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# PRESS RELEASE

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## RaySearch and Mevion to develop next-generation treatment planning techniques for FLASH proton radiotherapy treatment

*RaySearch Laboratories AB (publ) and Mevion Medical Systems, two companies that are leading the field of proton therapy, announce a collaboration to develop advanced treatment planning techniques for FLASH delivery with the MEVION S250i Proton Therapy System.*

The collaboration will explore FLASH intensity modulated proton therapy (IMPT) delivery using a technique that supports the delivery of large-volume clinical FLASH fields through the combination of smaller fields, each delivered at FLASH dose rates which complements Mevion's advanced HYPERSCAN delivery system.

Townsend Zwart, Vice President of Advanced Development, Mevion Medical Systems, says: "Mevion is pleased to continue our long partnership with RaySearch to develop ultra-high dose rate (FLASH) intensity modulated proton therapy. Optimizing FLASH delivery requires explicit consideration of the time dependent dose delivery and sequencing of proton spots. Overlapping spots or spots with multiple pulses may have complex FLASH weighting factors. Differing tissue types or tissue properties may also need to be included in an effective dose weighting model. The RaySearch development team is uniquely qualified to incorporate these features into a FLASH dose calculation module."

Kjell Eriksson, Chief Science Officer, RaySearch, says: "RayStation already supports IMPT planning for Mevion's HYPERSCAN system with Monte Carlo dose calculation for both optimization and final dose calculation. We are now excited to explore how RayStation can create optimal FLASH plans for the HYPERSCAN system and to further deepening our partnership."

Since 2014, RaySearch and Mevion have collaborated to provide advanced treatment planning capabilities for Mevion's HYPERSCAN pencil-beam scanning and Adaptive Aperture pMLC. Both companies will be exhibiting at the upcoming American Society for Radiation Oncology (ASTRO) annual meeting in Chicago, October 24–26. Attendees are invited to the respective booths to learn more.

*\*FLASH therapy is currently under preclinical research and is not yet available for commercial sale or clinical use.*

### [About Mevion Medical Systems](#)

Since 2004, Mevion Medical Systems has been the leading provider of compact proton therapy systems for cancer care. Dedicated to advancing the design and accessibility of proton therapy worldwide, Mevion was the first company to innovate this new single-room platform and continues to further the science and application of proton therapy. Mevion's flagship product, the MEVION S250i Proton Therapy System with HYPERSCAN pencil beam scanning, is the world's smallest proton therapy system that eliminates the obstacles of size, complexity, and cost that exists with other proton therapy systems. Mevion is headquartered in Littleton, Massachusetts, with a presence in Europe and Asia. For more information, please visit [mevion.com](http://mevion.com).

### [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 (OAS) 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 software is used by over 2,600 clinics in more than 65 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.

#### About RayStation

RayStation® is a flexible, innovative treatment planning system, chosen by many of the leading cancer centers worldwide. It combines unique features such as unmatched adaptive therapy capabilities, multi-criteria optimization, market-leading algorithms for IMRT and VMAT optimization with highly accurate dose engines for photon, electron, proton and carbon ion therapy. 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, the next-generation oncology information system. By harmonizing the treatment planning, we enable better care for cancer patients worldwide.

More information about RaySearch is available at [raysearchlabs.com](http://raysearchlabs.com)

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