NovaBay Pharmaceuticals, Inc. Form 424B5 July 13, 2015 Filed Pursuant to Rule 424(b)(5)

Registration No. 333-204998

PROSPECTUS

16,340,471 Shares Common Stock

This prospectus relates to the disposition from time to time of up to 16,340,471 shares of our common stock, which includes 5,446,824 shares of our common stock issuable upon the exercise of warrants. We are not selling any common stock under this prospectus and will not receive any of the proceeds from the sale of shares by the Selling Securityholders. We provide more information about the Selling Securityholders in the section entitled "Selling Securityholders" on page 2.

The Selling Securityholders may sell the shares of common stock described in this prospectus in a number of different ways and at varying prices. We provide more information about how the Selling Securityholders may sell their shares of common stock in the section entitled "Plan of Distribution" on page 5 of this prospectus. We will not be paying any underwriting discounts or commissions with this offering.

Our common stock is traded on the NYSE MKT under the symbol "NBY." On July 10, 2015, the reported closing price of the common stock was \$0.62 per share.

An investment in shares offered hereby involves a high degree of risk. You should review carefully the risks and uncertainties incorporated by reference herein under the heading "Risk Factors" on page 2 of this prospectus, and under similar headings in the other documents that are filed after the date hereof and incorporated by reference

into this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is July 13, 2015.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	i
PROSPECTUS SUMMARY	1
RISK FACTORS	2
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	2
USE OF PROCEEDS	2
SELLING SECURITYHOLDERS	2
PLAN OF DISTRIBUTION	4
VALIDITY OF SECURITIES	6
EXPERTS	6
WHERE YOU CAN FIND MORE INFORMATION	6
INCORPORATION BY REFERENCE	6

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using the "shelf" registration process. Under this process, the Selling Securityholders may from time to time, in one or more offerings, sell the common stock described in this prospectus.

You should rely only on the information contained in or incorporated by reference into this prospectus (as supplemented and amended). We have not, and the Selling Securityholders have not, authorized anyone to provide you with information different from that contained in this prospectus. This document may only be used where it is legal to sell these securities. The information contained in this prospectus (and in any supplement or amendment to this prospectus) is accurate only as of the date on the front of the document, and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since those dates.

We urge you to read carefully this prospectus (as supplemented and amended), together with the information incorporated herein by reference as described under the heading "Incorporation by Reference" before deciding whether to invest in any of the common stock being offered.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus or incorporated by reference in this prospectus, and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus (as supplemented and amended), including the financial data and related notes, risk factors and other information incorporated by reference in this prospectus, before making an investment decision. Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to "NovaBay," "the company," "we," "us," "our" or similar references mean NovaBay Pharmaceuticals, Inc.

NovaBay Pharmaceuticals, Inc.

NovaBay Pharmaceuticals, Inc. is a biopharmaceutical company focused on addressing the unmet therapeutic needs of the global, topical anti-infective market with two distinct product categories: (1) our three commercial products containing Neutrox^T(our proprietary, manufactured pure hypochlorous acid solution), namely, Avenova^T(previously known as i-Lid Cleanser) for the eye care market, NeutroPhase[®] for wound care, and CelleRx^T for the dermatology market; and (2) our clinical stage Aganocide[®] compounds.

We were incorporated under the laws of the State of California on January 19, 2000, as NovaCal Pharmaceuticals, Inc., and subsequently changed our name to NovaBay Pharmaceuticals, Inc. In June 2010, we changed the state in which we are incorporated, which we refer to as the Reincorporation, and are now incorporated under the laws of the State of Delaware. All references to "we," "us," "our," or "the Company" herein refer to the California corporation prior to the date of the Reincorporation, and to the Delaware corporation on and after the date of the Reincorporation.

NovaBay[®], NovaBay Pharma[®], AvenovaTM, NeutroPhase[®], CellerRx[®], AgaNase[®], Aganocide[®], AgaDerm[®], Neutrox[™] and Going Beyond AntibioticsTM are trademarks of NovaBay Pharmaceuticals, Inc. All other trademarks and trade names are the property of their respective owners. For further information regarding us and our financial information, you should refer to our recent filings with the Securities and Exchange Commission (the "SEC"). See "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference."

