Reviewer’s report

Title: Genotoxicity Evaluation of So-ochim-tang-gamibang (SOCG), a Herbal Medicine

Version: 0 Date: 23 Sep 2017

Reviewer: Przemysław Łukasz Mikołajczak

Reviewer’s report:

The manuscript titled "Genotoxicity evaluation of So-ochim-tang-gamibang (SOCG), a herbal medicine" is focusing on the study of potential genotoxicity of SOCG using three standard batteries of tests (1. bacterial reverse mutation test (Ames test), 2. in vitro mammalian chromosomal aberration test using Chinese hamster lung cells, 3. in vivo micronucleus test using ICR mice) as part of a safety evaluation. Authors found that SOCG is safe since it does not exhibit any genotoxic sings under the experimental conditions of the study. Since there is relatively little information concerning the genotoxicity of this product (mixture of 6 medicinal herbs as Cyperi Rhizoma (Cyperus rotundus L.), Lindera Radix (Lindera strychnifolia Fern.-Vill.), Aucklandiae Radix (Aucklandia lappa Decne.), Glycyrrhizae Radix (Glycyrrhiza uralensis Fisch.), Aurantii Fructus (Citrus aurantium L.), and Platycodi Radix (Platycodon grandiflorus Jacq. A.DC)., therefore the manuscript describes work on an interesting topic.

These following concerns need to be addressed:

A. Specific comments:

1. Since the SOCG is not popular in the rest of the world it should be of value to insert the information in what proportions is typically composed the product from these 6 herbs. There is an information about ratio of the product on the chapter "Preparation of the SOCG" (8: 4: 1: 1: 4: 4), however it is not clear whether the ratio is the same as in the commercially available product.

2. What was the solubility of SOCG in water, when up to the 5000 mg/kg dose was used in ICR mice, what was the volume of intragastrically administered SOCG or vehiculum? (see: chapter Methods, In vivo micronucleus test).

B. Minor errors:

1. It should be mentioned whether the values were expressed as arithmetic (?) means ± SD and what were the parameters in brackets (SEM?) (see: Table 1)

2. Please explain abbreviation : NOA (see: Table 3)

3. Some mistakes and errors in references:


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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