Reviewer's report

Title: Is peripubertal soy intake related to age at onset of menarche? A cross-sectional study among adolescents with a wide range of soy food consumption

Version: 1 Date: 12 February 2014

Reviewer: Adrian A. Franke

Reviewer's report:

This interesting and relevant study examines the connection of soy intake and age at onset of menarche, the defined marker of puberty, using a web based questionnaire in populations of adolescent Seventh-Day-Adventist girls in California and Michigan. Despite the intelligent web based approach the null findings could be due to inaccuracies of self reporting which should be mentioned as weakness of this study. The lack of information about past dietary soy intake could have been improved by including in the questionnaire whether and how diet patterns have changed in recent years.

More importantly, instead of soy food intake soy protein intake should be used as surrogate for soy exposure as this is highly correlated with the soy and isoflavone content in these processed foods and adjusts for dilutions, especially important for beverages. All statistics should therefore be recalculated using soy protein intake.

This paper should be considered for publications after these items are carefully addressed.

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.