Reviewer's report

Title: Arachidonic acid and cancer risk: a systematic review of observational studies

Version: 2 Date: 5 November 2012

Reviewer: Claudia Agnoli

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MINOR ESSENTIAL REVISIONS

1. Methods, Quality assessment and data extraction, lines 150-153: I understand that studies were too heterogeneous to perform meta-analysis, however the minimal number of studies to perform a meta-analysis taking into account the study design (i.e. prospective cohort studies, case-control studies, etc.). In the 2007 WCRF Report, for instance, minimal numbers were 5 for case-control studies and 2 for prospective cohort studies. Did the authors mean that these numbers could not be reached, neither to perform a “high vs low” meta-analysis? Moreover, what did they mean when they asked that the meta-analytic approach could be misleading for the readers?

2. Discussion, lines 298-304: now the link between low reporting quality and publication bias is clear, however the authors should be cautious in the assessment of publication bias because they did not perform any statistical test (i.e. Begg’s or Egger’s test) but only a qualitative evaluation. Please mention this in the text.

Level of interest: An article of limited interest

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