



ProKnow

Plan Study Review

Study Name:	UW TG244 Case 01 Prostate Fossa Nodes
Participant Name:	Alexandra Murray
Participant Email:	murray.alexand@uwlax.edu
Participant Role:	student
Participant Institution:	University of Wisconsin La Crosse
Created:	Wed Jul 19 2017 19:58:11 GMT+0000
TPS Manufacturer:	ADAC
TPS Model:	Pinnacle3
Number of Treatment Beams:	3
Radiation Type(s):	Photon
Delivery Type(s):	VMAT

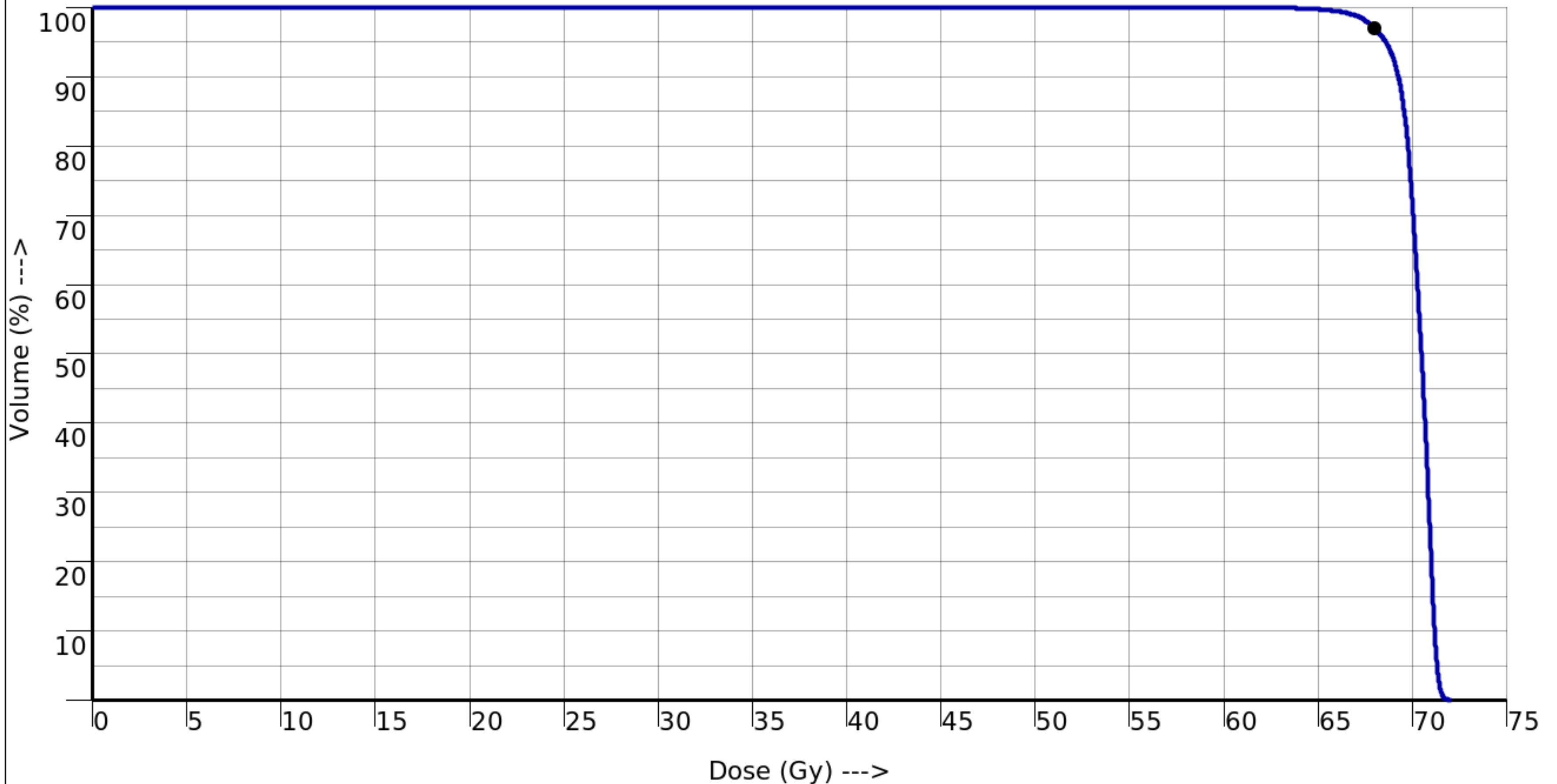
METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (%) of the PTV_68 covered by 68 (Gy)	97.024	90 <input checked="" type="checkbox"/>	95 <input checked="" type="checkbox"/>	30.00	30.00
Volume (%) of the PTV_56 covered by 56 (Gy)	99.332	90 <input checked="" type="checkbox"/>	95 <input checked="" type="checkbox"/>	30.00	30.00
Volume (%) of the PROSTATE_BED covered by 68 (Gy)	100.000	94 <input checked="" type="checkbox"/>	99 <input checked="" type="checkbox"/>	10.00	10.00
Conformation Number [64.6 (Gy), PTV_68]	0.801	0.5 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	12.61	15.00
Serial slice, dose-to-OAR failures [34 (Gy), RECTUM]	0.000	1 <input checked="" type="checkbox"/>	0 <input checked="" type="checkbox"/>	10.00	10.00
Dose (Gy) covering 0.03 (cc) of the PTV_68	72.011	74.8 <input checked="" type="checkbox"/>	71.4 <input type="checkbox"/>	8.20	10.00
Volume (cc) of the RECTUM covered by 68 (Gy)	1.230	45 <input checked="" type="checkbox"/>	10 <input checked="" type="checkbox"/>	10.00	10.00
Volume (%) of the RECTUM covered by 65 (Gy)	5.742	35 <input checked="" type="checkbox"/>	5 <input type="checkbox"/>	9.89	10.00
Volume (%) of the RECTUM covered by 40 (Gy)	17.173	40 <input checked="" type="checkbox"/>	20 <input checked="" type="checkbox"/>	10.00	10.00
Volume (%) of the BLADDER covered by 65 (Gy)	16.617	40 <input checked="" type="checkbox"/>	15 <input type="checkbox"/>	6.57	7.00
Volume (%) of the BLADDER covered by 40 (Gy)	38.273	70 <input checked="" type="checkbox"/>	40 <input checked="" type="checkbox"/>	3.00	3.00
Structure(s) containing the global max dose point	(3 values)	PTV_68 <input checked="" type="checkbox"/>	prostate_bed <input checked="" type="checkbox"/>	5.00	5.00
Estimated 'beam-on' time, all beams (minutes)	2.950	---	---	---	---
Cumulative meterset over all treatment beams	911.000	---	---	---	---
TOTALS		12 (of 12)	8 (of 12)	145.27	150.00

BEAM [#] NAME	MACHINE	MODALITY	ENERGY	METERSET	BEAM-ON TIME (Est.)
[1] Arc1a_C0	TrueBeamSTx	VMAT	6 MV	310 MU	61
[2] Arc1b_C0	TrueBeamSTx	VMAT	6 MV	310 MU	60
[3] Arc1c_C0	TrueBeamSTx	VMAT	6 MV	291 MU	56
				911 (TOTAL)	2.95 min (TOTAL)

BEAM [#] NAME	ISOCENTER	GEOMETRY	MODIFIERS
[1] Arc1a_C0	0, 0, 0 (DICOM -14.7, -360.7, 109.9)	Gantry (Dynamic CCW): 160 to 200, Collimator: 15, Couch: 0	
[2] Arc1b_C0	0, 0, 0 (DICOM -14.7, -360.7, 109.9)	Gantry (Dynamic CW): 205 to 155, Collimator: 355, Couch: 0	
[3] Arc1c_C0	0, 0, 0 (DICOM -14.7, -360.7, 109.9)	Gantry (Dynamic CCW): 158 to 202, Collimator: 95, Couch: 0	

