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Navidea Biopharmaceuticals Announces Receipt of Notice of Award

DUBLIN, Ohio--(BUSINESS WIRE)-- Navidea Biopharmaceuticals, Inc. (NYSE American: NAVB) ("Navidea" or the "Company"), a company focused on the development of precision immunodiagnostic agents and immunotherapeutics, today announced receipt of the Notice of Award from the National Heart, Lung, and Blood Institute of the National Institutes of Health ("NIH") for its Small Business Technology Transfer Phase 1 grant application submitted in collaboration with the University of Alabama at Birmingham ("UAB"), titled "Gallium 68 Tilmanocept for PET Imaging of Atherosclerosis Plaques." The grant award number is R41HL147640 and the award amount is \$225,000.

These studies will be done in partnership with Co-Principal Investigator Suzanne Lapi, Ph.D., Professor in the Departments of Radiology and Chemistry and cyclotron facility director at the University of Alabama at Birmingham.

In this grant-supported project, Navidea and UAB will test the hypothesis that Gallium 68 ("Ga68") tilmanocept CD206-targeted PET imaging of inflammatory macrophages in atherosclerotic plaques will enable direct, noninvasive assessment of the inflammatory microenvironment of plaques. Specifically, Ga68 tilmanocept imaging of atherosclerotic plaques in a relevant mouse model will be performed and comparison made to Fluorine 18 FDG PET imaging. There are currently deficiencies in the state of the art for diagnosing, assessing, and monitoring the efficacies of therapies for atherosclerosis, and a means to reliably and directly assess plaque inflammation by non-invasive imaging is critical to more accurately estimate cardiovascular disease ("CVD") event risk both in asymptomatic individuals and in CVD patients being treated to prevent a second CVD event. This work will provide fundamental information about the utility of Ga68 tilmanocept for this purpose and will support the clinical work with tilmanocept in atherosclerosis currently running.

David Ralph, Ph.D., Senior Director of Drug Development for Navidea and Co-Principal Investigator for this project, said, "Activated macrophages are critical contributors to atherosclerosis inflammation. Noninvasive imaging of these macrophages will permit direct assessment of disease processes, likely enabling improved estimates of cardiovascular disease risk for events such as heart attacks."

Michael Rosol, Chief Medical Officer for Navidea, said, "We are pleased that the NIH continues to recognize the potential of radiolabeled tilmanocept to assess atherosclerosis. This project fits in with our existing atherosclerosis pipeline and will enable us to test tilmanocept as a PET imaging agent and compare it to F18 FDG PET imaging, a widely studied method of looking at macrophages in plaques, but one which we believe has significant deficiencies in comparison to tilmanocept."

About Navidea

Navidea Biopharmaceuticals, Inc. (NYSE American: NAVB) is a biopharmaceutical company focused on the development of precision immunodiagnostic agents and immunotherapeutics. Navidea is developing multiple precision-targeted products based on its Manocept™ platform to enhance patient care by identifying the sites and pathways of disease and enable better diagnostic accuracy, clinical decision-making, and targeted treatment. Navidea's Manocept platform is predicated on the ability to specifically target the CD206 mannose receptor expressed on activated macrophages. The Manocept platform serves as the molecular backbone of Tc99m tilmanocept, the first product developed and commercialized by Navidea based on the platform. 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.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Forward looking statements include our expectations for the use of proceeds received from the offering. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, among other things: market and other conditions, the satisfaction of customary closing conditions related to the public offering and the impact of general economic, industry or political conditions in the United States or internationally, any future actions by Platinum-Montaur; general economic and business conditions, both nationally and in our markets; our history of losses and uncertainty of future profitability; the final outcome of any pending litigation; our ability to successfully complete research and further development of our drug candidates; the timing, cost and uncertainty of obtaining regulatory approvals of our drug candidates; our ability to successfully commercialize our drug candidates; our expectations and estimates concerning future financial performance, financing plans and the impact of competition; our ability to raise capital sufficient to fund our development and commercialization programs; our ability to implement our growth strategy; anticipated trends in our business; advances in technologies; our ability to comply with the NYSE American continued listing standards; our ability to maintain effective internal control over financial reporting; and other risk factors detailed in our most recent Annual Report on Form 10-K and other SEC filings. You are urged to carefully review and consider the disclosures found in our SEC filings, which are available at <http://www.sec.gov> or at <http://ir.navidea.com>.

Investors are urged to consider statements that include the words "will," "may," "could," "should," "plan," "continue," "designed," "goal," "forecast," "future," "believe," "intend," "expect," "anticipate," "estimate," "project," and similar expressions, as well as the negatives of those words or other comparable words, to be uncertain forward-looking statements.

You are cautioned not to place undue reliance on any forward-looking statements, any of which could turn out to be incorrect. We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this report. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this report may not occur and actual results

could differ materially from those anticipated or implied in the forward-looking statements.

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