
9-1-2009

In Reply to Dr. Hurkmans et al.

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Recommended Citation

Xiao, PhD, Ying; Papiez, PhD, Lech S.; and Galvin, DSc, James M., "In Reply to Dr. Hurkmans et al." (2009). *Department of Radiation Oncology Faculty Papers*. Paper 9.

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As submitted to: *International Journal of Radiation Oncology*

***Biology Physics* and later published as:**

In Reply to Dr. Hurkmans et al.

International Journal of Radiation Oncology Biology Physics,

Volume 75, Issue 1, 1 September 2009, Page 318

DOI: 10.1016/j.ijrobp.2009.05.051

We thank Hurkmans et al for their interest in our published manuscript. The points they raised were 1) not reporting on the volume dependence of the deviation from intended target coverage when density corrected is applied, 2) recommended criteria with heterogeneity correction are based upon plans that are not optimized with heterogeneity correction. We specified in the manuscript the limitation that the density corrected plans were not optimized. We agree with Hurkmans et al that this is a very important point to present. The optimized criteria should also include consideration of other important factors such as tumor motion management. The recommended criteria were intended to be an initial guidance to further investigation to optimize these criteria. We have initiated the investigation with the cases from RTOG study 0236 and planed against criteria from Xiao et al¹, RTOG 0813 and those from ROSEL study². Of the twenty cases we studied, we found that these were comparable criteria. Similar cases fulfill or fail either set of criteria. Further investigations and fine tuning of the criteria involving more cases from an increased number of institutions are warranted to ensure acceptable balance between plan quality and accrual for future SBRT lung clinical trials.

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