

## Letter to the Editor

### CD117 expression in mesothelioma

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**To the editor:** We read with interest the report of Horvai *et al*<sup>1</sup> on CD117 (c-kit) expression in malignant mesothelioma. The authors refer to a manuscript by two of us (DAA and LMW),<sup>2</sup> and state in their conclusion that ‘...[their] results raise significant doubt as to the expression of c-kit in malignant mesothelioma as reported elsewhere [our study].’ A careful review of the results of these two studies, however, shows essentially no difference in results between the studies. Horvai *et al* describe nuclear immunoreactivity by paraffin immunohistochemistry in seven of 37 mesotheliomas tested with one antibody (Dako, Carpinteria, CA, USA). Their c-kit mRNA RT-PCR studies on four cases are interpreted as negative, although their paraffin tissue amplification internal control appears extremely weak in Figure 2. This finding, if correct, suggests that nuclear staining by this antibody is an artifact. In our original report, we found no nuclear staining in any of 576 tumors studied, including 50 mesotheliomas, using a different antibody (Medical & Biological Laboratories Co, Nagoya, Japan). Additional cases have now been evaluated by one of us (RW) using tissue microarrays and nuclear staining has only been identified in one of 1085 cases evaluated. We feel that in the vast majority of tumors, nuclear staining for CD117 is artifactual and should not be considered as a positive result.

Horvai *et al* also used a second CD117 antibody (Cell-Marque, Hot Springs, AR, USA) on 31 of the

cases, finding moderate cytoplasmic staining in only one case and no nuclear staining. The one positive case was not studied for c-kit mRNA expression by RT-PCR. We previously found weak staining for CD117 in a significant number of all tumor types, but moderate or strong staining for CD117 was only found in one of 50 mesotheliomas in our study. Therefore, the results of the two studies are quite similar, and we are perplexed by the statement by Horvai *et al* casting doubt on our prior findings. Because of the lack of molecular study on the single case of interest, this new report simply confirms the data from 1998.

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### References

- 1 Horvai AE, Li L, Xu Z, *et al*. c-Kit is not expressed in malignant mesothelioma. *Mod Pathol* 2003;16:818–822.
- 2 Arber DA, Tamayo R, Weiss LM. Paraffin section detection of the *c-kit* gene product (CD117) in human tissues: value in the diagnosis of mast cell disorders. *Hum Pathol* 1998;28:498–504.