
First major advance in radiation treatment for high-grade gliomas in more than 25 years presented at ASTRO 2024

The UNITED trial demonstrates that radiation exposure to healthy brain can be minimized without compromising control for this aggressive type of brain tumor

WASHINGTON, D.C. – Elekta (EKTA-B.ST) today announced that Jay Detsky, MD, PhD, radiation oncologist at Sunnybrook Health Sciences Centre (Toronto, Ontario, Canada), presented initial cancer control outcomes from the UNITED trial (Unity-Based MR-Linac Guided Adaptive Radiotherapy for High Grade Glioma). In this study, clinicians used a novel high-precision radiation strategy with Elekta Unity to monitor and adapt treatment as the tumor evolves over the 3-6 week therapy. By adapting to the tumor's changing shape, clinicians were able to significantly reduce radiation exposure to healthy brain tissue as compared to the standard of care. Importantly, Dr. Detsky reported that this brain-sparing approach does not compromise control of high-grade gliomas (HGG), the most common and aggressive primary brain tumors in adults.

“MR-guided adaptive radiation may represent the first major advance in radiation treatment for high-grade gliomas in over 25 years,” says Dr. Detsky. “By integrating serial MRI imaging into the paradigm, we have been able to see a significant reduction in the volume of brain we’re irradiating when treating high-grade gliomas, which could significantly improve the tolerability of treatment and quality of life for patients.”

The results of the study, which were presented as part of the scientific program during the 2024 American Society for Radiation Oncology (ASTRO) Annual Meeting, challenge the belief that HGGs are static – that there is no meaningful change in shape of brain tumors from the time the initial radiation plan is generated to the end of the treatment course. Elekta Unity is the only high-field MR-Linac that enables clinicians to monitor these changes on a daily basis and react by immediately adjusting radiation delivery.

The UNITED trial was designed to compare how often patients experienced tumor recurrences at the edge of the radiation target using the new more precise approach against the historical standard. Prior research suggested that using a less precise approach was associated with recurrences at the target edge in about 1 in 9 patients (11%). In UNITED, only about 1 in 25 patients (4%) experienced tumor recurrence at the edge of the target, exceeding expectations.

“Scientists at Sunnybrook have been leading clinical development of brain tumor treatments in the MR-Linac Consortium for over a decade,” says John Christodouleas, MD, MPH, Senior Vice President of Medical Affairs, Elekta. “The UNITED trial is the fruit of tireless efforts of some very extraordinary clinicians and researchers at Sunnybrook.”

“When we started developing clinical treatments for Elekta Unity with the other founding members of the MR-Linac Consortium, we were all confident that it would be a game changer for cancers that move with breathing, like liver and pancreas cancers, but we were less certain about how important Unity would be for brain tumors,” says Arjun Sahgal, MD, Chief of



Radiation Oncology at Sunnybrook. “It is enormously gratifying to see Unity and UNITED move the needle for brain tumor patients too.”

To learn more about how clinicians can see clearly, adapt to change and be certain they are delivering the prescribed treatment with Elekta Unity, visit: www.elekta.com/Unity.

#

For further information, please contact:

Mattias Thorsson, Vice President, Head of Corporate Communications

Tel: +46 70 865 8012, e-mail: Mattias.Thorsson@elekta.com

Time zone: CET: Central European Time

Raven Canzeri, Global Director, Media Relations

Tel: +1 770-670-2524, e-mail: Raven.Canzeri@elekta.com

Time zone: ET: Eastern Time

About Elekta

As a leader in precision radiation therapy, Elekta is committed to ensuring every patient has access to the best cancer care possible. We openly collaborate with customers to advance sustainable, outcome-driven and cost-efficient solutions to meet evolving patient needs, improve lives and bring hope to everyone dealing with cancer. To us, it's personal, and our global team of 4,700 employees combine passion, science, and imagination to profoundly change cancer care. We don't just build technology, we build hope. Elekta is headquartered in Stockholm, Sweden, with offices in more than 40 countries and listed on Nasdaq Stockholm. For more information, visit elekta.com or follow [@Elekta](https://twitter.com/Elekta) on “X”, formerly known as Twitter.