

Defining Constraints



from here on down

About Constraints

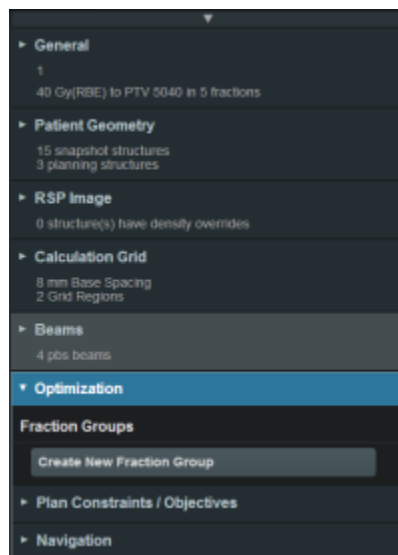
Constraints can be set in multiple levels and will function differently in each level. Constraints applied at the Fraction Group level apply to all the beams as a whole. Constraints applied at the Beamset level apply to that group of beams. The Constraint dose is divided by the beams in the Beamset. The following will provide a walk through of the different levels and how constraints work at each one.

Working with Constraints

Working with Fraction Group Constraints

The Constraints applied at the Fraction Group level take into account everything in the Fraction Group and Beam Sets

1. Select the Fraction Group if it has been created or create a new Fraction Group



2. Choose from the drop down the structure or structures that should be considered in the Fraction Group

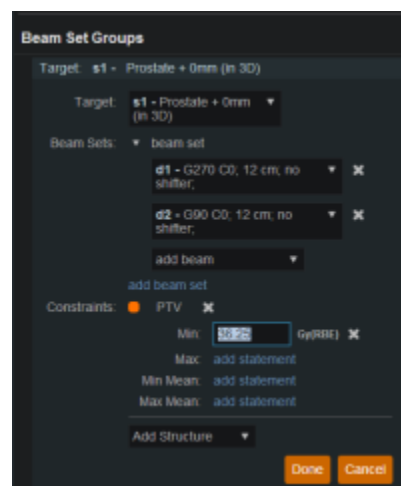


3. Define what constraint(s) should be applied to each structure by choosing the constraint and

entering the Gy



- Min- The minimum dose the structure should receive
 - Max- The maximum dose the structure should receive
 - Min Mean- the minimum mean dose a structure should receive
 - Max Mean- the maximum mean dose a structure should receive
 - the user can choose to apply one of these constraints or multiple constraints to the structure
4. Once the constraints are set in the Fraction Group the user will assign constraints in the Beam Sets assigned to the Fraction Group



- Each Beam Set group can have constraints.
- The constraints only apply to the Beam Set group that they are associated with
- As before the user can apply more than one Constraint to a Beam Set
- Min- The minimum dose the structure should receive
- Max- The maximum dose the structure should receive
- Min Mean- the minimum mean dose a structure should receive
- Max Mean- the maximum mean dose a structure should receive

Working with Plan Constraints

The Constraints applied at the Plan level apply to the plan as a whole. These constraints are what drive the feasibility calculation- whether the plan is achievable. The calculation engine considers these Constraints as “hard constraints” that have to be achieved

1. Open the Constraints block contained in the Plan Constraints/Objectives block
2. Choose the structures to apply constraints to
3. Choose the constraints to apply to the structure and the Gy that needs to be achieved



- Min- The minimum dose the structure will receive
- Max- The maximum dose the structure will receive
- Min Mean- the minimum mean dose a structure will receive
 - this will drive your dose up
- Max Mean- the maximum mean dose a structure will receive
 - this will limit the mean dose across the structure

Once all the Constraints have been set the user can move on to defining the Objectives

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