

PSS nominated as a joint research partner in NEDO Project on the ultra-early diagnostic and treatment system for cancer

Precision System Science Co., Ltd. (PSS) was nominated by the New Energy and Industrial Technology Development Organization (NEDO: Seiji Murata, chairman; Kawasaki City) as a joint research partner along with Konica Minolta Technology Center, Inc. and Fine Rubber R&D Co., Ltd. for the NEDO project to seek the ultra-early diagnostic and treatment system for cancer

Japan is one of the few advanced nations in the world, seeing a rise in both the number of cancer patients and their mortality rates. Approximately, 500,000 people are diagnosed with cancer each year, with approximately 300,000 dying of it. Consequently, there is an urgent society-wide demand for dealing with cancer, including the establishment of early diagnosis methods and new treatments. This project is positioned to comprehensively improve the system of diagnosing and treating cancer. It is understood that if cancer can be detected at a juncture earlier than the stage that brings about a drastic drop in patients' 5-year survival rate, the diverse treatment options are available. In this context, (1) development of an ultra-early-stage and advanced diagnostic system is sought in order to obtain accurate information such as the properties and location of cancer, and (2) research and development of an ultra-minimally-invasive treatment system that decreased burden on a patient's body is carried out to improve patients' QOL and to promote their early returning to normal social activities. The period of project implementation is five years up to March 2015.

In developing this ultra-early-stage and advanced diagnostic system, PSS will implement the R&D of a system that automates diagnosis of molecules and genes in the blood, jointly with two other companies. PSS will be in charge of developing a function for preparing samples for use in genetic testing. It will work to extract nucleic acid by using the magnetic beads technology from either plasma or cell components, and develop a system equipped with property analysis and other functions. PSS will capitalize on the expertise it has thus far accumulated on the extraction and purification of nucleic acid as well as on automation technology, to engage, with full force, in developing an automation system that realizes highly-reliable genetic testing in the ultra-early stages of cancer, which is one of the biggest national medical challenges for Japan.

For reference, please see NEDO website, at:

<http://www.nedo.go.jp/informations/koubo/list.html#05>

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