

NovaBay Pharmaceuticals, Inc.  
Form 424B5  
August 24, 2009

Filed Pursuant to Rule 424(b)(5)  
Registration No. 333-159917

PROSPECTUS SUPPLEMENT No. 2  
(To the Prospectus Dated August 10, 2009)

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1,225,000 Shares of Common Stock and  
Warrants to Purchase 1,225,000 Shares of Common Stock

This Prospectus Supplement No. 2 amends the prospectus supplement we filed on August 21, 2009, to correct the fees we will pay to the placement agent in connection with the sale of up to 1,225,000 units, with each unit consisting of one share of our common stock and a warrant to purchase one share of our common stock (and the shares of common stock issuable from time to time upon exercise of the offered warrants), to institutional investors pursuant to the prospectus supplement and the accompanying prospectus filed on August 21, 2009. The purchase price for each unit is \$2.00. Each warrant will have an exercise price of \$2.75 per share, and will be exercisable 180 days after issuance and will expire five years from the date of issuance. The shares of common stock and the warrants are immediately separable and will be issued separately, but will be purchased together in this offering. There will be no public market for the units or the warrants.

In addition, we are adding the Current Report on Form 8-K filed on August 21, 2009 to the list of documents incorporated by reference in the prospectus supplement.

These amendments are set forth on the following page. Except as revised as set forth on the following page, there are no other changes to the prospectus supplement we filed on August 21, 2009.

Maxim Group LLC

August 24, 2009

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### Changes to Plan of Distribution

The changes with respect to the fees that we will pay to the placement agent in connection with the offering are (1) a change to the commission percentage, (2) we will not be issuing the placement agent a warrant, (3) we will not be making sales to certain potential investors enumerated in the placement agent agreement, and (4) certain other changes. As a result, the three paragraphs under the caption “Plan of Distribution” set forth in the prospectus supplement we filed on August 21, 2009 describing the fees we will pay to the placement agent are revised to read in their entirety as follows:

We will pay the placement agent a commission equal to an aggregate of 6.3673% of the gross proceeds we receive from the sale of the units sold in this offering. In no event will the total amount of compensation paid to the placement agent and other securities brokers and dealers upon completion of this offering exceed 8% of the maximum gross proceeds of the offering.

The following table shows the per unit and total fees we will pay to the placement agent in connection with the sale of the securities offered pursuant to this prospectus supplement.

	Per Unit	Total
Commission	\$ 0.13	\$ 156,000
Legal fees and expenses (not to exceed \$40,000)	\$ 0.03	\$ 40,000
Total	\$ 0.16	\$ 196,000

Because there is no minimum offering amount required as a condition to closing in this offering, the actual total offering commissions, if any, are not presently determinable and may be substantially less than the maximum amount set forth above. The estimated offering expenses payable by us, in addition to the placement agent’s fee, are expected to be approximately \$249,500, which includes legal, accounting and printing costs and various other fees associated with registering and listing the shares of common stock (excluding up to \$40,000 payable by us to the placement agent for legal fees and expenses incurred by it in connection with this offering). After deducting the fees due to the placement agent and our estimated offering expenses, we expect the net proceeds from this offering to be up to approximately \$2.0 million.

### Changes to Information Incorporated by Reference

The list of Current Reports on Form 8-K incorporated by reference under the caption “Information Incorporated by Reference” set forth in the prospectus supplement we filed on August 21, 2009, is revised to read as follows:

- Our Current Reports on Form 8-K filed January 7, 2009, January 14, 2009, January 20, 2009, March 25, 2009, August 3, 2009 and August 21, 2009;