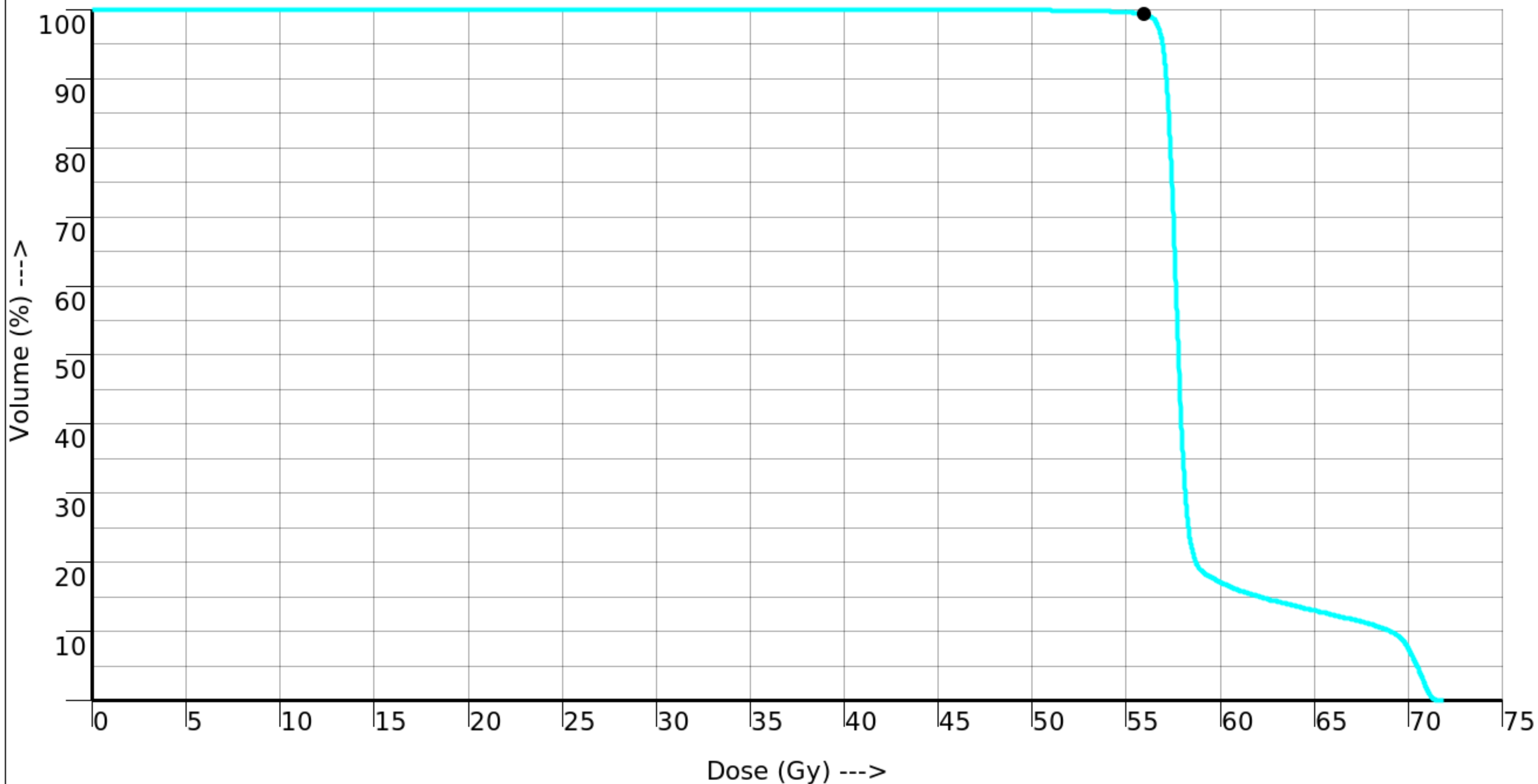
METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (%) of the PTV_68 covered by 68 (Gy)	97.024	90 <input checked="" type="checkbox"/> <small>0p 90</small>	95 <input checked="" type="checkbox"/> <small>27p 93</small> <small>30p 95</small>	30.00	30.00

Cumulative DVH: PTV 68 (182.896 cc)
Min: 61.463 Gy, Mean: 70.285 Gy, Max: 72.058 Gy, Vol: 182.896 cc



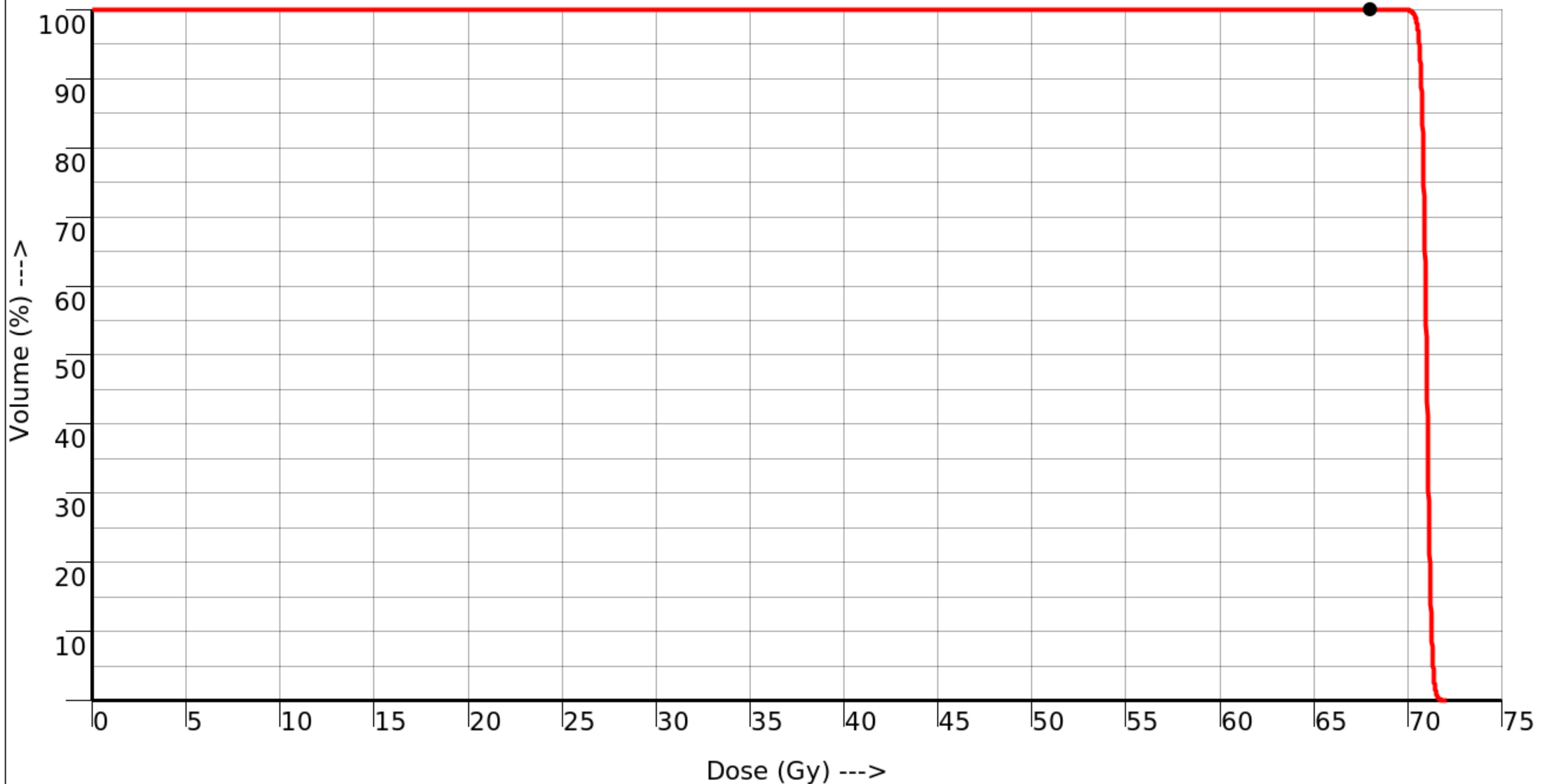
METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (%) of the PTV_56 covered by 56 (Gy)	99.332	90 <input checked="" type="checkbox"/> <small>0p 90</small>	95 <input checked="" type="checkbox"/> <small>27p 93</small> <small>30p 95</small>	30.00	30.00

