UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

NAVIDEA BIOPHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 31-1080091 (I.R.S. Employer Identification No.)

425 Metro Place North, Suite 450, Dublin, Ohio (Address of Principal Executive Offices)

43017 (Zip Code)

NAVIDEA BIOPHARMACEUTICALS, INC. FOURTH AMENDED AND RESTATED 2002 STOCK INCENTIVE PLAN

(Full title of the plan)

Brent L. Larson
Senior Vice President and Chief Financial Officer
Navidea Biopharmaceuticals, Inc.
425 Metro Place North, Suite 450
Dublin, Ohio 43017
(614) 793-7500
(Name, address and telephone number of agent for service)

Copies of Correspondence to: William J. Kelly, Jr., Esq. Porter, Wright, Morris & Arthur LLP 41 South High Street Columbus, Ohio 43215 (614) 227-2136 wjkelly@porterwright.com

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

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

Calculation of Registration Fee

Title of securities to be registered	Amount to be registered (1)(2)	Proposed maximum offering price per share (3)	Proposed maximum aggregate offering price (3)	Amount of registration fee (1)
Common Stock,				
\$.001 par value	5,000,000	\$3.63	\$18,150,000	\$2,080

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Pursuant to General Instruction E to Form S-8, a filing fee is only being paid with respect to the registration of additional securities for the Navidea Biopharmaceuticals, Inc. Fourth Amended and Restated 2002 Stock Incentive Plan (the "Plan"). Registration Statements on Form S-8 were previously filed on September 23, 2004 (Registration No. 333-119219), December 22, 2005 (Registration No. 333-130640), and August 20, 2008 (Registration No. 333-153110) for the existing securities available under the Plan.
- (3) Estimated solely for the purpose of calculating the proposed maximum aggregate offering price and the registration fee pursuant to Rule 457(h) and Rule 457(c) under the Securities Act of 1933, as amended, based upon the average of the high and low prices of Navidea Biopharmaceuticals, Inc. common stock as reported on the NYSE MKT stock exchange on August 8, 2012.

EXPLANATORY NOTE

This Registration Statement on Form S-8 (the "Registration Statement") is being filed for the purpose of registering an additional 5,000,000 shares of the common stock of Navidea Biopharmaceuticals, Inc. (the "Corporation") to be issued pursuant to the Corporation's Fourth Amended and Restated 2002 Stock Incentive Plan (the "Plan"). The shares of common stock of the Corporation being registered hereunder represent an increase in the number of shares available for issuance under the Plan, which increase was approved with respect to 3,000,000 shares by the Corporation's Board of Directors and by the Corporation's stockholders at the annual meeting of stockholders held August 15, 2011, and with respect to an additional 2,000,000 shares by the Corporation's Board of Directors and the Corporation's stockholders at the annual meeting of stockholders held August 14, 2012. Pursuant to General Instruction E to Form S-8, we incorporate by reference into this Registration Statement the contents of the Corporation's Registration Statement on Form S-8 previously filed with the Securities and Exchange Commission (the "Commission") on September 23, 2004 (Registration No. 333-130640), and the Registration Statement on Form S-8 previously filed with the Commission on August 20, 2008 (Registration No. 333-153110).

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 3. Incorporation of Documents by Reference

The following documents, all of which were previously filed by the Corporation (File No. 001-35076) with the Commission pursuant to the Securities Exchange Act of 1934, as amended ("Exchange Act"), are hereby incorporated by reference:

- 1. Annual Report on Form 10-K for the fiscal year ended December 31, 2011, filed March 7, 2012.
- 2. All other reports filed by the Registrant pursuant to Section 13(a) or 15(d) of the Exchange Act since December 31, 2011 (File No. 001-35076).
- 3. The description of the Corporation's common stock which is contained in the Corporation's prospectus supplement filed with the Securities and Exchange Commission on November 9, 2010, (File No. 333-168485) pursuant to Rule 424(b)(5), as updated in any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the Corporation pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents. Any statement incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 8. Exhibits

<u>Description</u>
Amended and Restated Certificate of Incorporation of Navidea Biopharmaceuticals, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K filed March 7, 2012).
Certificate of Ownership Merging Neoprobe Name Change, Inc. into Neoprobe Corporation, effective January 5, 2012, as filed with the Delaware Secretary of State (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed December 21, 2011).
Amended and Restated By-Laws dated July 21, 1993, as amended July 18, 1995, May 30, 1996 and July 26, 2007 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed August 3, 2007).
Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series B Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed June 28, 2010).
Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series C 10% Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed June 28, 2010).
Opinion of Porter, Wright, Morris & Arthur LLP regarding legality.
Consent of Porter, Wright, Morris & Arthur LLP (included in Exhibit 5 filed herewith).
Consent of Independent Registered Public Accounting Firm.
Power of Attorney.
Navidea Biopharmaceuticals, Inc. Fourth Amended and Restated 2002 Stock Incentive Plan (incorporated by reference to Appendix A to the Company's Definitive Proxy Statement filed July 10, 2012).

^{*} Filed herewith.

Signatures

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements of filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dublin, State of Ohio, on August 15, 2012.

NAVIDEA BIOPHARMACEUTICALS, INC.

