Human care makes the future possible
We care for life
Elekta is an international medical-technology group, providing advanced clinical solutions and comprehensive management information systems and services for efficient and cost-effective high precision treatment of cancer and brain disorders.

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Elekta develops clinical solutions and information systems to aid in the fight against two groups of serious diseases – cancer and brain disorders. Common to these diseases is that a radical treatment is often needed in the affected area, while surrounding healthy tissue needs to be spared to the greatest extent possible. Cancer is a group of many related diseases that develop when cells in a part of the body begin to grow out of control. Cancer cells replace normal healthy cells and damage the body by impairing the function of a particular organ.

Elekta’s systems and solutions are used at over 5,000 hospitals around the world to treat cancer with radiation therapy, to diagnose and treat brain disorders as well as to run efficient and effective clinical practices. All of Elekta’s solutions employ non-invasive or minimally invasive techniques and are therefore gentle to the patient and cost-effective, in addition to being clinically effective.
Cancer treatment

The global burden of cancer continues to increase, primarily due to an increase in life expectancy and improved diagnostic methods. The number of new cases is increasing rapidly, worldwide 12% of all people die from cancer and in industrialized countries (WHO) more than one in four will die as a result of this disease. At the same time, technological developments have resulted in increasingly improved cancer diagnosis so that cancers are detected earlier. As a consequence, the possibilities for successful treatment have improved.

Depending on the type of tumor, cancer is normally treated with radiation therapy, chemotherapy, surgery or selected combinations of these. Where available, almost half of all patients who are diagnosed with cancer are treated with radiation therapy at some stage of their illness. New advanced, more precise and accurate methods are expected to increase the role of radiation therapy in the future.

Brain disorders

Brain disorders are often critical and can severely affect the patient’s quality of life. At the same time, brain disorders are often very hard to treat without risk to the patient’s ability to function. Tumors that occur in the brain can be divided into two groups; benign and malignant. Among benign brain tumors, vestibular schwannomas, meningiomas and pituitary adenomas are notable, as they can become life threatening if not treated. Malignant brain tumors can be primary tumors or secondary metastases. The latter originate from primary tumors elsewhere in the body. Vascular malformations in the brain (arteriovenous malformations) are often congenital and go undiagnosed until they cause a brain hemorrhage. Functional brain disorders are diagnosed by observing symptoms such as Parkinsonian tremor or epileptic seizures. Elekta is currently focusing research on such disorders as facial pain (trigeminal neuralgia), epilepsy and Parkinson’s disease.

Collaboration

Elekta develops clinical solutions and information systems through close collaborative relationships with customer partners in research and advanced product development. Through these efforts Elekta is addressing the needs of healthcare systems as well as patients by reducing hospitalization costs and providing less traumatic treatment options.
Neuro and Stereotactic Systems

Elekta Neuroscience serves the most challenging needs of physicians and clinicians in the field of neuroscience and stereotactic radiation therapy seeking to deliver excellence for their patients. Based on over half a century of experience in stereotaxy, Elekta provides premium solutions for stereotactic treatments both in the brain and other parts of the body. The Leksell Gamma Knife® product line is complemented by Elekta Axesse™, an integrated robotic and image guided system for stereotactic radiosurgery (SRS) and stereotactic radiation therapy (SRT). For non-invasive real-time mapping of nerve cell activity in the brain, Elekta offers the Elekta Neuromag® magnetoencephalography (MEG) system.
Elekta Axesse™ provides a comprehensive and integrated solution to effectively apply stereotactic radiosurgery (SRS) and stereotactic radiation therapy (SRT). The system offers clinicians the ability to deliver higher and more conformal doses of radiation to the target in fewer fractions than with conventional radiation therapy techniques.

Elekta Axesse combines true three-dimensional (3D) image guidance at the time of treatment with highly conformal beam shaping and robotic 6D sub-millimeter patient positioning to deliver fast, efficient and accurate treatment.

With Elekta Axesse, clinicians can reduce complexity, streamline decision-making and increase patient throughput while executing more sophisticated protocols.
Gamma Knife® surgery

Gamma Knife® surgery, sometimes referred to as stereotactic radiosurgery (SRS), is a non-invasive method for treating brain disorders. It is the delivery of a single, high dose of irradiation to a small and critically located intra-cranial volume through the intact skull. Gamma Knife® surgery is preferred for its extreme accuracy, efficiency and outstanding therapeutic response. Today, Gamma Knife® surgery is performed in hundreds of leading hospitals and clinics around the world. Around 50,000 patients undergo Gamma Knife® surgery every year, and this unique procedure has an impressive scientific track record with thousands of peer-reviewed articles. No other non-invasive treatment method in this field has greater clinical acceptance.

