



## Leksell Gamma Knife® Perfexion™

An exceptional tool  
for exceptional  
radiosurgery

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# Medical professionals and patients prefer Gamma Knife surgery

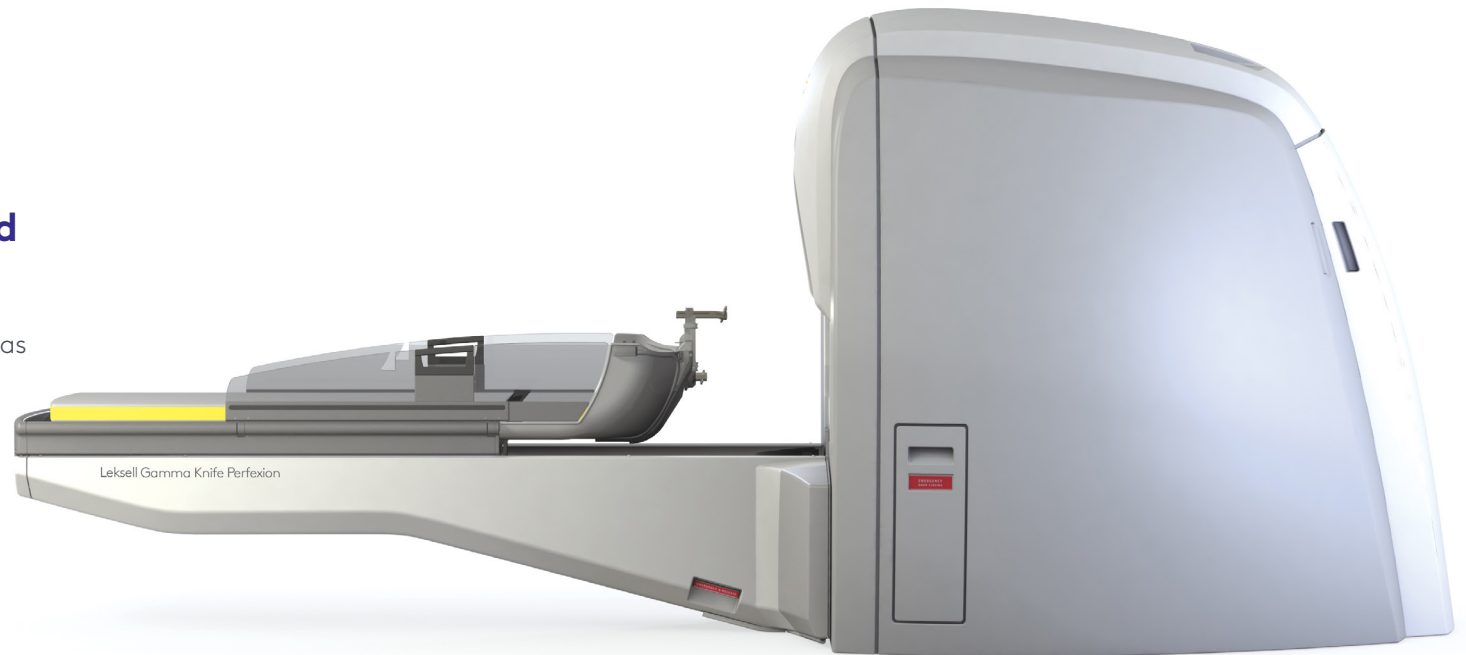
More than 90,000 patients undergo Leksell Gamma Knife® radiosurgery every year, and more than 1.3 million patients have undergone Gamma Knife surgery to date. Pioneering knowledge, insight from physicians, meticulous research and cutting-edge technology—this is Leksell Gamma Knife surgery.

Leksell Gamma Knife is specifically designed for non-invasive procedures. Gamma Knife surgery provides pinpoint accuracy, unmatched efficiency and outstanding results. Patients benefit from fast, painless treatment, often conducted in an outpatient surgical setting without the need for general anesthesia or even convalescence.

## Leksell Gamma Knife® Perfexion™—so sophisticated it's simplifying radiosurgery

Leksell Gamma Knife is consistently regarded as the best non-invasive treatment for brain disorders.

Room radiation levels are low enough to allow for a window into the treatment room and the system can be accommodated within a normal-sized room.



