Reviewer’s report

Title: The JACS prospective cohort study of newly diagnosed women with breast cancer investigating joint and muscle pain, aches, and stiffness: pain and quality of life at baseline

Version: 1 Date: 13 February 2014

Reviewer: Diana Greenfield

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Overall
Dr Fenlon et al are intending to study a cohort of newly diagnosed women with non-metastatic breast cancer to demonstrate the epidemiology and natural history of joint and muscle pains, aches and stiffness. This intended prospective study is of interest since the evidence to date is derived from retrospective analysis of clinical trials. Here the authors describe the study proposal and present the baseline data. Overall the study is well-designed and has appropriate methodology. It is well-written, logical and easy to understand. Recommend to accept pending minor revision.

Title & Abstract
The abstract accurately conveys what has been found. There are no major discrepancies between the abstract and the remainder of the manuscript. However, the methods section teases the reader into thinking they will be receiving the results of the prospective study. It would be clearer if the authors introduce the intention to present the baseline data sooner and provide a rationale for this decision, (for the latter if not here then in the background).

Background
The background session provides a concise overview of the existing evidence and provides a clear rationale for the prospective study which is clearly acknowledged by the authors.

Methods
The outlined methods are clear and potentially reproducible. The authors justify their use of pain and QoL measures. The statistical analyses section is appropriate.

Results and discussion
Unusually, the results and discussion sections are presented together. However these are presented logically and are well supported by clear Tables and Figures. The data appear sound. There is no information provided about the severity of the musculoskeletal pain experienced by 69% of the cohort at baseline. This information would have been useful and associations with QoL explored in more detail both here at baseline and prospectively. Should this
information be available it would be useful to include here (discretionary revision), particularly to explore the natural history between treatment groups for the prospective study. Otherwise the lack of severity of pain information should be commented on as a limitation of the study (minor essential revision). Other limitations, ie cohort representation are clearly stated.

Conclusions
The acronym JAPAMS is used but not defined ? a typo. The conclusions are well-balanced and are supported by the data.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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'