 1986, as amended, and any guidance thereunder, that results in the Executive being unable to perform any gainful activity, the Company shall pay to the Executive the difference, if any, between any cash benefits received by the Executive from a Company-sponsored disability insurance policy and the Executive's salary hereunder in accordance with paragraph A of Section 3 above. At the time of any such termination, the Company shall pay the Executive or Executive's estate, the value of any accrued but unused vacation time, and the amount of all accrued but previously unpaid base salary through the date of such termination. The Company shall promptly reimburse the Executive or Executive's estate for the amount of any expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3 above.

Notwithstanding the foregoing, if the Company reasonably determines that any of the benefits described in this paragraph C may not be exempt from federal income tax, then for a period of six (6) months after the date of the Executive's termination, the Executive shall pay to the Company an amount equal to the stated taxable cost of such coverages. After the expiration of the six-month period, the Executive or Executive's estate shall receive from the Company a reimbursement of the amounts paid by the Executive.

- D. **Termination Without Cause.** A termination "without cause" is a termination of the employment of the Executive by the Company that is not "for cause" and not occasioned by the resignation, death or disability of the Executive. If the Company terminates the employment of the Executive without cause before the end of the Term of this Agreement, the Company shall, at the time of such termination, pay to the Executive the severance payment provided in paragraph F of this Section 4 together with the value of any accrued but unused vacation time and the amount of all accrued but previously unpaid base salary through the date of such termination, and shall provide Executive with all benefits to which he is entitled under paragraph C of Section 3 above for the longer of eighteen (18) months or the full unexpired Term of this Agreement. The Company shall promptly reimburse the Executive for the amount of any expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3.

If the Company terminates the employment of the Executive because it has ceased to do business or substantially completed the liquidation of its assets or because it has relocated its headquarters to another city and the Executive has decided not to relocate also, such termination of employment shall be deemed to be "without cause."

- E. **End of the Term of this Agreement.** Upon sixty (60) calendar days advance written notice to Executive of the Company's intent not to renew the Term of this Agreement, the Company may terminate the Agreement and the employment of the Executive at the end of the Term of this Agreement without any further payment obligation to Executive other than as set forth in this Section 4. E. he shall be an employee at will and his employment may be terminated at any time by either the Company or the Executive without notice and for any reason not prohibited by law or no reason at all. If the Company terminates the employment of the Executive at the end of the Term of this Agreement, the Company shall, at the time of its next regularly scheduled payroll cycle, pay to the Executive the value of any accrued but unused vacation time and the amount of all accrued but previously unpaid base salary through the date of such termination. The Company shall also promptly reimburse the Executive for the amount of any reasonable expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3 above. At the discretion of the Company, the Company may offer to employ Executive as an at-will employee whose employment may be terminated at any time by either the Company or the Executive without notice and for any reason not prohibited by law, including for no reason. If Executive agrees to such at-will employment, the Company will establish the Executive's duties, compensation, employee benefits, any bonus eligibility, any stock-incentive rights, vacation and sick/personal leave rights, and Sections 1., 2., 3.A. through 3.E., and 4.A. through 4.H. of this Agreement shall no longer apply to the Parties and will be null and void. All other provisions of this Agreement will remain in full force and effect, including all of Executive's post-termination obligations and restrictive covenants set forth in this Agreement.

F. **Severance.** If the employment of the Executive is terminated by the Company without cause before the end of the Term of this Agreement, then the Executive shall be paid, as a severance payment at the time of such termination the amount of Two Hundred Seventy Thousand Dollars (\$270,000), subject to all applicable tax withholdings and deductions, together with the value of any accrued but unused vacation time.

- G. **Change of Control Severance.** In addition to the rights of the Executive under the Company's employee benefit plans (paragraph C of Section 3 above) but in lieu of any severance payment under paragraph F of this Section 4 above, if there is a Change of Control of the Company (as defined below) during the Term, and at the time of the

Change of Control or within six (6) months after the Change of Control, the employment of the Executive is concurrently or subsequently terminated (i) by the Company without cause, or (ii) by the resignation of the Executive because he has reasonably determined in good faith that his titles, authorities, responsibilities, salary, bonus opportunities or benefits have been materially diminished, that a material adverse change in his working conditions has occurred, that his services are no longer required in light of the Company's business plan, or the Company has breached this Agreement, the Company shall pay the Executive, as a severance payment, at the time of such termination, the amount of Four Hundred Five Thousand Dollars (\$405,000), subject to all applicable tax withholdings and deductions, together with the value of any accrued but unused vacation time, and the amount of all accrued but previously unpaid base salary through the date of termination and shall provide him with all of the Executive benefits under paragraph C of Section 3 above for the longer of twelve (12) months or the full unexpired Term of this Agreement. The Company shall promptly reimburse the Executive for the amount of any expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3 above. Notwithstanding the foregoing, before the Executive may resign pursuant to clause (ii) of this paragraph, the Executive shall deliver to the Company a written notice of the Executive's intent to terminate his employment thereunder, and the Company shall have been given a reasonable opportunity to cure any such act, omission or condition within thirty (30) days after the Company's receipt of such notice.

