Reviewer's report

Title: Isolation and characterization of two canine melanoma cell lines: New models for comparative oncology

Version: 0 Date: 22 Jun 2018

Reviewer: J. Paul Woods

Reviewer's report:

line 86: "evidence" for "evident"

Table 1: drop "CNS" add PDT: Population Doubling Time

"muccosal" to "mucosal"

reference WHO staging for canine melanoma

line 328: "contrasting clinical profiles" really both are similar. Both are locally invasive melanomas and perhaps case 1 was diagnosed earlier than case 2. Do we have follow up on case 1 to see if it developed distant mets? Did case 1 receive a thoracic CT to rule out mets (like case 2 had thoracic CT to rule in mets?)

Case 2 with mets (i.e. Stage IV) did well to live 6 months to have the opportunity to get CNS mets so I also challenge lines 347 & lines 391 & line 403 that insinuates that Dog 2's tumour had more "natural aggressiveness of the tumour" than dog 1's tumour

line 400: IC50 values of cell lines lower than those for Sk-Mel28

line 453: can't say "continuous exposure to these agents led to the development of resistance". Resistance may have already been there.

line 484: why wasn't c-Kit investigated for these cell lines? Particularly since mentioned in Figure 1 as a genomic status in human mucosal melanoma

Table 2: I suggest reverse order of cell lines (1 than 2)

Figure 7:: "dacarbazine" on labels

Figure 8 dog cell lines improperly labeled cDuX and cMeX
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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