Leksell Gamma Knife® Perfexion™

Leksell Gamma Knife® Perfexion™ represents the future of SRS. This innovative system radically broadens both the techniques and the scope of treatments. Leksell Gamma Knife Perfexion offers faster, more flexible surgical procedures, thereby enabling substantially more patients to be treated with less effort than ever before.
The Extend Program™ *

The Extend Program™ is a non-invasive repeat fixation system allowing for fractionated treatments of the head. Extend creates new possibilities for the most challenging cases and further expands the utilization of Leksell Gamma Knife® Perfexion™.

* The Extend Program is not available for sale or distribution in all markets. Please contact your local Elekta office or authorised distributor.

Leksell Gamma Knife® 4C

Leksell Gamma Knife® 4C is built for the needs of hospitals and clinics with a strong patient case load and offers all the benefits of Gamma Knife® surgery. Built-in robotic Automatic Positioning System™ receives coordinates directly from the treatment plan, providing improved workflow, performance and speed. Leksell Gamma Knife 4C meets the highest demands of efficiency and economy.

Leksell GammaPlan®

Leksell GammaPlan® is designed for Gamma Knife surgery. It enables the physician to tailor a conformal treatment plan for a specific medical condition, and ensures that the most precise and effective treatment is delivered, regardless of the number and complexity of the targets. The system supports all imaging modalities, including non-stereotactic images. It is equipped with remote planning capability and multi-user functionality.
Leksell SurgiPlan®

Leksell SurgiPlan® is an advanced image-based neurosurgical planning software, specifically designed for use with Leksell Stereotactic System®. It offers functions and modules to visualize and analyze patient images, and to plan and evaluate different surgical approaches. This powerful tool increases the accuracy and confidence of the planning procedure. Leksell SurgiPlan provides a smooth workflow, time savings and enhanced clinical outcomes.

Leksell Stereotactic System®

Elekta’s system within stereotactic neurosurgery is characterized by simplicity, versatility and accuracy. The core system within stereotactic neurosurgery is Leksell Stereotactic System®, a three-dimensional reference system which allows the surgeon to very accurately localize and treat the pathological area with highest accuracy. The system is used for diagnostic as well as therapeutic procedures, such as biopsies of deep-seated targets and treatment of functional disorders.

Leksell Stereotactic System constitutes, one integrated system, together with two other major components, Leksell SurgiPlan® for pre-operative planning and Leksell® Neuro Generator for lesioning and stimulation. It also provides the foundation for late Professor Lars Leksell’s development of Leksell Gamma Knife and radiosurgery as an effective treatment option.

Elekta Neuromag®

Magnetoencephalography (MEG) is presently regarded as the most efficient method for tracking brain activity in real-time. Compared to EEG, MEG has unique sensitivity capabilities. MEG has been proven to be of clinical advantage for improving patient management in the evaluation of epilepsy. It is also used for pre-surgical mapping of visual, auditory, somatosensory, and motor cortex functional areas.

In brain research MEG has long been an invaluable tool, in areas such as memory, behavior and cognitive functions. Real-time brain mapping and monitoring is one of the most exciting developments in neuroscience today.

Elekta Neuromag has the most advanced sensor design which gives the highest yield of information.
Elekta is the world’s largest provider of software systems developed for oncology practices. Elekta Software supports the entire workflow in cancer care, from diagnostics to treatment planning, treatment delivery, verification, administration and patient follow-up.

Elekta CMS Software develop leading-edge treatment planning and workflow management IT solutions for radiation therapy providers. For more than 25 years, Elekta CMS Software have continuously developed applications and innovative workflow solutions designed to make all members of the radiotherapy team more effective in providing quality, human care. The new Elekta CMS Software brand reaffirms our deep, long-standing commitment to our customers. Together with Elekta Impac Software and the entire Elekta Group, we are dedicated to delivering open, vendor-neutral connectivity and flexible architectures that integrate seamlessly with customers’ new or existing systems.

The MOSAIQ® oncology information system encompasses image enabled solutions for electronic medical records as well as modules for many of the needs of a busy oncology practice.