For the purpose of this Agreement, a Change of Control of the Company has occurred when: (a) any person (defined for the purposes of this paragraph G to mean any person within the meaning of Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act")), other than Navidea, an employee benefit plan created by its Board of Directors for the benefit of its employees, or a participant in a transaction approved by its Board of Directors for the principal purpose of raising additional capital, either directly or indirectly, or an Affiliate of such participant, acquires beneficial ownership (determined under Rule 13d-3 of the Regulations promulgated by the Securities and Exchange Commission under Section 13(d) of the Exchange Act) of securities issued by Navidea having thirty percent (30%) or more of the voting power of all the voting securities issued by Navidea in the election of Directors at the next meeting of the holders of voting securities to be held for such purpose; (b) a majority of the Directors elected at any meeting of the holders of voting securities of Navidea are persons who were not nominated for such election by the Board of Directors or a duly constituted committee of the Board of Directors having authority in such matters; (c) the stockholders of Navidea approve a merger or consolidation of Navidea with another person other than a merger or consolidation in which the holders of Navidea's voting securities issued and outstanding immediately before such merger or consolidation continue to hold voting securities in the surviving or resulting corporation (in the same relative proportions to each other as existed before such event) comprising eighty percent (80%) or more of the voting power for all purposes of the surviving or resulting corporation; or (d) the stockholders of Navidea approve a transfer of substantially all of the assets of Navidea to another person other than: (i) a transfer to a transferee, eighty percent (80%) or more of the voting power of which is owned or controlled by Navidea or by the holders of Navidea's voting securities issued and outstanding immediately before such transfer in the same relative proportions to each other as existed before such event, or (ii) a transfer following which Navidea continues the operation of one or more lines of business that were operated by Navidea prior to the transfer, and a class of common stock of Navidea remains registered under Section 12 of the Securities Exchange Act of 1934. The parties hereto agree that for the purpose of determining the time when a Change of Control has occurred that if any transaction results from a definite proposal that was made before the end of the Term of this Agreement but which continued until after the end of the Term of this Agreement and such transaction is consummated after the end of the Term of this Agreement, such transaction shall be deemed to have occurred when the definite proposal was made for the purposes of the first sentence of this paragraph G of Section 4. Notwithstanding the foregoing, before the Executive may resign pursuant to clause (ii) of the first paragraph of this Section 4(G), the Executive shall deliver to the Company a written notice of the Executive's intent to terminate his employment thereunder, and the Company shall have been given a reasonable opportunity to cure any such act, omission or condition within thirty (30) days after the Company's receipt of such notice.

- H. **Benefit and Stock Plans.** In the event that a benefit plan, Stock Plan or award agreement which covers the Executive has specific provisions concerning termination of employment, or the death or disability of an employee (e.g., life insurance or disability insurance), then such benefit plan, Stock Plan or award agreement shall control the disposition of the benefits or stock options.
- I. **Resignation of All Other Positions.** Upon termination of the Executive's employment hereunder for any reason, the Executive shall be deemed to have resigned from all positions that the Executive holds as an officer or member of the board of directors (or a committee thereof) of the Company or any of its related entities or affiliates.
- J. **Cooperation.** The parties agree that certain matters in which the Executive will be involved during the Term may necessitate the Executive's cooperation following termination of his employment. Accordingly, following the termination of the Executive's employment for any reason, to the extent reasonably requested by the Board, the Executive shall cooperate with the Company in connection with matters arising out of the Executive's service to the Company; provided that, the Company shall make reasonable efforts to minimize disruption of the Executive's other activities. The Company shall reimburse the Executive for reasonable and pre-approved expenses incurred in connection with such cooperation and, to the extent that the Executive is required to spend substantial time on such matters, the Company shall compensate the Executive at an hourly rate based on the Executive's Base Salary on the date of termination.

- 5. **Proprietary Information Agreement.** Executive has executed a Proprietary Information Agreement as a condition of employment with the Company. The Proprietary Information Agreement shall not be limited by this Agreement in any manner, and the Executive shall act in accordance with the provisions of the Proprietary Information Agreement at all times during the Term of this Agreement.

6. Non-Competition. Executive agrees that for so long as he is employed by the Company under this Agreement and for one (1) year thereafter, the Executive will not:

- A. enter into the employ of or render any services to any person, firm, or corporation, which is engaged, in any part, in a Competitive Business (as defined below);
- B. engage in any directly Competitive Business for his own account;
- C. become associated with or interested in through retention or by employment any Competitive Business as an individual, partner, shareholder, creditor, director, officer, principal, agent, employee, trustee, consultant, advisor, or in any other relationship or capacity; or
- D. solicit, interfere with, or endeavor to entice away from the Company, any of its customers, strategic partners, or sources of supply.

Nothing in this Agreement shall preclude Executive from taking employment in the banking or related financial services industries nor from investing his personal assets in the securities or any Competitive Business if such securities are traded on a national stock exchange or in the over-the-counter market and if such investment does not result in his beneficially owning, at any time, more than one percent (1%) of the publicly-traded equity securities of such Competitive Business. "Competitive Business" for purposes of this Agreement shall mean any business or enterprise:

- a. which is engaged in the development, commercialization or distribution of drugs and/or systems for use in detection, diagnosis or treatment of cancer, inflammatory or immune-related diseases, including without limitation the development, commercialization or distribution of radiopharmaceuticals for such purposes, or
- b. which reasonably could be understood to be competitive in the relevant market with products and/or systems described in clause a above, or
- c. in which the Company engages in during the Term of this Agreement pursuant to a determination of the Board of Directors and from which the Company derives a material amount of revenue or in which the Company has made a material capital investment.

The covenant set forth in this Section 6 shall terminate immediately upon the substantial completion of the liquidation of assets of the Company.

7. Arbitration. Any dispute or controversy arising under or in connection with this Agreement, or otherwise arising under or in connection with Executive's employment with or termination from the Company, shall be settled exclusively by arbitration in Columbus, Ohio, in accordance with the non-union employment arbitration rules of the American Arbitration Association ("AAA") then in effect. If specific non-union employment dispute rules are not in effect, then AAA commercial arbitration rules shall govern the dispute. If the amount claimed exceeds \$100,000, the arbitration shall be before a panel of three arbitrators. Judgment may be entered on the arbitrator's award in any court having jurisdiction.

