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Letter

Response to Comments on: Extended-term effects of head and neck irradiation in a rodent. *Eur J Cancer* 2001, **37**, 1938–1945

The study which was published in the *Eur J Cancer* 2001, **37**, 1938–1945 concerns the extended effects of head and neck irradiation in a rodent.

It should be stressed that this paper *does not* focus on the effects of irradiation on the salivary glands, but rather on the systemic effects of head and neck irradiation after an extended term (up to 1 year). Unfortunately, as opposed to salivary effects, this issue has barely been examined and reported to the professional community. This is very unfortunate in light of its potential importance on both clinical and radio-biological mechanistic grounds.

Indeed, irradiation-induced damage to the salivary glands is the most prevalent complication of radiotherapy administered for head and neck malignancies, and the group of Drs Konings, Vissink and Coppes is a leading and highly respectable research group in the field. However, in spite of the contributions made by conformal radiotherapy (CRT), three-dimensional (3D)-CRT and Intensity-modulated radiotherapy (IMRT), one can not always focus the irradiation field to only a limited region of the head and neck, as often the tumours treated are relatively extended, and the field of irradiation administered includes most of the head and neck region. Careful reading of both the introduction and discussion sections of the paper reveals that there are few previous reports available tending to indicate that head and neck irradiation may effect hearing, sight and even growth, although this happens in the long-term. Moreover, even if the study had been limited exclusively to the irradiation effects on the salivary glands, it would be warranted to report these effects on the salivary glands after an extended term. Unfortunately, most, if not all, of the studies of salivary involvement are short-term (most often up to one month), and this, in spite of the fact that salivary involvement as we know it is most often life-long and based on a delayed mechanism, as we previously reported [1–5].

Finally, it is important to note that the model used in this study of whole head and neck irradiation is a wellestablished one which has been used and is still being used in hundreds of reported studies. In fact, it is still popular today under suitable circumstances such as those currently reported. Various recently published papers by respectable researchers using this model are available; one such example is the outstanding study by O'Connell and colleagues of the National Institute of Health (NIH) published in 1999 [6].

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