Reviewer's report

Title: Use of a Chemically Induced-Colon Carcinogenesis-Prone Apc-Mutant Rat in a Chemotherapeutic Bioassay

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Reviewer: Mariano Bizzarri

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The paper by Yoshimi K. et al. (Use of a Chemically Induced-Colon carcinogenesis Prone Apc-Mutant Rat in a Chemotherapeutic Bioassay) address an important issue, i.e. the availability of a chemically-induced colon cancer model in animals, suitable for chemotherapeutic studies. The proposed model, indeed, fit with several requirements needed in the experimental setting. The experimental work has been clearly described; the paper is well written and concise. The paper is recommended for publication

minor comments
1. in the Discussion, it should be profitable to highlight how relevant the synergy in between different pathogenetic cues (APC-mutation, chemical carcinogen exposure, tissue inflammation) is in order to obtain a "human-like" colon cancer; the complexity of the carcinogenic process should be briefly outlined on that section.
2. in "Results", how the acquisition of volume data from histological section has been obtained should be better detailed and explained. Moreover, it is not really clear if FU treatment induces or not a significant reduction in tumour mass. Differences among the two groups of rat are firstly considered as "non significant" - when examined macroscopically - and thereafter that difference becomes "significant" when "the the volume was calculated from the histological sections"; such statement needs to be fully explained and discussed.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.