Reviewer's report

Title: Perilla Extract improves GI health in a randomized placebo controlled double blind human study

Version: 4 Date: 31 December 2013

Reviewer: Jurgen Drewe

Reviewer's report:

1. Is the question posed by the authors well defined?
   Yes

2. Are the methods appropriate and well described?
   yes

3. Are the data sound?
   Yes

4. 

5. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   Yes

6. Are the discussion and conclusions well balanced and adequately supported by the data?
   Some of the non-significant comparisons should be stated as such

7. Are limitations of the work clearly stated?
   Yes

8. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
   Yes

9. Do the title and abstract accurately convey what has been found?
   Title is too ambiguous “improves GI health”. This should be more specific. No abbreviation in the title

10. Is the writing acceptable?
   Yes, however abbreviations should be used consistently
The presented data are interesting, showing that Perilla extract given as a food supplement may significantly improve gastrointestinal disturbances. However, there are a major and numerous minor points that should be improved

- Major Compulsory Revisions

Page 1:

Title: “Perilla extract improves gastrointestinal symptoms in a randomized, placebo-controlled, double-blind human pilot study” instead of “Perilla Extract improves GI health symptoms in a randomized placebo controlled double blind human pilot study”. The term GI health is medically to ambiguous

- Minor Essential Revisions

Page 3:

Abstract
Line 3: “this” instead of “thus”
Line 6-7: “in vitro” and “ex vivo” always in italics and without hyphen
Line 7: delete “proprietary”
All over: “Perilla frutescens” always in italics
Line 9: “investigate” instead of “demonstrate”
Method: “The study was performed according to a double-blind, randomized, placebo-controlled parallel design” instead of “The study was performed double blind, randomized, placebo-controlled and with parallel design”
Do not start sentences with a number (e.g. “Fifty” instead of “50”)
Use always “run-in” instead of “run in” and “gut-brain” instead of “brain-gut”
Line 14: “30-70 years”
Line 20: “improved” instead of “imoroved”

Page 3:

Line 3, 10: please, remove key word “gut health”. This is too ambiguous and no medical term
Line 18: “apigenin” instead of “Apigenin”
Line 21: “melissa” instead of “Melisse” and “basil” instead of “Basil”.

Page 4:

Line 15: “double-blind, placebo-controlled” instead of “double blind, placebo-controlled”

Page 5:
Line 1: “reviewed and approved” instead of “reviewed”
Line 7: “Forty-seven” instead of “47”
Line 20: Delete sentence. This is a hypothesis
Line 21: Delete sentence. Not a part of Methods, but a general statement

Page 6:
Line 5: write “following reverse phase high performance liquid chromatography (RT-HPLC) method. RP-HPLC was performed…”
Line 13: “according to” instead of “due to”
Line 14, reference substances: was an internal or external standard used?
Line 14: Delete “with sufficient recovery rate” — unnecessary.

Page 7:
Line 6: consistent “4-week”
Line 16: use consistently the same abbreviation (PAC-SYM) throughout the manuscript
Line 21: use consistently the same abbreviation (PAC-QOL) throughout the manuscript

Page 8:
Line 14: “PSQ20” was not defined yet (e.g. “Perceived Stress Questionnaire”) and referenced

Page 9:
Line 1: “analysis of variance (ANOVA)” instead of “ANOVA”
Line 11: “or Mann-Whitney test, as appropriate” instead of “or rather Mann Whitney test”
Line 12: “confidence” instead of “confidential”

Page 10:
Line 5: “strengthened” instead of “strengthen”
2nd paragraph: which of the differences were statistically significant. If not, state it (“slightly” etc.)
End of 3rd paragraph: say “total GI symptom score”. “decreased significant by trend” is a contradiction! Say instead “decreased slightly”
What is the meaning of the star (p=0.048*)?
Next paragraph: indicate clearly what differences were significant

Page 11:#
3rd paragraph: “did not” instead of “didn’t”
Use “Bristol Stool Form Scale” instead of “Bristol stole scale”
Line 6: “number” instead of “amount”. Was the difference significant?
Line 15: use only the abbreviation PSQ20

Last line: Use “gastroenteritis” instead of “stomach flu”. The later is not a medical term but colloquial. Please correct also in Consort figure

Page 12:
Line 13: “The study was conducted according to a double-blind and placebo-controlled and parallel design with…” instead of “The study was conducted double-blind and placebo-controlled with…”

Page 13:
Line 6: “study population” instead of “collective”
Line 13: “could not” instead of “couldn’t”

Page 14:
Conclusion: Please move the 2 last sentences to the end of the discussion

List of abbreviations: PSQ20 Perceived Stress Questionnaire
Add ANOVA, SD, BMI

Page 16:
References: Reference 7 – page numbers are missing
Legend of Figure 2: “Scutellarein” instead of “scutellarein”
Titles of tables 2 and 3: “standard deviation (SD)” instead of “standard deviation”

Page 20:
Figure: “Gastroenteritis” instead of “stomach flu”
Figures 3 to 5 were not readable

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests