



Elekta MR-linac featured in record-breaking 42 abstracts at ESTRO 37

Growing body of data demonstrates the clinical utility of Elekta MR-linac and its ability to enable magnetic resonance/radiation therapy (MR/RT)

BARCELONA, April 23, 2018 – Elekta (EKTA-B.ST) today announced that its transformative MR-linac system is featured in 42 abstracts at the European Society for Radiotherapy and Oncology (ESTRO) 37th Annual Conference, taking place April 20 – 24 in Barcelona. Founding members of the Elekta MR-linac Consortium are presenting 36 abstracts and new collaborators from an ever-growing number of world-class cancer centers are presenting six abstracts. Elekta MR-linac is groundbreaking because it overcomes the technical barriers that have hindered the integration of radiation therapy with real-time high-field 1.5 Tesla (T) MR imaging. It is the only system to truly unlock the imaging capabilities of MR/RT, enabling clinicians to see what they treat in real time and offer each patient truly personalized therapy.

“For decades radiation oncologists have been challenged by the inability to see what we treat in real time, and the expansive body of MR-linac data presented at ESTRO 37 makes it clear that the dawn of a wholly new approach to radiation therapy is on the horizon,” said Ananya Choudhury, MA, PhD, MRCP, FRCR, The Christie NHS Foundation Trust, UK. “These data demonstrate that MR-linac has the potential to transform how cancer is treated by allowing more effective tumor targeting, providing better protection for healthy tissue and organs at risk, reducing side effects and enabling real-time adaptation of treatment plans. The ability to see what we treat has the potential to fundamentally change the way we currently treat patients and enable the radiation oncology community to dramatically improve health outcomes.”

The Elekta MR-linac Consortium is a collaborative industrial-academic partnership that Elekta founded with seven centers and its technology partner, Philips, in 2012 to provide an evidence-based introduction of Elekta MR-linac to the medical community, and to support the advancement of the technology.

Key findings presented at ESTRO 37 include:

- *1.5T MRI-Linac treatment planning for multiple lymph node oligometastases in the pelvic area* (Presentation number OC-0616, oral presentation, Monday, April 23). This study investigated the MR-linac treatment plan quality of multiple lymph node oligometastases in the pelvic area in ten patients. Results show that all treatments were delivered to the target area while protecting organs at risk. This study shows that multiple lymph node oligometastases could potentially be identified and treated on the MR-linac with plan quality and conformity that meet international criteria. Results also suggest that MR-linac may enable the use of smaller treatment target volumes, which could pave the way for further dose escalation and hypofractionation.
- *Investigating online adaptive workflows for prostate patients on the MR-Linac: an in-silico study* (Presentation number OC-0615, oral presentation, Monday, April 23). This study investigated three methods for rapidly adjusting treatment plans to account for changes in rectal volume in patients with prostate cancer. Results show



that currently available methods can be used for daily re-planning strategies. The optimal method (Segment Weight and Shape Optimization, or SSO) enabled treatment replanning in 239 seconds, which should be feasible for daily plan adjustment in real-world clinical settings.

- *Optimizing acquisition speed and contrast of respiratory correlated 4D-MRI on a 1.5T MRI-Linac* (Presentation number PV-0535, poster presentation, Monday, April 23). Internal organs can move during radiation therapy due to breathing, digestion and other normal functions. This study assessed the quality of images using several approaches to account for respiratory motion and also sought to identify the optimum speed for acquiring images to account for abdominal motion in healthy volunteers. Motion of internal organs during radiation therapy due to breathing and other anatomic functions. Results show that four-dimensional MR images were successfully acquired on a 1.5T MR-linac with one of the approaches (self-navigated GA-SoS 4D-MRI). They also demonstrate the feasibility of characterizing abdominal motion even when using only 19% - 38% of the captured image data. The ability to accurately characterize motion with a more limited data set should reduce acquisition time, which is an important factor in making MR-linac compatible with real world clinical workflows.

“The 42 abstracts presented at this conference is continued evidence of the intensity of the work of the Elekta MR-linac Consortium which has resulted in 125 scientific papers on Elekta’s MR-linac, more than any other MR-guided radiation delivery system,” said Elekta CEO, Richard Hausmann. “With this expert community, Elekta has achieved a technical tour-de-force by working with those on the front line of cancer therapy to innovative next-generation technologies that address unmet needs. We recognize the critical role that the consortium members played in making the ability to see what is treated in real-time a reality, and in developing the clinical protocols and processes that will enable MR/RT and transform patient care as we gear up for pending market introduction.”

Additional information about Elekta MR-linac can be found at www.elekta.com/mrrt .

Elekta MR-linac is a work in progress and not available for sale or distribution.

For further information, please contact:

Oskar Bosson, Global EVP Corporate Communications and Investor Relations

Tel: +46 70 410 7180, e-mail: Oskar.Bosson@elekta.com

Time zone: CET: Central European Time

Michelle Joiner, Director, Global Media Relations

Tel: +1 770 670 2447, e-mail: michelle.joiner@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.