Supplementary

Appendix 1

Dosimetric calculations were conducted using the Varian Eclipse 15.6 computer planning system, adhering to the dose standards outlined in the Radiation Therapy Oncology Group (RTOG) 0933 protocol. The dosimetric data encompassed various parameters: CI, GI, HI, and OARs including the lens, cornea, lacrimal gland, retina, optic nerve, optic chiasm, and brainstem.

The dosimetric parameters were calculated as follows:

$$CI_{RTOG} = \frac{PV}{TV} \quad [1]$$

PV, prescription volume, the volume wrapped by prescription isodose lines. TV, target volume. The higher the RTOG CI, the better the fitness.

$$CI_{Paddick} = \frac{TV_{PV} \times TV_{PV}}{TV \times PV} \quad [2]$$

TV_{PV}, the volume of target area covered by prescription isodose lines. The closer the Paddick CI to 1, the better the conformal.

$$GI = \frac{PV_{50\%}}{PV} \quad [3]$$

PV50% is 50% isodose line wrapped volume. The lower the GI dose, the steeper the drop.

$$HI = \frac{D_{max}}{D_{Dprescribed}} \quad [4]$$

Dmax and Dprescribed doses were maximum and prescribed doses, respectively. The smaller the HI, the better the uniformity.

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