Elekta also supplies a wide range of highly advanced treatment planning systems for linear accelerator systems and for particle therapy, including Xio®, Monaco, ERGO++ and Focal. In addition, Elekta facilitates efficient operations and pathology laboratories, clinical laboratories and cancer registry operations with systems such as PowerPath® and METRIQ®.
Every complex treatment delivery begins with the creation of a treatment plan. The aim of treatment planning is to provide a plan that maximizes dose to the tumor and minimizes dose to organs at risk. Elekta offer a range of treatment planning software for a variety of clinical techniques.

**XiO**

XiO delivers comprehensive 3D/IMRT treatment planning functionality on a platform that supports a range of treatment modalities. It combines the latest tools and most robust dose calculation algorithms with an intuitive, user-friendly interface. Plans are generated quickly and accurately to optimize the delivery of radiation therapy. Leveraging the speed and performance capabilities of the Linux operating system, XiO delivers robust network performance in the most demanding of clinical environments.
Atlas-based Autosegmentation

- Automated contouring application that deforms atlases of anatomy previously defined on a reference image onto a new patient image, creating a new structure set fit to the patient anatomy.
- Significantly reduces time spent creating and editing patient contours
- Compatible with any radiation treatment planning systems.

Focal

- Registration and fusion of multi-modality images; segmentation and contouring tools
- Virtual simulation stand alone application
- Independent review of plans from compatible systems

ERGO++

ERGO++ provides everything that is required by radiation oncology and neurosurgery teams by enabling IMRT treatment planning for static and rotational beams, using dose volume constraints and inverse planning. Multi-modality image support also means that ERGO++ can offer registration and fusion of a range of images such as CT, MR or PET, making it a flexible and versatile tool for both disciplines. To optimize planning for neurosurgical cases ERGO++ offers the facility to plan using MRI images.

Monaco*

Monaco is a next-generation IMRT planning system, and represents a significant leap forward in IMRT. It features innovative biological cost functions with multi-criterial constrained optimization, a powerful leaf sequence optimizer and a robust Monte Carlo dose calculation algorithm. Fully integrated into the CMS Focal platform, Monaco provides seamless connectivity and integration with the advanced fusion, contouring, simulation and plan review capabilities of Focal and represents state-of-the-art IMRT planning. VMAT is the next step in IMRT delivery. As an extension of Monaco IMRT, VMAT planning uses dynamic leaf and gantry movements to deliver highly conformal plans more efficiently and in less time. These new capabilities coupled with variable dose rate delivery, enable clinicians to increase their patient throughput without compromising patient care.
In busy oncology departments it is critical that patient information is available quickly and easily and is accessible to many different medical personnel. As the industry’s leading supplier of cancer management systems, Elekta Software provides a complete, fully integrated and seamless management information solutions addressing the entire spectrum of cancer care.
MOSAIQ® is a dedicated oncology information system (OIS) which streamlines the entire oncology workflow from initial diagnosis and staging through to treatment planning, treatment delivery and subsequent follow up. The system helps maximise efficiency through minimizing manually driven paper based functions via electronic medical record (EMR). Patient queues are dramatically reduced and errors are minimized.

Capable of supporting multi-vendor, multi-disciplinary and multi-site organizations, MOSAIQ provides a solution to ensure that information is always available wherever it is needed, at any time.

MOSAIQ Resource Scheduling provides a clinically effective solution to complex scheduling problems associated with traditional paper based methods which are ineffective and prone to errors.

This department scheduling system includes user defined views for staff, resource and department schedules, featuring flexible templates, conflict checking/resolution, find function and ability to download appointments to a PDA.

MOSAIQ Oncology PACS (picture archiving and communication system) is an oncology specific patient retrieval and archiving system designed to manage the ever increasing volumes of image and patient data sets that are generated using today’s specialized complex imaging techniques and machines such as IGRT (image guided radiation therapy) and Elekta Synergy®. MOSAIQ Oncology PACS is designed to support the specific workflow needs of oncology enabling individual medical staff to archive, retrieve and manage volumes of images and information from within MOSAIQ.

Based on open system architecture, MOSAIQ Oncology PACS can interface with a broad range of treatment planning, positioning and document management systems and supports proprietary and non DICOM formats such as AVI, bitmap, jpg, MP3, pdf, tiff, text, Microsoft® Word etc., providing a complete picture of patient care, stored in a single database.
MOSAIQ® Medical Oncology & Registry

MOSAIQ® can be configured to manage the complexities and nuances of both medical oncology and radiation oncology, providing a comprehensive oncology charting solution. MOSAIQ Medical Oncology integrated seamlessly with MOSAIQ Radiation Oncology, making it the easiest solution for comprehensive sites. Vendor-independent, both oncology management systems utilize the same database.