8. Attorneys' Fees and Expenses. In the event that any action, suit, or other legal or equitable proceeding is brought by either Party to enforce the provisions of this Agreement, or to obtain money damages for the breach thereof, then the Party which substantially prevails in such action (whether by judgment or settlement) shall be entitled to recover from the other Party all reasonable expenses of such litigation (including any appeals), including, but not limited to, reasonable attorneys' fees and disbursements.

9. Governing Law. The Agreement shall be governed by and construed in accordance with the laws of the State of Ohio without regard to its conflicts of laws principles.

10. Jurisdiction; Service of Process. Except as otherwise provided in Section 7, any action or proceeding arising out of or relating to this Agreement, or arising out of or relating to Executive's employment with or termination from the Company, shall be brought exclusively in the state or federal courts located in Franklin County, Ohio, and each of the parties irrevocably submits to the jurisdiction of each such court in any such action or proceeding, waives any objection it may now or hereafter have to venue or to convenience of forum, agrees that all claims in respect of the action or proceeding shall be heard and determined only in any such court and agrees not to bring any action or proceeding arising out of or relating to this Agreement in any other court. The parties agree that either or both of them may file a copy of this Section with any court as written evidence of the knowing, voluntary and bargained agreement between the parties irrevocably to waive any objections to venue or to convenience of forum. Process in any action or proceeding referred to in the first sentence of this section may be served on any party anywhere in the world

11. Waiver of Jury Trial. THE PARTIES HEREBY UNCONDITIONALLY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING DIRECTLY OR INDIRECTLY OUT OF, RELATED TO, OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OR BREACH OF THIS AGREEMENT, AND/OR THE EMPLOYMENT OR BUSINESS RELATIONSHIP THAT IS BEING ESTABLISHED BETWEEN THEM. The scope of this waiver is intended to be all encompassing of any and all disputes that may be filed in any court or other tribunal (including, without limitation, contract claims, tort claims, breach of duty claims, and all other common law and statutory claims). THIS WAIVER IS IRREVOCABLE, MEANING THAT IT MAY NOT BE MODIFIED EITHER ORALLY

OR IN WRITING, AND THE WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS, OR MODIFICATIONS TO THIS AGREEMENT AND RELATED DOCUMENTS. In the event of litigation, this Agreement may be filed as a written consent to a trial by the court.

12. **Validity.** The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of the Agreement, which shall remain in full force and effect.
13. **Compliance with Section 409A of the Internal Revenue Code.** It is intended that this Agreement comply with Section 409A of the Internal Revenue Code of 1986, as amended, and any guidance thereunder ("Section 409A"). If, when the Executive's employment with the Company terminates, the Executive is a "specified employee" as defined in Section 409A(a)(1)(B)(i), and if any payments under this Agreement, including payments under Section 4, will result in additional tax or interest to the Executive under Section 409A(a)(1)(B) ("Section 409A Penalties"), then despite any provision of this Agreement to the contrary, the Executive will not be entitled to payments until the earliest of (a) the date that is at least six months after termination of the Executive's employment for reasons other than the Executive's death, (b) the date of the Executive's death, or (c) any earlier date that does not result in Section 409A Penalties to the Executive. As soon as practicable after the end of the period during which payments are delayed under this provision, the entire amount of the delayed payments shall be paid to the Executive in a lump sum. Additionally, if any provision of this Agreement would subject the Executive to Section 409A Penalties, the Company will apply such provision in a manner consistent with Section 409A during any period in which an arrangement is permitted to comply operationally with Section 409A and before a formal amendment to this Agreement is required. For purposes of this Agreement, any reference to the Executive's termination of employment will mean that the Executive has incurred a "separation from service" under Section 409A. No payments to be made under this Agreement may be accelerated or deferred except as specifically permitted under Section 409A. Any payments that qualify for the "short-term deferral" exception or another exception under Section 409A of the Code shall be paid under the applicable exception. Each payment of compensation under this Agreement shall be treated as a separate payment of compensation for purposes of Section 409A. To the extent that any reimbursements provided under this Agreement constitute deferred compensation subject to Section 409A, such amounts shall be paid or reimbursed to Executive promptly, but in no event later than December 31 of the year following the year in which the expense is incurred. The amount of any such payments eligible for reimbursement in one year shall not affect the payments or expenses that are eligible for payment or reimbursement in any other taxable year, and Executive's right to such payments or reimbursement shall not be subject to liquidation or exchange for any other benefit.
14. **Entire Agreement.** This Agreement, together with the Proprietary Information Agreement referenced above, constitutes the entire understanding between the parties with respect to the subject matter hereof, and supersedes all negotiations, prior discussions, and preliminary agreements to this Agreement. This Agreement may not be amended except in writing executed by the parties hereto.
15. **Effect on Successors of Interest.** This Agreement shall inure to the benefit of and be binding upon heirs, administrators, executors, successors and assigns of each of the parties hereto. Notwithstanding the above, the Executive recognizes and agrees that his obligation under this Agreement may not be assigned without the written consent of the Company. The Company, however, may assign its rights and obligations under this Agreement without any prior notice to the Executive.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed and delivered this Agreement as of the date first written above.

NAVIDEA BIOPHARMACEUTICALS, INC. EXECUTIVE

By: /s/ Ricardo J. Gonzalez
Ricardo J. Gonzalez, CEO

/s/ Thomas J. Klima
Thomas J. Klima

EXHIBIT A

You will be eligible to participate in an employee stock option program, subject to the Board of Directors' Compensation, Nominating and Governance (CNG) Committee's approval, which upon vesting of the options will enable you to acquire shares of the Company's common stock, subject to all applicable plan terms and conditions.

