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Navidea Biopharmaceuticals' NAV4694 β-Amyloid Imaging Agent to Be Used in Alzheimer's Disease Studies by Australian Imaging, Biomarker & Lifestyle Flagship Study of Ageing (AIBL)

Leading Neurodegenerative Disease and Imaging Research Consortium to Convert to NAV4694 from "Gold Standard" ^{11}C-labeled Pittsburgh Compound-B (PiB)

DUBLIN, Ohio--(BUSINESS WIRE)-- Navidea Biopharmaceuticals, Inc. (NYSE MKT: NAVB), a biopharmaceutical company focused on precision diagnostic radiopharmaceuticals, today announced that the Australian Imaging, Biomarker & Lifestyle Flagship Study of Ageing (AIBL) plans to switch to using Navidea's Fluorine-18 labeled β-amyloid imaging candidate, NAV4694, from ^{11}C-labeled Pittsburgh Compound-B (PiB) for its comprehensive research initiative in Alzheimer's disease and Mild Cognitive Impairment. Dr. Christopher C. Rowe, MD FRACP, Director of the Department of Nuclear Medicine and Centre for PET at Austin Health, Melbourne, Australia, announced the changeover to NAV4694 at the World Wide Alzheimer's Disease Neuroimaging Initiative meeting in Boston, MA.

AIBL, a globally renowned, multi-disciplinary effort to investigate factors impacting the development of Alzheimer's disease across Australia, has previously employed the widely-recognized PiB compound in its research. PiB is the PET imaging agent prototype for β-amyloid detection, and remains an accepted benchmark standard for studies investigating Alzheimer's disease and differential diagnoses of dementia. Recently published results from a head-to-head study funded by AstraZeneca that directly compared PiB to NAV4694 demonstrated that NAV4694 displayed imaging characteristics nearly identical to those of PiB.[1]

"Recent updates to appropriate use criteria allow for earlier diagnosis and therapeutic intervention in the diagnosis of probable Alzheimer's disease, and we believe β-amyloid PET imaging will play an increasingly important role for clinicians investigating this disease," said Dr. Rowe, lead author on the head-to-head study. "As the accepted benchmark β-amyloid imaging agent, PiB has an excellent performance profile, but issues around timing, logistics and costs make its routine use challenging. A β-amyloid imaging agent that is accessible and affordable and that can be reliably interpreted in a variety of clinical settings would be most pragmatic. Our studies with NAV4694 show that it mirrors the performance of PiB, and that we can therefore confidently make this changeover and begin using NAV4694 in our research."

"The team at AIBL is recognized as a world leader in neurodegenerative disease and

imaging diagnostics, and we are honored that they have selected NAV4694 as a β-amyloid standard for their research," said Thomas H. Tulip, PhD, President and Chief Business Officer of Navidea. "We are pleased to support AIBL's work in advancing research and knowledge about the development and diagnosis of Alzheimer's disease, with the mutual goal of providing physicians with an improved diagnostic tool having outstanding performance characteristics that can aid in the diagnosis of Alzheimer's disease and other forms of neurodegenerative dementia."

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.

[1] Rowe CC, Pejoska S, Mulligan R, et al. Head-to-Head Comparison of ^{11}C-PiB and ^{18}F-AZD4694 (NAV4694) for β-Amyloid Imaging in Aging and Dementia. *J Nucl Med.* 2013; 54:880-886.

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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