### One-button automation

The system offers physicians a fully automated, single push-button approach to operations that translates into dramatic time savings



### Robotic efficiency

Collimator size automatically changes according to the treatment plan



### Unrivalled radiation protection

Every feature of the system reflects patient and staff safety and comfort



### Full reproducibility

Leksell Gamma Knife Perfexion offers protocol reproducibility with full backward compatibility to existing Gamma Knife surgery protocols



### Improved workflow speeds radiosurgery

The system comes complete with Leksell GammaPlan®, the dedicated treatment planning system designed to take full advantage of Gamma Knife incorporated features and intelligence

## Smooth and seamless treatment workflow

The ideal treatment procedure for physicians and patients is a single session that is swift, precise and elegant. This is where Gamma Knife surgery excels. Each step in the process enables superior clinical efficiency and convenience.

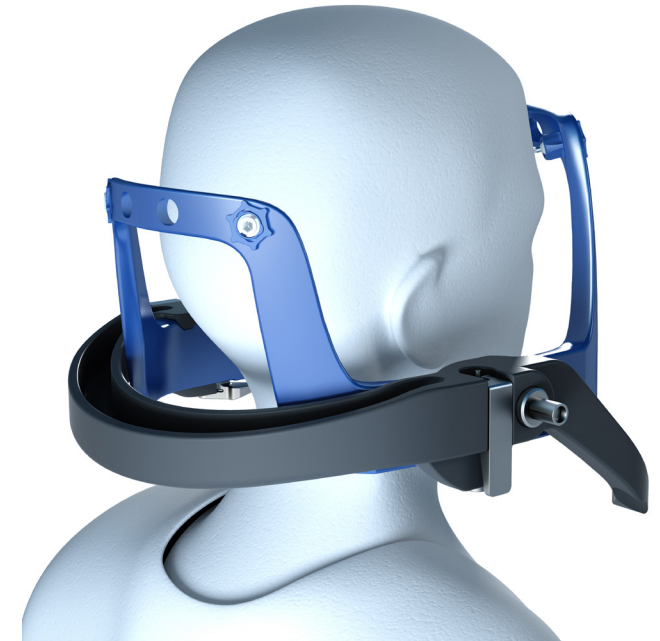
### Complete integration

The system digitally integrates diagnostic images, treatment planning and dose delivery into a seamless information flow. The procedure is implemented via a single push-button operation.

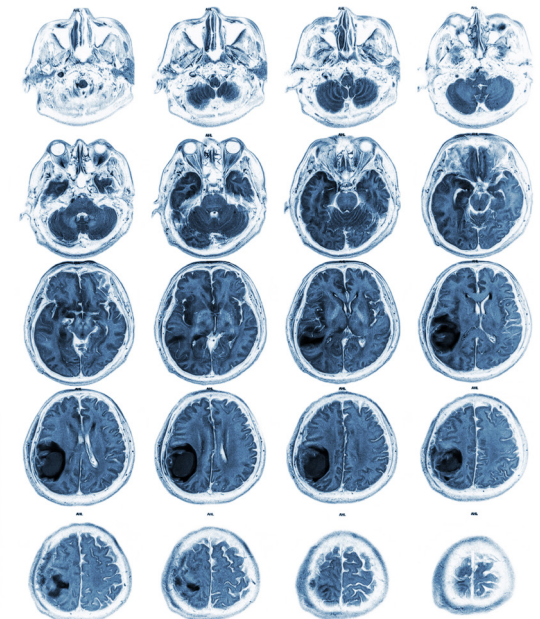
### Highest comfort and safety

Patient comfort and wellbeing are priorities at every treatment phase. The entire process is straightforward and the patient is usually ready to return to normal life the next day.

Workflow is so efficient that staff numbers are minimized while physician time is optimized.



**Frame Attachment** Leksell® Vantage™ head frame is secured to the patient's head throughout the entire treatment procedure to ensure maximum accuracy.



## Leksell GammaPlan— The power of planning

The objective of Leksell GammaPlan is to enable the physician to tailor a conformal treatment plan for a specific medical condition.

Leksell GammaPlan has been developed in collaboration with the professionals who actually use the system, which explains why so much attention has been devoted to ensuring true user-friendliness, speed and precision.

### Rapid, precise planning

The system makes it possible to plan treatment of one or several lesions with as many isocenters as clinically deemed optimal. This is performed in a matter of minutes. Irradiation of the lesions is then delivered with superior conformity and selectivity.