In conjunction with your acceptance of and starting employment with the Company, stock options for 100,000 shares of the Company's common stock will be issued to you, subject to the terms of the Company's standard stock option agreement. The grant date for the options will be your first day of employment. The options will vest on an equal annual basis over four (4) years on each anniversary of your first date of employment and will be priced at the closing price on the date of the Company's receipt of your acceptance of this offer. No further vesting will occur if and when your employment with the Company

is terminated, for whatever reason, whether by you or the Company.

In addition, in conjunction with your employment, you will be issued 100,000 shares of restricted stock of the Company, subject to the terms of the Company's standard restricted stock grant agreement. Specific vesting terms for the restricted stock grant will be agreed to by the Parties in connection with finalizing the grant documents.

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The EMPLOYMENT AGREEMENT

This Employment Agreement is made and entered into effective as of January 1, 2015 (the "Effective Date"), by and between **Navidea Biopharmaceuticals, Inc.**, a Delaware corporation with a place of business at 5600 Blazer Parkway, Suite 200, Dublin, Ohio 43017-7550 (the "Company" or "Navidea") and **Michael Tomblyn, M.D.**, residing at 10 Leanda Court, South Barrington IL 60010 (the "Executive"). The Company and Executive are hereinafter sometimes individually referred to as a "Party" and collectively referred to as the "Parties."

WHEREAS, the Company has offered to employ Executive as its Executive Medical Director, and the Executive desires to accept such employment; and

WHEREAS, the Parties wish to establish terms, covenants, and conditions for the Executive's employment with the Company through this Employment Agreement (the "Agreement").

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the Parties hereto agree as follows:

1. **Duties.** From and after the Effective Date, and based upon the terms and conditions set forth herein, the Company agrees to employ the Executive and the Executive agrees to be employed by the Company, as the Company's Executive Medical Director and in such additional executive level position or positions as shall be assigned to him by the Company from time to time. While serving in the Executive Medical Director position, the Executive shall report directly to, be responsible to, and shall take direction from Dr. Cornelia Reininger, SVP and Chief Medical Officer of the Company. The Executive shall, if requested, also serve as an officer of any affiliate of the Company for no additional compensation. During the Term of this Agreement (as defined in Section 2 below), the Executive agrees to devote substantially all of his working time to the position he holds with the Company and to faithfully, industriously, and to the best of his ability, experience and talent, perform the duties that are assigned to him. The Executive shall also observe and abide by the corporate policies, personnel practices and rules, and decisions of the Company in all business matters.

The Executive represents and warrants to the Company that Exhibit A attached hereto sets forth a true and complete list of (a) all offices, directorships and other positions held by the Executive in corporations and firms other than the Company and its subsidiaries, and (b) any investment or ownership interest in any corporation or firm other than the Company beneficially owned by the Executive (excluding investments in life insurance policies, bank deposits, publicly traded securities that are less than five percent (5%) of their class and real estate). The Executive will promptly notify the Board of Directors of the Company of any additional positions undertaken or investments made by the Executive during the Term of this Agreement if they are of a type which, if they had existed on the date hereof, should have been listed on Exhibit A hereto. As long as the Executive's other positions or investments in other firms do not create a conflict of interest, violate the Executive's obligations under Section 6 below or cause the Executive to neglect his duties hereunder, such activities and positions shall not be deemed to be a breach of this Agreement.

2. **Term of this Agreement.** Subject to Section 4 hereof, the Term of this Agreement shall be for a period commencing on January 1, 2015 and terminating January 1, 2017 (the "Term"), unless terminated earlier pursuant to the termination provisions set forth in Section 4 of this Agreement. At the end of the Term, and at the end of each Term thereafter, the Term of this Agreement shall automatically renew for a like two-year Term, unless either Party to this Agreement provides sixty (60) calendar days advanced written notice to the other Party, prior to the end of any Term, of the Party's intent not to renew the Agreement for another Term. The Parties also understand and agree that any termination of this Agreement, whether at the end of a Term or as otherwise set forth in Section 4 of this Agreement, shall also terminate the Executive's employment with the Company, unless otherwise agreed to in writing by the Company.

3. **Compensation.** During the Term, the Company shall pay, and the Executive agrees to accept as full consideration for the services to be rendered by the Executive hereunder, compensation consisting of the following:

A. **Salary.** Beginning on the first day of the Term, the Company shall pay the Executive a salary of Three Hundred Thousand Dollars (\$300,000) per year (the "Base Salary"), subject to all applicable tax withholdings and deductions and payable in semi-monthly or monthly installments as requested by the Executive. The Compensation, Nominating and Governance Committee of the Board of Directors (the "Committee") shall review the Executive's Base Salary on an annual basis and may increase or decrease the Base Salary based on its business judgment.

B. **Bonus.** For each complete calendar year of the Term, the Executive shall have the opportunity to earn an annual bonus (the "Annual Bonus") equal to 35% of Base Salary (the "Target Bonus"), as in effect at the beginning of the applicable calendar year, based on achievement of annual corporate and individual target performance goals established by the Committee. The Committee will, on an annual basis, review the performance of the Company and of the Executive in relation to the target performance goals and will pay such Annual Bonus, as it deems appropriate, in its discretion, to the Executive based upon such review. Any bonus earned in any calendar year will be payable in the first calendar quarter of the following calendar year. In order to be eligible to receive payment of an Annual Bonus, the Executive must be employed by the Company as of the day of the applicable calendar year on which the Company pays the

Annual Bonuses.