Cumulative DVH: PTV 56 (255.519 cc)
Min: 44.869 Gy, Mean: 59.405 Gy, Max: 71.860 Gy, Vol: 255.519 cc



METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (%) of the PROSTATE_BED covered by 68 (Gy)	100.000	94 <input checked="" type="checkbox"/> <small>0p 94</small>	99 <input checked="" type="checkbox"/> <small>10p 99</small>	10.00	10.00

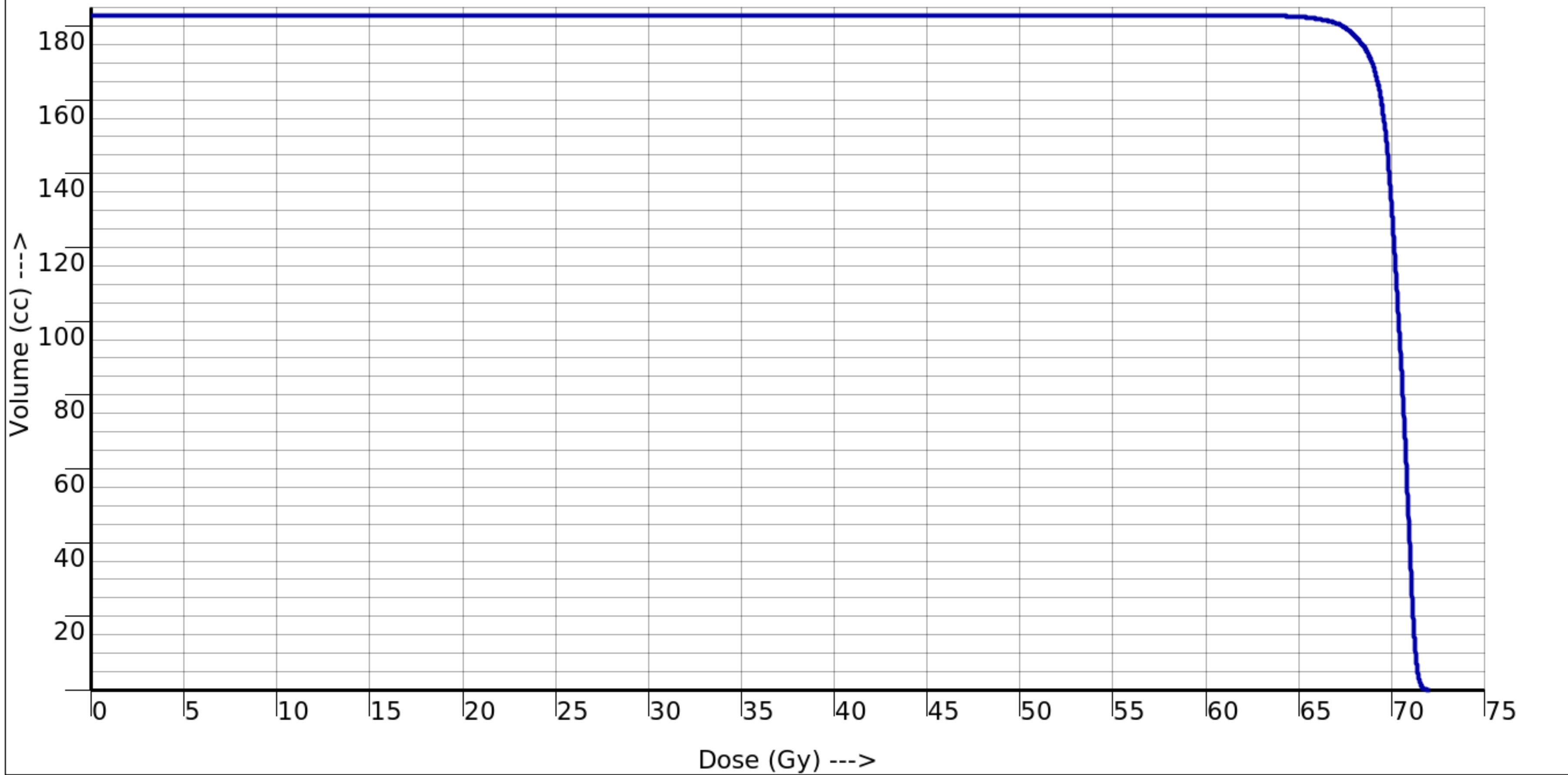
Cumulative DVH: prostate bed (65.168 cc)
Min: 69.470 Gy, Mean: 70.981 Gy, Max: 72.058 Gy, Vol: 65.168 cc



METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Conformation Number [64.6 (Gy), PTV_68]	0.801	0.5 <input checked="" type="checkbox"/>	$\frac{15p}{1}$ 1	<input type="checkbox"/> 12.61	15.00

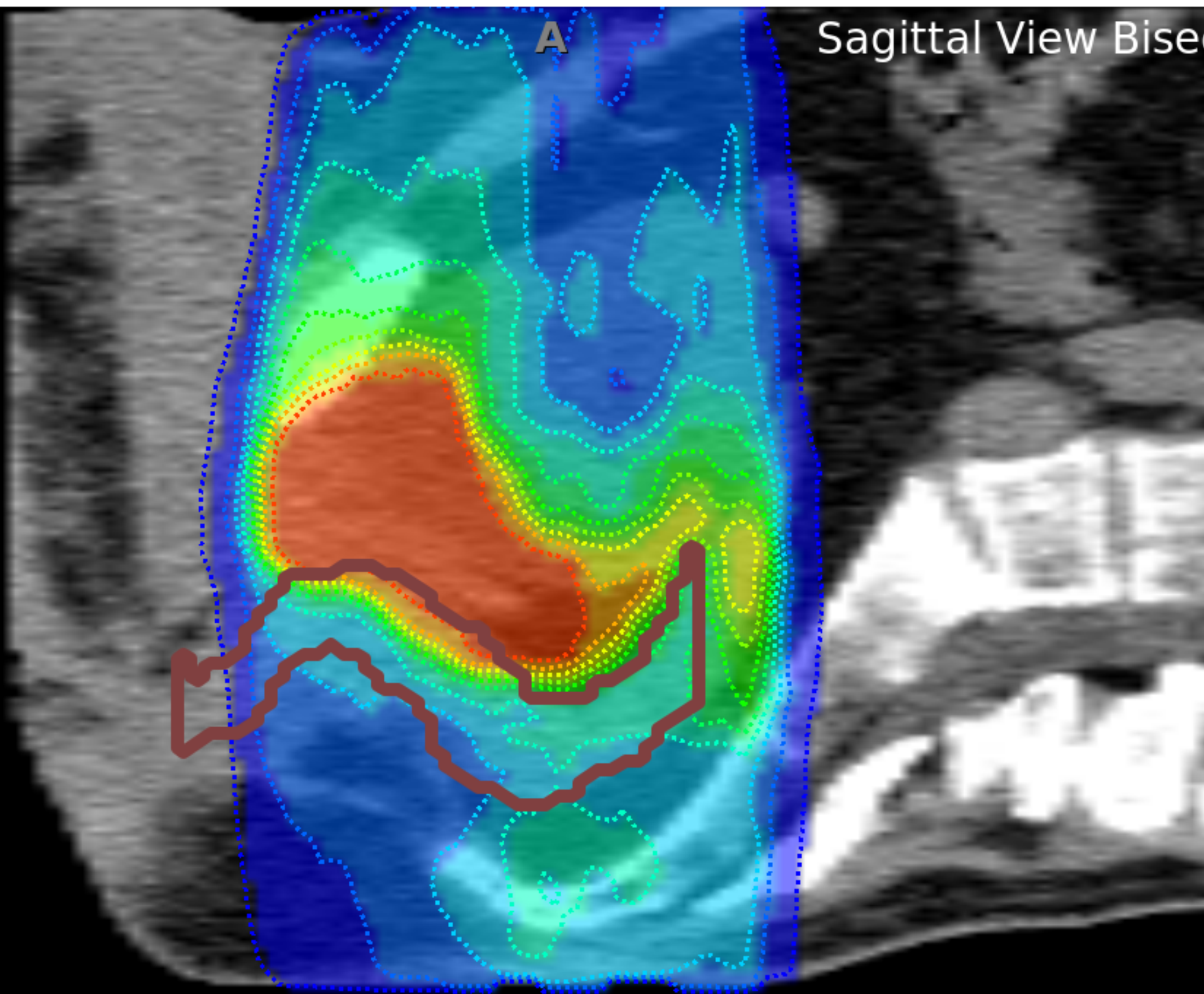
DETAILS: PTV_68 Vol Covered by 64.600 Gy (cc): 182.55, PTV_68 Vol (cc): 182.90, 64.600 Gy Irradiated Vol (cc): 227.45

