MACHINE LEARNING PLANNING MODEL

RSL-PROSTATE-SVS-NODES-7700-SIB (3.0)*

MODEL OVERVIEW

Model algorithm	U-Net
Model type	Automated Planning
Treatment site	Prostate+SVs+Nodes
Modality	Photons
Treatment techniques	Validated for VMAT
Prescribed dose [cGy]	7700/5600
Number of fractions	35
Dose per fraction [cGy]	220/160

MODEL INFORMATION

The model has been validated quantitatively and qualitatively by RaySearch clinical specialist against the protocol below. Details can be found in the model validation report. RaySearch can help your clinic to adapt and commission the model to your protocol, clinical priorities, and treatment machines.

Validation patient example

Subject to regulatory clearance in some markets. Not for marketing in the USA or Canada.

Continued on next page >

Model Protocol

ROI	Clinical goal
PTV_High	At least 50.0 % volume at 7700.0 cGy dose
PTV_High	At least 50.0 % volume at 7700.0 cGy dose
PTV_High	At least 98.0 % volume at 7315.0 cGy dose
PTV_Low	At least 98.0 % volume at 5320.0 cGy dose
PTV_Low	At least 50.0 % volume at 5600.0 cGy dose
Bladder	At most 15.0 % volume at 7000.0 cGy dose
Bladder	At most 60.0 % volume at 4000.0 cGy dose
Rectum	At most 35.0 % volume at 6400.0 cGy dose
Rectum	At most 40.0 % volume at 6000.0 cGy dose
Rectum	At most 55.0 % volume at 5000.0 cGy dose
Rectum	At most 65.0 % volume at 4000.0 cGy dose
Rectum	At most 80.0 % volume at 3000.0 cGy dose
Rectum	At most 30.0 % volume at 6500.0 cGy dose
Bowel_Small	At most 150.0 cm^3 volume at 4500.0 cGy dose
PenileBulb	At most 5100.0 cGy average dose
Femur_Head_L	At most 5.0 % volume at 5000.0 cGy dose
Femur_Head_R	At most 5.0 % volume at 5000.0 cGy dose
Rectum	At most 15.0 % volume at 7400.0 cGy dose
Rectum	At most 25.0 % volume at 6900.0 cGy dose
Rectum	At most 50.0 % volume at 5900.0 cGy dose
Rectum	At most 3.0 % volume at 7500.0 cGy dose
Rectum	At most 15.0 % volume at 7000.0 cGy dose
Bladder	At most 15.0 % volume at 7900.0 cGy dose
Bladder	At most 25.0 % volume at 7400.0 cGy dose
Bladder	At most 35.0 % volume at 6900.0 cGy dose
Bladder	At most 50.0 % volume at 6400.0 cGy dose
Bladder	At most 30.0 % volume at 6500.0 cGy dose

P.O. Box 3297, SE-103 65 Stockholm, Sweden
www.raysearchlabs.com

RaySearch Laboratories