

GHG teleconference Agenda: Proton Trial QA – Proton Plan Assessment Subgroup

Tuesday December 18th, 2018, 2000-2100 GMT

Attendees: Jonny Lee (chair), Paige Taylor (co-chair), Joerg Lehman, Enrico Clementel, Walter Bosch, Ying Xiao

Apologies:

Discussion:

Jonny shared two proton plans from a planning exercise. The case was a pediatric ependymoma with target and OARs already contoured. Beam arrangements quite different: one plan with three coplanar posterior beams, the other with two non-coplanar beams. DVHs and planning instructions were reviewed. Comments about beams treating through heterogeneities and beams with OARs distal to target. Some US protocols make recommendations about beam arrangements.

Plan constraints discussed. Wording from UK and US compared: “Optimal” ≈ “Per Protocol” ; “Mandatory” ≈ “Deviation Acceptable”

How do we evaluate and compare plans? Planning components to pay attention to during plan evaluation:

- Patient positioning reproducibility (ex: skin folds in the neck)
- The CT scan FOV – clipping patient anatomy can lead to erroneous HU and RLSP values
- Immobilization devices/couch are properly included in dose calculation
- Beam arrangements with regards to couch (ex: avoid oblique field that partially treats through couch)
- DVH constraints
- Robust planning reports

Action Items:

- Enrico: set up Box account for the group to share files
- Jonny: share ependymoma planning constraints
- Paige: share COG Ependymoma protocol and NRG H&N protocol example
- IROC: collect a few proton H&N plans to share
 - Maybe some clinical and some phantom plans?
- Coreen: send out doodle for next teleconference: February