The Offering

This prospectus relates to the resale by the Selling Securityholders listed in this prospectus of up to 16,340,471 shares of our common stock, 5,446,824 shares of which are issuable upon the exercise of warrants held by the Selling

Edgar Filing: NovaBay Pharmaceuticals, Inc. - Form 424B5

Securityholders. Our common stock is currently listed on The NYSE MKT under the symbol "NBY." All of the shares, if sold, will be sold by the Selling Securityholders. Such Selling Securityholders may sell their shares of our common stock from time to time at market prices prevailing at the time of sale, at prices related to the prevailing market price, or at negotiated prices. We will not receive any of the proceeds from the sale of the shares by the Selling Securityholders. In the case, however, of warrants issued to the Selling Securityholders on May 21, 2015, upon a cash exercise of the warrants by the Selling Securityholders, we will receive, for each share of common stock exercised, the exercise price of \$0.78. If the warrants are exercised in a cashless exercise, we will not receive any proceeds from the exercise of the warrants.

RISK FACTORS

An investment in our common stock involves a high degree of risk. Prior to making a decision about investing in our common stock, you should consider carefully the specific risk factors discussed in the sections entitled "Risk Factors" contained in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q, as filed with the SEC, which are incorporated in this prospectus by reference in their entirety, as well as any amendment or updates to our risk factors reflected in subsequent filings with the SEC, including any prospectus supplement hereto. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any additional risks and uncertainties actually occur, our business, financial condition, results of operations and cash flow could be materially and adversely affected. In that case, the trading price of our common stock could decline and you might lose all or part of your investment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The statements in this prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are subject to a number of risks and uncertainties. All statements that are not historical facts are forward-looking statements, including statements about our product candidates, market opportunities, competition, strategies, anticipated trends and challenges in our business and the markets in which we operate, and anticipated expenses and capital requirements. These statements appear in a number of places and can be identified by the use of forward-looking terminology such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "future," "intend," or "certain" or the negative of these terms or other variations or comparable terminology, or by discussions of strategy.

Our actual results may differ materially from the results expressed or implied by these forward-looking statements because of the risk factors and other factors disclosed in this prospectus and documents incorporated by reference. The risk factors may not be all of the factors that could cause actual results to vary materially from the forward-looking statements. The forward-looking statements made or incorporated in this prospectus relate only to circumstances as of the date on which the statements are made. Readers should not place undue reliance on these forward-looking statements and are cautioned that any such forward-looking statements are not guarantees of future performance.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of shares of our common stock by the Selling Securityholders pursuant to this prospectus. A portion of the shares covered by this prospectus are issuable upon exercise of the warrants to purchase our common stock. Upon any exercise of the warrants for cash, the Selling Securityholders would pay us the exercise price of the warrants. The cash exercise price of the warrants is \$0.78 per share of our common stock. Under certain conditions set forth in the warrants, the warrants are exercisable on a cashless basis. If the warrants are exercised on a cashless basis, we would not receive any cash payment from the Selling Securityholders Securityholders upon any exercise of the warrants.

SELLING SECURITYHOLDERS

On May 18, 2015, we entered into a definitive securities purchase agreement with the Selling Securityholders, pursuant to which we issued and sold an aggregate of 10,893,647 immediately separable units. Each unit comprises one share of our common stock, and a warrant with an 18-month term to purchase one-half of a share of our common stock, for an aggregate purchase price of \$6,862,997.61. On May 18, 2015, we entered into a registration rights agreement with the Selling Securityholders pursuant to which we agreed to file the registration statement, of which this prospectus is a part, to cover the resale of the shares issued and issuable to the Selling Securityholders, and to keep such registration statement effective until the earlier of the date (i) on which all of the 16,340,471 shares registered for resale have been sold under this registration statement or pursuant to Rule 144 under the Securities Act, or Rule 144, or (ii) on the date that all of the 16,340,471 shares can be sold publicly without restriction or limitation under Rule 144.