The MOSAIQ Medical Oncology chart has been designed to streamline chemotherapy ordering and administration by allowing clinicians to plan treatment, process orders and track patient progress from a single worksheet.

METRIQ™

Within MOSAIQ, accessing data for outcomes reporting is quick and efficient posting directly to the Cancer Registry. The data visualization and analysis tools bring to light the valuable information stored in MOSAIQ for producing reports, graphical information and analyzing cancer data for transferring to the registry.

SYNERGISTIQ™

SYNERGISTIQ™ integrates MOSAIQ® and Elekta Synergy® with a consolidated and synchronized user interface that brings together the various systems that are required for IGRT.

SYNERGISTIQ eases the clinical workflow through the use of the clinical workflow engine which automates patient selection by sending reference data and pre-sets to Elekta Synergy.

VolumeView™ images, reference images and registration images are automatically stored with the patient medical record in MOSAIQ. Images are available for review throughout the clinic, using the MOSAIQ image registration tools. In the SYNERGISTIQ environment MOSAIQ will ascertain whether an appropriate reference image is available and if it detects that a new reference image is required this will be automatically recalled.

ANALYTIQ™

The information compiled by everyday use of IMPAC Software solutions provides a valuable source of oncology data. ANALYTIQ ‘closes the loop’ by providing an efficient means of analyzing and auditing oncology data in order to facilitate decision-making and to promote continual quality improvements.

Information is presented in graphical format allowing quick and easy data visualization of trends and anomalies and exploring root causes. With ANALYTIQ, a user can initiate a more detailed analysis on a portion of the data by simply highlighting an area of interest.

ANALYTIQ analyses can be easily bookmarked at various stages in the process. Each analysis can be exported in a variety of formats or embedded in a presentation to demonstrate the results of the analysis and provide support for your conclusions.
Elekta Oncology has a broad product portfolio of clinical solutions for radiation therapy, including linear accelerators with multileaf collimators, integrated X-ray imaging systems and clinical solutions for patient positioning and fixation. Elekta is the world leader in image guided radiotherapy (IGRT) with Elekta Synergy®, which integrates high-resolution 3D imaging at the time of treatment. During 2008 Elekta introduced Elekta Compact™, a system for high quality conventional radiotherapy, and VMAT (volumetric intensity modulated arc therapy), a delivery solution which combines a significant reduction in treatment time with improved avoidance of radiation dose to healthy tissues surrounding the tumor.

Innovation

Through collaboration with our clinical research partners, Elekta has lead the development of intensity modulated arc therapies and intensity modulated radiation therapy (IMRT) for over 10 years. Combining our expertise in volumetric imaging and dynamic arc modulation, Elekta is continually developing a portfolio of solutions to directly address the many challenges faced by our customers. The best technological advances are moulded into practical solutions through real-life experience. To capture this, Elekta has drawn together a VMAT Consortium and IGRT Research Group, which comprises many world-leading, and most published experts in their field.

A glance at the history of these developments

First digitally controlled linear accelerator. First Elekta International IMRT Consortium Meeting. First full field, fully integrated 40 x 40cm multileaf collimator. First Elekta Synergy® Research Group (IGRT consortium) meeting. First release of Elekta PrecisePLAN™ for segmental IMRT inverse treatment planning. First integrated 4mm Beam Modulator™ multileaf collimator with full inter-digitation. Acquisition of Medical Intelligence, providing a range of patient immobilization products.
2005 Full product release of Elekta Synergy for advanced IMRT and IGRT with 3D VolumeView™.

2005 Acquisition of Impac providing electronic treatment and image management system.

2007 Acquisition of 3D Line providing a choice of mini and micro MLC, ERGO++ for SRS/SRT.

2007 First release of ERGO++ in Europe with VMAT arc sequencer.

2008 Release of VMAT and Elekta Compact™.

2008 Acquisition of CMS.

2008 Release of MLC2.
Support systems

Radiation therapy is rapidly developing increasingly refined treatment methods. Elekta offer a range of treatment support products to meet a variety of clinical needs. These products offer versatility in treatment positioning, patient access and accuracy in repositioning.
HexaPOD™ evo RT system

HexaPOD™ evo RT system features the first robotic patient-positioning platform with six degrees of freedom. It enables accurate and remote geometric correction of any misalignments detected by state-of-the-art image guidance systems, thereby closing the gap in the six degrees of freedom chain of image guided radiation therapy (IGRT) localization and patient positioning.

