

Navidea Biopharmaceuticals Participates in Symposium Focused on Sentinel Lymph Node Biopsy at the International Symposium on Metastasis in Head and Neck Cancer

DUBLIN, Ohio--(BUSINESS WIRE)-- Navidea Biopharmaceuticals, Inc. (NYSE MKT: NAVB), a biopharmaceutical company focused on precision diagnostic radiopharmaceuticals, today announced that it recently participated in a focused panel session at the 6th International Symposium on Metastasis in Head and Neck Cancer held in Marburg, Germany.

Lymphoseek® (technetium Tc 99m tilmanocept) Injection and initial clinical experience data from one site participating in the Lymphoseek head and neck cancer clinical trial, NEO3-06, were discussed during a satellite symposium focused on Sentinel Lymph Node (SLN) biopsy in Head and Neck Cancer. In this session, presentations were made by a panel of head and neck specialists which included Lymphoseek-related presentations from Navidea's Chief Medical Officer, Cornelia Reininger, MD, PhD and Francisco J. Civantos, MD, FACS, Head & Neck / Skull Base Surgery, University of Miami. Lymphoseek is a receptor-targeted, small-molecule, investigational radiopharmaceutical used in lymphatic mapping procedures.

"It was enlightening for the delegates to understand more about sentinel node localization and the specific function of Lymphoseek. Following significant panel and expert discussion, it was agreed that sentinel node localization has a vital role in head and neck cancers and should be applied in routine clinical care," Prof. John Buscombe, Head of the Department of Nuclear Medicine at Cambridge University Hospitals, Cambridge, UK commented. "However, current radioactive colloids often display variable performance and the limitation of being of human or animal origin. These data appear to indicate that lymphatic mapping procedures can be improved using an agent such as Lymphoseek which shows more accurate localization of the sentinel node or nodes and will lead to less aggressive surgery, more accurate staging of disease and fewer side effects."

Professor Buscombe acted as moderator for the session and described the history and technique of sentinel node localization and demonstrated that the technique was safe for the surgeons, their assistants and the pathologists. Dr. Reininger provided a summary of Lymphoseek's performance advantages in lymphatic mapping of solid tumor cancers. Data demonstrated Lymphoseek's rapid clearance from the injection site but stability in the sentinel node for up to 24 hours and reinforced its ability to accurately identify and map SLNs that can facilitate accurate staging and may potentially decrease some patients' extent of surgery, thus reducing possible serious morbidity. Professor Civantos spoke of the University of Miami's initial clinical experience with Lymphoseek. Results to date have demonstrated its utility, diagnostic predictive value and safety in patients, both preoperatively

in lymphoscintigraphy and for intraoperative localization.

"In the current standard of care with head and neck tumors, it is not uncommon to remove as many as 60 regional lymph nodes during bilateral neck dissection because of the likelihood that patients may have hidden cancer in the lymph nodes. Sentinel node biopsy allows for a much less invasive and more precise evaluation with reduced surgical side effects" said Dr. Civantos. "Our initial clinical experience with Lymphoseek suggested a high level of accuracy in the identification and mapping of SLNs that may significantly improve the precision and practicality of the procedure. We believe that Lymphoseek may also have special utility to improve localization in certain tumor types such as those found on the floor of the mouth. I fully expect the final results of the multi-institutional trial, when completed, will confirm these impressions."

"The study of head and neck cancer is part of Navidea's worldwide strategy to expand the utilization of Lymphoseek into multiple cancer types beyond breast cancer and melanoma and to assist physicians and patients in improving the accuracy of cancer diagnosis and staging," said Dr. Reininger. "We believe that there are many unmet needs in the lymphatic mapping of other solid tumor cancers where the procedure may be highly useful, but for which a suitable agent has not yet been developed. Lymphoseek targets key predictive lymph nodes through its specifically-designed, receptor-based mechanism and can fill that need and enhance diagnostic accuracy."

The satellite symposium, Sentinel Lymph Node (SLN) Biopsy in Head and Neck Cancer, was jointly sponsored with SurgicEye GmbH, Munich, Germany.

About Lymphoseek®

Lymphoseek[®] (technetium Tc 99m tilmanocept) Injection is a novel, receptor-targeted, small-molecule, investigational radiopharmaceutical used in lymphatic mapping procedures that are performed to help stage cancers such as breast cancer and melanoma. Lymphoseek is designed to identify the lymph nodes that drain from a primary tumor, which have the highest probability of harboring cancer.

Lymphatic mapping is a procedure in which lymph nodes that may contain tumor metastases are identified and biopsied to determine if cancer has spread beyond the primary tumor. Accurate staging of cancer is critical, as it guides therapy decisions and determines patient prognosis and risk of recurrence. According to the American Cancer Society, approximately 229,000 new cases of breast cancer, 76,000 new cases of melanoma and 67,000 new cases of head and neck cancers are expected to be diagnosed in the United States in 2012.

About Lymphatic Mapping

Lymphatic mapping is a procedure designed to guide lymph node dissection and biopsy procedures. It consists of Intraoperative Lymphatic Mapping (ILM) often accompanied by lymphoscintigraphy. Lymphoscintigraphy is an imaging procedure routinely performed preoperatively to provide guidance on the location of lymph nodes to be biopsied. ILM is a surgical procedure in which lymph nodes draining the area around a tumor are identified and biopsied to determine if cancer has spread to the lymph nodes. These nodes, commonly referred to as "Sentinel Lymph Nodes," are removed and analyzed for the presence of malignant cells. Lymphatic Mapping provides an accurate staging procedure that can help

ensure optimal surgical and therapeutic choices, including the avoidance of the morbidity of a complete lymph node dissection for patients in whom the Sentinel Lymph Nodes were found to be free of cancer.

About Navidea

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 RIGScanTM – 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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