Transformative potential of Elekta’s high-field MR-guided linear accelerator highlighted in seven abstracts at ESTRO 35

New data adds to growing body of more than 50 peer-reviewed journal publications

TURIN, Italy, April 27, 2016 – Elekta today announced that its leading-edge high-field MR-guided linear accelerator (MR-linac) platform will be the focal point of seven scientific presentations at ESTRO 35, the annual meeting of the European Society for Radiotherapy & Oncology, taking place April 29 – May 3.

Elekta’s MR-linac integrates a state-of-the-art radiotherapy system and a high-field MRI scanner with sophisticated software that allows a physician to clearly see the patient’s anatomy in real time. The MR-linac is designed to improve targeting of tumor tissue while reducing exposure of normal tissue to radiation beams. It will allow physicians to precisely locate a tumor, as well as lock onto it during delivery, even when tumor tissue is moving during treatment or changes shape, location or size between treatment sessions.

At ESTRO 35, the potential of Elekta’s MR-linac will be discussed in the following sessions:

- **Abstract SP-0485: “MR-linac: Clinical Introduction”**: Christopher Schultz, M.D., FACR, Professor in the Department of Radiation Oncology at Froedert and Medical College of Wisconsin. May 2, 2:30 p.m. - 4 p.m. This presentation will discuss the integration of MR-linac into current RT practice, the structure of the Elekta MR-linac Consortium and its plans to provide a robust body of evidence to support optimal development of MR-linac technology.

- **Abstract OC-0549: “The effects of magnetic field and real-time tumor tracking on lung stereotactic body radiotherapy”**: Martin J. Menten, a doctoral candidate at The Institute for Cancer Research, London. May 2, 4:45 p.m. – 5:45 p.m. This study demonstrates that use of Elekta’s Monaco® treatment planning software accounts for the effects of magnetic field during treatment planning and enables the design of clinically acceptable lung stereotactic body RT with a MR-linac. The data also show that the magnetic field does not compromise the ability of real-time tumor tracking to decrease dose exposure to healthy tissue.

“To evaluate the effect of the magnetic field and real-time tumor tracking, we modeled several dose-volume metrics and the amount of energy that would be delivered to patients with lung tumors,” explains Prof. Uwe Oelfke, MCCPM, FInstP, and Head of the Joint Department of Physics at The Institute of Cancer Research, London, and The Royal Marsden NHS Foundation Trust. “Real-time tumor tracking would allow us to maintain dose coverage of gross tumor volume while reducing the dose delivered, which decreased exposure to skin and healthy lung tissue. This was observed with and without the presence of the magnetic field, demonstrating that Monaco effectively addresses the challenge posed by the interaction of the MRI with the delivery of radiation therapy.”

Additional presentations include:

- **Abstract: OC-0075: “Impact of air around an ion chamber: solid water phantoms not suitable for dosimetry on an MR-linac”**: S. Hackett, B. van Asselen, J. Wolthaus, J. Kok, S. Woodings, J. Lagendijk, B. Raaymakers; April 30, 10:45 – 11:45 a.m.


• Abstract: SP-0483: “MRI Linac: physics perspective”; B. Raaymakers, J.J.W. Lagendijk; May 2, 2:30 – 4 p.m.


“We believe our high-field MR-linac will fundamentally change the RT landscape,” says Tomas Puusepp, President and CEO of Elekta. “Real-time, diagnostic-quality imaging and the ability to enable dose adaptation during treatment will allow radiation oncologists the same power of visibility during a radiation procedure that a surgeon has in the operating theater. With MR-linac, physicians can watch while they treat, allowing for a tailored approach to each patient’s needs at a specific moment in time. This is a wholly different approach to RT that has not previously been feasible.”

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

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The above information is such that Elekta AB (publ) shall make public in accordance with the Securities Market Act and/or the Financial Instruments Trading Act. The information was published at 18:00 CET on April 27, 2016.

About Elekta
Elekta is a human care company pioneering significant innovations and clinical solutions for treating cancer and brain disorders. The company develops sophisticated, state-of-the-art tools and treatment planning systems for radiation therapy, radiosurgery and brachytherapy, as well as workflow enhancing software systems across the spectrum of cancer care. Stretching the boundaries of science and technology, providing intelligent and resource-efficient solutions that offer confidence to both health care providers and patients, Elekta aims to improve, prolong and even save patient lives.

Today, Elekta solutions in oncology and neurosurgery are used in over 6,000 hospitals