Precise Table

Precise Table offers functions and features to support an increasingly broad range of radiation therapy applications. The extensive range of tabletops available with Precise Table offers clinical flexibility whilst the large vertical table movement range enables the treatment of large fields at extended distances and irradiation from beneath with a source-to-skin distance of up to 150cm.

iBEAM® evo Couchtop

iBEAM® evo Couchtop is the next generation couchtop for both imaging and treatment, providing outstanding in situ imaging quality and minimizing artifacts. The iBEAM evo Couchtop has a unique homogenous carbon fiber sandwich design which contains no metal in the treatment area. This offers improved radiotranslucency, with minimized attenuation spread across the range of beam entry angles, providing the perfect solution for IMRT, VMAT and IGRT.
Elekta offers the only commercially available digitally-controlled linear accelerator. This enables access to a range of fully remote service tools to ensure clinical up-time is maximized. Elekta treatment systems also offer the largest patient clearance ensuring a wide range of complex techniques can be achieved. The low isocenter of the Elekta treatment systems also ensures ease-of-set-up for the radiation therapist.
Desktop Pro™ control system*

Desktop Pro™ control system introduces the fifth-generation integrated digital control system, designed for the Elekta range of digital linear accelerators. Desktop Pro control system ensures a smoother patient flow and enables more treatments per linear accelerator, thus improving the financial performance of the clinic.

Desktop Pro control system is also designed to ensure the dosimetric accuracy of VMAT delivery while offering the freedom to simultaneously vary; dose rate, dynamic MLC and diaphragm, collimator, gantry angle and speed. Desktop Pro control system is the only digital control system to offer real-time control of all of these parameters.

In combination with software solutions from the MOSAIQ portfolio it is possible for customers to have a flexible network which integrates all Elekta digital linear accelerators*, into a multi-facility clinic. Desktop Pro control system enables a common user interface across multi-vendor departments, through the use of the iCom protocols and is compatible with products from the MOSAIQ portfolio as well as a wide range of third-party record-and-verify systems.

* currently not available for Elekta Compact™

Elekta Compact™ **

A cost-effective investment for today, Elekta Compact™ has a modular design enabling new functions and features to be easily added. The breadth of applications supported by the system is matched by the depth of service and support from Elekta – the acknowledged leader in the development, manufacturing and delivery of precision radiation products. Compliant with all relevant international standards, Elekta Compact is the cost effective choice for the busy oncology department.

Elekta Compact has been designed for patients. Wide machine clearance, low isocenter, unintimidating fascia design and near-silent operation provide a reassuring setting and a less stressful environment.

** Elekta Compact is not available for sale or distribution in all markets. Please contact your local Elekta office or authorised distributor.

Precise Treatment System™

Precise Treatment System™ is designed as an integrated system to ensure the performance parameters for a wide range of treatment techniques and advanced applications are easily achieved. Optimized for rapid delivery of intensity modulated radiation therapy (IMRT), this system has excellent dose and parameter accuracy during the delivery of low dose sequential IMRT fields and rapid beam start-up through accurate and stable beam control. Such features are the cornerstone of advanced treatment deliveries such as VMAT.

Precise Treatment System is a robust and reliable system designed for high intensity day-to-day clinical use.
Elekta provide a wide range of treatment systems with capability for imaging at the time of treatment. The ability to image at the time of treatment and verify the tumor and treatment position, has provided unmatched clinical confidence for 3D conformal, VMAT, hyper fractionated and stereotactic treatment, through improved dose conformance and reduced irradiation to healthy structures.

Elekta Infinity

Built on market-proven, fifth-generation digital technology, Elekta Infinity redefines treatment precision, speed and control. It is a fully integrated treatment system that allows you to personalize your imaging and treatment workflows. Elekta Infinity delivers unmatched dose conformance, treatment speed and offers ultra-low dose safeguards for the patient. Optimized for VMAT delivery this highly responsive, intuitive treatment system frees you to focus on patients and benefit from efficient workflow.
Elekta Synergy® S

Elekta Synergy® S sets the standard of accuracy and therapeutic efficacy in extracranial stereotactic radiation therapy (SRT) and stereotactic radiosurgery (SRS) applications. Modelled on the proven design of Elekta Synergy®, Elekta Synergy S combines high-conformance beam shaping with image guided radiation therapy for advanced stereotactic radiation treatments. It also offers all the advantages of the complete line of Elekta digital linear accelerators, including exceptional positional accuracy, integrated digital controls, open connectivity, quiet operation and a durable, ergonomic design.

