Reviewer's report

Title: Gallotannin-rich fraction from Caesalpinia spinosa (Molina) Kuntze exerts cytotoxic activity and increases sensitivity to doxorubicin treatment in a leukemia cell line.

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Reviewer: Min-Hsiung Pan

Reviewer's report:

Major compulsory Revisions

This study by Castañeda, et al., was aimed at evaluating the mechanisms by which chemotherapy in combination with natural products on leukemia cells may increase conventional therapy effectiveness. The authors conclude that P2Et fraction modulates tumor cell proliferation as potential sources of adjuvants, helpful in anti-tumoral therapy. Overall, the investigation is comprehensive and important novel results are clearly presented. However, there are some concerns in the manuscript that once corrected will improve the quality of this work.

1. The authors should provide the purity of P2Et and its chemical characterization.
2. Is the concentration (44.5 #g/kg) used relevant for those achieved in the human body?
3. The authors should evaluate the cytotoxicity of P2Et in normal cells.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

No