

SIM

PLAN

TREAT

DOSE

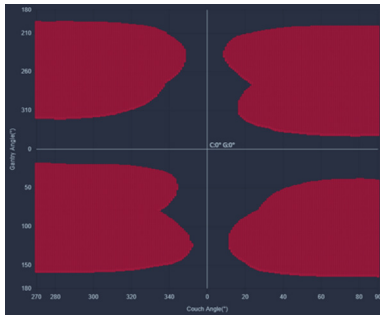
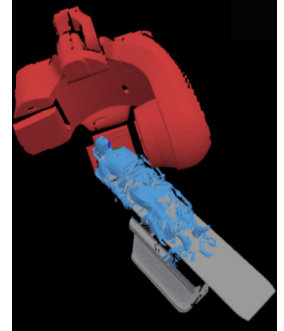
maprt®

SGRT FOR CLEARANCE MAPPING

MapRT is a new tool for clearance mapping during the planning process.

MapRT uses two lateral wide-field cameras in simulation to deliver a full 3D model of patients and accessories. This model is then used to calculate a clearance map for every couch (x-axis) and gantry (y-axis) angle.

Plans can be imported from all the main planning systems to check beams, arcs, and transition clearance.



Better Plans Made Easy.

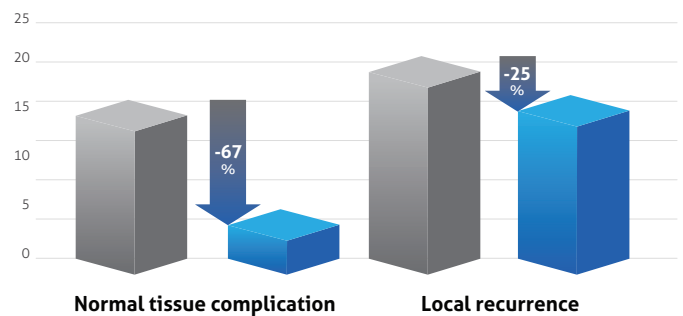
Check treatment clearances before sim.
Improve dose plan using clearance map beam options.
Avoid dry runs and replans for non-deliverable plans.

Recent studies show that non-coplanar treatments can deliver clinically relevant improvements to treatment plans¹, specifically in lung cancer^{2,3,4,5}, breast cancer^{6,7,8,9}, head and neck cancer¹⁰⁻¹⁵ and lymphoma^{16,17}.

Traditionally, non-coplanar treatments require extra planning and machine time, both for dry runs and treatments. MapRT can help avoid this by simplifying the planning process and reducing the need for dry runs.

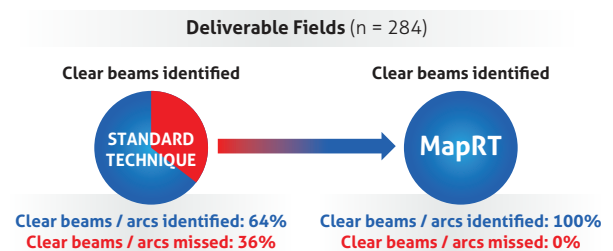
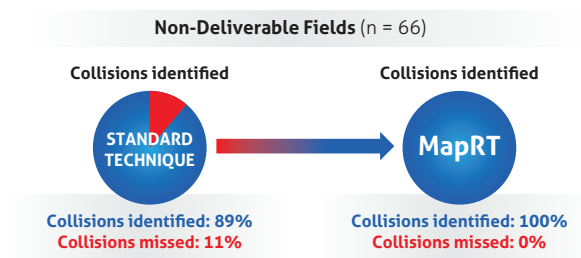
Calculated Outcome Probabilities¹²:
Head and neck cancer retreatments

VMAT coplanar
Noncoplanar



Improved assessment of deliverability

A five-center planning study¹⁸ recently showed improved assessment of deliverability using MapRT:



Using additional information from MapRT:

Planners accepted 3% of non-deliverable fields as small patient position changes would be feasible.

Using additional information from MapRT:

Planners rejected 12% of clear beams to improve patient comfort, citing proximity between the gantry and patient's face.