2

We are registering the resale of the shares issued pursuant to the registration right agreement to permit each of the Selling Securityholders identified below, or their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part, to resell or otherwise dispose of the shares in the manner contemplated under "Plan of Distribution" in this prospectus (as may be supplemented and amended). This prospectus covers the sale or other disposition by the Selling Securityholders of up to the total number of shares of common stock issued or issuable to the Selling Securityholders pursuant to the securities purchase agreement. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the Selling Securityholders, we are referring to the shares issued or issuable to the Selling Securityholders in this prospectus, we are referring to the purchase agreement, and when we refer to the Selling Securityholders in this prospectus, we are referring to the purchase agreement, and when we refer to the Selling Securityholders in this prospectus, we are referring to the purchase agreement and, as applicable, their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part.

The Selling Securityholders may sell some, all or none of their shares. We do not know how long the Selling Securityholders will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the Selling Securityholders regarding the sale or other disposition of any of the shares. The shares covered hereby may be offered from time to time by the Selling Securityholders.

The following table sets forth the name of each Selling Securityholder, the number of shares of our common stock owned by the Selling Securityholders as of June 12, 2015, the number of shares that may be offered under this prospectus, and the number of shares of our common stock to be beneficially owned by the Selling Securityholders assuming all of the shares covered hereby are sold. Solely for purposes of the following table, we have assumed that the shares issued pursuant to the Warrants are owned by the Selling Securityholders even though the Warrants have not been exercised, and are not exercisable until November 22, 2015.

All information contained in the table below and the footnotes thereto is based upon information provided to us by the Selling Securityholders. The information in the table below and the footnotes thereto regarding shares of common stock to be beneficially owned after the offering assumes the sale of all shares being offered by the Selling Securityholders under this prospectus. We believe that each of the Selling Securityholders named in this table has sole voting and investment power with respect to the shares of common stock indicated as owned.

The following table sets forth:

the name of each of the Selling Securityholders;

the number of shares of our common stock owned by each such Selling Securityholder prior to this offering;

the number of shares of our common stock being offered pursuant to this prospectus; and

the number of shares of our common stock owned upon completion of this offering.

Name of Selling Securityholder	Shares of Common Stock Owned Prior to Offering(1)	Shares of Common Stock Being Offered	Shares of Common Stock Owned After Offering
Jian Ping Fu	9,523,809	9,523,809(2)	0
Li Ping Gu	1,190,475	1,190,475(3)	0
Xiaohao Hu	714,285	714,285 (4)	0
Tong Li	2,380,952	2,380,952(5)	0
Dean L. Rider, M.D.	150,000	150,000 (6)	0
Mi Jia Wu	1,190,475	1,190,475(7)	0
Quian Xia	1,190,475	1,190,475(8)	0

3

All selling securityholders will own less than 1% of our common stock after offering.

(1) Includes shares of common stock issuable upon exercise of warrants. For the purposes hereof, we assume the issuance of all such shares pursuant to a cash exercise.

(2) Consists of 3,174,603 shares of common stock issuable upon the exercise of warrants held by the Selling Securityholder and 6,349,206 shares of common stock owned by the Selling Securityholder.

(3) Consists of 396,825 shares of common stock issuable upon the exercise of warrants held by the Selling Securityholder and 793,650 shares of common stock owned by the Selling Securityholder.

(4) Consists of 238,095 shares of common stock issuable upon the exercise of warrants held by the Selling Securityholder and 476,190 shares of common stock owned by the Selling Securityholder.

(5) Consists of 793,651 shares of common stock issuable upon the exercise of warrants held by the Selling Securityholder and 1,587,301 shares of common stock owned by the Selling Securityholder.

(6) Consists of 50,000 shares of common stock issuable upon the exercise of warrants held by the Selling Securityholder and 100,000 shares of common stock owned by the Selling Securityholder.

(7) Consists of 396,825 shares of common stock issuable upon the exercise of warrants held by the Selling Securityholder and 793,650 shares of common stock owned by the Selling Securityholder.

(8) Consists of 396,825 shares of common stock issuable upon the exercise of warrants held by the Selling Securityholder and 793,650 shares of common stock owned by the Selling Securityholder.

Relationships with the Selling Securityholders

Affiliates of NovaBay

No Selling Securityholders are affiliates or associates of NovaBay nor have been within the past three years.

