DSS Questions

1. What are the “essential” elements needed to approve a plan for treatment?

(100%)

PTV dose metrics, DVH, and comparison w/ planning objectives

OAR dose metrics, OAR DVH, comparison w/ planning objectives

Patient information as conveyed in MD notes, EPIC diagnosis page

(50%)

visual inspection of isodose lines

Plan description including delivery time

1. When comparing two plans, what are the primary decision variables?
2. PTV dosimetry then (2) OAR dosimetry

PTV hotspot, PTV conformity (including conformity index)

Treatment time, delivery complexity

1. What are some features you like about current / conventional treatment planning systems?

Scorecard, hovering over DVH to see statistics, dragging isodose interaction, toggle DVH lines off / on,

More control over DVH graph, what is seen / not seen,

1. What are some of the features you dislike in current/conventional TPSs?

Lag time, (lack of) accessibility, see planning objectives and clinical patient information, simultaneous viewing of data, DVH + isodose + popup box showing prescription, planning objectives, and clinical patient information), lack of BED calculator, lack of information about total doses, lack of composite endpoints (like NTCP, outcomes),

1. Decision Support System details: Provide lots of plans, describe tradeoffs, and allow for selection.

Add robust system for viewing BED/EQD2, scorecard feature visual at all times, “plan complexity” including treatment time visual at all times.

Comparison system w.r.t. a benchmark, ie what is the cost of variable x given fixed variable y.