Reviewer's report

Title: Chemopreventive effects of berberine on intestinal tumor development in APCmin/+ mice

Version: 2 Date: 3 June 2013

Reviewer: Michael Wargovich

Reviewer's report:

The manuscript reports the chemopreventive effects of berberine in the ApcMin mouse model for intestinal cancer. There are problems with the data presentation, omission of aspects of methodology, and language.

Methodology:
1) Source of berberine is not given.
2) Please describe in more detail how "random" fields for IHC quantitation were chosen. Was the evaluator blinded to treatment?
3) How was protein extracted for westerns? Did this include epithelial and non-epithelial cells?
4) Why do the authors use Ki-67 as loading control? Western blotting analysis, line 6. This must be a mistake as it is not a constantly expressed protein.

Major Compulsory Revision

Data presentation:
1) Table 1; there is no data presentation by histological grade. I assume these were all benign adenomas?
2) Figure 1- the authors measured cyclin D1 and cleaved caspase 3 but no data is presented.
3) Figure 2- the westerns do not support the authors conclusions. It looks like b-catenin was only marginally down-regulated; no change in KI-67, no change in p-EGFR!

Language

The paper contains grammatical errors. Especially in the references cited.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I have no competing interests