

Elekta hits Radiotherapy milestone with 5,000th Linear Accelerator Manufactured

08 March 2019 | News

Radiation therapy system delivered to Korea's Hallym University Kangnam Sacred Heart Hospital



With the number of new cancer cases globally expected to rise by about 70 percent over the next two decades, access to radiotherapy - a key treatment modality for up to 60 percent of cancer patients - is more critical than ever. Since the manufacture of its first linear accelerator (linac) six decades ago, Elekta (EKTA-B.ST) has been committed to providing radiotherapy systems to every corner of the world. Hallym University Kangnam Sacred Heart Hospital (Seoul, Republic of Korea) will receive Elekta's 5,000th linac assembled at its Crawley, England facility. A linac is a machine for delivering external beam radiation to cancer in any part or organ of the body. Using special beam-shaping technology to conform to the tumor's shape, the linac delivers high-energy X-rays or electrons to the target - destroying cancer cells while sparing surrounding healthy tissues.

Hallym University Kangnam's new radiotherapy system is Elekta's most sophisticated digital linac, Versa HD™ equipped with the Agility™ multi-leaf collimator (MLC) and integrated imaging technology for highly targeted, ultra-conformal treatment of cancers all throughout the body.

A tradition of precision radiation medicine : Versa HD represents the culmination of six decades of Elekta linac innovations, allowing the delivery of high definition dynamic radiosurgery (HDRS) which allows stereotactic treatments (SRS & SBRT) throughout the body to be delivered in standard treatment slots. This history is punctuated by numerous radiotherapy industry firsts, including:

- The first commercially-produced linac
- The first fully digital linac
- The first linac with integrated cone beam CT technology, Elekta Synergy®, the system that ushered in the era of image-guided radiotherapy

Elekta's Crawley plant also is the birthplace of the industry's fastest MLC (Agility) and the world's first high field MR-linac, Elekta Unity. Unity integrates an advanced linac with a 1.5T magnetic resonance system, enabling doctors for the first time to "see what you treat" during the delivery of radiation beams and to adapt the treatment in real time.

Elekta recently consolidated much of its research and development resources in the new 45,700 square meter (150,000 sq. ft.) Cornerstone facility on Elekta's Crawley campus. Cornerstone was designed to serve as an international radiotherapy hub and a magnet for oncology innovations for the coming decades. It is home to 750 Elekta employees, comprising engineers, scientists, clinicians and customer-facing professionals.