



# GAMMAKNIFE

SOUTH AFRICA

MOST PROVEN RADIOSURGERY TREATMENT



**No Incision.  
No Hospital Stay.  
Documented Outcomes.**



Gamma Knife Icon is able to reach areas deep in your brain. The radiation delivery is extremely precise, which means tissue surrounding the treatment area is spared. The technology's level of precision and accuracy allows delivery of highly effective doses of radiation exactly where needed while preserving healthy surrounding tissue that may impact function and quality of life.

## How it works

Despite its name, Gamma Knife does not involve a surgical incision or opening of the skull — it is named for its surgical precision.

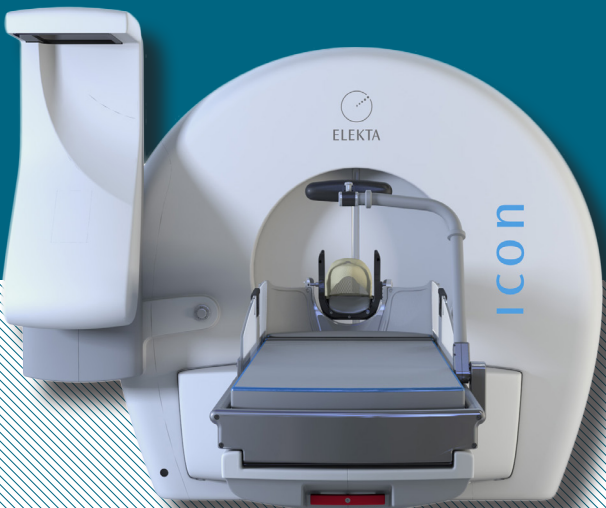
Low-dose radiation is delivered simultaneously through up to 192 beams that converge to deliver a highly effective dose of radiation.

The specific way in which the beams are prescribed to dose a defined target in the brain results in exceptional precision.

The dose fall off is very steep, which minimizes radiation of healthy tissue.

Preserving healthy tissue reduces potential side effects to support quality of life post-treatment.

Typically outpatient treatments are performed in single or multiple sessions, and most patients can return to routine activities within a day or two.



**Regarded as the Gold Standard in intracranial radiosurgery**, it is preferred for its extreme accuracy, efficiency and outstanding therapeutic response.

## Unrivalled precision and accuracy

When it comes to sparing healthy brain and body tissue, no other radiosurgery technique can match Leksell Gamma Knife®. Preserving tissue helps maintain normal function that can impact quality of life.

Icon is the sixth generation of the Gamma Knife system and is based on the company's nearly 40 years of stereotactic radiosurgery innovation and decades of collaboration with neurosurgeons and radiation oncologists.

## Unique technology specifically designed for intracranial radiosurgery

**2 to 4 x**

better sparing of normal brain tissue compared with other stereotactic platforms<sup>2</sup>

**up to 130 x**

lower dose to the rest of the body compared with traditional linear accelerators<sup>3</sup>



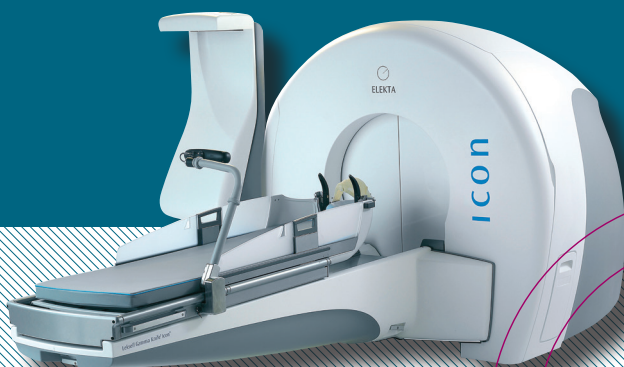
**GAMMAKNIFE**

S O U T H A F R I C A



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**More than 1 million patients**  
undergo Gamma Knife surgery  
every year.<sup>1</sup>

- <sup>1</sup> Leksell Gamma Knife® Society September 2016
- <sup>2</sup> Ma L, Nichol A, et al. Variable dose interplay effects across radiosurgical apparatus in treating multiple brain metastases. *Int J Comput Assist Radiol Surg.* 2014; 9(6): 1079-1086. Published online 2014 Apr 20. doi: 10.1007/s11548-014-1001-4
- <sup>3</sup> Lindquist C and Paddick I. The Leksell Gamma Knife Perfexion and comparisons with its predecessors. *Neurosurgery* 61: ONS 130-141 2007; Vlachopoulou V, Antypas C, Delis H, et al. Peripheral doses in patients undergoing Cyberknife treatment for intracranial lesions. A single centre experience. *Radiation Oncology (London, England)* 2011;6:157