PLAN OF DISTRIBUTION

The Company is registering the shares of its common stock offered pursuant to the Registration Statement and related prospectus, or the Prospectus, on behalf of the Selling Securityholders. The Selling Securityholders, which term as used herein includes pledgees, donees, transferees or other successors-in-interest selling shares received from the Selling Securityholders as a gift, pledge, partnership distribution or other transfer after the date of the Prospectus, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. The Selling Securityholders will pay any brokerage commissions and similar selling expenses attributable to the sale of the shares. The Company will pay other expenses relating to the preparation, updating and filing of the Registration Statement. The Company will not receive any of the proceeds from the sale of the shares by the Selling Securityholders. In the case, however, of warrants issued to the Selling Securityholders on May 21, 2015, upon a cash exercise of the warrants by the Selling Securityholders, the Company will receive the exercise price of \$0.78 per share of its common stock exercise of the warrants.

These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. To the extent any of the Selling Securityholders gift, pledge or otherwise transfer the shares offered hereby, such transferees may offer and sell the shares from time to time under the Prospectus, provided that the Prospectus has been amended under Rule 424(b)(3) or other applicable provision of the Securities Act, to include the name of such transferee in the list of Selling Securityholders under the Prospectus.

The Selling Securityholders may use any one or more of the following methods when disposing of shares or interests therein, some of which may or may not involve broker-dealers acting as agent or principal:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

settlement of short sales, to the extent permitted by law;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

in transactions through broker-dealers that agree with the Selling Securityholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale; or

any other method permitted pursuant to applicable law.

The Selling Securityholders may also sell securities under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Securityholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Securityholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2121.

In connection with the sale of the securities or interests therein, the Selling Securityholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Securityholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers

Edgar Filing: NovaBay Pharmaceuticals, Inc. - Form 424B5

that in turn may sell these securities. The Selling Securityholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Securityholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Securityholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Securityholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because Selling Securityholders may be deemed to be "underwriters" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act, including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The Selling Securityholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the resale securities by the Selling Securityholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Securityholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Securityholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of securities of the common stock by the Selling Securityholders or any other person. We will make copies of this prospectus available to the Selling Securityholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

VALIDITY OF SECURITIES

The validity of the securities being offered hereby has been passed upon by Cooley LLP, Palo Alto, California.

EXPERTS

OUM & Co. LLP, independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2014, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on OUM & Co. LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3

Edgar Filing: NovaBay Pharmaceuticals, Inc. - Form 424B5

under the Securities Act to register the shares of common stock offered by this prospectus. However, this prospectus does not contain all of the information contained in the registration statement and the exhibits and schedules to the registration statement. For further information with respect to us and the securities offered under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, at the SEC's public reference rooms at 100 F Street, N.E., in Washington, D.C. 20549. You can request copies of these documents by contacting the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information about the operation of the public reference rooms. Our SEC filings are also available at the SEC's website at www.sec.gov. In addition, you can read and copy our SEC filings at the office of the Financial Industry Regulatory Authority at 1735 K Street, N.W., Washington, D.C. 20006.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information contained in documents that we file with them, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus modifies or supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, and information that we file later with the SEC also will automatically update and supersede this information.

We incorporate by reference the documents listed below and any documents that we file in the future with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and before the completion of the offering (other than current reports furnished pursuant to Form 8-K):

1. Our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 26, 2015, as amended by Form 10-K/A, filed with the SEC on April 14, 2015;

2. Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 14, 2015;

3. Our Current Reports on Form 8-K filed with the SEC on March 9, 2015, March 24, 2015, April 14, 2015, May 1, 2015, May 22, 2015, and June 18, 2015; and

4. The description of our common stock in our registration statement on Form 8-A filed with the SEC on August 29, 2007, as updated by our Form 8-K filed with the SEC on June 29, 2010.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You may request in writing or orally a copy of these filings, at no cost, by writing or telephoning us at the following address:

NovaBay Pharmaceuticals, Inc.

5980 Horton Street, Suite 550

Emeryville, CA 94608

(510) 899-8800

Attn: Secretary