Against the motion: This house believes that standard fractionation will remain the standard-of-care for the majority of curative treatments by 2025

J. Overgaard

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Abstract not received

For the motion (rebuttal): It is the small fraction sizes that need special pleading, not the large ones.

A. Nahum

Fractionation is a very odd business. The question ought really to be “Why should we deliver curative radiotherapy in a large number of small doses, thereby prolonging the number of treatment days, increasing both patient inconvenience, and overall treatment costs?” Given the significant reduction in doses to non-target tissues achievable by modern conformal external-beam therapy (including intensity modulated photons and spot-scanned protons), and the recent findings for breast tumours, and probably also for prostate, that the 𝛼/𝛽 for the clonogens is of the same order as that for late normal-tissue complications, there are not many tumour sites where hyperfractionation is justified. In the latter category are only relatively large lung tumours, close to the mediastinum, and those tumours in the head & neck region where ‘serial’ normal tissues (e.g. spinal cord) are dose-limiting. Otherwise the onus is on the ‘hyper-fractionators’ to justify, to both administrators and patients, the vast number of daily visits they wish to impose on patients. One can go further - fraction size/number should be tailored to each patient according to the maxim “Deliver the minimum number of fractions compatible with a high rate of local control and a low rate of complications”. Software such as ‘BioSuite’ exists to do exactly this; there are no good excuses for not using it.

Against the motion rebuttal

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Abstract not received