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Navidea Biopharmaceuticals Highlights New Data for NAV4694 PET β-Amyloid Imaging Agent Presented at AAIC 2013

– Comparative Results from Alzheimer's Disease (AD) Post-Mortem Tissue Study Presented by McGill Center for Studies in Aging –

DUBLIN, Ohio--(BUSINESS WIRE)-- Navidea Biopharmaceuticals, Inc. (NYSE MKT: NAVB), a biopharmaceutical company focused on precision diagnostic radiopharmaceuticals, today announced that researchers at McGill Center for Studies in Aging, Douglas Research Institute and Montreal Neurological Institute presented results of a post-mortem brain tissue study using Navidea's investigational Fluorine-18 labeled β-amyloid imaging agent, NAV4694, during the Alzheimer's Association International Conference (AAIC) in Boston, MA. The study comparing performance characteristics of NAV4694 to the gold-standard imaging agent, ^{11}C-labeled Pittsburgh Compound-B (PiB), in control and AD brain tissue concluded that although the molecules share structural similarity, NAV4694 better differentiated amyloid deposition associated with AD in post-mortem brains than PiB.[1]

"Our research indicates that NAV4694 shows strong performance characteristics as an amyloid imaging agent for AD research and clinical use," said Pedro Rosa-Neto MD, PhD, Assistant Professor of Neurology, Neurosurgery and Psychiatry at McGill University, Quebec, Canada. "This study indicated that unlike PiB, the benchmark PET amyloid agent, NAV4694 was capable of differentiating controls from AD in all brain regions and also exhibited a wider dynamic range and fewer false negatives as compared to gold-standard pathology."

"We are very pleased that the McGill research team has shared these data with our colleagues and the scientific community at AAIC," said Connie Reininger, MD, PhD, Navidea's Senior Vice President and Chief Medical Officer. "We remain committed to providing physicians and patients an improved diagnostic agent that can aid in the differential diagnosis of Alzheimer's disease and other forms of neurodegenerative dementia. These results further support the recently announced AIBL decision to utilize NAV4694 in place of PiB in their comprehensive research initiative in AD and Mild Cognitive Impairment."

[1] The study entitled, *"[18F]NAV4694 shows higher binding and wider dynamic range compared to [11C]PIB in Alzheimer's disease post-mortem tissue"* was presented as a poster by E. Zimmer et al on Tuesday, July 16, 2013 at Alzheimer's Association International Conference (AAIC). The study included analysis of 25 Control (age=74.6+/-11.7) and 13 AD (age=75.3+/-8.6) human post-mortem brain samples containing the prefrontal cortex, hippocampus, posterior cingulate cortex, inferior parietal cortex and striatum regions.

About NAV4694

NAV4694 is a Fluorine-18 labeled precision radiopharmaceutical candidate intended for use in Positron Emission Tomography (PET) imaging and evaluation of patients with signs or symptoms of cognitive impairment such as Alzheimer's disease (AD). NAV4694 binds to β-amyloid deposits in the brain that can then be imaged in scans. β-amyloid plaque pathology is widely used in the diagnosis of AD. The ability of NAV4694 imaging to display amyloid plaque pathology may enable earlier identification of AD and improve monitoring of disease progression and interpretation of brain scan images. Navidea has an ongoing NAV4694 Phase 2b trial in Mild Cognitive Impairment and a Phase 3 program for NAV4694 in AD.

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 actively developing four radiopharmaceutical agent platforms – Lymphoseek®, NAV4694, NAV5001 and RIGScan™ – to help identify the sites and pathways of undetected disease and enable better diagnostic accuracy, clinical decision-making and, ultimately, patient care. 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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