### Optimal tool for planning multiple targets

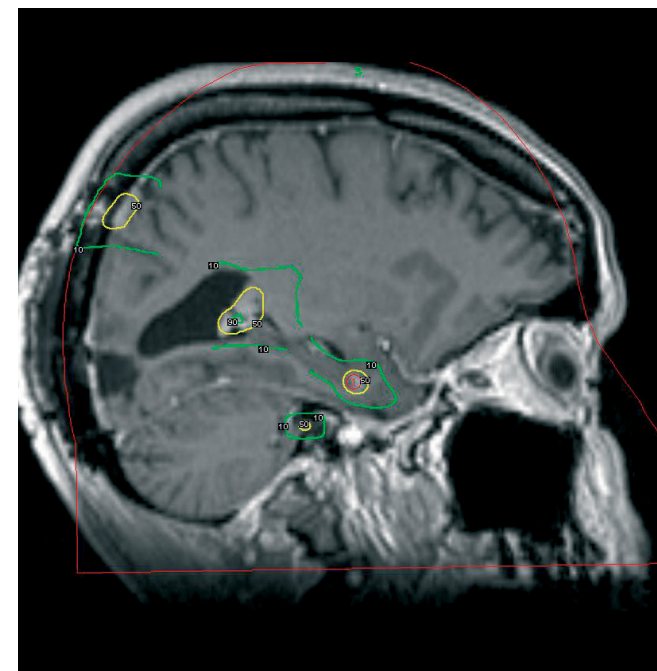
Based on a new algorithm, using automatic balancing of the radiation dose, treatment planning for multiple brain metastases is now as easy as planning for a single target.

### Regardless of complexity

Leksell GammaPlan ensures delivery of the most precise and effective treatment, regardless of the number and complexity of targets—so physicians can achieve new heights of successful patient outcomes.

### Remote planning

Leksell GammaPlan® Remote provides flexible and secure access to Leksell GammaPlan—anytime, anywhere. Users in a different building, city or even country can access and use Leksell GammaPlan from their PC or Mac.



## Leksell GammaPlan

- Client-server architecture simultaneously supports multiple-user access to the online patient database
- Supports all imaging modalities (CT, MRI, angio, PET and MEG)—including non-stereotactic image studies
- Real-time dose calculation
- Optimized planning of multiple targets
- Composite Shots enable dose sculpting of complex structures
- Dynamic Shaping protects critical anatomical structures

# Leksell Gamma Knife<sup>®</sup> Lightning

## A simple solution for accelerated radiosurgery

Leksell Gamma Knife<sup>®</sup> Lightning is a new generation of radiosurgery treatment planning that delivers personalized treatment adapted to the individual patient.

It is a revolutionary, fully integrated treatment optimizer for intracranial radiosurgery that provides simple and precise treatment planning and accelerated dose delivery.



Each of your patients is unique—why wouldn't their treatment plans be?

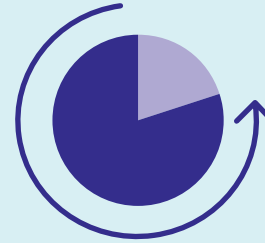


## Automated planning

With multiple and simultaneous hard constraints such as dose to target and sparing of organs at risk, you can now develop multiple alternative plans with different priorities and objectives.



## Accelerated workflow



**80% or more**  
planning time  
reduction

Experience more power, more flexibility and more freedom to develop just the right plan for your patient. At the same time, the possibility to deliver treatment in a shorter timespan allows you to accelerate your workflow and run your program more efficiently than ever.\*

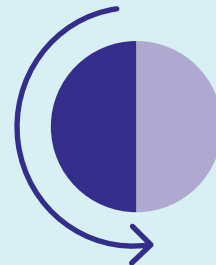
## Assured quality



**Designed to enable even novice planners to quickly create high quality, conformal treatment plans.**

60% of Lightning plans had better gradient index, and 100% had simultaneous higher selectivity and shorter beam-on time.\*

## Faster treatments



Up to  
**50% lower**  
beam-on time

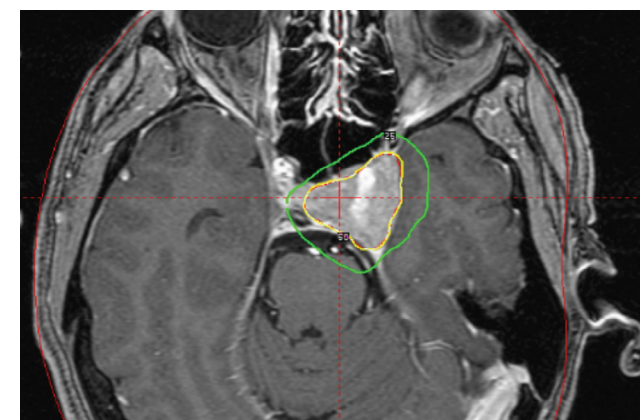
Lightning helps optimize the operational efficiency of your workflow, enabling significant time and resource savings through increased patient throughput.\*

\*<https://www.elekta.com/dam/jcr:71565192-bad0-4f35-8bf8-4a300d95e8a8/Medical%20physics%20article.pdf>

# Leksell® Vantage™ for Leksell Gamma Knife

## Advancing Leksell Gamma Knife Radiosurgery

Leksell Vantage, the latest and most advanced stereotactic headframe system from the pioneers and world leaders in stereotactic headframe systems, has now been specifically adapted for Leksell Gamma Knife radiosurgery.



