

Your review report

Manuscript

Aspirin inhibits the progression of hepatocellular carcinoma by reducing PD-L1 expression

Feedback for the author(s)

Comments to the author(s)

This study examined the effect of aspirin on the advancement of hepatocellular carcinoma in rats and cell lines. While the study's findings are interesting, there are certain issues that the authors should address through revision.

1. Title: Although the study included numerous variables, only PDL-1 is referred to in the title.
2. Introduction: The introduction is well-organized, with the exception of the absence of the role of measured parameters in the progression of HCC and the duplication of content in the second and third paragraphs, which should be merged.

Second paragraph: "Some previous epidemiological studies have also shown that aspirin has a chemopreventive effect on liver¹², ovarian¹³, prostate¹⁴, and colorectal^{15,16} cancers."

Third paragraph: "Research has indicated that aspirin can hinder the progression of ovarian²⁰, lung²¹, and colorectal²² cancer by inhibiting PD-L1 expression."

Results: The findings are intriguing, but the way in which they are presented is ambiguous, and the figures are very complicated, because some figures include an extensive amount of information that is not easily understood, and the figure only represents the "Mean" of the groups while the "Standard errors" are absent. In addition, the captions are poor and do not adequately clarify the groups.

Discussion: This section is extremely well-written, and the way of describing the results is ideal, but there is no interpretation of the change in some study-related parameters (ALT, AST, CHE, Chol, TG, TP, PLT... etc.).

Methods:

- A. The authors did not provide any justification for the dosages and treatment durations used in this study, despite the fact that they were derived from either a preliminary investigation or prior research.
- B. The majority of the sentences in the second paragraph of the animal model are written in a "ordering" style, such as: Weigh the liver, take typical diseased tissue, etc.
- C. The authors mention the "Chi-square test" in the statistical analysis, although there are no findings demonstrating its use.

References: There are several very old references that should be replaced with new references.

Confidential feedback for the Editor

Your recommendation

- *Revise*

Is the study design appropriate to answer the research question (including the use of appropriate controls), and are the conclusions supported by the evidence presented?

- *No, but these points can be addressed with revisions*

Are the methods sufficiently described to allow the study to be repeated?

- *Yes*

Is the use of statistics and treatment of uncertainties appropriate?

- *Yes*

Is the presentation of the work clear?

- *No, it needs some language corrections before being published*

Are the images in this manuscript (including electrophoretic gels and blots) free from apparent manipulation?

- *Yes*

Confidential comments to the Editor