Reviewer’s report

Title: The effects of EPA and DHA enriched fish oil on nutritional and immunological markers of treatment naïve breast cancer patients: A randomized double-blind controlled trial

Version: 0 Date: 03 Jul 2017

Reviewer: Alison Coates

Reviewer’s report:

This paper tested 4 weeks of fish oil supplementation vs placebo on markers of inflammation and omega 3 incorporation in patients newly diagnosed with breast cancer. This is an area with scare information and it is good to see a well-controlled study being conducted. There are a number of points to be addressed for clarification

P3, line 77- in the systematic review (ref 12) what time frame of supplementation was associated with a reduced risk?

P3, line 72/73 remove "in consequence"

P4- check ref 14 e

P4, line 81 is improved body weight an increase or decrease in this instance?

P6, line 150- how was BMI classified?- a reference should be provided or further details

P6, line 155- does NutWin have multiple databases to choose from- please specify

P9, given the high dropout was the study sufficiently powered? A retrospective power calculation would be helpful

P10- need to report on lipids and glucose results- where are these data reported? They should be in text or a table

P11, line 271- as the CRP change was not significant this should be stated rather than close to significant

P11, line 273-275- what changes occurred in CD8+ in the control group

P12, check grammar lines 291-295

P13, lines 314-325- this section focuses on changes in CD4+ but doesn't comment on CD8+ or the ratio- what are the implications of only CD4+ T lymphocytes changing
p13. Line 331 states the previous study ref 14 saw a change in PGE2 but this study did not—would you expect a change in 4 weeks?

I suggest removing the abbreviations in table 1

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