Cumulative DVH: PTV 68 (182.896 cc)
 Min: 61.463 Gy, Mean: 70.285 Gy, Max: 72.058 Gy, Vol: 182.896 cc



METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Serial slice, dose-to-OAR failures [34 (Gy), RECTUM]	0.000	1 <input checked="" type="checkbox"/>	10p 0 <input checked="" type="checkbox"/>	10.00	10.00

-1.15 mm

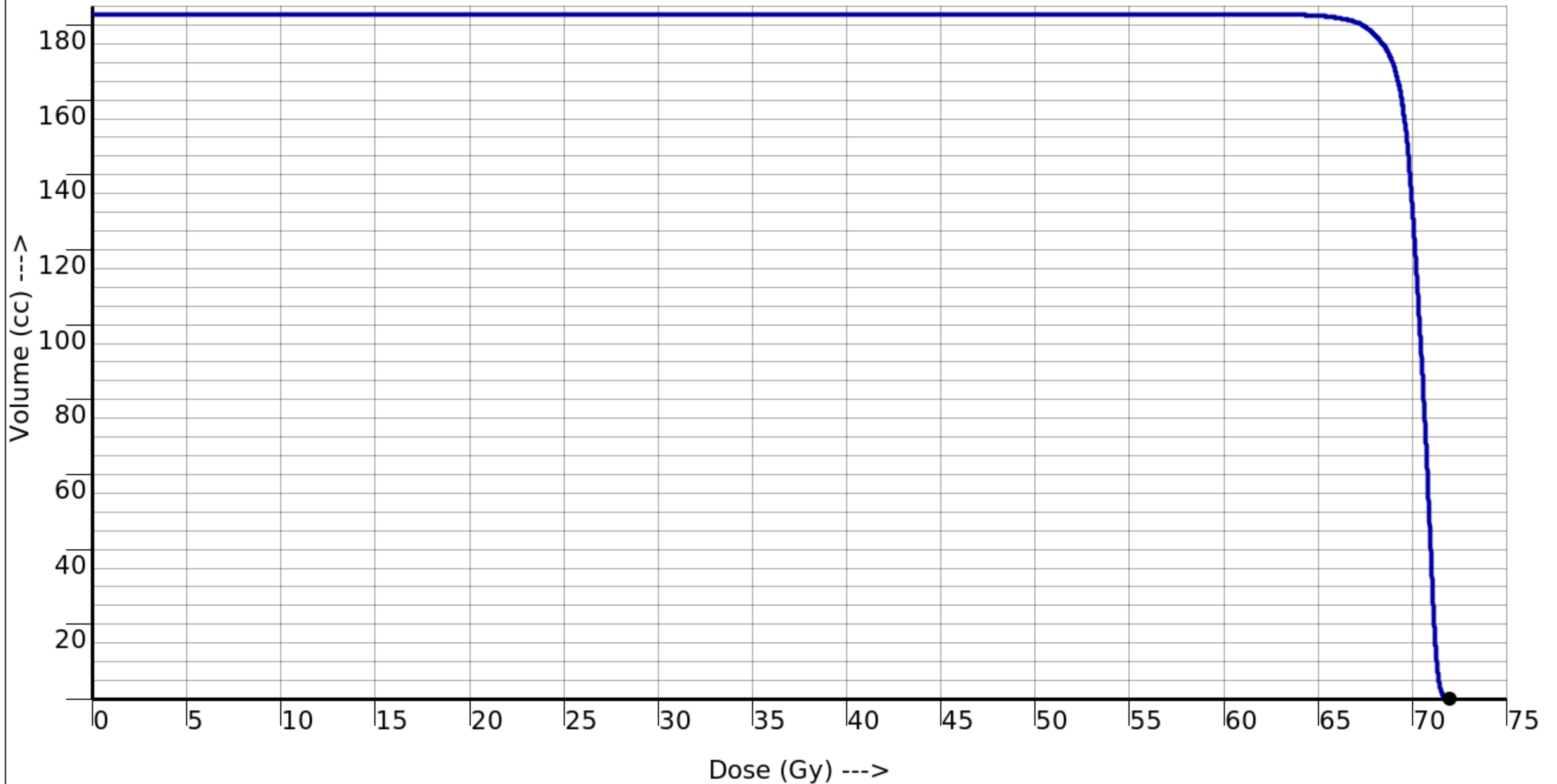


Sagittal View Bisecting Serial ROI



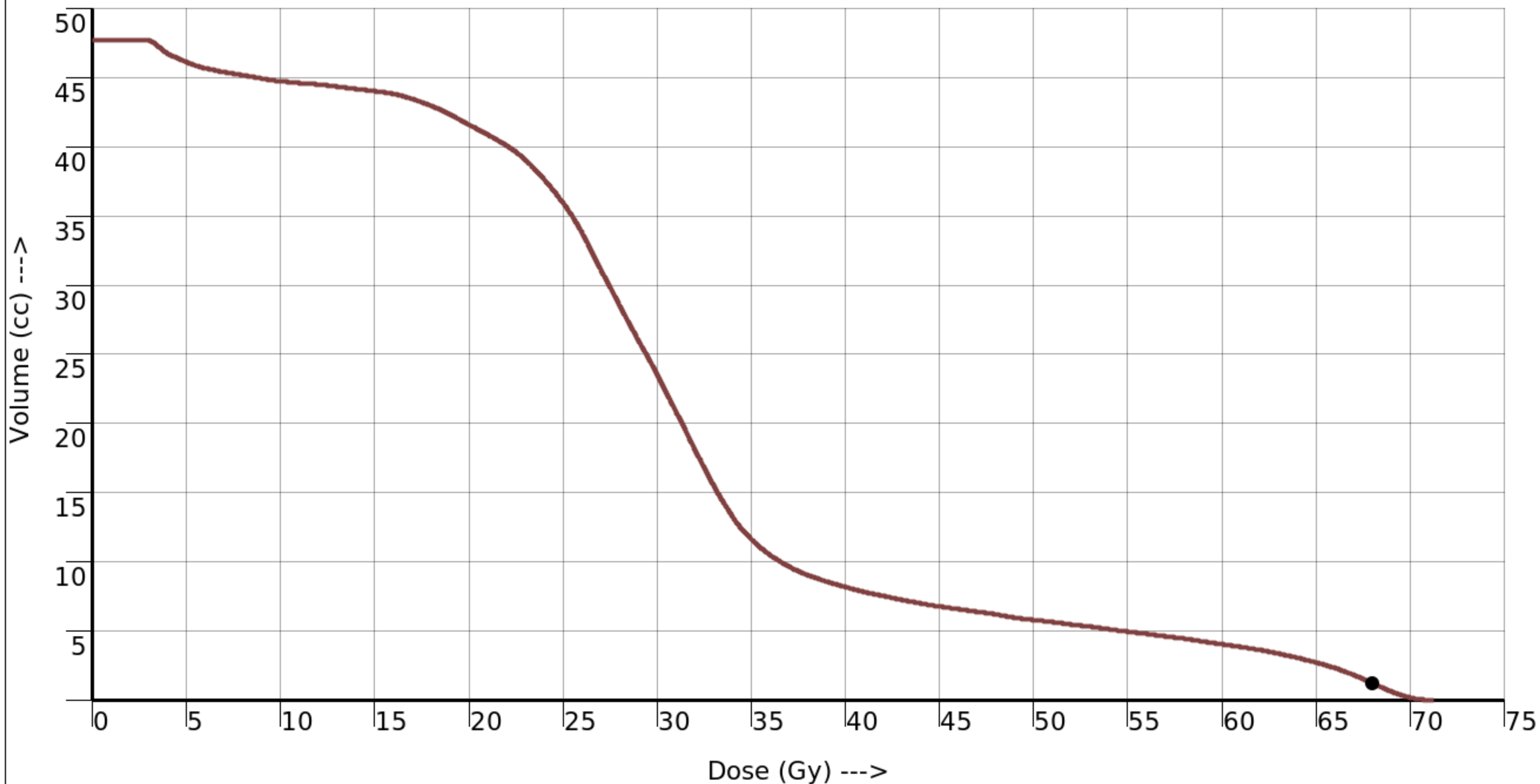
METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Dose (Gy) covering 0.03 (cc) of the PTV_68	72.011	74.8 <input checked="" type="checkbox"/>	$\frac{10p}{71.4}$ 71.4 <input type="checkbox"/>	8.20	10.00

Cumulative DVH: PTV 68 (182.896 cc)
Min: 61.463 Gy, Mean: 70.285 Gy, Max: 72.058 Gy, Vol: 182.896 cc



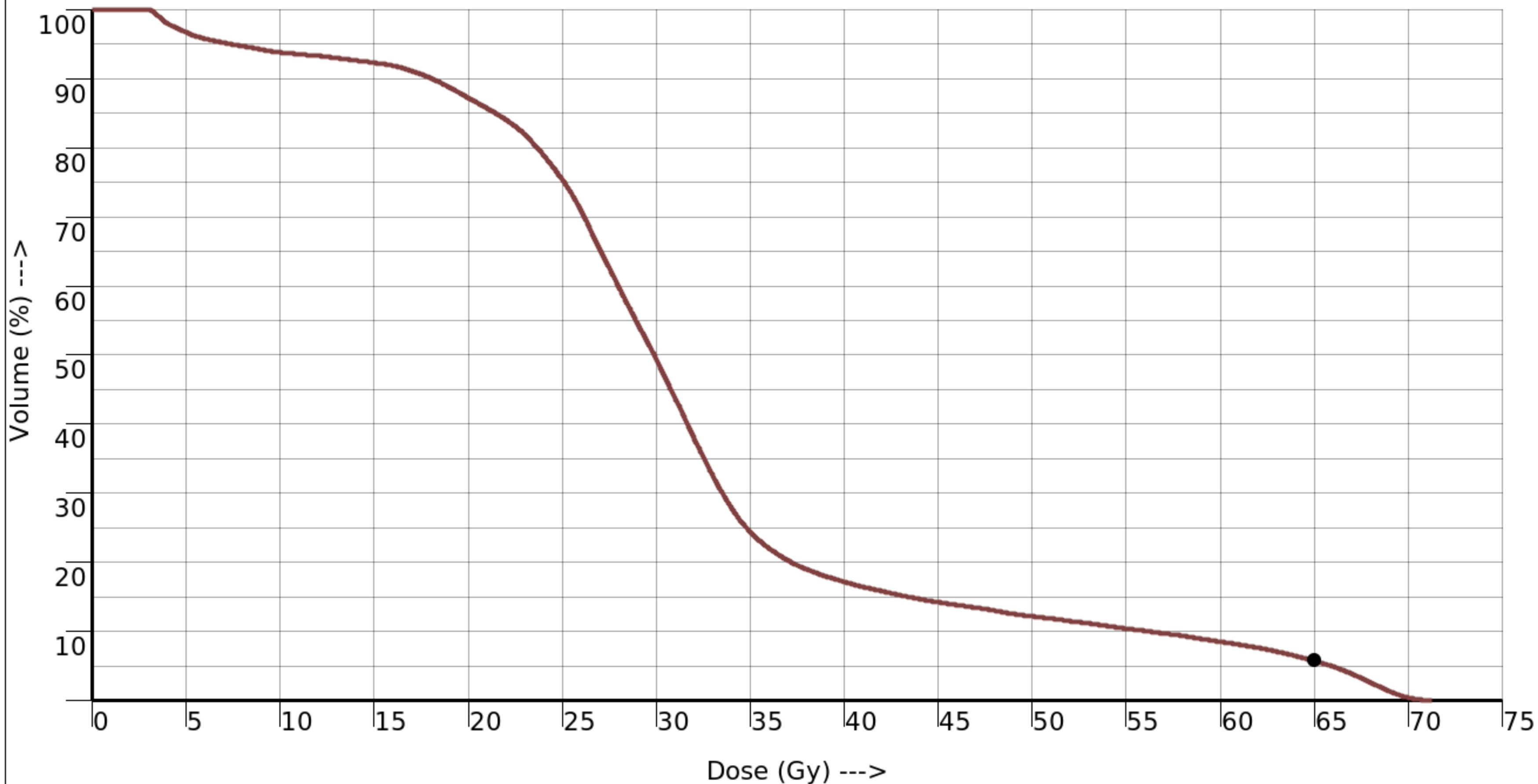
METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (cc) of the RECTUM covered by 68 (Gy)	1.230	45 <input checked="" type="checkbox"/> <small>Op 45</small>	10 <input checked="" type="checkbox"/> <small>10p 10</small>	10.00	10.00

Cumulative DVH: Rectum (47.683 cc)
Min: 2.881 Gy, Mean: 31.928 Gy, Max: 71.266 Gy, Vol: 47.683 cc



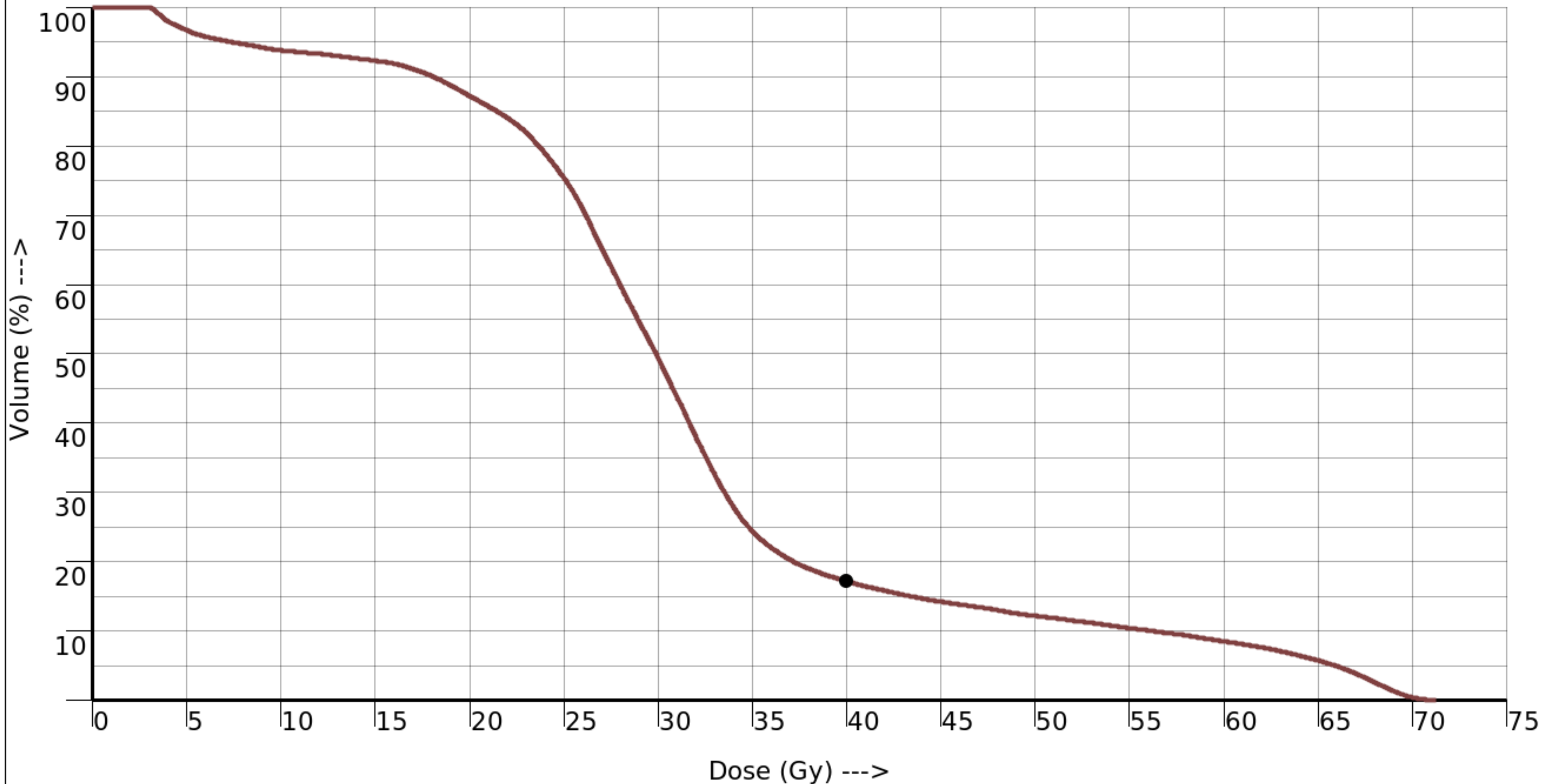
METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (%) of the RECTUM covered by 65 (Gy)	5.742	35 <input checked="" type="checkbox"/>	5 <input type="checkbox"/>	9.89	10.00

