

Review of: "Unravelling the Phytochemical and Pharmacognosy Contour of Traditional Medicinal Plant: Pterocarpus Marsupium Roxb"

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Potential competing interests: No potential competing interests to declare.

The manuscript entitles "Unravelling the Phytochemical and Pharmacognosy Contour of Traditional Medicinal Plant: Pterocarpus Marsupium Roxb" by A. Umamaheswari, et. al., explained about the attempt to unite its phytoconstituents and its pharmacological activities such as antidiabetic, antioxidant, antibacterial, antimicrobial, anticancer, anti-inflammatory, memory-enhancing activity, hepatoprotective, and antihyperlipidaemic activity. In the near future, further investigational studies are needed to isolate and characterize the bioactive compounds present as lead molecules in drug discovery research. The aim of the manuscript is providing to reveal the Pterocarpus marsupium Roxb has various pharmacological activities such as analgesic, anti-diabetic, anti-inflammatory, anti-cancer, hepatoprotective, anti-microbial, anti-bacterial, anti-diarrhoeal, memory-enhancing activity, antioxidant, and anti-hyperlipidaemic. The manuscript has been written regular with a good discussion. There are some revisions for better understanding as below:

- 1. The introduction section needs more literature survey for better literature review. Some relevant references to this research should be cited for literature survey review as follow: a) Journal of Molecular Liquids, 2022, 368, 120826. b) Journal of Biomolecular Structure and Dynamics, 2021, 39 (3), 1029-1043. c) Journal of Molecular Structure, 2022, 1269, 133803.d) Luminescence, 2022, 37 (11), 1836-1845. e) Journal of protein chemistry, 2003, 22, 23-30.
- 2. The compound in Table 1 has low solubility. What is propose of the authors about enhance of solubility? Please explain in the text of manuscript.
- 3. Nano-formulation of compound is one of enhance the cellular uptake. The authors should compare the different methods of nano-formulation of non-polar compounds from the viewpoint of increase of solubility.
- 4. The authors should compare the effect of compounds with nano-formulation of them on the cell lines from the viewpoint of the concentrations of nano form and their effect on the cll lines.
- 5. What is relationship between the solubility of compound and their anti-cancer effect? Do the non-soluble compounds have anti-cancer effect? Please explain in the text of manuscript.

After the revision, the manuscript can be considered in Qeios.