- C. **Benefits.** During the Term of this Agreement, the Executive will receive such employee benefits as are generally available to all employees of the Company.
- D. **Stock Options and Incentives.** The Committee may, from time to time, grant to the Executive stock options, restricted stock purchase opportunities and such other forms of equity-based incentive compensation as it deems appropriate, in its discretion, under the Company's applicable plans which are then in effect. Additionally, in consideration of entering into this Agreement and as an inducement to Executive joining the Company, the Committee will grant Executive the stock options and shares of restricted stock as set forth in Exhibit A hereto and subject to the terms and conditions of the Company's applicable plans. All awards of equity incentives shall be governed by a separate equity incentive award agreement, the equity incentive terms of which shall govern the rights of the Executive and the Company in the event of any conflict between such agreement and this Agreement; otherwise, this Agreement shall control the Executive's employment with, termination from, and post-termination covenants owed to, the Company.
- E. **Vacation and Sick/Personal Leave.** The Executive shall be entitled to four (4) weeks of vacation and up to eighty (80) hours of sick/personal leave during each calendar year (prorated for partial years) during the Term of this Agreement, in accordance with the Company's vacation policies, as in effect from time to time.
- F. **Expenses.** The Company shall reimburse the Executive for all reasonable out-of-pocket expenses incurred by him in the performance of his duties hereunder, including expenses for travel, entertainment and similar items, promptly after the timely presentation (preferably within no longer than two weeks of incurring the expense) by the Executive of an itemized account of such expenses.
- G. **Clawback Policy.** The Company's obligation to pay any bonus or stock-based incentive compensation under paragraphs B. or D. of this Section 3, and the Executive's right to receive or retain such compensation, shall be subject to any policy adopted by the Board of Directors or the Committee (or any successor committee of the Board of Directors with authority over executive compensation) pursuant to the "clawback" provisions of Section 304 of the Sarbanes-Oxley Act of 2002, Section 10D of the Securities Exchange Act of 1934, or regulations promulgated thereunder, or pursuant to any rule of any national securities exchange on which the equity securities of the Company are listed implementing Section 10D of the Securities Exchange Act of 1934, or regulations promulgated thereunder.

4. Termination.

- A. **For Cause.** The Company may terminate the employment of the Executive prior to the end of the Term of this Agreement "for cause." Termination "for cause" shall be defined as a termination by the Company of the employment of the Executive occasioned by:
 - i. the failure by the Executive to cure a breach of a material duty imposed on the Executive under this Agreement or any other written agreement between Executive and the Company within 15 days after written notice thereof by the Company;
 - ii. the continuation by the Executive after written notice by the Company of a violation of any Company personnel policy, work rule or directive, or continued neglect of a duty imposed on the Executive under this Agreement;
 - iii. acts by Executive of fraud, embezzlement, theft or other material dishonesty directed against Navidea;
 - iv. the Executive is formally charged with a felony (other than a traffic offense), or a crime involving moral turpitude, that in the reasonable good faith judgment of the Board of Directors, may result in material damage to the Company or its reputation, or would materially interfere with the performance of Executive's obligations under this Agreement; or
 - v. any condition which either results from the Executive's substantial dependence, as reasonably determined in good faith by the Board of Directors, on alcohol, or on any narcotic drug or other controlled or illegal substance.

In the event of termination by the Company "for cause," all of the Company's payments of salary, benefits, and any other payments shall cease at the time of termination, and the Company shall have no further payment obligations to the Executive.

- B. **Resignation.** If the Executive resigns for any reason (except as otherwise defined in paragraph G of this Section 4), all salary, benefits, and any other payments by the Company shall cease at the time such resignation becomes effective. At the time of any such resignation, the Company shall pay the Executive the value of any accrued but unused vacation time, and the amount of all accrued but previously unpaid base salary through the date of such termination. The Company shall promptly reimburse the Executive for the amount of any expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3 above.
- C. **Disability, Death.** The Company may terminate the employment of the Executive prior to the end of the Term of this Agreement if the Executive has been unable to perform his duties hereunder or a similar job for a continuous period of six (6) months due to a physical or mental condition that, in the opinion of a licensed physician, will be of indefinite duration or is without a reasonable probability of recovery for a period of at

least six (6) months. The Executive agrees to submit to an examination by a licensed physician of his choice in order to obtain such opinion, at the request of the Company, made after the Executive has been absent from his place of employment for at least six (6) months. The Company shall pay for any requested examination. However, this provision does not abrogate either the Company's or the Executive's rights and obligations pursuant to the Family and Medical Leave Act of 1993, and a termination of employment under this paragraph C shall not be deemed to be a termination "for cause."

If during the Term of this Agreement, the Executive dies or the Executive's employment is terminated because of the Executive's disability, all salary, benefits and any other payments shall cease at the time of death or termination due to disability, provided, however, that the Company shall pay such other amounts or provide such other benefits required to be paid or provided to the Executive or the Executive's estate under any plan, program, policy, practice, contract, or arrangement in which the Executive or the Executive's estate is eligible to receive such payments or benefits from the Company, for the longer of twelve (12) months after such death or termination or the full unexpired Term of this Agreement on the same terms and conditions (including cost) as were applicable before such death or termination. In addition, for the first six (6) months of any disability, as defined under Section 409A of the Internal Revenue Code of 1986, as amended, and any guidance thereunder, that results in the Executive being unable to perform any gainful activity, the Company shall pay to the Executive the difference, if any, between any cash benefits received by the Executive from a Company-sponsored disability insurance policy and the Executive's salary hereunder in accordance with paragraph A of Section 3 above. At the time of any such termination, the Company shall pay the Executive or Executive's estate, the value of any accrued but unused vacation time, and the amount of all accrued but previously unpaid base salary through the date of such termination. The Company shall promptly reimburse the Executive or Executive's estate for the amount of any expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3 above.

Notwithstanding the foregoing, if the Company reasonably determines that any of the benefits described in this paragraph C may not be exempt from federal income tax, then for a period of six (6) months after the date of the Executive's termination, the Executive shall pay to the Company an amount equal to the stated taxable cost of such coverages. After the expiration of the six-month period, the Executive or Executive's estate shall receive from the Company a reimbursement of the amounts paid by the Executive.

