



Clinical data on Elekta Unity from Elekta's MR-linac Consortium featured in 20 abstracts at ESTRO 36

Advances in magnetic resonance radiation therapy (MR/RT) has the potential to transform accuracy, efficiency and clinical outcomes in radiation therapy

VIENNA, May 8, 2017 – Elekta (EKTA-B.ST) today announced that Elekta Unity, the first magnetic resonance radiation therapy (MR/RT) system capable of delivering precisely targeted radiation doses while simultaneously capturing the highest quality magnetic resonance (MR) images, was featured in 20 abstracts at 36th ESTRO (European Society for Radiotherapy & Oncology) meeting. Elekta Unity, a transformative radiation delivery system integrates next generation linear accelerator technology with a high field (1.5 Tesla) MR imaging system, is designed to allow clinicians to visualize tumors in real time as they treat.

In October 2012, Elekta established the International Elekta MR-linac Consortium, a global collaboration of premier radiation oncology centers and clinicians. The 20 abstracts presented at the conference focused on the development, clinical applications and workflow integration protocols for Elekta Unity and highlighted the significant technical and clinical progress that the Consortium has achieved in realizing the full potential of MR/RT.

At a symposium titled "MR guided radiotherapy: the new standard of care in 10 years time," Stella Mook, MD, PhD, a radiation oncologist at UMC Utrecht, delivered a presentation on "[Clinical opportunities with MR guided external beam RT](#)" (Abstract SP-0393). Dr. Mook discussed several ways in which Elekta's MR-linac will enable a new era of high precision treatment with broad clinical opportunities. The diagnostic quality MR guidance provided by Elekta Unity and its MR technology partner, Philips, is expected to allow more precise dosing to smaller target areas and reduced radiation exposure to normal tissue. Improvements in tumor targeting will allow higher doses of radiation to be delivered over fewer treatment sessions, potentially omitting the need for surgery. Daily plan adaptation based on real-time imaging may also support the development of organ-sparing treatment strategies and would allow radiation therapy to be used in a broader number of cancer indications.

At a symposium titled, "Adaptive radiotherapy (both anatomical and 'functional' changes)," Jan-Jakob Sonke, PhD, Group leader of Adaptive Radiotherapy at the Netherlands Cancer Institute, delivered a presentation on "[Adaptive strategies to account for anatomical changes](#)" (Abstract SP-0405). Dr. Sonke described the magnitude and frequency with which anatomical changes occur during a radiation treatment session for different disease sites and discussed how adaptive strategies can be designed to efficiently mitigate these changes on various time scales. Subsequently, he exemplified such strategies currently implemented clinically driven by CBCT integrated linacs. Finally, he discussed the potential of the MR-linac for online and real-time adaptations.

Key findings from the Consortium also included a presentation titled "[Online workflow for the First-in-Man study on bone metastases at the MRI-linear accelerator](#)" (Abstract OC-0163), which was delivered by Lieke Meijers, Radiotherapy Technologist at UMC Utrecht. The study discussed in this presentation was designed to test the feasibility of an online workflow for patients with bone metastases to be treated on the Elekta Unity system. Using a body-shaped testing device containing material equivalent to human tissues (Alderson Phantom), researchers determined that the developed protocol allowed for a total workflow time of about 45 minutes. This work flow includes patient set-up imaging, registration contouring, treatment planning, position verification, dose delivery and post-irradiation position verification scan.



“MR/RT is an area of great excitement within the radiation oncology community and the data presented at ESTRO 36 highlight the potential for Elekta Unity to transform the way cancer patients are treated,” said Kevin Brown, Vice President Research and Innovation at Elekta. “Researchers conceptualized MR-linac nearly two decades ago, and the Consortium members have demonstrated a tireless commitment to realizing the breakthroughs that made Unity possible. The twenty abstracts presented at this prestigious conference reflect their vision and commitment to ensuring that all patients who may benefit from radiation therapy achieve optimal outcomes.”

For more information, please visit www.elekta.com/Unity.

Elekta Unity is a work in progress and not available for sale or distribution.

#

For further information, please contact:

Gert van Santen, Group Vice President Corporate Communications, Elekta AB

Tel: +31 653 561 242, e-mail: gert.vansanten@elekta.com

Time zone: CET: Central European Time

Raven Canzeri, Global Public Relations Manager, Elekta

Tel: +1 770-670-2524, e-mail: raven.canzeri@elekta.com

Time zone: ET: Eastern Time

About Elekta

Elekta is proud to be the leading innovator of equipment and software used to improve, prolong and save the lives of people with cancer and brain disorders. Our advanced, effective solutions are created in collaboration with customers, and more than 6,000 hospitals worldwide rely on Elekta technology. Our treatment solutions and oncology informatics portfolios are designed to enhance the delivery of radiation therapy, radiosurgery and brachytherapy, and to drive cost efficiency in clinical workflows. Elekta employs 3,600 people around the world. Headquartered in Stockholm, Sweden, Elekta is listed on NASDAQ Stockholm. www.elekta.com