Introducing the system that knows no boundaries.
Meet Leksell Gamma Knife® Icon,™ the cranial radiosurgery system that knows no boundaries. A system that gives flexibility in immobilization and workflows, enabling expansion into new treatment areas and fractionation paradigms without compromising on precision and efficiency. Regardless of treating the smallest, most complex lesions or multiple metastases, Icon delivers. You can have it all – ultimate clinical and workflow flexibility with the highest accuracy and lowest dose to normal tissue.

Icon™ is the 6th generation Gamma Knife® since physician Lars Leksell, in search of better methods for treating the brain, invented stereotactic radiosurgery. Hundreds of thousands of patients later, it is clear that what began as one man’s concern for his patients resulted in nearly a million individuals worldwide benefitting from Gamma Knife radiosurgery. Today that very philosophy is present in Leksell Gamma Knife Icon.
Leksell Gamma Knife® Icon™
Precision Radiosurgery with Online Adaptive DoseControl™

» Leksell Gamma Knife Icon will be a great step forward, significantly improving flexibility of the system. The ability to choose the level of immobilisation a patient requires, between fixed frame and mask with CBCT and infrared intrafraction monitoring, will improve the efficiency of the department and provide a patient friendly, focused and flexible intracranial SRS service «

ALISON CAMERON, MD.
Consultant Clinical Oncologist, Gamma Knife Lead Clinician, Clinical Oncology Speciality Tutor.
University Hospital Bristol NHS Foundation Trust; Bristol, UK

» Leksell Gamma Knife Icon increases the flexibility of the Gamma Knife system, allowing comfortable, efficient fractionated treatment while preserving high-precision frame-based radiosurgery capability, with smooth workflow and essentially no downtime «

PENNY SNEED, MD.
Professor In Residence, Clinical Services Director at Parnassus and Vice-Chair, Department of Radiation Oncology.
University of California, San Francisco, USA

» Leksell Gamma Knife Icon represents the next quantum leap in intracranial SRS technology. The addition of the onboard imaging capabilities still remains true to the fundamental principles and workflow of the Gamma Knife that has made it so successful «

JASON SHEEHAN, MD.
Professor of Neurological Surgery, Professor of Radiation Oncology, Professor of Neuroscience,
UVa Gamma Knife Center Co-Director, Riverside-UVa Gamma Knife Co-Director.
University of Virginia, Charlottesville, USA

» Leksell Gamma Knife Icon offers increased clinical versatility while maintaining the fundamental Gamma Knife values of accuracy and workflow efficiency «

IAN PADDICK
Consultant Physicist.
London, UK
Flexibility – adapt to your case.

Frame-based or frameless, image guided or fiducial-based workflow, single-session or fractionated treatment, standard radiosurgery or ultra-precise microradiosurgery – the choice is yours. Leksell Gamma Knife Icon ensures that the precision of frameless immobilization is at a similar level as frame-based treatments. This distinguishes Icon from any other frameless solution on the market. Several optimized workflows enable you to adapt to the requirements of each case without compromising on the accuracy of the dose delivery. While Leksell Gamma Knife has undergone yet another evolution, one thing will never change: our uncompromising dedication to quality and precision.

Online Adaptive DoseControl™ – setting a new standard.

Online Adaptive DoseControl™ is a comprehensive concept that confirms accuracy and ensures precision of treatment delivery. Integrated with the control system, it provides continuous quality control through the entire process and permits real-time clinical decision making at the time of treatment.

Real-Time Motion Management.

With Icon, a similar level of precision can be achieved with frameless immobilization as with the frame. The high-definition motion management system monitors the patient in real time during treatment with 0.15 mm accuracy, six times better than industry standard. If the patient moves outside of the pre-set threshold, the system’s gating functionality instantly blocks the radiation.

Online Control of Dose Delivery.

The unique integrated stereotactic Cone Beam CT is a new addition to Icon. Calibrated to the patient positioning system, it determines stereotactic coordinates in 3D using bony anatomy. After co-registration of the images from the CBCT and MR, the treatment plan adapts automatically to any needed correction in patient position. Thanks to the unique dose delivery attributes of Leksell Gamma Knife, the system automatically adapts for patient rotation online, shot by shot, without any mechanical movements.

Leksell GammaPlan® – Simplifying the complex.

With Leksell GammaPlan a full treatment plan can take just minutes to complete, even for complex cases. Inverse planning automatically optimizes the plan. Dose sculpting enables precise handling of complex targets and with Dynamic shaping critical structures are protected. The Convolution module accounts for different tissue types when the dose is being calculated.

For Leksell Gamma Knife Icon, the seamless integration between GammaPlan, the stereotactic CBCT and the delivery unit makes GammaPlan more than a treatment planning system – it is a treatment management system.
Leksell Gamma Knife® Icon™ delivers the best brain care there is.

UNLIMITED CLINICAL AND WORKFLOW FLEXIBILITY FOR CRANIAL SRS
• Frame-based or frameless immobilization
• Single or multiple session
• Standard radiosurgery or ultra-precise microradiosurgery
• Wide range of conditions

CONTINUOUS QUALITY CONTROL THROUGH ONLINE ADAPTIVE DOSECONTROL™
• Integrated stereotactic CBCT
• Real-time high-definition motion management with 0.15 mm accuracy
• Automatic adaptation of treatment plan delivery to compensate for patient position changes
• Online dose evaluation for highest certainty
Leksell Gamma Knife® Icon delivers the best brain care there is.

HIGHEST PRECISION IN THE MARKET
- Frameless treatments with similar level of precision as frame-based treatments
- Average 0.15 mm accuracy in clinical setting
- High therapeutic dose with maximum precision
- Lowest dose to healthy tissue: 2-4 times lower dose to normal brain
- 10-130 times lower extracranial dose

EFFICIENCY AND SAFETY THROUGH SEAMLESS INTEGRATION AND OPTIMIZATION
- High workflow efficiency
- Outcomes consistency
- Minimize risk of error
- Industry-leading uptime
- Cost effective
Unrivaled precision for every case.

All system components are designed for reliability and optimized to work as one integrated system. This results in the highest accuracy in the market: a documented average of 0.15 mm, achieved in real clinical settings.

When it comes to sparing healthy brain tissue, no other radiosurgery technique can match Leksell Gamma Knife. The unique design with isocentric targeting and multiple fixed beams make sure the dose is delivered where you want it and nowhere else. With Icon the dose to normal brain is typically 2-4 times lower than with other technologies. The extracranial dose is in the range of 10-130 times lower. Regardless of immobilization method, with Leksell Gamma Knife Icon the highest accuracy and steepest dose fall off are achieved every time. So frame-based or frameless, Gamma Knife precision is always at work.

Flexible workflows – optimal efficiency.
Why Leksell Gamma Knife® Icon™?

Leksell Gamma Knife® Icon™ introduces a broader take on precision. Integrated immobilization, workflow and imaging technologies mean greater clinical flexibility and enhanced everyday efficiency in your clinic. And that translates into more patients receiving the best brain care possible.

Whichever cranial condition you treat with Icon, unrivalled precision is achieved. That applies to both frame-based and frameless immobilization.

Born of a profound care for patients with cranial disorders, every detail of Leksell Gamma Knife Icon was designed with the patient in mind, and the providers who treat them.

www.careforthebrain.com