- D. **Termination Without Cause.** A termination "without cause" is a termination of the employment of the Executive by the Company that is not "for cause" and not occasioned by the resignation, death or disability of the Executive. If the Company terminates the employment of the Executive without cause before the end of the Term of this Agreement, the Company shall, at the time of such termination, pay to the Executive the severance payment provided in paragraph F of this Section 4 together with the value of any accrued but unused vacation time and the amount of all accrued but previously unpaid base salary through the date of such termination, and shall provide Executive with all benefits to which he is entitled under paragraph C of Section 3 above for the longer of eighteen (18) months or the full unexpired Term of this Agreement. The Company shall promptly reimburse the Executive for the amount of any expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3.

If the Company terminates the employment of the Executive because it has ceased to do business or substantially completed the liquidation of its assets or because it has relocated its headquarters to another city and the Executive has decided not to relocate also, such termination of employment shall be deemed to be "without cause."

- E. **End of the Term of this Agreement.** Upon sixty (60) calendar days advance written notice to Executive of the Company's intent not to renew the Term of this Agreement, the Company may terminate the Agreement and the employment of the Executive at the end of the Term of this Agreement without any further payment obligation to Executive other than as set forth in this Section 4. E. he shall be an employee at will and his employment may be terminated at any time by either the Company or the Executive without notice and for any reason not prohibited by law or no reason at all. If the Company terminates the employment of the Executive at the end of the Term of this Agreement, the Company shall, at the time of its next regularly scheduled payroll cycle, pay to the Executive the value of any accrued but unused vacation time and the amount of all accrued but previously unpaid base salary through the date of such termination. The Company shall also promptly reimburse the Executive for the amount of any reasonable expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3 above. At the discretion of the Company, the Company may offer to employ Executive as an at-will employee whose employment may be terminated at any time by either the Company or the Executive without notice and for any reason not prohibited by law, including for no reason. If Executive agrees to such at-will employment, the Company will establish the Executive's duties, compensation, employee benefits, any bonus eligibility, any stock-incentive rights, vacation and sick/personal leave rights, and Sections 1., 2., 3.A. through 3.E., and 4.A. through 4.H. of this Agreement shall no longer apply to the Parties and will be null and void. All other provisions of this Agreement will remain in full force and effect, including all of Executive's post-termination obligations and restrictive covenants set forth in this Agreement.

F. **Severance.** If the employment of the Executive is terminated by the Company without cause before the end of the Term of this Agreement, then the Executive shall be paid, as a severance payment at the time of such termination the amount of Three Hundred Thousand Dollars (\$300,000), subject to all applicable tax withholdings and deductions, together with the value of any accrued but unused vacation time.

- G. **Change of Control Severance.** In addition to the rights of the Executive under the Company's employee benefit plans (paragraph C of Section 3 above) but in lieu of any severance payment under paragraph F of this Section 4 above, if there is a Change of Control of the Company (as defined below) during the Term, and at the time of the

Change of Control or within six (6) months after the Change of Control, the employment of the Executive is concurrently or subsequently terminated (i) by the Company without cause, or (ii) by the resignation of the Executive because he has reasonably determined in good faith that his titles, authorities, responsibilities, salary, bonus opportunities or benefits have been materially diminished, that a material adverse change in his working conditions has occurred, that his services are no longer required in light of the Company's business plan, or the Company has breached this Agreement, the Company shall pay the Executive, as a severance payment, at the time of such termination, the amount of Four Hundred Fifty Thousand Dollars (\$450,000), subject to all applicable tax withholdings and deductions, together with the value of any accrued but unused vacation time, and the amount of all accrued but previously unpaid base salary through the date of termination and shall provide him with all of the Executive benefits under paragraph C of Section 3 above for the longer of twelve (12) months or the full unexpired Term of this Agreement. The Company shall promptly reimburse the Executive for the amount of any expenses incurred prior to such termination by the Executive as required under paragraph F of Section 3 above. Notwithstanding the foregoing, before the Executive may resign pursuant to clause (ii) of this paragraph, the Executive shall deliver to the Company a written notice of the Executive's intent to terminate his employment thereunder, and the Company shall have been given a reasonable opportunity to cure any such act, omission or condition within thirty (30) days after the Company's receipt of such notice.

For the purpose of this Agreement, a Change of Control of the Company has occurred when: (a) any person (defined for the purposes of this paragraph G to mean any person within the meaning of Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act")), other than Navidea, an employee benefit plan created by its Board of Directors for the benefit of its employees, or a participant in a transaction approved by its Board of Directors for the principal purpose of raising additional capital, either directly or indirectly, or an Affiliate of such participant, acquires beneficial ownership (determined under Rule 13d-3 of the Regulations promulgated by the Securities and Exchange Commission under Section 13(d) of the Exchange Act) of securities issued by Navidea having thirty percent (30%) or more of the voting power of all the voting securities issued by Navidea in the election of Directors at the next meeting of the holders of voting securities to be held for such purpose; (b) a majority of the Directors elected at any meeting of the holders of voting securities of Navidea are persons who were not nominated for such election by the Board of Directors or a duly constituted committee of the Board of Directors having authority in such matters; (c) the stockholders of Navidea approve a merger or consolidation of Navidea with another person other than a merger or consolidation in which the holders of Navidea's voting securities issued and outstanding immediately before such merger or consolidation continue to hold voting securities in the surviving or resulting corporation (in the same relative proportions to each other as existed before such event) comprising eighty percent (80%) or more of the voting power for all purposes of the surviving or resulting corporation; or (d) the stockholders of Navidea approve a transfer of substantially all of the assets of Navidea to another person other than: (i) a transfer to a transferee, eighty percent (80%) or more of the voting power of which is owned or controlled by Navidea or by the holders of Navidea's voting securities issued and outstanding immediately before such transfer in the same relative proportions to each other as existed before such event, or (ii) a transfer following which Navidea continues the operation of one or more lines of business that were operated by Navidea prior to the transfer, and a class of common stock of Navidea remains registered under Section 12 of the Securities Exchange Act of 1934. The parties hereto agree that for the purpose of determining the time when a Change of Control has occurred that if any transaction results from a definite proposal that was made before the end of the Term of this Agreement but which continued until after the end of the Term of this Agreement and such transaction is consummated after the end of the Term of this Agreement, such transaction shall be deemed to have occurred when the definite proposal was made for the purposes of the first sentence of this paragraph G of Section 4. Notwithstanding the foregoing, before the Executive may resign pursuant to clause (ii) of the first paragraph of this Section 4(G), the Executive shall deliver to the Company a written notice of the Executive's intent to terminate his employment thereunder, and the Company shall have been given a reasonable opportunity to cure any such act, omission or condition within thirty (30) days after the Company's receipt of such notice.

- H. **Benefit and Stock Plans.** In the event that a benefit plan, Stock Plan or award agreement which covers the Executive has specific provisions concerning termination of employment, or the death or disability of an employee (e.g., life insurance or disability insurance), then such benefit plan, Stock Plan or award agreement shall control the disposition of the benefits or stock options.
- I. **Resignation of All Other Positions.** Upon termination of the Executive's employment hereunder for any reason, the Executive shall be deemed to have resigned from all positions that the Executive holds as an officer or member of the board of directors (or a committee thereof) of the Company or any of its related entities or affiliates.
- J. **Cooperation.** The parties agree that certain matters in which the Executive will be involved during the Term may necessitate the Executive's cooperation following termination of his employment. Accordingly, following the termination of the Executive's employment for any reason, to the extent reasonably requested by the Board, the Executive shall cooperate with the Company in connection with matters arising out of the Executive's service to the Company; provided that, the Company shall make reasonable efforts to minimize disruption of the Executive's other activities. The Company shall reimburse the Executive for reasonable and pre-approved expenses incurred in connection with such cooperation and, to the extent that the Executive is required to spend substantial time on such matters, the Company shall compensate the Executive at an hourly rate based on the Executive's Base Salary on the date of termination.

- 5. **Proprietary Information Agreement.** Executive has executed a Proprietary Information Agreement as a condition of employment with the Company. The Proprietary Information Agreement shall not be limited by this Agreement in any manner, and the Executive shall act in accordance with the provisions of the Proprietary Information Agreement at all times during the Term of this Agreement.

6. Non-Competition. Executive agrees that for so long as he is employed by the Company under this Agreement and for one (1) year thereafter, the Executive will not:

- A. enter into the employ of or render any services to any person, firm, or corporation, which is engaged, in any part, in a Competitive Business (as defined below);
- B. engage in any directly Competitive Business for his own account;
- C. become associated with or interested in through retention or by employment any Competitive Business as an individual, partner, shareholder, creditor, director, officer, principal, agent, employee, trustee, consultant, advisor, or in any other relationship or capacity; or
- D. solicit, interfere with, or endeavor to entice away from the Company, any of its customers, strategic partners, or sources of supply.

Nothing in this Agreement shall preclude Executive from taking employment in the banking or related financial services industries nor from investing his personal assets in the securities or any Competitive Business if such securities are traded on a national stock exchange or in the over-the-counter market and if such investment does not result in his beneficially owning, at any time, more than one percent (1%) of the publicly-traded equity securities of such Competitive Business. "Competitive Business" for purposes of this Agreement shall mean any business or enterprise:

- a. which is engaged in the development, commercialization or distribution of drugs and/or systems for use in detection, diagnosis or treatment of cancer, inflammatory or immune-related diseases, including without limitation the development, commercialization or distribution of radiopharmaceuticals for such purposes, or
- b. which reasonably could be understood to be competitive in the relevant market with products and/or systems described in clause a above, or
- c. in which the Company engages in during the Term of this Agreement pursuant to a determination of the Board of Directors and from which the Company derives a material amount of revenue or in which the Company has made a material capital investment.

The covenant set forth in this Section 6 shall terminate immediately upon the substantial completion of the liquidation of assets of the Company.

7. Arbitration. Any dispute or controversy arising under or in connection with this Agreement, or otherwise arising under or in connection with Executive's employment with or termination from the Company, shall be settled exclusively by arbitration in Columbus, Ohio, in accordance with the non-union employment arbitration rules of the American Arbitration Association ("AAA") then in effect. If specific non-union employment dispute rules are not in effect, then AAA commercial arbitration rules shall govern the dispute. If the amount claimed exceeds \$100,000, the arbitration shall be before a panel of three arbitrators. Judgment may be entered on the arbitrator's award in any court having jurisdiction.

8. Attorneys' Fees and Expenses. In the event that any action, suit, or other legal or equitable proceeding is brought by either Party to enforce the provisions of this Agreement, or to obtain money damages for the breach thereof, then the Party which substantially prevails in such action (whether by judgment or settlement) shall be entitled to recover from the other Party all reasonable expenses of such litigation (including any appeals), including, but not limited to, reasonable attorneys' fees and disbursements.

9. Governing Law. The Agreement shall be governed by and construed in accordance with the laws of the State of Ohio without regard to its conflicts of laws principles.