Cumulative DVH: Rectum (47.683 cc)
Min: 2.881 Gy, Mean: 31.928 Gy, Max: 71.266 Gy, Vol: 47.683 cc



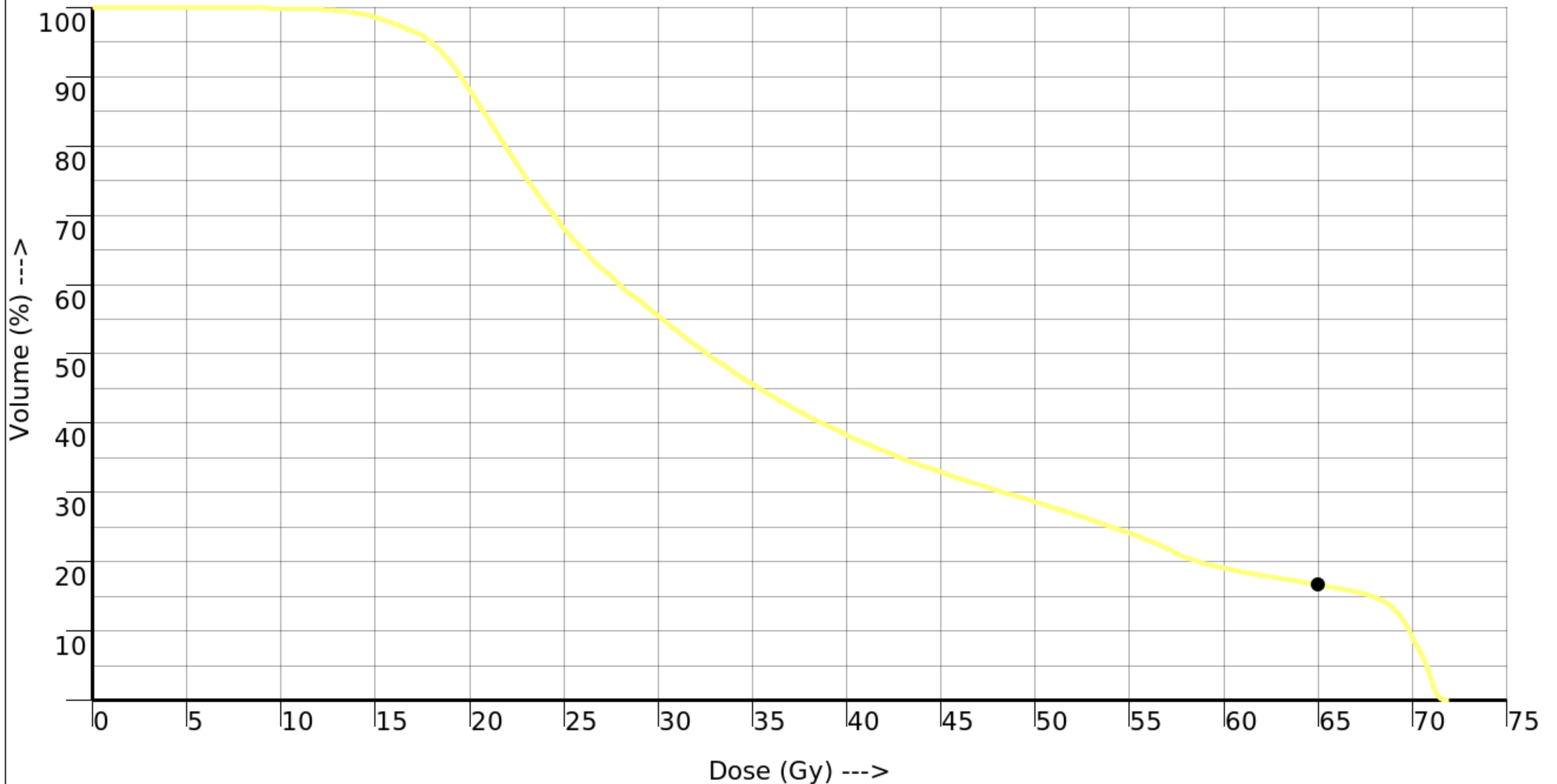
METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (%) of the RECTUM covered by 40 (Gy)	17.173	40 <input checked="" type="checkbox"/>	20 <input checked="" type="checkbox"/>	10.00	10.00

Cumulative DVH: Rectum (47.683 cc)
Min: 2.881 Gy, Mean: 31.928 Gy, Max: 71.266 Gy, Vol: 47.683 cc



