

May 3, 2016



Navidea and Macrophage Therapeutics to Provide Development Program Update

DUBLIN, Ohio--(BUSINESS WIRE)-- Navidea Biopharmaceuticals, Inc. (NYSE MKT:NAV) announces a conference call on Thursday, May 5, 2016 at 4:30 p.m. ET to further update the market on its Manocept™ macrophage targeting programs for immunodiagnostic and immunotherapeutic applications.

As mentioned on our previous call, we are eager to keep an open channel of discussion with investors regarding the important developments with the Manocept technology. We will devote a substantial portion of the call to Q&A as we want to make certain we address the subjects that are important to investors. We plan to continue discussing the progress of this promising technology during regularly scheduled Macrophage Therapeutics update calls.

Conference Call Details

Investors and the public are invited to access the live audio webcast through the link below. Participants who would like to ask questions during the question and answer session must participate by telephone also. Participants are encouraged to log-in and/or dial-in fifteen minutes before the conference call begins. The webcast replay is expected to be available on our investor website, <http://ir.navidea.com>, approximately two to four hours after the live event.

Event: Navidea and Macrophage Therapeutics Manocept™ Program Update Call
Date/Time: Thursday, May 5, 2016 at 4:30 p.m. ET

Webcast Link: <http://edge.media-server.com/m/p/iugtsbk3/lan/en>

Dial-in Number –
US: (855) 897-5884

Dial in Number –
Int'l: (720) 634-2940

Participant
Passcode: 5852350

Replay A webcast replay will be available on the Investor Relations section of our website at <http://ir.navidea.com> for 30 days.

About Manocept CD206 Immunotargeting Platform for Therapeutics Development

Manocept™ CD206 Immunotargeting Platform is a proprietary mannose-containing, receptor-directed technology platform designed to engineer novel, synthetic receptor targeted imaging agents and therapeutics for cancer and other diseases. Manocept's unique structural and molecular properties enable the design of novel immuno-constructs that selectively target and bind to CD206 (mannose receptor) and other C-type Lectins found on

activated, disease-associated macrophages and tumor associated macrophages (TAMs). The Manocept CD206 Immunotargeting Platform provides a novel and valuable approach to the design of drug molecules targeting CD206 disease-associated macrophages for therapeutic purposes.

About Navidea

Navidea Biopharmaceuticals, Inc. (NYSE MKT: NAVB) is a biopharmaceutical company focused on the development and commercialization of precision immunodiagnostic agents and immunotherapeutics. Navidea is developing multiple precision-targeted products and platforms including Manocept™ and NAV4694 to help identify the sites and pathways of undetected disease and enable better diagnostic accuracy, clinical decision-making, targeted treatment and, ultimately, patient care. Lymphoseek® (technetium Tc 99m tilmanocept) injection, Navidea's first commercial product from the Manocept platform, was approved by the FDA in March 2013 and in Europe in November 2014. The development activities of the Manocept immunotherapeutic platform will be conducted by Navidea in conjunction with its subsidiary, Macrophage Therapeutics. Navidea's strategy is to deliver superior growth and shareholder return by bringing to market novel products and advancing the Company's pipeline through global partnering and commercialization efforts. For more information, please visit www.navidea.com.

About Macrophage Therapeutics

Macrophage Therapeutics, Inc., a subsidiary of Navidea Biopharmaceuticals, Inc. (NAVB), is developing therapeutics using the patented Manocept immunotherapy platform licensed from Navidea to target over-active macrophages implicated in cancer, cardiovascular, central nervous system, autoimmune, antiviral, and skin diseases. Manocept specifically targets CD206, or the mannose receptor prevalent on over-active macrophages. The technology enables highly specific targeted delivery of active (either existing or yet to be developed) agents that can modulate the activity of over-active macrophages that have been implicated in many diseases. Targeted delivery should significantly enhance a given compound's efficacy and safety.

The Private Securities Litigation Reform Act of 1995 (the Act) provides a safe harbor for forward-looking statements made by or on behalf of the Company. Statements in this news release, which relate to other than strictly historical facts, such as statements about the Company's plans and strategies, expectations for future financial performance, new and existing products and technologies, anticipated clinical and regulatory pathways, and markets for the Company's products are forward-looking statements within the meaning of the Act. The words "believe," "expect," "anticipate," "estimate," "project," and similar expressions identify forward-looking statements that speak only as of the date hereof. Investors are cautioned that such statements involve risks and uncertainties that could cause actual results to differ materially from historical or anticipated results due to many factors including, but not limited to, the Company's continuing operating losses, uncertainty of market acceptance of its products, reliance on third party manufacturers, accumulated deficit, future capital needs, uncertainty of capital funding, dependence on limited product line and distribution channels, competition, limited marketing and manufacturing experience, risks of development of new products, regulatory risks and other risks detailed in the Company's most recent Annual Report on Form 10-K and other Securities and Exchange Commission filings. The Company undertakes no obligation to publicly update or revise any

forward-looking statements.

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Navidea Biopharmaceuticals

Investors & Media

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