10. Jurisdiction; Service of Process. Except as otherwise provided in Section 7, any action or proceeding arising out of or relating to this Agreement, or arising out of or relating to Executive's employment with or termination from the Company, shall be brought exclusively in the state or federal courts located in Franklin County, Ohio, and each of the parties irrevocably submits to the jurisdiction of each such court in any such action or proceeding, waives any objection it may now or hereafter have to venue or to convenience of forum, agrees that all claims in respect of the action or proceeding shall be heard and determined only in any such court and agrees not to bring any action or proceeding arising out of or relating to this Agreement in any other court. The parties agree that either or both of them may file a copy of this Section with any court as written evidence of the knowing, voluntary and bargained agreement between the parties irrevocably to waive any objections to venue or to convenience of forum. Process in any action or proceeding referred to in the first sentence of this section may be served on any party anywhere in the world

11. Waiver of Jury Trial. THE PARTIES HEREBY UNCONDITIONALLY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING DIRECTLY OR INDIRECTLY OUT OF, RELATED TO, OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OR BREACH OF THIS AGREEMENT, AND/OR THE EMPLOYMENT OR BUSINESS RELATIONSHIP THAT IS BEING ESTABLISHED BETWEEN THEM. The scope of this waiver is intended to be all encompassing of any and all disputes that may be filed in any court or other tribunal (including, without limitation, contract claims, tort claims, breach of duty claims, and all other common law and statutory claims). THIS WAIVER IS IRREVOCABLE, MEANING THAT IT MAY NOT BE MODIFIED EITHER ORALLY

OR IN WRITING, AND THE WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS, OR MODIFICATIONS TO THIS AGREEMENT AND RELATED DOCUMENTS. In the event of litigation, this Agreement may be filed as a written consent to a trial by the court.

12. **Validity.** The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of the Agreement, which shall remain in full force and effect.
13. **Compliance with Section 409A of the Internal Revenue Code.** It is intended that this Agreement comply with Section 409A of the Internal Revenue Code of 1986, as amended, and any guidance thereunder ("Section 409A"). If, when the Executive's employment with the Company terminates, the Executive is a "specified employee" as defined in Section 409A(a)(1)(B)(i), and if any payments under this Agreement, including payments under Section 4, will result in additional tax or interest to the Executive under Section 409A(a)(1)(B) ("Section 409A Penalties"), then despite any provision of this Agreement to the contrary, the Executive will not be entitled to payments until the earliest of (a) the date that is at least six months after termination of the Executive's employment for reasons other than the Executive's death, (b) the date of the Executive's death, or (c) any earlier date that does not result in Section 409A Penalties to the Executive. As soon as practicable after the end of the period during which payments are delayed under this provision, the entire amount of the delayed payments shall be paid to the Executive in a lump sum. Additionally, if any provision of this Agreement would subject the Executive to Section 409A Penalties, the Company will apply such provision in a manner consistent with Section 409A during any period in which an arrangement is permitted to comply operationally with Section 409A and before a formal amendment to this Agreement is required. For purposes of this Agreement, any reference to the Executive's termination of employment will mean that the Executive has incurred a "separation from service" under Section 409A. No payments to be made under this Agreement may be accelerated or deferred except as specifically permitted under Section 409A. Any payments that qualify for the "short-term deferral" exception or another exception under Section 409A of the Code shall be paid under the applicable exception. Each payment of compensation under this Agreement shall be treated as a separate payment of compensation for purposes of Section 409A. To the extent that any reimbursements provided under this Agreement constitute deferred compensation subject to Section 409A, such amounts shall be paid or reimbursed to Executive promptly, but in no event later than December 31 of the year following the year in which the expense is incurred. The amount of any such payments eligible for reimbursement in one year shall not affect the payments or expenses that are eligible for payment or reimbursement in any other taxable year, and Executive's right to such payments or reimbursement shall not be subject to liquidation or exchange for any other benefit.
14. **Entire Agreement.** This Agreement, together with the Proprietary Information Agreement referenced above, constitutes the entire understanding between the parties with respect to the subject matter hereof, and supersedes all negotiations, prior discussions, and preliminary agreements to this Agreement. This Agreement may not be amended except in writing executed by the parties hereto.
15. **Effect on Successors of Interest.** This Agreement shall inure to the benefit of and be binding upon heirs, administrators, executors, successors and assigns of each of the parties hereto. Notwithstanding the above, the Executive recognizes and agrees that his obligation under this Agreement may not be assigned without the written consent of the Company. The Company, however, may assign its rights and obligations under this Agreement without any prior notice to the Executive.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed and delivered this Agreement as of the date first written above.

NAVIDEA BIOPHARMACEUTICALS, INC. EXECUTIVE

By: /s/ Ricardo J. Gonzalez
Ricardo J. Gonzalez, CEO

/s/ Michael Tomblyn
Michael Tomblyn, M.D.

EXHIBIT A

You will be eligible to participate in an employee stock option program, subject to the Board of Directors' Compensation, Nominating and Governance (CNG) Committee's approval, which upon vesting of the options will enable you to acquire shares of the Company's common stock, subject to all applicable plan terms and conditions.

In conjunction with your acceptance of and starting employment with the Company, stock options for 100,000 shares of the Company's common stock will be issued to you, subject to the terms of the Company's standard stock option agreement. The grant date for the options will be your first day of employment. The options will vest on an equal annual basis over four (4) years on each anniversary of your first date of employment and will be priced at the closing price on the date of the Company's receipt of your acceptance of this offer. No further vesting will occur if and when your employment with the Company

is terminated, for whatever reason, whether by you or the Company.

In addition, in conjunction with your employment, you will be issued 100,000 shares of restricted stock of the Company, subject to the terms of the Company's standard restricted stock grant agreement. Specific vesting terms for the restricted stock grant will be agreed to by the Parties in connection with finalizing the grant documents.

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**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.

August 10, 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.

August 10, 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.

August 10, 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.

August 10, 2015

/s/ Brent L. Larson

Brent L. Larson

Executive Vice President and Chief Financial Officer