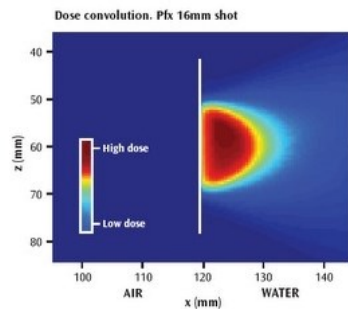


Leksell GammaPlan® -Convolution

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Convolution is an accelerated multi-beam convolution algorithm that models build-up effects and takes inhomogeneity of material into account. Convolution dose engine is specifically designed to rapidly generate dose plans with heterogeneity correction (for inhomogeneous tissue, such as tissue-air and tissue-bone interfaces). It is highly adapted to Leksell Gamma Knife®.

Convolution has taken features from Collapsed cone convolution, the pencil beam convolution and uses the same basic principles as the TMR (Tissue-Maximum-Ratio) algorithm. The algorithm is able to compute the total dose received at any point within the three dimensional stereotactic space defined by the frame coordinates. The patient's anatomy is defined by CT images used to account for material heterogeneities. As a complement to the TMR dose algorithm, Convolution gives you freedom-of-choice and flexibility, allowing you to decide which dose calculation algorithm to use for a plan.