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Help

QUICK QUESTION 2 (2/2 points)

In the previous video, we constructed the optimization problem (see the last slide).

If the beamlet intensity of the first beamlet is set to 3, how much radiation will that beamlet deliver to tumor voxels?

6

6

Answer: 6

How much radiation will it deliver to healthy tissue voxels?

9

9

Answer: 9

EXPLANATION

Beamlet 1 hits one tumor voxel, and two healthy tissue voxels. At unit intensity, it delivers a dose of 2 to the tumor voxel, a dose of 2 to the first healthy tissue voxel, and a dose of 1 to the second healthy tissue voxel. At intensity 3, this means that it will deliver a dose of 2*3 = 6 to the tumor voxel, and 2*3 + 1*3 = 9 to the healthy tissue voxels.

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