

# Review of: "Hepatoprotective Effect of the Ursolic Acid-Oleanolic Acid Mixture Administered Intragastrically in Mice with Liver Damage Induced by Anti-TB Drugs"

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Potential competing interests: No potential competing interests to declare.

The study addresses a relevant topic for public health, such as the search for alternatives that contribute to tuberculosis treatments. Therefore, the results must provide certainty to proceed to the next stage in investigating the proposed substances. A weakness of the study is the number of experimental animals included in each study group, which, although not explicitly mentioned, is implied to be three—an insufficient number for inferential statistical analysis.

Some specific details identified as weaknesses or areas for improvement in the manuscript, some expressed as questions, are as follows:

1. The author mentions that the reduction in TB cases is very slow, citing a 30% decrease in total cases and a 20% reduction in incidence in 2020. According to what indicator is this reduction considered very slow? The cited references mention different values (35% and 20%, respectively). If this trend continues, will the proposed goals for addressing tuberculosis be achieved?
2. Using "etc." may be considered imprecise in academic writing.
3. The citation style needs to be standardized.
4. The description of the administered doses is unclear. The author discusses dilutions and doses simultaneously, leaving doubt about the amount of the evaluated substances received by each group.
5. The use of acronyms such as IMSS and GPC is not defined.
6. The number of animals included per group is not specified.
7. Regarding histological analysis, although the author includes references, a brief description of the histological variables to be observed or the briefly described method should be included. The first reference does not describe the technique but refers to another reference, creating a kind of nested citation or citation of a citation.
8. In the results, the UA/OA mixture identification is only mentioned but not demonstrated.
9. In Fig. 1, the BWG axis has no units, and the literal "a" meaning is not included.
10. Table 1 does not include statistical analysis.
11. In Table 2, the meaning of acronyms is omitted.
12. How is hepatic hematopoiesis evaluated in the postnatal period?
13. In statistical analyses, the approach to categorical variables or checking the normality of data is omitted. The presentation of results could be improved by presenting the mean and standard deviation instead of the standard

error, as this requires readers to cross the limits, and sometimes, there are crosses that the author identifies as significant.

14. The author uses the differential liver weight as an argument in the discussion. However, in the results, no statistical analyses are included to demonstrate that the difference in organ weight is significant. Perhaps the author relies on the standard error to mention differences, but even so, values from other groups should also be noted as significant, not just some.