



IMPROVE YOUR WORKFLOW

PRE-PLANNING

RayAnatomy

- Deep Learning
- Rigid Registration
- Target volume creation

RayDeformable

- Deformable Registration
- QA TG 132

POST-PLANNING

RayEvaluation

- Advanced evaluation tools
- EQD2 (2 GY equivalent dose computation)
- Dose comparison
- Radiomics tools

RayDeformable

- Mapping and accumulation of dose between the CT
- Tools for dose cumulation

ADAPTIVE THERAPY

RayTracker

- Synthetic CT
- Dose accumulation
- Comparison between dose calculated and dose delivered
- Secondary Dose Calculation





PRE-PLANNING

RayAnatomy is an innovative software for radiotherapy workflow standardization, designed to handle the increasing volume of multimodal images (CT-PET/CT, MR, CBCT and 4D-CT)

RayAnatomy integrates manual and semi-automatic tools for target delineation and automatic segmentation tools based on Deep Learning algorithms for OARs. It Includes custom 3D bolus printing, DCR support with tissue enhancement filters and automatic and manual tools for multimodal rigid registration supported by a dedicated workspace for contouring on image fusion.

- Model based organ delineation (MBS)
- Atlas based organ delineation using the clinic's patient database (ABS)
- Intelligent ROI expansion, algebra and administration
- Visualization of ROI in 2D and 3D
- 4D CT movie function
- Creation of 4D-CT projections (maximum, minimum, average)
- Linear and smart interpolation with edge detection algorithm
- Region growing tool with delimited region



RayDeformable include deformable fusion tools for multimodal images with 2 different GPU-based algorithms, Adaptive and dose accumulation tools

- Deformable registration tools to establish mapping between CT, CBCT, virtual CTs, CT-PET or MR
- Mapping and accumulation of dose between the CT datasets
- 2 algorithms for deformable registration ANACONDA (Hybrid intensity and structure based) and MORFEUS (Biomechanical model) based on GPU
- QA TG 132 tools for deformable registration verification
- Tools for adaptive and dose cumulation



POST-PLANNING



RayEvaluation includes an advanced virtual simulation console and a complete evaluation platform, including clinical goals and customizable tools for plan validation

The module consist of Radiomics, 2 Gy equivalent dose computation (EQD2) and robust evaluation of treatment plans, allowing the complete management of Pre-Planning and Post-Planning workflow.

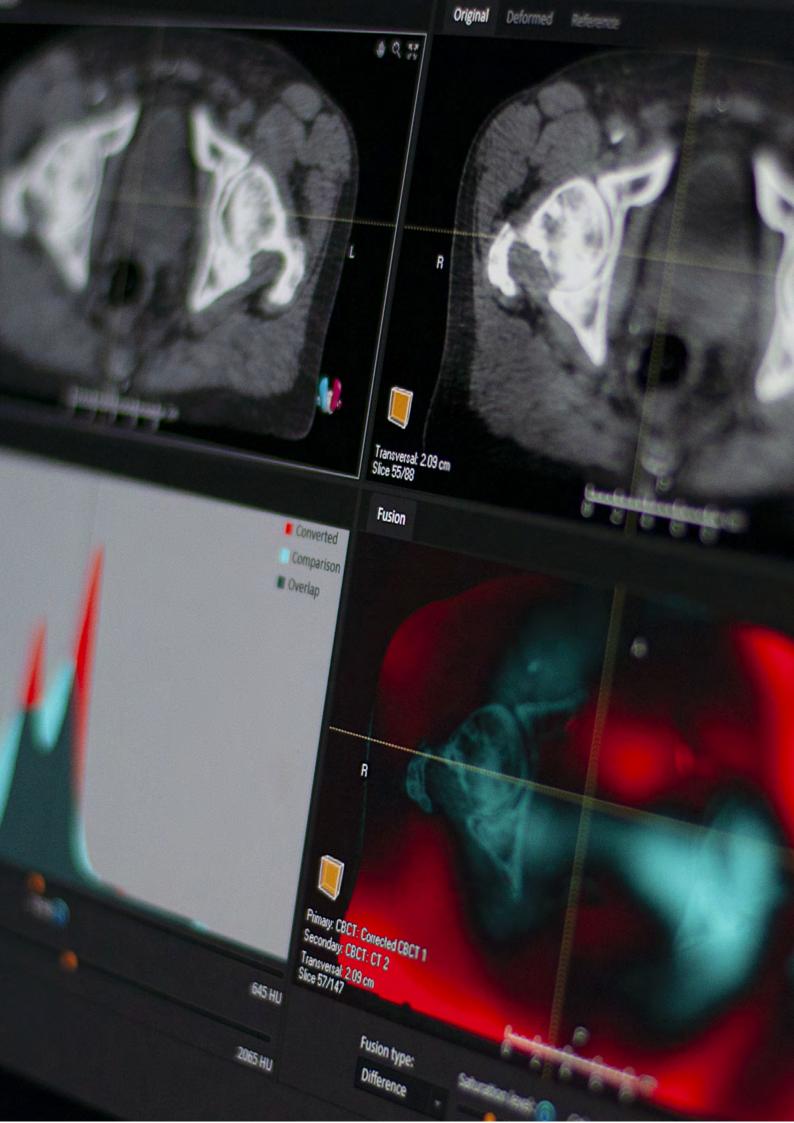
- Dose comparison and weighted summation of imported doses from any other system
- Simulated organ motion
- Powerful scripting tool
- Radiobiological indices:
- NTCP (Normal Tissue Complication Probability)
- TCP (Tumor Control Probability)

ADAPTIVE THERAPY

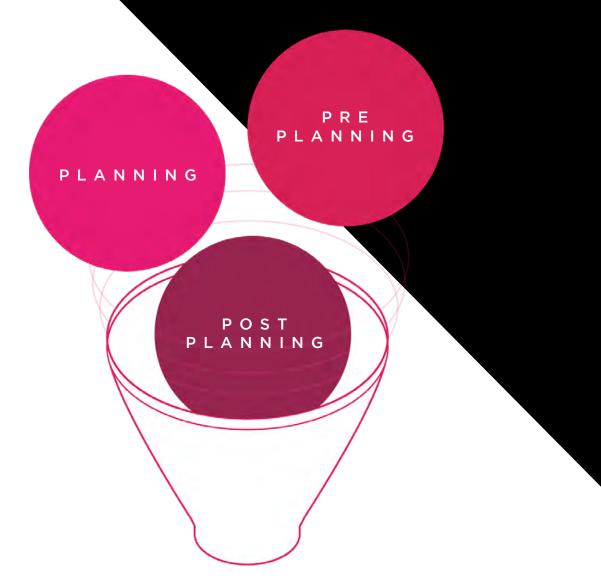
RayTracker integrates in a single platform the secondary dose calculation with Monte Carlo algorithm

This includes as well as the ability to generate Synthetic CT from daily CBCT with FOV (Field of View) reconstruction functions for more accurate calculation and lower uncertainty in dose accumulation for Adaptive Therapy.

- CBCT True calculation
- Compute daily fraction
- Dose comparison between dose calculated and dose delivered



Upgrades the system to MC and CC Algorithm dose calculation, getting the whole workflow **on one platform**



Raystation TPS

ALL INCLUDED ON ONE PLATFORM



