

Appendix A. Clinical treatment planning goals

Table A1: Clinical treatment planning goals according to our institution's clinical protocol, prescribing a mean dose of 65 and 54 Gy to the primary and secondary planning target volumes (PTV), respectively. Depending on the clinical case, priorities 2a and 2b can change order.

priority	volume of interest	clinical goal
1	spinal cord	$D_{1cc} < 46 \text{ Gy}$
1	spinal cord + 3mm PRV	$D_{1cc} < 48 \text{ Gy}$
1	brainstem	$D_{1cc} < 54 \text{ Gy}$
1	brainstem + 3mm PRV	$D_{1cc} < 56 \text{ Gy}$
2a	primary PTV	$D_{99\%} > 90\% \text{ of } 65 \text{ Gy}$
2a	primary PTV	$D_{95\%} > 95\% \text{ of } 65 \text{ Gy}$
2a	primary PTV	$D_{50\%} = 65 \pm 1 \text{ Gy}$
2a	secondary PTV	$D_{99\%} > 90\% \text{ of } 54 \text{ Gy}$
2a	secondary PTV	$D_{95\%} > 95\% \text{ of } 54 \text{ Gy}$
2a	secondary PTV	$D_{50\%} = 54 \pm 1 \text{ Gy}$
2b	optical nerves	$D_{1cc} < 54 \text{ Gy}$
2b	optical nerves + 1mm PRV	$D_{1cc} < 55 \text{ Gy}$
2b	chiasm	$D_{1cc} < 55 \text{ Gy}$
2b	chiasm + 1mm PRV	$D_{1cc} < 56 \text{ Gy}$
2b	optical lenses	$D_{\text{mean}} < 6 \text{ Gy}$
3	parotids	$D_{\text{mean}} < 26 \text{ Gy}$