

# PRESS RELEASE

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# World leading carbon ion center QST in Japan, selects RayStation

RaySearch Laboratories AB (publ) announces that QST, National Institutes for Quantum Science and Technology in Chiba, Japan, has selected the treatment planning system RayStation®\* for clinical use at the QST hospital. The order was received and delivered in the first quarter of 2024.

Already in 2018 RaySearch and NIRS (today known as QST) entered a partnership, including a long-term licensing agreement that enabled RaySearch to integrate the microdosimetric kinetic model (MKM) developed at NIRS, into the RayStation treatment planning system. This was followed by a research collaboration agreement in 2022, with focus on advancing ion beam therapy via the pencil beam scanning technique. The aim of the researchers from RaySearch and NIRS was to explore areas such as radiobiological modeling of ion-beam irradiation and dose fractionation, robust beam delivery and plan optimization algorithms.

QST's purchase of RayStation is a logical step and manifests the long and fruitful research collaboration. Some of the advanced technologies included are multicriteria optimization, deformable image registration, dose tracking over multiple treatments and adaptive radiotherapy.

Ion beam therapy is a highly advanced form of radiation therapy in which tumors are treated with protons or heavier ions such as helium or carbon. NIRS pioneered the clinical application of ion beam therapy during the 1990s and today, QST is a leading center for carbon ion therapy with more than 15,000 patients who have been treated at the HIMAC facility in Chiba. In 2016 an expansion from two to three treatment rooms for delivery of pencil beam scanning plans was completed, where the third room has the additional capability of a rotating gantry.

Dr Shigeru Yamada, former Director General of QST Hospital, says: "We are very pleased to have RayStation which will expand our research capabilities and also improve our ability to treat patients with high precision."

Johan Löf, founder and CEO, RaySearch, says: "We look forward to continuing our long and close collaboration with QST, to bring new solutions with speed, efficiency and optimization to healthcare providers around the world who are at the forefront of fighting cancer."

The order value is JPY 265 million (approximately SEK 18.6 million), excluding service contract, most of which will be recognized as revenue in the first quarter of 2024.



#### **About QST**

QST was founded as NIRS in 1957, with a mission to advance basic and applied research into radiological science in Japan. In the decades since, the mission has been conducted in terms of "aggressive" and "passive" applications of radiation. Aggressive applications include imaging of biological change at the molecular level and cancer treatment with high-energy ion beams. Passive research is oriented towards clarifying the biological consequences of radiation and preventing any adverse effects, as well as training and educating future research professionals in the field. QST was formed in April 2016 when NIRS merged with the quantum beam and nuclear fusion departments formerly belonging to the Japan Atomic Energy Agency.

### About RaySearch

RaySearch Laboratories AB (publ) is a medical technology company that develops innovative software solutions for improved cancer treatment. RaySearch markets the RayStation®\* treatment planning system (TPS) and the oncology information system (OIS) RayCare®\*. The most recent additions to the RaySearch product line are RayIntelligence® and RayCommand®\*. RayIntelligence is an oncology analytics system which enables cancer clinics to collect, structure and analyze data. RayCommand, a treatment control system (TCS), is designed to link the treatment machine and the treatment planning and oncology information systems.

RaySearch's software has been sold to more than 1,000 centers in 43 countries. The company was founded in 2000 as a spin-off from the Karolinska Institute in Stockholm and the share has been listed on Nasdaq Stockholm since 2003. More information is available at <a href="mailto:raysearchlabs.com">raysearchlabs.com</a>.

#### **About RayStation**

RayStation®\* is a flexible, innovative treatment planning system, chosen by many leading cancer centers worldwide. It combines unique features such as unmatched adaptive therapy capabilities, multi-criteria optimization, market-leading algorithms for treatment plan optimization for HDR brachytherapy and external beam therapy with photons, electrons, and protons, as well as helium and carbon ions. RayStation supports a wide range of treatment machines, providing one control center for all treatment planning needs and ensuring centers get greater value from existing equipment. RayStation also seamlessly integrates with RayCare®\*. By harmonizing the treatment planning, the care of cancer patients worldwide is improved.

## For more information, please contact:

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<sup>\*</sup> Subject to regulatory clearance in some markets.