Reviewer's report

Title: Use of phytoestrogens and effects perceived by postmenopausal women: result of a questionnaire-based survey

Version: 1 Date: 21 March 2014

Reviewer: Sybil Crawford

Reviewer's report:

Major Compulsory Revisions:

1. Sixteen percent of respondents reported first-time use of phytoestrogens. Consequently, the questions on positive and negative perceptions of phytoestrogens since beginning use are not applicable to these women, and they should be omitted from analyses of these items.

2. Please provide more detail on how eligible participants were identified and recruited. Was this done by the pharmacist, based on a woman's purchase of a phytoestrogen product?

3. The Discussion section states that this study is the first to provide data regarding patterns of phytoestrogen use for postmenopausal symptoms. The authors need to do a more thorough literature review, as there have been a number of publications on this topic.

4. The current study includes only phytoestrogen purchasers, so does not provide information on the percentage of peri- or postmenopausal women using phytoestrogens. This needs to be discussed as a limitation.

5. It would help to have a table summarizing the characteristics of respondents, perhaps comparing subgroups based on a key variable such as length of use, or peri- versus postmenopausal status.

6. Tables 1 and 2 indicate in footnotes that data are missing on relatively large percentages of respondents. Please discuss further, including how nonrespondents differ from respondents, e.g., are they predominantly first-time purchasers.

Minor Essential Revisions:

1. The next-to-last paragraph in the Background section is not quite clear – is the message that phytoestrogen use is likely to be under-reported to physicians because it is considered to be a food supplement? If so, it is unclear why that would hamper assessments of phytoestrogen use in surveys. This has been done in a number of previous surveys.

2. Please clarify whether the survey was self-administered but distributed by pharmacists, or administered to respondents by pharmacists.
3. Numbers and terms are not quite consistent in several places. The abstract specifies 190 post-menopausal women ages 38-77, but the introduction mentions peri- and postmenopausal women, and the first paragraph of results gives the age range as 37-77.

4. Please indicate how postmenopausal and perimenopausal stages were assessed/defined. There doesn’t seem to be a relevant question included on the survey.

5. The sentence regarding 25 products containing phytoestrogens would be better placed in the Methods section.

6. The discussion section notes that the beneficial effect of phytoestrogens on hot flashes increased with long-term use, while other positive perceptions decreased with long-term use. The authors are using between-woman comparisons to make inferences about within-woman changes over time; that limitation should be noted.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.