# Leksell GammaPlan® Inverse Planning\* Create a Dose Plan with Only a Few Clicks



Inverse Planning is one of several value-added software modules in the Leksell GammaPlan® portfolio. It enables fast automatic planning, while ensuring superb accuracy and flexibility.

### **Speed Your Planning**

Planning times are considerably reduced and a good plan can be completed in minutes, even for complex cases.

### **Unleash the Full Power**

Inverse Planning helps you take full advantage of the strengths of Leksell Gamma Knife\* Perfexion". The unique sectoring design lets you create optimal plans using composite shots. Inverse Planning also automatically manages the complex prob-lem of planning the dose in relation to changing individual sector collimator sizes.

### **Saving Time and Improving Efficiency**

The speed of Inverse Planning creates time to check other options for optimizing target doses, eliminating time-consuming manual tasks.

### **Full Surgical Control at Every Step**

Inverse Planning gives you full control throughout the entire planning process. You choose the settings, change them at will and maintain full control over the final solution.

### **Ease-of-use Promotes Confidence**

Inverse Planning makes it possible for even less-experienced users to quickly and easily create optimal treatment plans, while effectively managing a large number of variables.

The Inverse Planning module is also a highly efficient educational tool. It promotes better understanding of the core principles necessary to truly master the dose-planning process.

\*Inverse Planning is a works in progress and is not for sale in all markets.

For more information please visit www.elekta.com/GammaPlan

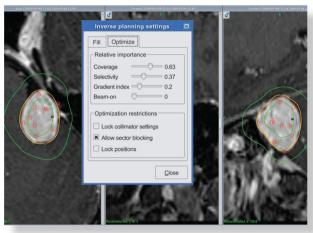


# **Inverse Planning, Major Features**

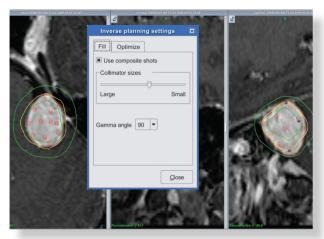
The module consists of two key independent functions – filling and optimization – which affect the critical activities of dose distribution and plan optimization.

### **Filling**

The filling function makes a preliminary estimate of the dose distribution for a given target volume by determining the number of isocenters and their approximate position. The target is then automatically filled with shots. This takes only a few seconds, and during this phase you can manually add, subtract or move shots at any time.



Optimization dialogue box. Screen showing optimized dose distribution.



Filling dialogue box. Screen showing target filled with shots.

### **Optimization**

The optimization function is used to improve the preliminary plan by searching for a minimum of the goal function. Thousands of iterations are run and a very accurate dose plan follows within minutes.

The optimization process is controlled by prioritizing four parameters: target coverage, selectivity, dose gradient and treatment time. It is also possible to change the number and location of shots at any time during the procedure.



## Inverse Planning – for Greater Power, Speed and Efficacy

Elekta continues to add functionality to Leksell GammaPlan. Using the latest technology, Gamma Knife<sup>\*</sup> software modules bring more power to your planning. This opens the platform for future upgrades and opportunities, while delivering on daily clinical needs for improved workflow, cost efficiency and treatment quality.

Requires regulatory approval.

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Corporate Head Office:

Elekta AB (publ) Box 7593, SE-103 93 Stockholm, Sweden

Tel +46 8 587 254 00 Fax +46 8 587 255 00 Regional Sales, Marketing and Service:

North America

Tel +1 770 300 9725 Fax +1 770 448 6338 info.america@elekta. Europe, Middle East, Africa, Eastern Europe, Latin America Tel +46 8 587 254 00 Fax +46 8 587 255 00 info.europe@elekta.com Asia Pacific

Tel +852 2891 2208 Fax +852 2575 7133 info.asia@elekta.com

