PRESS RELEASE

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RAYSEARCH RELEASES THE TREATMENT CONTROL SYSTEM RAYCOMMAND

RaySearch Laboratories AB (publ) announces the release of the first version of the treatment control system (TCS) RayCommand®, and that the system received first market clearances in Europe on December 23, 2020.*

RayCommand is the link between the treatment machine and the treatment planning and oncology information systems. It coordinates and orchestrates the different systems involved in patient treatment, such as imaging systems, beam delivery systems and the patient support system. Effective coordination is critical to achieve safe and efficient patient treatments. RayCommand was developed in close collaboration with Advanced Oncotherapy (AVO), the UK-based developer of next-generation proton therapy technology, and Austria's MedAustron, one of the world's most advanced cancer centers.

RayCommand is an important extension of RaySearch's innovative product portfolio. The development of a cutting-edge TCS broadens the company's capabilities, in line with its ambition to improve patient care through the entire cancer treatment process.

The idea to develop a TCS resulted from a collaboration agreement between RaySearch and AVO to develop a comprehensive software solution for the proton therapy system AVO LIGHT. By synchronizing the TCS, treatment planning system (TPS) and oncology information system (OIS), clinics can more efficiently coordinate and orchestrate the multitude of systems involved in cancer treatment, including imaging, beam delivery and patient support.

Jonathan Farr, Chief Clinical Officer, AVO, says: "In 2008, I was at West German Proton Therapy Center in Essen and decided to acquire RayStation although the first version was still under development. Ten years later, in 2018, history repeated itself. At that time, RaySearch had not yet started developing a treatment control system, but we agreed that a TCS from RaySearch would be ideal to take advantage of the LIGHT system's special capabilities. The release of the first version of RayCommand, and its successful feasibility testing together with RayStation and RayCare, is a very positive step for LIGHT's overall development."

RaySearch's development of RayCommand sparked a great deal of interest from other industrial and clinical partners, including MedAustron, a leading Austrian center specializing in ion radiation therapy and research. MedAustron operates a synchrotron-based accelerator facility for cancer treatment built in Wiener Neustadt, 50 km south of Vienna, Austria.

Markus Stock, Head of Medical Physics at EBG MedAustron, says: "MedAustron started its clinical operation with RayStation as treatment planning system for protons and carbon ions in 2016. We trusted in RaySearch to fulfill our clinical requirements for a high-quality patient care at our facility. It was a logical next step for us to integrate RaySearch software technology beyond treatment planning by switching to RayCommand, bringing a well-integrated treatment control system to our environment."

RayCommand is the result of a close working partnership between the RaySearch, AVO and MedAustron. After 18 months of intense development and integration with different systems, successful testing took place in December 2020 at AVO and MedAustron.

David Clerk, AVO V&V Test Engineer, says: "After concluding our feasibility testing, it is wonderful to see that we have an integrated suite of RaySearch products that can seamlessly take a patient through the main stages of the LIGHT proton therapy workflow, from their entrance to the clinic through to the proton therapy treatment. "

Johannes Hopfgartner, Medical Physicist, EBG MedAustron, says: "After a series of intense integration shifts in our gantry room, it was a big deal to see the in-room components, such as gantry, snout, nozzle filters and patient positioner, being orchestrated by RayCommand and reaching their planned destinations with the

correct parameter settings. Successful communication of RayCommand with the MedAustron Accelerator MAPTA concluded an efficient integration period. A perfect pre-Christmas present for the whole team!"

Johan Löf, founder and CEO, RaySearch, says: "The development of RayCommand is a natural step for RaySearch. Until now, every machine manufacturer has had to develop its own systems for the control and treatment rooms. These systems fulfill essentially the same function. RayCommand enables a more consistent user experience regardless of the type of treatment machine. It also makes it easier for new machine manufacturers to establish themselves in the market, which I believe is vital to facilitate innovation, increase competition in our industry and improve cancer care."

About Advanced Oncotherapy

Advanced Oncotherapy plc (AVO) is a provider of particle therapy with protons that harnesses the best in modern technology. AVO focuses on the development of a proprietary proton accelerator called Linac for Image Guided Hadron Technology (LIGHT). LIGHT's compact configuration delivers proton beams in a way that facilitates greater precision and electronic control. AVO will offer healthcare providers affordable systems that will enable them to treat cancer with innovative technology and reduce treatment-related side effects. More information: https://www.avoplc.com/en-gb/

About MedAustron

MedAustron is a cutting-edge center for ion therapy and research, specialized in advanced cancer treatment using protons and carbon ions. The center is located in Wiener Neustadt, Lower Austria, 50 km south of Vienna. MedAustron has 200 employees, including physicians, physicists, engineers, medical physicists, and radiation therapy technologists. More information: https://www.medaustron.at/en

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 and the RayCare* oncology information system to clinics all over the world and distributes products through licensing agreements with leading medical technology companies. RaySearch's software is used by over 2,600 clinics in more than 65 countries. The company was founded in 2000 as a spin-off from Karolinska Institute in Stockholm and the share has been listed on Nasdaq Stockholm since 2003. More information: www.raysearchlabs.com

About RayStation

RayStation integrates all RaySearch's advanced treatment planning solutions into a flexible treatment planning system. It combines unique features such as multi-criteria optimization tools with full support for 4D adaptive radiation therapy. It also includes functionality such as RaySearch's market-leading algorithms for IMRT and VMAT optimization and highly accurate dose engines for photon, electron, proton and carbon ion therapy. The system is built on the latest software architecture and features a graphical user interface with state-of-the-art usability.

About RayCare

RayCare is designed to support the complex logistical challenges of modern oncology clinics. It represents the future of oncology information system technology, supporting the vision of one oncology workflow. Many cancer patients receive a combination of treatment types, and RayCare is designed to reflect that. It will efficiently coordinate activities in radiation therapy, chemotherapy and surgery and will offer advanced features for clinical resource optimization, workflow automation and adaptive radiation therapy.

** Subject to regulatory clearance in some markets.*

More information about RaySearch is available at www.raysearchlabs.com

For further information, please contact:
Johan Löf, Founder and CEO, RaySearch Laboratories AB (publ)
Telephone: +46 (0)8-510 530 00
johan.lof@raysearchlabs.com

Peter Thysell, CFO, RaySearch Laboratories AB (publ)
Telephone: +46 (0)70 661 05 59
peter.thysell@raysearchlabs.com