Response to correspondence on the molecular biology of head and neck cancer

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Tumour–microenvironment interaction is an interesting new field in cancer research. However, it is not specific to head and neck cancer and is still in its infancy. Therefore, it was not the focus of our Review on the molecular biology of head and neck cancer (The molecular biology of head and neck cancer. *Nature Rev. Cancer* 11, 9–22 (2011))¹.

We refrained from listing the different sub-sites within the head and neck sites. Vered et al. (The role of the tumour microenvironment in the biology of head and neck cancer: lessons from mobile tongue cancer. Nature Rev. Cancer 31 Mar 2011 (doi:10.1038/ nrc2982-c1)2 suggest that base-of-tongue tumours should be considered oral cavity carcinomas. We adhere to the internationally agreed-upon standard that the base-of-tongue is a sub-site of the oropharynx³. The presence of tonsillar tissue⁴ and the relative prevalence of human papillomavirus (HPV)-infected tumours⁵ support this. To prevent confusion it is important that the research field complies with generally accepted conventions.

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- Leemans, C. R., Braakhuis, B. J. M. & Brakenhoff, R. H. The molecular biology of head and neck cancer. Nature Rev. Cancer 11, 9–22 (2011).
- Vered, M., Dayan, D. & Salo, T. The role of the tumour microenvironment in the biology of head and neck cancer: lessons from mobile tongue cancer. *Nature Rev. Cancer* 31 Mar 2011 (doi:10.1038/ nrc2982-c1).
- Sobin, L., Gospodarowicz, M. K. & Wittekind, C. in TNM Classification of Malignant Tumours 7th edn 22–63 (Wiley-Blackwell, Chichester, UK, 2009)
- Meyer, D. B. in *Laboratory Guide for Human Histology* 65 (Wayne State University Press, Detroit, USA, 1985).
- Chaturvedi, A. K., Engels, E. A., Anderson, W. F. & Gillison, M. L. Incidence trends for human papillomavirus-related and -unrelated oral squamous cell carcinomas in the united states. *J. Clin. Oncol.* 26, 612–619 (2008).

Competing interests statement

The authors declare no competing financial interests.