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Merkel cell polyomavirus and non-small cell lung cancer

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Sir,

We congratulate Hashida et al (2013) on an interesting report that Merkel cell polyomavirus (MCV) is present in $\sim 18\%$ of nonsmall cell lung carcinoma (NSCLC). An important clarification is needed; however, we have not yet discovered a naturally occurring mutation in the MCV large T retinoblastoma-binding motif (LFCDE). We engineered the sequence that the authors refer to as Appendix206 (JN038578) to have a lysine substitution mutation (LFCDK) to serve as a negative control for the wild-type appendixderived LT deposited as JN038579, which possesses a wild-type LXCXE motif. Post-submission editing at NCBI obfuscated the description of JN038578, leading to the confusion described in this paper. Thus, all but one of the MCV sequences Hashida et al (2013) report are consistent with wild-type virus and do not have the tumour-specific mutations we described that eliminate MCV LT helicase activity (Shuda et al, 2008). The authors do describe one virus (AC43) with a terminally truncated LT consistent with a

tumour-derived mutation. Together with its high viral copy number, this case represents a particularly intriguing tumor that deserves careful follow-up, such as Southern blotting for clonality and histopathological characterization with reliable biomarkers for NSCLC to investigate a potential MCV contribution to its tumorigenesis.

REFERENCES

- Hashida Y, Imajoh M, Nemoto Y, Kamioka M, Taniguchi A, Taguchi T, Kume M, Orihashi K, Daibata M (2013) Detection of Merkel cell polyomavirus with a tumour-specific signature in non-small cell lung cancer. *Br J Cancer* **108**(3): 629–637.
- Shuda M, Feng H, Kwun HJ, Rosen ST, Gjoerup O, Moore PS, Chang Y (2008) T antigen mutations are a human tumor-specific signature for Merkel cell polyomavirus. *Proc Natl Acad Sci USA* 105(42): 16272–16277.

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