Reviewer’s report

Title: Effects of Eleutheroside B and Eleutheroside E on rat cytochrome P450 activity in vitro

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Reviewer: Jing-cheng Tang

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In this study, the authors reported eleutherosides including eleutheroside B (EB) and eleutheroside E (EE), two active ingredients existing in traditional Chinese Medicinal herb Eleutherococcus senticosus (ES), can inhibit rat liver cytochrome P450 enzymes CYP2C9 and CYP2D6 activity. The inhibition of P450 enzymes by eleutherosides is first reported and the kinetic parameters have been obtained. This study highlights the possible herb-drug interaction, a topic important for the safe use of herbal medicines. Overall, the study is comprehensive and the results are constructive for the safe use of herbal medicines. In my opinion the manuscript can be published after major revision.

1. English should be corrected. Some sentences in the manuscript are obscure and difficult to be understood. eg) 1. Introduction, line 6, “This medicinal plant is not only popular in China and Russia, but among the 10 popular herbal dietary supplements used in the United States [1]”. I suggest having the paper revised by a person with English as their first language.

2. The manuscript contains some typographical errors. eg) 2.3.3. Chlorzoxazone and 6-hydroxylation assay for CYP2E1, line 7, “onto” should be changed to “into”. These should be corrected.

3. In this paper, many data obtained come from HPLC assay, so the authors are supposed to provide the chromatograms with high quality of probe substrate assays for CYP2C9, CYP2D6, CYP2E1 and CYP3A activity.