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CORRESPONDENCE

Radiation doses from radiological imaging do not increase the risk of cancer: *Author reply*

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(The Editors do not hold themselves responsible for opinions expressed by correspondents)

To the Editor,

Quantifying the effects of low doses of ionizing radiation is certainly not easy, but it is probably not useful to broadly characterize studies whose conclusions are different from one's own views as "outdated, discredited, incomplete or irrelevant".

Dr Doss would like to translate his apparent certainty that low doses of radiation relevant to CT "do not cause any cancer" and indeed are "cancer preventative", to advocate dropping two of the key contemporary tenets of radiological usage: justification and optimization. Central to justification is the concept that CT scans should be given if

and only if there is clear medical justification. Central to optimization is that the lowest radiation dose possible should be given consistent with acquiring the required information. Clearly, if low doses of radiation prevent cancer, as Dr Doss believes, then optimization and justification would both be counterproductive.

Over the past decade, there has been a markedly increased emphasis on both CT optimization (e.g. the Image Gently campaign) and CT justification (e.g. improved decision rules). In the context of what we know and, perhaps more importantly, what we do not know about low-dose radiation risks, it would be unfortunate if these improvements in clinical practice were lost.