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Navidea Biopharmaceuticals Announces the Presentation of Manocept™ Data at Keystone Symposia for Molecular Cell Biology of Macrophages in Human Disease

– Data from Manocept studies focuses on diagnostic imaging potential for rheumatoid arthritis and systemic autoimmune diseases –

DUBLIN, Ohio--(BUSINESS WIRE)-- Navidea Biopharmaceuticals, Inc. (NYSE MKT:NAV), a biopharmaceutical company focused on precision diagnostic radiopharmaceuticals, today announced data utilizing compounds from the Company's Manocept™ platform in models of rheumatoid arthritis are being presented by Thomas Rosol, DVM, PhD, DACVP from The Ohio State University at a [Keystone Symposia on Molecular Cell Biology of Macrophages in Human Disease](#) held, February 9-14 in Santa Fe, NM.

The poster presentation on February 12, 2014, entitled "[Imaging of macrophages in immune-mediated inflammatory disease and cartilage antibody-induced arthritis in mice using Cy3-tilmanocept](#)" highlights research from Dr. Rosol and other Navidea collaborators at the Ohio State University. The studies demonstrate the ability of *Cy3-tilmanocept*, a CD206-targeted fluorescent imaging agent, to identify and localize to disease-state macrophages when administered intravenously, enabling detection of immune-mediated arthritis in affected joints *in vivo* in mice. Results were confirmed using histopathology. The data highlighted the identification of immune-mediated inflammation seen in arthritic elbows and knees of arthritis-affected mice but not in control mice or un-affected joints within arthritic mice.

"The imaging results in this study showed preferential localization of macrophages by *Cy3-tilmanocept* in affected joints with little to no localization in unaffected joints," commented Thomas Rosol, DVM, PhD, DACVP from The Ohio State University and member of the Manocept Advisory Board. "As the mannose receptor is a key portal for imaging pathological states of macrophage-associated inflammation, the Manocept-derived molecules are potentially potent tools for addressing unmet needs in this area such as identifying, staging, assessing disease activity and monitoring therapeutic efficacy."

"Collaborative studies such as this as well as those recently published in [Nature Outlook: Medical Imaging](#) by key experts in the field of immune-inflammatory, macrophage-mediated diseases provide strong encouragement in support of the Manocept platform," said Frederick Cope, PhD, FACN, Navidea Senior Vice President and Chief Scientific Officer. "We intend to continue evaluating these emerging data to further define promising areas of clinical focus, development pathways and partnering options for this innovative platform."

About the Manocept Platform

Navidea's Manocept platform is predicated on the ability to specifically target the CD206 mannose receptor expressed on macrophages. 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 acts as an engine for purpose-built molecules that may enhance diagnostic accuracy, clinical decision-making 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. The Company's FDA-approved precision diagnostic lymphatic mapping agent, Lymphoseek® (technetium 99m tilmanocept) Injection, is representative of the ability to successfully exploit this mechanism to develop powerful, new diagnostic agents.

About Navidea Biopharmaceuticals Inc.

Navidea Biopharmaceuticals, Inc. (NYSE MKT: NAVB) is a biopharmaceutical company focused on the development and commercialization of precision diagnostics and radiopharmaceutical agents. Navidea is developing multiple precision diagnostic products and platforms including NAV4694, NAV5001, Manocept™ and NAV1800 (RIGScan™), to help identify the sites and pathways of undetected disease and enable better diagnostic accuracy, clinical decision-making and, ultimately, patient care. Lymphoseek® (technetium 99m tilmanocept) Injection, Navidea's first commercial product from the Manocept platform, was approved by the FDA in March 2013. Navidea's strategy is to deliver superior growth and shareholder return by bringing to market novel radiopharmaceutical agents and advancing the Company's pipeline through selective acquisitions, global partnering and commercialization efforts. For more information, please visit www.navidea.com.

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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