

## 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 present study described the hepatoprotective effect of a mixture of the natural compounds ursolic acid (UA) and oleanolic acid (OA) by establishing a model of liver injury induced by anti-tuberculosis drugs (RIF/INH/PZA-). Treating with the mixture of UA and OA by gastric gavage for 60 days, observing the increase in body weight, and examining the biochemical indices of the blood, and carrying out a histological analysis, the authors concluded that the mixture had the ability to increase body weight, reduce the levels of liver enzymes, as well as reduce the damage caused by steatosis. Overall, the combination of UA and OA is hepatoprotective; however, there are still parts of this paper that do not convince me, and here are my comments:

- 1. The authors should have performed separate treatment controls of UA as well as OA to determine the source of efficacy of the combination and its individual efficacies.
- 2. The paper lacks an explanation of the current concentration of this combination used.
- 3. Regarding the fact that only HE staining was performed as a biological test to investigate the protective effect of the combination on liver injury, I believe that this is not enough and that more research should be done at the animal and cellular levels.
- 4. In this study, the authors examined the weight changes of different organs and various blood parameters, but I have doubts about the detection of kidney, urea, and other parameters; in addition, statistical data should be added to prove the differences between the group using this combination and the other groups in the treatment of liver injury.

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