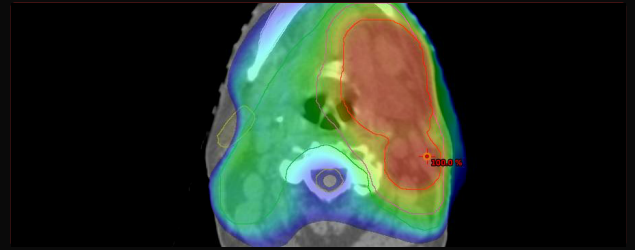


FAST AND ACCURATE INDEPENDENT DOSE VERIFICATION

FDA 510(k) K213137, cleared 2022. A TPS-neutral Monte Carlo recalculation that shares no engine, beam data, or geometry with your planning system. Under 5 minutes per plan.



Independent Monte Carlo dose distribution overlaid on planning CT

THE ERRORS A TPS WON'T FLAG

A TPS cannot sanity-check itself. INTDose recomputes from scratch and catches what a TPS won't flag.

MU MISCALCS

Monitor units that pass TPS checks anyway.

CONTOUR MISMATCH

Planning contours that do not match delivery.

BEAM-DATA DRIFT

Machine drift compounding silently over months.

MODALITY MISTAGS

Plans tagged with the wrong modality or energy.

MLC LEAF DRIFT

Leaf-position drift below TPS tolerance thresholds.

GEOMETRIC OFFSET

Plan-to-delivery differences the TPS does not surface.

AAPM TG-114 and TG-219 recommend independent 2-D/3-D dose verification as part of a comprehensive QA program.

DICOM-RT IN. PDF REPORT OUT. UNDER 5 MINUTES.

1

IMPORT DICOM-RT

Plan, CT, RT structure, and RT dose — DICOM push from PACS, direct upload, or Varian API. No manual entry.

2

MONTE CARLO RECOMPUTE

Full Monte Carlo on the original CT with planned beams + an independent machine model. No shared engine.

3

GAMMA + DVH COMPARE

3-D gamma index at clinical tolerances (3%/2mm, 3%/3mm). Per-structure DVH overlay shows where doses diverge.

4

ARCHIVE PDF REPORT

Mean-dose comparison (global + OAR-stratified), gamma map, 1-D/2-D dose profiles. Filed with the plan.

THREE THINGS TO TRUST

INDEPENDENT BY CONSTRUCTION

Different engine, beam data, and geometry handling than your TPS. Errors a self-consistent TPS can't catch.

VALIDATED TO A NUMBER YOU CAN STAND BEHIND

PENELOPE Monte Carlo + virtual source models, commissioned per machine within 1% of Varian Gold data.

RUNS ALONGSIDE YOUR CLINICAL DAY

Under 5 minutes per plan. Batch mode + headless QA. Automated execution as new studies arrive.

WHERE INTDOSE FITS

MACHINES

Varian linacs · Halcyon · TomoTherapy
Photons: 3DCRT, IMRT, VMAT

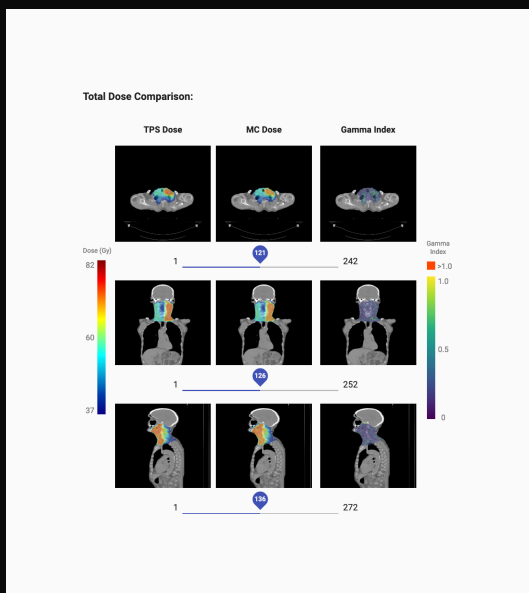
PLANNING SYSTEMS

Varian Eclipse
Philips Pinnacle

DEPLOYMENT

On-premise, no cloud egress
One-click Docker install

SEE THE OUTPUT



Independent Dose Verification Using Monte Carlo Report

Study Detail:

Plan Name: Left BOT + neck	Study Date: 8/3/21
Patient Name: INTDOSE_6X_002	Patient ID: INTDOSE_6X_002
Date of Birth: N/A	Referring Physician's Name: N/A
Institution: N/A	Treatment Delivery: Varian Linac
Machine ID: TrueBeamSN2004	Prescribed Dose: 70.00 Gy
Number of Fractions: 35	Prescribed Dose Per Fraction: 2.00 Gy

Notes:

Report notes

Summary of Results:

	TPS Dose (Gy)	MC Dose (Gy)	Difference (%)
Mean dose for regions > 80% D _{max}	69.46	69.02	0.64
D ₁₀₀ around D _{max} (1.9 cm, 25.6 cm, 114.1 cm)	71.48	72.5	-1.41

Gamma Index Pass Rate (%)	Criteria	Ref. Dose (Gy)	Thresh. Dose	Voxel Size (mm)	Max Voxel Gamma
98.02	3%/2mm	74.99	10% of Ref. Dose	(2.3, 2.3, 3.0)	1.1

[Add Gamma Index Calculation](#)

