

# News Release

STELLA PHARMA CORPORATION

STELLA CHEMIFA CORPORATION

Sumitomo Heavy Industries, Ltd.

Innovation Network Corporation of Japan

## **INCJ and Sumitomo Heavy Industries, Ltd. to invest in STELLA PHARMA CORPORATION, developer of boron-based drugs used for Boron Neutron Capture Therapy (BNCT)**

**March 24, 2016** - Innovation Network Corporation of Japan (“INCJ”) and Sumitomo Heavy Industries, Ltd. (“Sumitomo Heavy Industries”) announced today the decision to invest in STELLA PHARMA CORPORATION (“STELLA PHARMA”), a 100% subsidiary of STELLA CHEMIFA CORPORATION (“STELLA CHEMIFA”) through allocation of new shares to a third party, aiming to promote the development of the boron-based drug SPM-011 which is used for a highly anticipated new type of cancer treatment, Boron Neutron Capture Therapy (BNCT). INCJ will invest up to ¥3.5 billion through a third party share allocation.

BNCT is a type of radiation therapy for cancer treatment which includes two steps: administering boron-based drugs for BNCT to cancer patients to introduce Boron (Boron-10) into the cancer cells; and irradiating low-energy neutron from outside the body. Through this two-step process, the boron (Boron-10) nucleus captures the neutrons inside the body, causing a fission reaction ( $^{10}\text{B}(n,\alpha)^7\text{Li}$ ) and emitting a particle beam with a range of around single cell. It is anticipated that this process will enable selective destruction of cancer cells that have taken up boron (Boron-10), with minimal damage to surrounding normal cells.

BNCT was first performed in the US in 1951. In Japan, although universities have been at the center of most clinical researches since 1968, practical application has not been possible due to two reasons: the need for boron enrichment technology (technology to enrich Boron-10, which accounts for only 20% of natural boron) for boron-based drugs; and only the reliance on nuclear reactors as a source of neutrons.

STELLA CHEMIFA has now established a boron isotope enrichment technology unique in Japan. Additionally, the success of Sumitomo Heavy Industries and Kyoto University Research Reactor Institute’s joint development of a cyclotron neutron irradiation system (BNCT30) has created a foundation to promote the practical application of BNCT.

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STELLA PHARMA developed a boron-based drug SPM-011 jointly with Osaka Prefecture University, using STELLA CHEMIFA's boron isotope enrichment technology. STELLA PHARMA, together with Sumitomo Heavy Industries, is now conducting clinical trials and has announced the start of Phase Two trial to target recurrent malignant glioma with the aim of obtaining the world's first regulatory approval for BNCT. Both companies respectively are scheduled to file for manufacturing and sales approval once preparation of necessary data for SPM-011 and BNCT30 is complete. STELLA PHARMA's development of SPM-011 has also received support under the contract development program operated by the Japan Agency for Medical Research and Development (AMED).

In addition to providing STELLA PHARMA with the capital needed to grow its business, INCJ will provide management support to strengthen business development and the promotion of clinical trials through the appointment of outside directors and other activities. At the same time as supporting the practical application of BNCT therapy through obtaining the world's first regulatory approval, INCJ will also promote Japan's innovative medical technology development through open innovation across manufacturing industries and academia.

## Press contacts

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## **About STELLA PHARMA CORPORATION**

Established	June 2007
Business Outline	R&D, manufacturing and sales of medical products and medical devices
Headquarters	Osaka
President	Tomoyuki Asano

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## **About Innovative Network Corporation of Japan (INCJ)**

INCJ was established in July 2009 as a public-private partnership that provides financial, technological and management support for next-generation businesses. INCJ specifically supports those projects that combine technologies and varied expertise across industries and materialize open innovation. INCJ has the capacity to invest up to ¥2 trillion (approx US\$20 billion).

INCJ's management team is drawn from the private sector with diverse experience in investment, technologies and management. Through its Innovation Network Committee, INCJ assesses investment opportunities that contribute to industrial innovation in Japan in line with criteria set by the government.