Elekta Synergy®

Elekta Synergy® is the first linear accelerator with integrated equipment for high resolution 3D X-ray volume imaging (XVI). This advanced system simultaneously acquires and reconstructs 3D image data on the target and surrounding critical structures, as a whole volume with a single gantry sweep. Elekta Synergy uses innovative XVI technology which enables routine 3D volume imaging of a tumor, prior to treatment, decreasing the risk of error due to movement of the tumor or internal organs.

Elekta Synergy® Platform

Elekta Synergy® Platform is a unique multi-functional digital accelerator that is XVI-ready and future-proofed. Elekta Synergy Platform combines all the proven benefits of Elekta digital accelerators with a platform for image guided radiation therapy (IGRT). Elekta Synergy Platform has a full range of treatment capabilities and MV portal imaging to provide improved treatment conformance and accuracy.
Beam-shaping options

A linear accelerator produces a radiation beam of either electrons or high energy X-rays. This beam is shaped to match the tumor shape and the patient is positioned to ensure that the beam is directed at the tumor. Elekta offer a range of beam-shaping options to meet a variety of clinical needs.

MLCi

MLCi is fully integrated in the linear accelerator both physically within the standard collimator housing and electrically within the control system. The nominal 1cm leaf resolution is maintained for the full 40 x 40cm field at the isocenter, together with unrivalled leaf travel capability of 32.5cm.

MLCi2

The MLCi2 is the next generation integrated multileaf collimator, based on the proven technology of the existing MLCi. The MLCi2 offers improved transmission performance without compromising existing clinical benefits of the MLCi design. Specifically designed to further reduce inter-leaf and intra-leaf transmission. The ability of MLCi2 to significantly minimize dose to healthy tissue outside the treatment beam as well as having the capability to interdigitate, makes it ideal for complex treatment deliveries such as IMRT and VMAT.
**Beam Modulator™**

Beam Modulator™ offers high resolution beam-shaping fully integrated with the linear accelerator. Offering the possibility to interdigitate and create a number of field shapes within a single beam delivery.

Beam Modulator is designed to meet the stringent needs of the rapidly evolving field of high resolution extracranial SRT and IMRT.

**Dynamic micro multileaf collimator**

The dynamic micro multileaf collimator offered by Elekta is the most versatile technology available today for fulfilling add-on beam shaping requirements and is compatible with any of the range of Elekta Linear Accelerators.

There are three dynamic micro multileaf add-on collimators to choose from providing a 3mm, 5mm and 7mm leaf width (at isocenter) and 7 x 7cm, 10 x 12 and 10 x 17 fieldsize (at isocenter), respectively. All options offer the facility for dynamic treatments and the improved homogeneity in target shaping, including minimizing dose to critical organs, that this provides. The 3mm and 5mm dynamic micro-multileaf collimators are certified for use up to 18MV making it an extremely versatile tool for SRT and SRS.

**Stereotactic cones**

Elekta offer a range of small field precision cones which facilitate the implementation of stereotactic radiosurgery and stereotactic radiation therapy and are fully compatible with the range of Elekta treatment systems. To optimize stereotactic field shaping, a range of cones are available in varying sizes from 5mm to 50mm.
Elekta offer both MV and kV imaging at the time of treatment.

- MV imaging is offered on Precise Treatment System™, Elekta Synergy® Platform, Elekta Synergy®, Elekta Synergy® S and Elekta Infinity
- kV imaging through XVI is offered on Elekta Synergy®, Elekta Synergy® S and Elekta Infinity.
PlanarView™ provides similar functionality to existing orthogonal MV portal images for initial patient set-up. However, the X-rays in the kV energy range produced by XVI create high quality images at very low doses (0.2cGy).

MotionView™ Sequence mode imaging capability is also provided by XVI and helps locate targets that move at a higher frequency due to respiration, allowing true evaluation of patient motion while the patient is in the treatment position, thus optimizing treatment delivery.

iViewGT™ is an electronic portal imaging device and an important component of IGRT, providing high-resolution, high-contrast MV images for treatment verification with the patient in the treatment position. Real-time imaging is also made possible with iViewGT using imaging during treatment.