/s/ Brent L. Larson

Brent L. Larson, Senior Vice President, Chief Financial Officer, Treasurer and Secretary

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Mark J. Pykett* Mark J. Pykett	President, Chief Executive Officer and Director (principal executive officer)	August 15, 2012
/s/ Brent L. Larson Brent L. Larson	Senior Vice President, Chief Financial Officer, Treasurer and Secretary (principal financial officer and principal accounting officer)	August 15, 2012
/s/ Gordon A. Troup* Gordon A. Troup	Chairman of the Board of Directors	August 15, 2012
/s/ Peter F. Drake* Peter F. Drake	Director	August 15, 2012
/s/ Brendan A. Ford* Brendan A. Ford	Director	August 15, 2012
Jess E. Jones	Director	August 15, 2012
/s/ Erik K. Rowinsky* Erik K. Rowinsky	Director	August 15, 2012
* By: /s/ Brent L. Larson Brent L. Larson, attorney-in-fact for each of the persons indicated		

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Navidea Biopharmaceuticals, Inc.

EXHIBITS

EXHIBIT INDEX

Exhibit Number		<u>Description</u>
4(a)		Amended and Restated Certificate of Incorporation of Navidea Biopharmaceuticals, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K filed March 7, 2012).
4(b)		Certificate of Ownership Merging Neoprobe Name Change, Inc. into Neoprobe Corporation, effective January 5, 2012, as filed with the Delaware Secretary of State (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed December 21, 2011).
4(c)		Amended and Restated By-Laws dated July 21, 1993, as amended July 18, 1995, May 30, 1996 and July 26, 2007 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed August 3, 2007).
4(d)		Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series B Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed June 28, 2010).
4(e)		Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series C 10% Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed June 28, 2010).
5	*	Opinion of Porter, Wright, Morris & Arthur LLP regarding legality.
23(a)		Consent of Porter, Wright, Morris & Arthur LLP (included in Exhibit 5 filed herewith).
23(b)	*	Consent of Independent Registered Public Accounting Firm.
24	*	Power of Attorney.
99		Navidea Biopharmaceuticals, Inc. Fourth Amended and Restated 2002 Stock Incentive Plan (incorporated by reference to Appendix A to the Company's Definitive Proxy Statement filed July 10, 2012).
		<u> </u>

^{*} Filed herewith.

PORTER, WRIGHT, MORRIS & ARTHUR LLP

41 South High Street Columbus, Ohio 43215-6194 Telephone: 614/227-2000 Facsimile: 614/227-2100

August 15, 2012

Navidea Biopharmaceuticals, Inc. 425 Metro Place North, Suite 450 Dublin, Ohio 43017

Re: Registration Statement on Form S-8

Navidea Biopharmaceuticals, Inc. Fourth Amended and Restated 2002 Stock Incentive Plan (the "Plan")

Ladies and Gentlemen:

We have acted as counsel for Navidea Biopharmaceuticals, Inc., a Delaware corporation ("Navidea"), in connection with the Registration Statement on Form S-8 (the "Registration Statement"), filed by Navidea with the Securities and Exchange Commission under the Securities Act of 1933, as amended, with respect to the registration of 5,000,000 shares of Navidea Common Stock, \$.001 par value (the "Shares"), to be issued under the Plan.

In connection with this opinion, we have examined such corporate records, documents and other instruments of the registrant as we have deemed necessary.

Based on the foregoing, we are of the opinion that the Shares will, when issued and paid for in accordance with the provisions of the Plan, be legally issued, fully paid and nonassessable, and entitled to the benefits of the Plan.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ Porter, Wright, Morris & Arthur LLP

PORTER, WRIGHT, MORRIS & ARTHUR LLP

Consent of Independent Registered Public Accounting Firm

Navidea Biopharmaceuticals, Inc. Dublin, Ohio

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our reports dated March 6, 2012, relating to the consolidated financial statements and the effectiveness of Navidea Biopharmaceutical Inc.'s internal control over financial reporting appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2011.

/s/ BDO USA, LLP Chicago, Illinois

August 15, 2012

POWER OF ATTORNEY

Each of the undersigned officers and directors of Navidea Biopharmaceuticals, Inc., a Delaware corporation (the "Company"), hereby appoints Mark J. Pykett and Brent L. Larson as his true and lawful attorneys-in-fact, or either of them, with power to act without the other, as his true and lawful attorney-in-fact, in his name and on his behalf, and in any and all capacities stated below, to sign and to cause to be filed with the Securities and Exchange Commission (the "Commission"), the Company's Registration Statement on Form S-8 (the "Registration Statement") to register under the Securities Act of 1933, as amended, 5,000,000 shares of common stock, \$.001 par value, of the Company to be sold and distributed by the Company pursuant to the Company's Fourth Amended and Restated 2002 Stock Incentive Plan (the "Plan") and such other number of shares as may be issued under any anti-dilution provision of the Plan, and any and all amendments, including post-effective amendments, to the Registration Statement, hereby granting unto such attorneys-in-fact, and to each of them, full power and authority to do and perform in the name of and on behalf of the undersigned, in any and all such capacities, every act and thing whatsoever necessary to be done in and about the premises as fully as the undersigned could or might do in person, hereby granting to each such attorney-in-fact full power of substitution and revocation, and hereby ratifying all that any such attorney-in-fact or his substitute may do by virtue hereof.

IN WITNESS WHEREOF, the undersigned have signed these presents this 14th day of August, 2012.

Signature	Title	Date
/s/ Mark J. Pykett Mark J. Pykett	President, Chief Executive Officer and Director (principal executive officer)	
/s/ Brent L. Larson Brent L. Larson	Senior Vice President, Chief Financial Officer, Treasurer and Secretary (principal financial officer and principal accounting officer)	
/s/ Gordon A. Troup Gordon A. Troup	Chairman of the Board of Directors	
/s/ Peter F. Drake Peter F. Drake	Director	
/s/ Brendan A. Ford Brendan A. Ford	Director	
Jess E. Jones	Director	
/s/ Erik K. Rowinsky Erik K. Rowinsky	Director	