### Powerful Simplicity

Leksell Vantage workflow, from frame application to automatic implementation in Leksell GammaPlan, saves setup time and makes the process smoother and simpler for you and your patient.

- Single piece design for easy assembly and workflow management
- Intuitive and effective workflow, based on clinically proven and trusted technology
- Fast and confident docking onto Leksell Gamma Knife

### Patient Comfort

The open face design provides better physical comfort for the patient and reduction in imaging time and overall treatment time.

- It also encourages patient compliance and a better overall patient experience.
- Facial expressions clearly visible
  - Free airways—no interference with nose, eyes and mouth
  - Allows easy eating and drinking
  - Rapid frame attachment
  - Minimized magnetically-induced RF heating
  - Added space around shoulders

### Accuracy and confidence

The ability to see more detailed brain anatomy for treatment planning inspires confidence in target positioning and overall treatment accuracy.

- Non-metallic materials used in the frame design increase the potential to acquire stereotactic treatment planning images with superior structural information
- Together with a multi-channel neuro head coil, Vantage enables MRI image acquisition up to 50% faster
- Better quality images are also possible with single channel neuro head coil




## Gamma Knife surgery is proven and reliable

In today's cost-driven healthcare environment, it's crucial to evaluate expensive technology investments on the basis of hard facts and proven results. This is particularly true when choosing the best care for patients suffering from serious neurological diseases and cancer. In these cases, radiosurgery with Leksell Gamma Knife offers a range of benefits and efficacies fully supported by years of evidence-based medicine.


### Proven and documented results

Clinical results for Gamma Knife treatment have been extensively published in peer-reviewed journals, which cite significant increases in successful outcomes. Only Leksell Gamma Knife can show this long-term performance and how it combines cost-effectiveness with improved quality of life for patients in both curative and palliative care.


The unique ability to treat multiple brain metastases provides new opportunities for patients to prolong life and gain better quality of life. With greater awareness among patients, Gamma Knife surgery is increasingly being requested when it comes to treatment of the brain.



0.15mm  
average accuracy



<10  
minutes QA



99%  
average uptime\*



>10k  
peer-reviewed  
Leksell Gamma Knife  
publications on PubMed<sup>1</sup>



>1,300,000  
patients treated<sup>2</sup>

\* Data maintained by Elekta

1. Search on PubMed 2019.

2. Leksell Gamma Knife Society treatment statistics 2019



LEKSELL  
GAMMA KNIFE  
SOCIETY

# Leksell Gamma Knife Society

## Stereotactic radiosurgery leadership

As a Gamma Knife user, you become a member of Leksell Gamma Knife Society—a scientific community of more than 1,800 members who share knowledge and drive the development of intracranial SRS. Visit [LGKSociety.com](http://LGKSociety.com) for more information.



**Peer-to-peer collaboration  
and knowledge sharing**



**Global and multidisciplinary  
membership**



**Promoting clinical research**



**Annual treatment statistics  
providing global and  
regional insights**



**Educational webinars  
and resources**

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# Maximize the use of your system with **Elekta Care™ Service**

**Our focus is on you**—helping you achieve the highest uptime possible and ensuring you can use your Elekta solution to its full capabilities. Comprehensive service and support provide you with confidence that your Elekta system will be available when you need it to keep patient treatments on schedule. Robust learning programs and training resources enable you to push the boundaries of your clinical capabilities, ensuring clinical excellence every day. Our ongoing partnership is an integral part of your investment, helping you maximize your equipment’s lifetime value.

Designed to help you provide the best care possible for your patients, Elekta Care Service is a portfolio of award-winning services that supports you from installation throughout the lifetime of your Elekta solution.



- ⊕ **Confidence in system uptime**
- ⊕ **Excellence in clinical capability**
- ⊕ **Partnership to maximize the lifetime value of your investment**

**For almost five decades, Elekta has been a leader in precision radiation medicine.**

**Our more than 4,000 employees worldwide are committed to ensuring everyone in the world with cancer has access to—and benefits from—more precise, personalized radiotherapy treatments.**



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