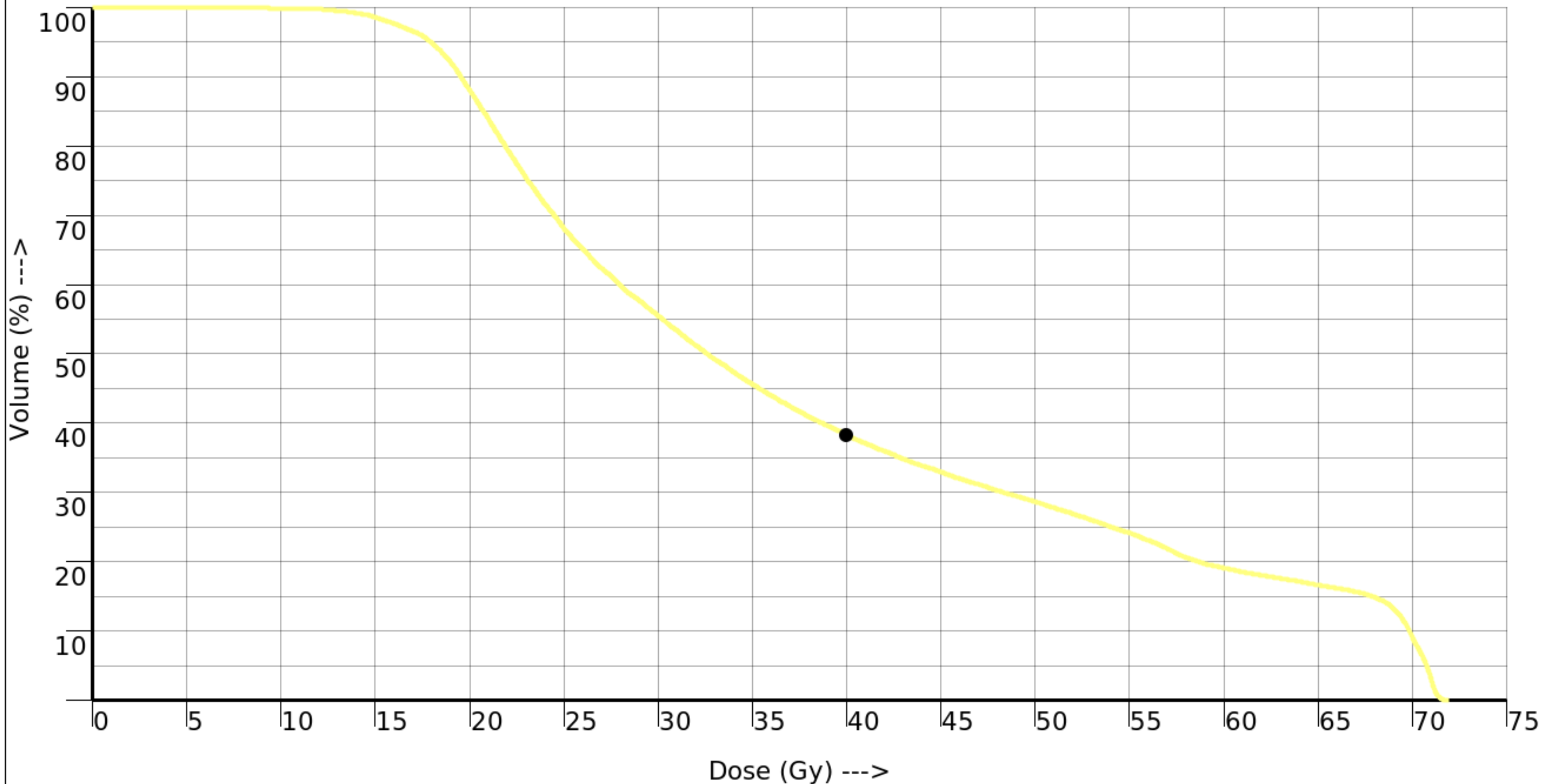
METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (%) of the BLADDER covered by 65 (Gy)	16.617	40 <input checked="" type="checkbox"/>	15 <input type="checkbox"/>	6.57	7.00

Cumulative DVH: Bladder (313.266 cc)
Min: 8.603 Gy, Mean: 38.673 Gy, Max: 71.970 Gy, Vol: 313.266 cc



METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Volume (%) of the BLADDER covered by 40 (Gy)	38.273	70 <input checked="" type="checkbox"/> <small>Op 70</small>	<small>2.5p 50</small> 40 <input checked="" type="checkbox"/> <small>3p 40</small>	3.00	3.00

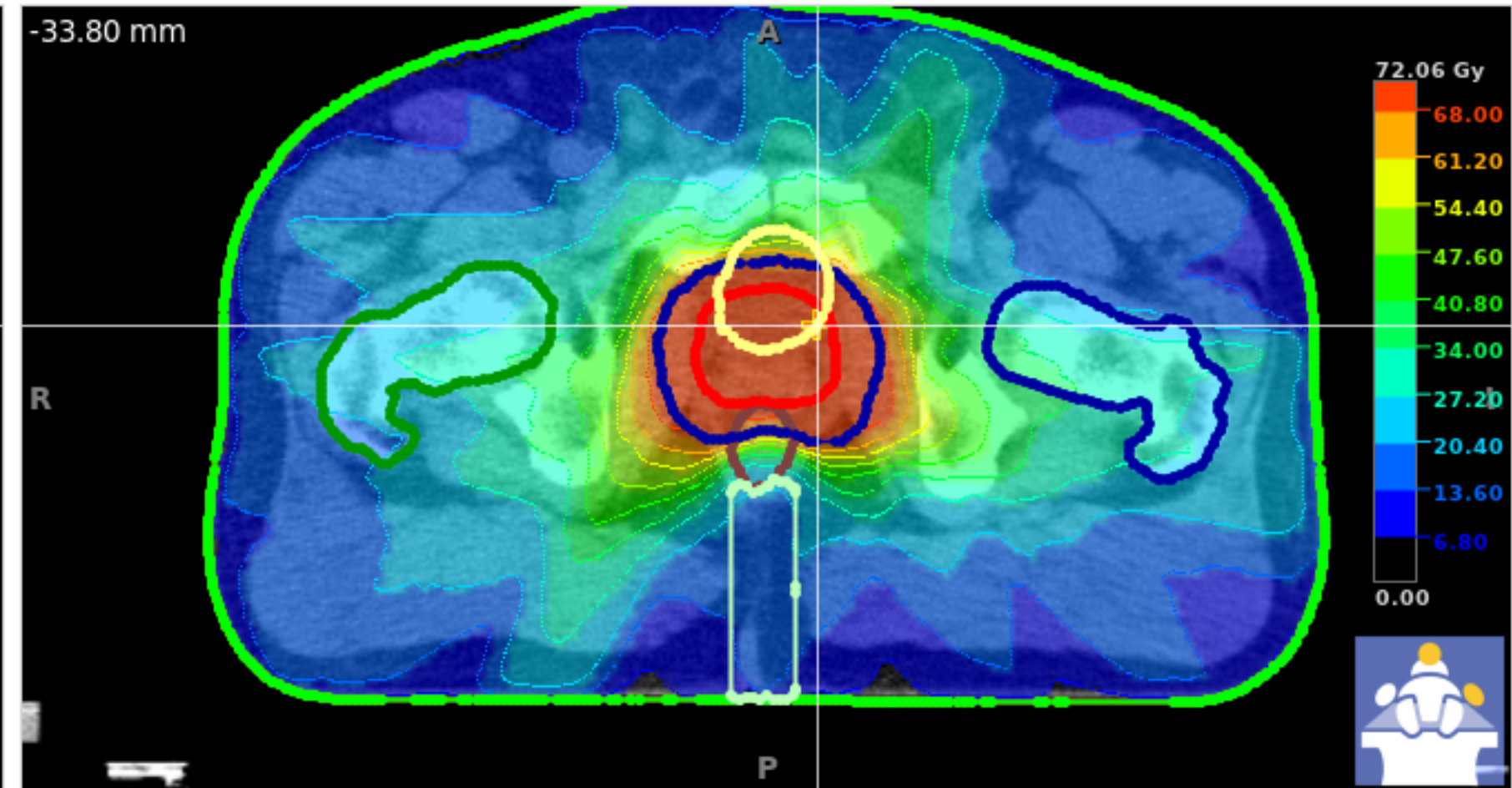
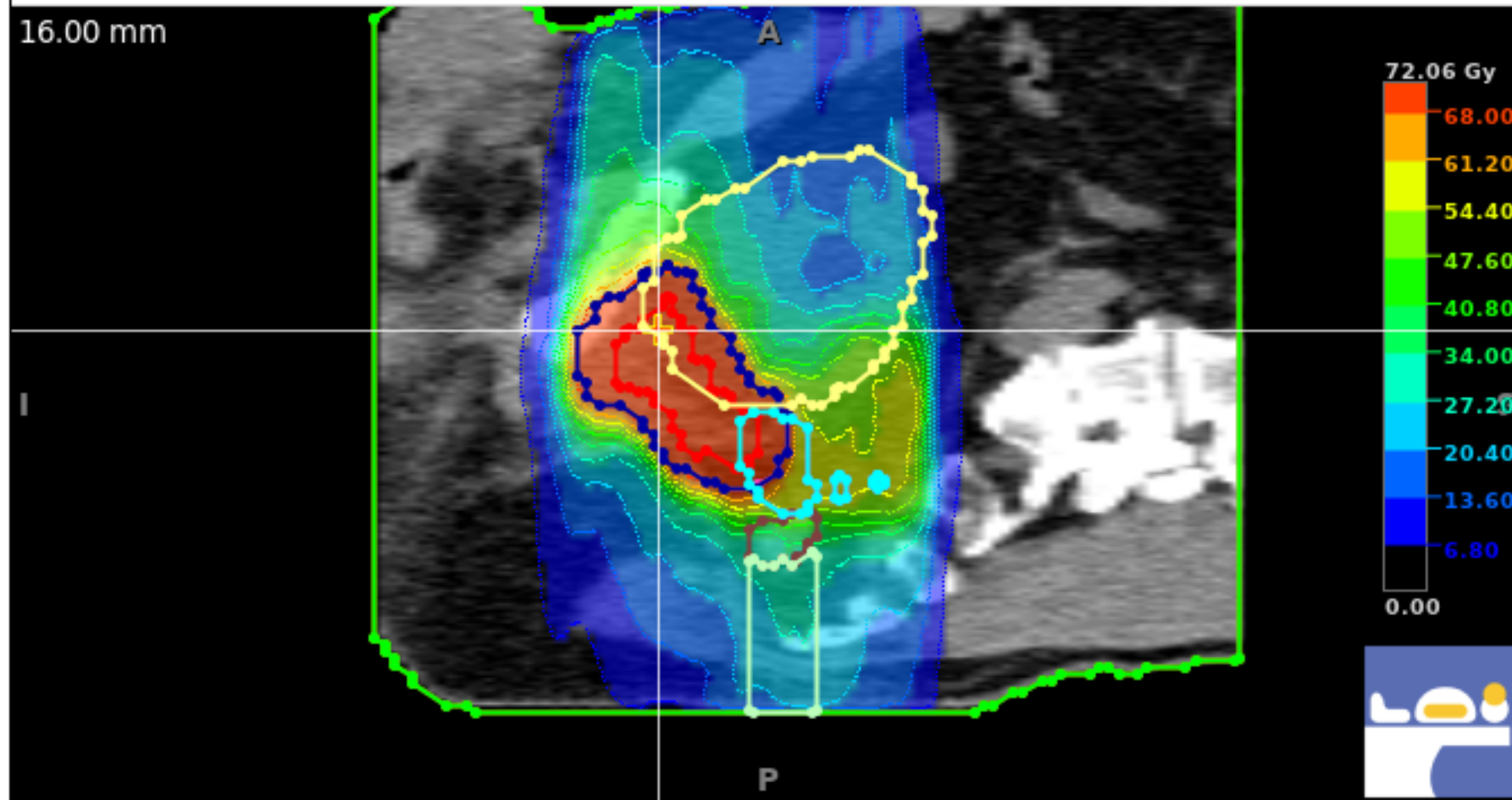
Cumulative DVH: Bladder (313.266 cc)
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METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Structure(s) containing the global max dose point	(3 values)	PTV_68 ✓	prostate_bed ✓	5.00	5.00

