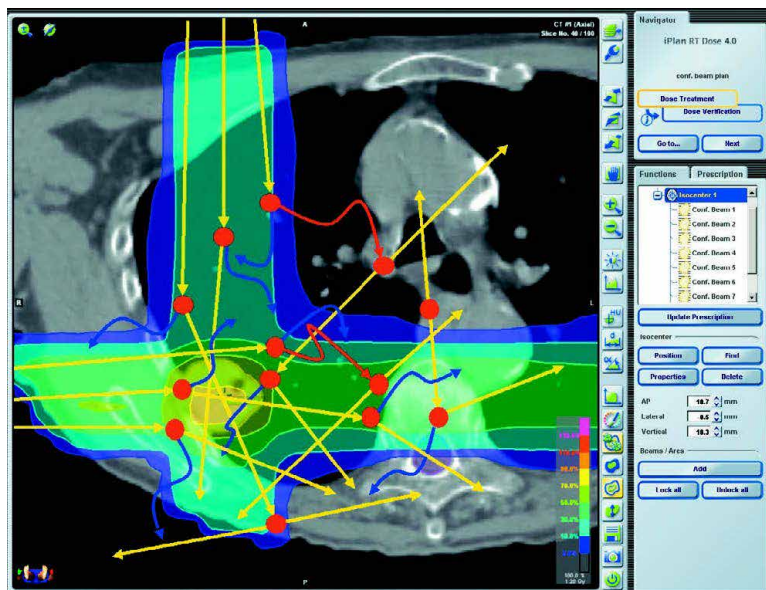


iPLAN[®] MONTE CARLO DOSE CALCULATION

Precise dose calculations within seconds for SBRT

iPlan[®] Monte Carlo dose calculation offers fast, accurate dose calculations for more precise treatment of extracranial indications—expanding SBRT treatment possibilities. iPlan Monte Carlo performs dose calculations within seconds for conformal beam and dynamic arc treatments and within minutes for complex IMRT cases. Seamless integration allows for use with all major linear accelerators and multi-leaf collimator (MLC) types. This advanced calculation method eliminates treatment area restrictions of conventional dose calculation algorithms¹ for highly precise treatment delivery to inhomogeneous regions including lung and head & neck indications.

- › Unmatched speed and intuitive user interface enable broader treatment spectrum and use with every patient
- › Customizable solution adapts to specific Linac and MLC configurations
- › Integrates with iPlan RT Image and Automatic contouring tools to further enhance treatment planning efficiency, consistency and accuracy
- › Enables photon based MLC treatments including conformal beam, dynamic arc, IMRT and composite planning for combined treatment modalities

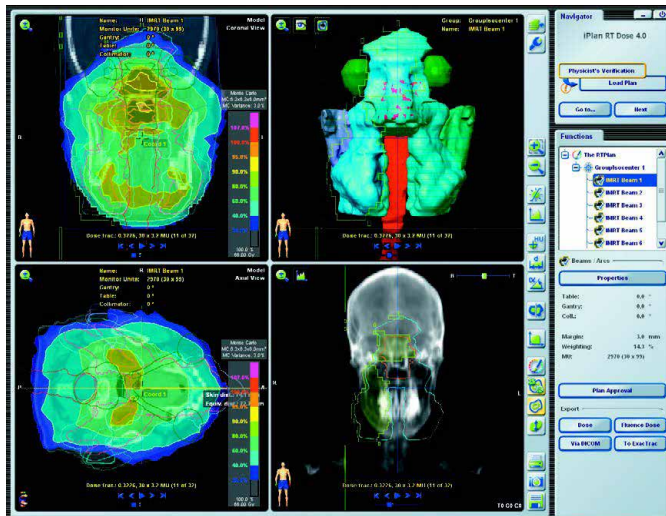


iPlan Monte Carlo IMRT dose display for head & neck indications

MORE PRECISE TREATMENT DELIVERY

iPlan® Monte Carlo is a high performance Monte Carlo algorithm for therapeutic photon beam radiation delivery. Based on the XVMC (X-Ray Voxel Monte Carlo) algorithm, iPlan Monte Carlo was developed to provide high-precision treatment in everyday clinical practice and has been verified using the widely respected EGSnrc and BEAMnrc algorithms.

iPlan Monte Carlo is an integral part of iPlan RT Dose, offering advanced technology for multiple treatment approaches. iPlan Monte Carlo considers Linac head geometry, secondary electron dose effects and tissue inhomogeneities², providing clinicians with faster and more accurate dose calculation for SBRT.

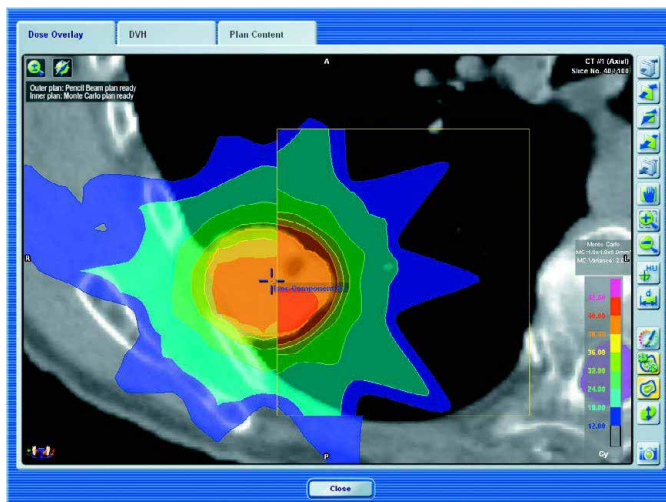


iPlan Monte Carlo IMRT dose display for head & neck indications

▶ “The new iPlan Monte Carlo algorithm integrates some of the most advanced tools available in the clinical environment, including image registration and segmentation tools, providing a powerful instrument to tackle the most challenging radiosurgery cases in lung and head & neck sites.”

Kamil Yenice, Ph.D., Chief of Clinical Physics, University of Chicago, Department of Radiation and Cellular Oncology, USA

▶ “The iPlan Monte Carlo algorithm improves dose plan accuracy for radiotherapy and radiosurgery especially for extracranial indications. Specifically for tumors in the lung and head & neck regions, we are now able to more precisely define the borders between tissue of different consistency. That allows us to reach an improved starting point in order to optimize the planned dosage in the affected regions.”



Comparison of iPlan Monte Carlo (inner plan) and Pencil Beam (outer plan) for dose correction in small lung tumor

Tilo Wiezorek, Ph.D., University Clinic Jena, Clinic for Radiation Therapy and Radiation Oncology, Germany