

PRESS RELEASE



June 26, 2023

SNBL Announces Results of Collaboration Research with Hamamatsu University School of Medicine Using SNBL's Nose-to-Brain Delivery Technology

TOKYO and KAGOSHIMA, Japan, June 26, 2023 – Shin Nippon Biomedical Laboratories, Ltd. (TSE Prime: 2395, Chairman and President: Ryoichi Nagata, M.D., Ph.D., “SNBL”) is pleased to announce that the results of its collaboration research with Prof. Yasuhiro Magata, Ph.D. from the Department of Molecular Imaging of the Institute for Medical Photonics Research at Hamamatsu University School of Medicine, have been published in the [Journal of Controlled Release \(JCR\)](#), an authoritative scientific journal on drug delivery research. The research was conducted by SNBL's Translational Research (TR) division and Prof. Magata and his team on technology for delivering drugs with poor blood-brain barrier permeability from the nose to the brain (Nose-to-Brain delivery technology: N2B-system).

The unmet medical needs for central nervous system (CNS) disorders are very high, and the development of therapeutic drugs is a priority for pharmaceutical companies. However, the presence of the blood-brain barrier presents a major obstacle to delivering CNS drugs to the brain. The N2B-system is expected to be applied to drugs that cannot be sufficiently delivered to the brain due to the existence of the blood-brain barrier.

In the present study, the brain uptake of a model drug with poor blood-brain barrier permeability that is not easily delivered to the brain by intravenous injection, was evaluated using PET imaging* when it was selectively administered to the olfactory region of cynomolgus monkeys using SNBL's newly developed N2B-system. It was confirmed that SNBL's N2B-system enhances the brain uptake of model drug compared to general nasal administration techniques.

We look forward to advancing the research and optimization of the N2B-system further to enhance its potential for therapeutic applications, with a goal that the findings thereby will be translated into clinical settings in the future. Based on the positive results of the aforementioned collaborative study, we will also begin considering the possibility of conducting clinical research on the N2B-system in the future.

* PET (Positron Emission Tomography) imaging is one of the methods of administering a drug labeled with a radioisotope to non-invasively image the brain uptake and accumulation of living organisms.

About the Article

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About SNBL

Shin Nippon Biomedical Laboratories, Ltd. ("SNBL") (TSE:2395) is a listed nonclinical contract research organization (CRO) that was founded in Kagoshima, Japan, in 1957. Based on its corporate philosophy of "We are a company that values the environment, life, and people", and with a proven record of accomplishment as the oldest and established CRO in Japan, SNBL is proud to be the only company in Japan that can provide a comprehensive portfolio of services and solutions for drug discovery and development for pharmaceutical companies, biotech ventures, universities, and research institutions both in Japan and overseas. The SNBL's Translational Research business has engaged in drug discovery, with the focus on business development and out-licensing of its proprietary intranasal drug delivery technologies and intranasal devices. SNBL also operates the Medipolis business, making use of a large tract of land and forests it owns in Ibusuki-City in Kagoshima prefecture, to promote the local economy and environmental conservation at the same time through its power generation and hospitality businesses. The aim of the Medipolis business is to contribute to people's well-being, improved quality of life, and happiness. For further information, please visit <https://www.snbl.co.jp>.

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