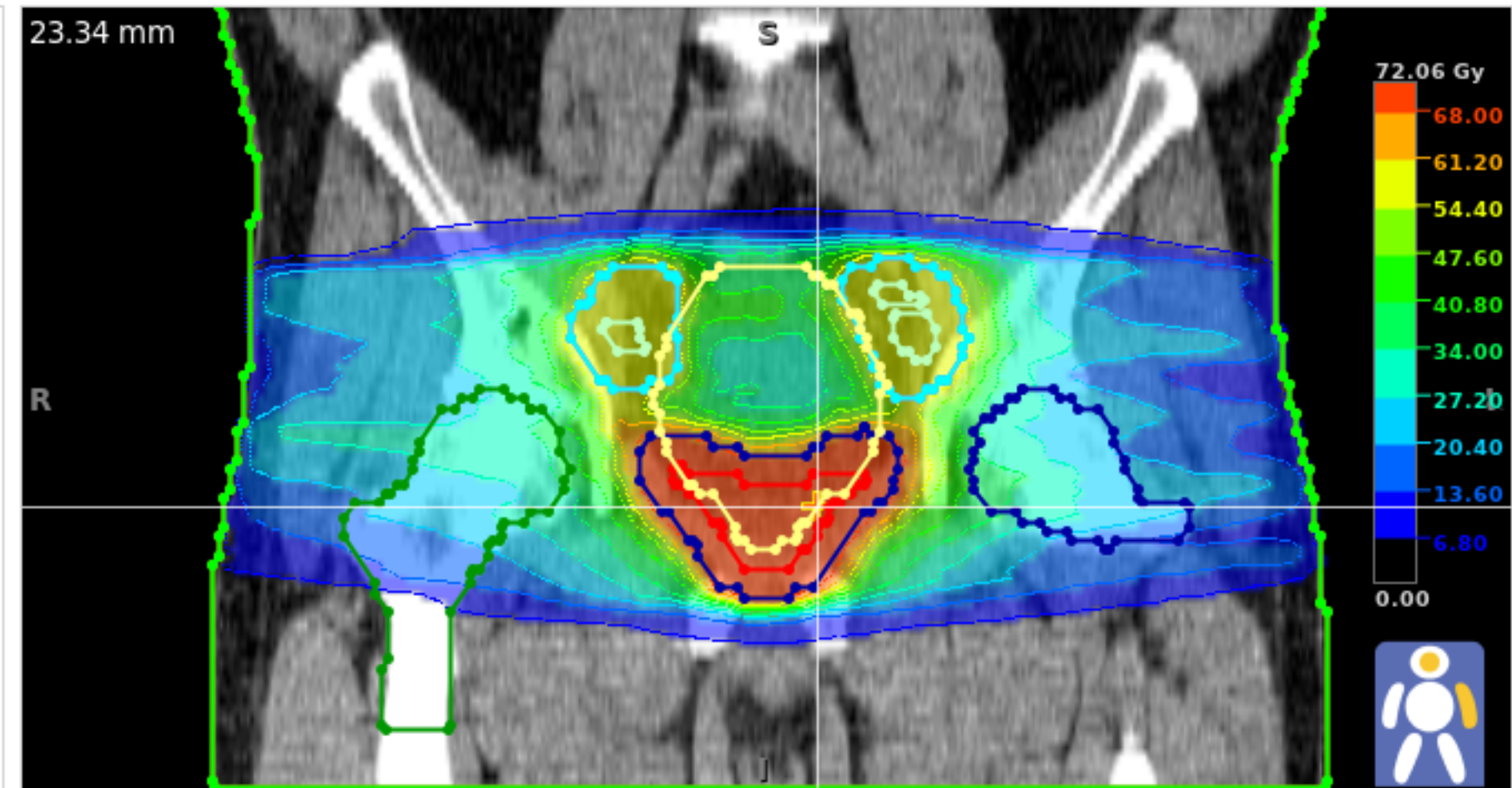
DETAILS: Global Max Location (mm): [16.00, -33.80, 23.34], Structure(s) containing the global max dose: prostate_bed, PTV_68, BODY

Planes Intersecting Global Max Dose



Global Max Dose (Gy): 72.05814
 X (mm): -194.001 to 200.999 step 2.5
 Y (mm): -128.801 to 143.699 step 2.5
 Z (mm): -231.661 to 170.839 step 2.5
 DICOM Origin (mm): (-14.735, -360.661, 109.948)

XYZ coordinates have been transformed into an intuitive "couch coordinate system" (IEC, not DICOM), where: +X is couch's lateral "left"; +Y is in towards gantry; and +Z is vertical up from couch. The (0,0,0) coordinate defaults to the first treatment beam isocenter if a plan is loaded or, if there is no plan, the origin from the DICOM RT Dose is preserved.



METRIC	RESULT	MIN REQ	IDEAL	POINTS	WEIGHT
Estimated 'beam-on' time, all beams (minutes)	2.950	---	---	---	---

BEAM [#] NAME	MACHINE	MODALITY	ENERGY	METERSET	BEAM-ON TIME (Est.)
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				<u>911 (TOTAL)</u>	<u>2.95 min (TOTAL)</u>

BEAM [#] NAME	ISOCENTER	GEOMETRY	MODIFIERS
[1] Arc1a_C0	0, 0, 0 (DICOM -14.7, -360.7, 109.9)	Gantry (Dynamic CCW): 160 to 200, Collimator: 15, Couch: 0	
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