VolumeView™ Innovative XVI technology is integrated directly onto the treatment system itself enabling routine 3D volume imaging of a tumor immediately prior to treatment. VolumeView™ visualization of soft tissue decreases the risk of geometric miss by confirming tumor and risk organ position immediately before treatment, with possible update of patient position.

Using VolumeView™, clinicians can visualize soft tissue detail in any area of the body. This unique functionality offers two potential benefits:

- the ability to minimize side effects of radiation therapy by reducing the margins previously set to account for uncertainties of target dimensions, location and movement and improve patient outcomes
- the potential to adopt dose escalation and hypofractionation regimes with the confidence that a 3D plan will be delivered as an accurately targeted 3D treatment.
High conformance radiation therapy treatment modalities require precise patient positioning, immobilization and organ motion management. To address the issue of motion management Elekta offer a range of solutions for the entire body.

**BodyFIX®**

The patented BodyFIX® dual vacuum technology maximizes repositioning accuracy and intra-treatment patient stability by reducing both involuntary and voluntary patient movement, including breathing motion.

**Active Breathing Coordinator™**

Active Breathing Coordinator™ addresses the localization challenges associated with breathing motion and provides a stable and reproducible target position. It has particular application for precision treatment in the thorax or upper abdomen.
Elekta Esarte® Frame

Elekta Esarte® Frame is a true step forward in the design of head frames for use in SRT. Based on the success of Leksell® Coordinate Frame G, Elekta Esarte Frame is built on almost 60 years of clinical experience. In conjunction with the Elekta range of digital accelerators, this relocatable frame enables high precision intracranial treatment in all parts of the brain.

HeadFIX®

HeadFIX® is a unique vacuum-activated head frame providing the clinician with a highly accurate and reliable non-invasive immobilization and repositioning device. HeadFIX® is designed to facilitate high precision immobilization and SRT.

Leksell® Coordinate Frame G

Leksell® Coordinate Frame G and associated accessories form a minimally invasive frame system for SRS. Using one of the Elekta range of digital linear accelerators, the system is capable of treating targets in all parts of the brain and the head above the level of the hard palate. Leksell Coordinate Frame G is engineered for maximum accuracy, ease of use and flexibility.
Elekta Services – guaranteed confidence from Elekta

All-inclusive lifecycle support contracts give centers guaranteed peak performance during the full lifecycle of the equipment. They ensure prolonged equipment lifetime, maximum return on investment and improved clinical performance.

Improving financial performance

Elekta Services help increase the efficiency of planning and administration, to boost revenues and lower cost per patient. With Elekta, the clinic can count on site planning, marketing programs and obsolescence programs that proactively upgrade computer equipment and software.
Smoothing patient flow

Elekta Services are fine-tuned to maximize clinical uptime, eliminate clinical interruptions, deliver consistent treatment quality and enable more treatments per day. Elekta offers; customized Customer Service & Support Programs, a range of on-demand services and Elekta IntelliMax which manages, intelligently monitors and services devices for maximum clinical availability and financial performance.

Improving clinical efficiency

By taking advantage of the latest technology, clinical developments, modular upgrades, enhancements and accessories, Elekta can help the clinic make the most of the resources already available. This means shortening the length of stay, reducing costs per patient and extending equipment lifetime.

Ensuring staff competence

Elekta is committed to helping customers feel confident in the use of the equipment, in order to achieve the highest clinical result. Elekta offers; clinical training in collaboration with leading hospitals, comprehensive on-site application training for confidence in clinical practice, and technical training that helps the clinic optimize the management of Elekta equipment.

Elekta provides clinical education programs at centers of excellence to assist with training of team members. Clinical courses have been run at hospitals in London, UK; Ghent, Belgium; Lund, Sweden; Mannheim, Germany; and in China. Further courses are planned for the future in a wide range of geographic locations. Supervised hands-on experience in an Elekta training course provides carers with specialized knowledge they can apply with confidence on the job.
A human care company, Elekta pioneers significant innovations and clinical solutions for treating cancer and brain disorders. Elekta provides intelligent and resource-efficient technologies that improve, prolong and save patient lives. We go beyond collaboration seeking long-term relationships built on trust with a shared vision, offering confidence to healthcare providers and their patients.