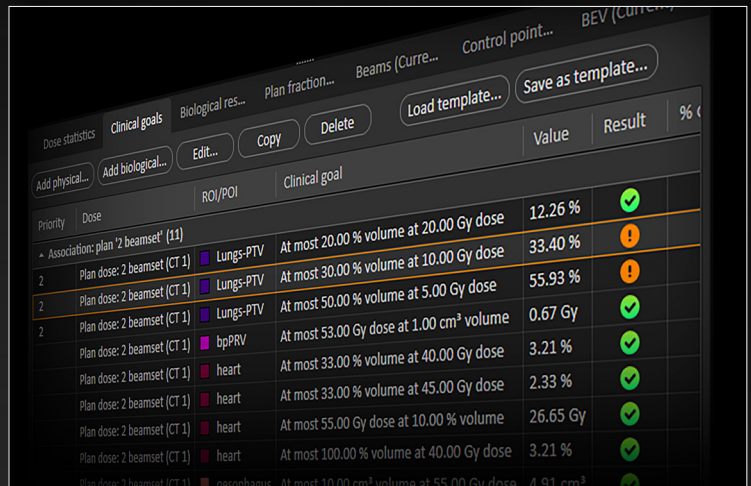# RayStation

2024A

RAYSTATION 2024A IS HERE.
SEE WHAT'S NEW!

In RayStation 2024A* some major feature requests from our users have been implemented.

CLINICAL GOALS ON PLAN AND BEAM SET

RayStation 2024A adds the possibility to associate clinical goals to either the plan or a beam set within the plan. Plan associated clinical goals are evaluated against the total dose of the plan. Beam set clinical goals are evaluated against the respective beam set dose. In modules where multiple doses can be compared, clinical goals can be evaluated against multiple doses at the same time.
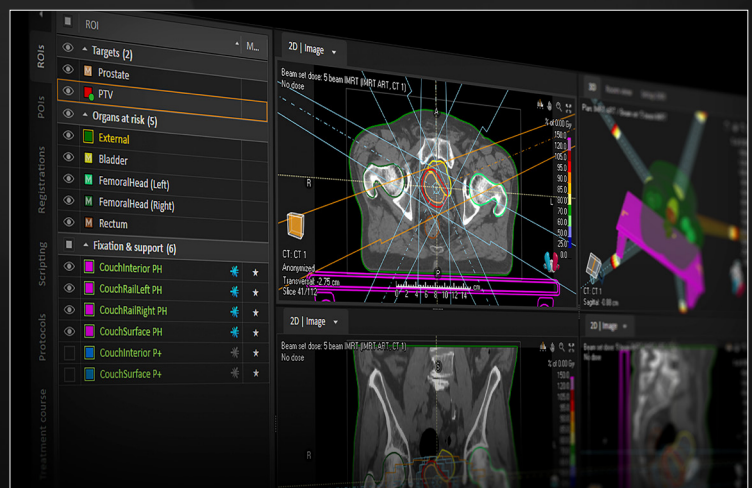
FIXATION AND SUPPORT ROI PER BEAM SET

It is now possible to select Fixation and Support ROIs per beam set. This makes it possible to contour, for example, multiple couches to use for different modalities. Only selected Fixation and Support ROIs will be included in dose computation, SSD calculation, beam entry validation etc.

ONE-CLICK SYNTHETIC CT GENERATION

RayStation 2024A also comes with a significantly improved workflow for synthetic CT generation. When creating a synthetic CT based on a CBCT the system now automatically creates a field-of-view ROI and a deformable registration as well as the field-of-view expansion.

Subject to regulatory clearance in some markets.

www.raysearchlabs.com/raystation

RaySearch Laboratories

OTHER RAYSTATION 2024A HIGHLIGHTS

- Faster saving of cases

- Faster to open a planning module

- Tool for segmentation of vessels in lungs

- Multi-column layout for clinical goals comparison in Plan Evaluation

- Export of High-Dose Technique Type 'SRS' for photons

- Improved Dose Reference Description handling for improved connectivity with ARIA and Mosaiq

- Higher dose grid resolution for proton PBS (down to 0.5 mm)

- Improved RBE computation for light ions using the trichrome fluence model

| | | | Difference: Current - Compare 1 | DVH | Dose statistics | **Clinical goals** | Objectives/constraints (Compare 1) | Beams (Compare 1) | Control poin |

Add physical... | Add biological... | Edit... | Copy | Delete | Load template... | Save as template...

Comparison (evaluated on displayed doses)

Prio	ROI/POI	Clinical goal	Associated dose Result [%]	Current Plan dose: 3DCRT PR... Result [%]	Compare 1 Plan dose: SMLC PRO... Result [%]
Association: Plan '3DCRT PROSTATE' (7)					
	Bladder	At most 50.00 % volume at 40.80 Gy dose	✅ 41.10 % — 0	✅ 41.10 % — 0	✅ 24.24 % — 0
	Bladder	At most 25.00 % volume at 48.60 Gy dose	⚠️ 39.49 % — 0	⚠️ 39.49 % — 0	✅ 18.24 % — 0
	Bladder	At most 5.00 % volume at 60.00 Gy dose	⚠️ 37.41 % — 0	⚠️ 37.41 % — 0	✅ 3.96 % — 0
	PTV_60	At least 57.00 Gy dose at 99.00 % volume	⚠️ 56.44 Gy — 0	⚠️ 56.44 Gy — 0	✅ 58.83 Gy — 0
	PTV_60	At least 54.00 Gy dose at 90.00 % volume	✅ 113.69 Gy — 0	✅ 113.69 Gy — 0	✅ 59.37 Gy — 0
	PTV_60	At most 63.00 Gy dose at 2.00 % volume	⚠️ 127.01 Gy — 0	⚠️ 127.01 Gy — 0	✅ 61.38 Gy — 0
	PTV_60	At least a conformity index of 1.00 at 65.00...	⚠️ 0.24 — 0	⚠️ 0.24 — 0	N/A — 0
Association: Beam set '3DCRT PROSTATE' (20)					
Association: Beam set '3DCRT PROSTATE_2' (7)					
	Bladder	At most 50.00 % volume at 40.80 Gy dose	✅ 13.08 % — 0	✅ 41.10 % — 0	✅ 24.24 % — 0
	Bladder	At most 25.00 % volume at 48.60 Gy dose	✅ 9.98 % — 0	⚠️ 39.49 % — 0	✅ 18.24 % — 0
	Bladder	At most 5.00 % volume at 60.00 Gy dose	⚠️ 5.79 % — 0	⚠️ 37.41 % — 0	✅ 3.96 % — 0
	PTV_60	At least 57.00 Gy dose at 99.00 % volume	⚠️ 23.04 Gy — 0	⚠️ 56.44 Gy — 0	✅ 58.83 Gy — 0
	PTV_60	At least 54.00 Gy dose at 90.00 % volume	✅ 55.80 Gy — 0	✅ 113.69 Gy — 0	✅ 59.37 Gy — 0
	PTV_60	At most 63.00 Gy dose at 2.00 % volume	⚠️ 64.65 Gy — 0	⚠️ 127.01 Gy — 0	✅ 61.38 Gy — 0
	PTV_60	At least a conformity index of 1.00 at 65.00...	N/A — 0	⚠️ 0.24 — 0	N/A — 0