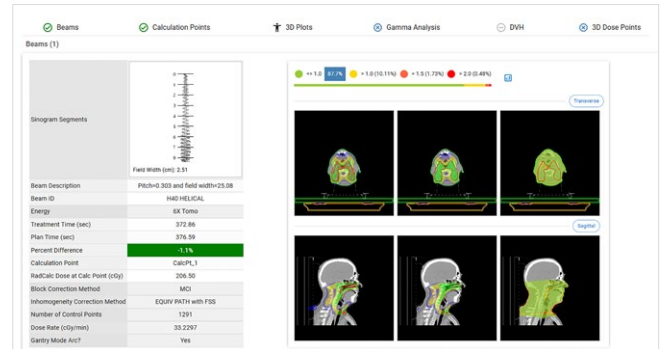EN

Specialized module

RadCalc TomoTherapy

The RadCalc TomoTherapy® stand-alone package is designed to provide highly accurate dose calculations and verification for TomoTherapy® treatments[1]. This module integrates seamlessly into clinical workflows and enhances quality assurance (QA) processes with comprehensive 3D calculations, advanced algorithm support, and an intuitive interface for treatment planning.

Features

- **Support for TomoHelical, TomoDirectTM, and TomoEDGETM deliveries**
  RadCalc supports plans for all TomoTherapy® modes from precision, enabling accurate time and dose verification across varied delivery techniques without needing multiple tools.
- **Advanced dose comparison and visualization**
  Offers 2D and 3D dose visualization, sinogram and BEV control point review of intended doses and plan, enhancing treatment accuracy.

- **Ray-tracing and profile modeling for enhanced accuracy:**
  Uses sophisticated ray-tracing and gaussian modeling to ensure precise dose calculations, even in complex treatment scenarios.
- **Comprehensive 3D dosimetry for enhanced patient safety:**
  Verifies dose across the entire treatment volume, minimizing discrepancies and improving the accuracy of patient treatments.
- **Time-saving and workflow efficiency**
  Automates dose calculations and eliminates manual setups, reducing preparation time and allowing clinicians to focus on patient care.

Requirements

General hardware requirements for RadCalc (main program)

	Network install	Local install – not recommended
Operating System	Microsoft® Windows® Server 2016, 2019 or 2022	Microsoft® Windows® 10, and 11, 32-bit and 64-bit operating systems
Processor	8 Core or better	8 Core or better
RAM	16 GB or more	
Network	5 Gbps connection, bandwidth to the client should be 10 mbps with a latency not exceeding 50 ms	
Video	Minimum resolution 1024 × 768 px (scaling up to 125 %) and minimum 1 GB video memory (RAM)	
Graphics	OpenGL 1.1 support required	OpenGL 1.1 support required
Hard drive space	1TB SSD available, varies with quantity and type of patient data	512 GB available, varies with quantity and type of patient data

Dedicated RadCalc external calculation engine hardware

	Fast Monte Carlo (Photon and Electron) Dose Engine
Operating System	Windows 64-Bit OS (10,11, Server 2016, 2019 or 2022)
GPU	NVIDIA GeForce RTX 3080 Ti, or similar (must be NVIDIA with 12 GB or more)
CPU	Intel Core i7-9700, 8 Core, 12 MB cache, or better
RAM	32 GB or more
Disk	512 GB SSD or more

Contact us!

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Precise