Redefining treatment precision, speed and control

Elekta Infinity™
Digital accelerator for advanced treatments
Confidence

to increase conformance and speed without compromising target coverage

Set yourself apart with comprehensive radiation therapy treatment capabilities from Elekta, the innovator in oncology solutions. Built on market-proven, seventh 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. For your patients, Elekta Infinity delivers precision dose conformance, fast treatment speed and ultra-low dose safeguards. For your treatment team, this highly responsive, intuitive treatment system frees you to focus on patients and benefit from efficient workflow. Using Elekta Infinity, the freedom to deliver superior treatment results is now in your hands.
Why Elekta Infinity?

- Volumetric intensity modulated arc therapy (VMAT) delivery with single or multiple arcs for efficient dose distributions
- Improve conformance and speed without compromising target coverage
- Advanced 2D, 3D and 4D imaging solutions
- Large field volumetric imaging with sophisticated guidance tools
- Scalability for easy migration to next-generation treatment planning systems
- Seventh generation integrated digital control system with proven performance and safety
- Real-time assurance that the intended dose is delivered as precisely as it was planned

“Treatment was delivered perfectly with Elekta Infinity. I can tell you the therapists were absolutely thrilled and immediately had numerous recommendations of patients they thought would benefit from VMAT, and that was based primarily on the time efficiency of delivery.”

David R. Asche, MS Director of Physics and Engineering, RAS Radiation Oncology Centers Sacramento, CA USA
Elekta Infinity™ with VMAT gives you the flexibility to dynamically control multiple treatment parameters while the beam is on and rotating. For the first time, you can tailor treatment plans to optimize dose to the tumor and spare surrounding healthy tissue. Elekta Infinity can optimize the accuracy and speed of delivery by simultaneously manipulating the gantry position, gantry speed, MLC leaves, dose rate and collimator angle.

See Before Treating
Elekta VolumeView™ imaging is integrated into Elekta Infinity, enabling you to routinely confirm target and organ at risk positions immediately before treatment. Elekta X-ray volumetric imaging (XVI) enables you to routinely confirm size, shape and position of the target volume compared to plan, as well as the position of critical adjacent structures.

Choose Your Approach
Elekta Infinity offers you a choice – use a single arc or choose multiple arcs to optimize the VMAT plan. For many cases a single-arc VMAT plan may be sufficient to achieve the desired dose distribution. For complex anatomical sites a multiple-arc VMAT plan can deliver superior target coverage while sparing healthy tissue and adjacent critical structures. The clinical advantages of either multiple- or single-arc VMAT deliveries are enhanced by the use of non-coplanar treatment techniques.

Less Overall Radiation
Elekta Infinity with VMAT requires significantly fewer MUs than conventional techniques, reducing total MU delivery by up to 50%. VolumeView™ imaging also delivers high precision localization at ultra-low doses, allowing you to confidently image every day without fear of unnecessary risk to patients.

“Elekta Infinity will give us a competitive advantage over other centers in our area, additionally, the ability to treat with the highest degree of accuracy will benefit our patients tremendously.”

Kyle Antes, MS
Director and Chief Physicist,
Presbyterian Cancer Center, Dallas, TX, USA
More quality time

The less time a patient spends on the treatment table, the better. Shorter treatment times not only improve patient comfort, but also reduce the inaccuracies resulting from patient movement during treatment delivery – speed is an essential element of accurate treatment.

Totally Targeted Minutes

Elekta Infinity™ dramatically reduces treatment delivery time – to less than two minutes in some cases and with integrated imaging and highly conformal VMAT delivery, you can perform most treatment sessions in five minutes or less.

Fast and Accurate

Volumetric imaging delivers high-quality images at ultra-low doses, so you can quickly and confidently image every day before treatment. In three minutes or less, you can verify patient position, pinpoint the target and visualize adjacent critical structures. With quick, efficient treatment delivery, patients are less likely to move, which improves accuracy while limiting the whole-body dose of radiation they receive over time.

More Flexible Time

Reducing the time each patient spends in the treatment room increases the opportunity to treat more patients per day. Elekta Infinity gives you the opportunity to bring flexibility to your clinical schedule.

Typical complex treatment time (minutes)

![Bar chart showing typical treatment times: Conventional IMRT 19 minutes, Helical IMRT 14 minutes, Elekta VMAT 2 minutes.]
With ultra-low dose and rapid beam shaping, Elekta Infinity™ delivers radiation only where you place it. Elekta Infinity protects patients with real-time, point-to-point monitoring. You can be confident of safeguarding surrounding tissue and reducing the risks associated with radiation. Elekta has always focused on optimizing every step of the care process so that you can focus on what matters most - patient care.

Above All Else – Safety

The integrated beam shaping of Infinity is designed for the needs of modern treatment techniques such as VMAT. It limits interleaf and overall patient plane leakage for lower dose volumes to critical structures. In addition, advanced digital monitoring technology in the Elekta Infinity control system constantly tracks all delivery parameters during treatment. Combined with completely machine-independent verification through MOSAIQ® image-integrated oncology information system (OIS), you can be confident that treatments are delivered exactly as planned.

On Time – Not Overtime

The speed and precision of Elekta Infinity help you complete scheduled treatments on time. All imaging, planning, treatment and OIS capabilities are integrated with Elekta Infinity, enabling your team to quickly and easily move from one step to the next. A built-in workflow manager streamlines treatment sessions, enabling everyone on your team to focus on the patient and treatment – instead of the technology. Now you can go home on time and minimize overtime requirements.

Integrated from Start to Finish

The powerful OIS fully integrates workflow for the entire clinical and administrative staff. This includes comprehensive EMR systems that facilitate communication, increase productivity and elevate efficiency to an entirely new level – from start to finish.

“We have found that for complex cases the use of multiple arcs allows us to achieve a more uniform dose in the target and enables improved sparing of critical structures.”

David Shepard PhD, Director of Medical Physics, Swedish Cancer Institute Seattle, Washington
Elekta Care™ is designed to help you maximize the use of your Elekta technology, so you can focus on your patients and your practice.

Elekta Care™ supports you from startup through your product’s lifecycle with comprehensive options from education, training and upgrades to solutions allowing you the highest uptime and improved operational efficiency.

To learn more, visit elekta.com/elektacare
We are healthcare technology innovators, specializing in radiotherapy treatments for cancer and brain disorders.

We help clinicians to improve patients’ lives through our forward-thinking treatment solutions and oncology informatics, creating focus where it matters to achieve better outcomes.