**Reviewer’s report**

**Title:** Pilot randomised controlled trial of Weight Watchers® referral with or without dietitian-led group support for weight loss in women treated for breast cancer: the BRIGHT (BReast cancer weIGHT loss) trial.

**Version:** 0  **Date:** 14 Dec 2017

**Reviewer:** Stephanie Ross

**Reviewer's report:**

The BRIGHT Study was a pilot randomized controlled trial (RCT) that assessed the feasibility of implementing a breast cancer-tailored dietetic support with generic Weight Watchers (WW) referral as compared to generic WW referral or a control. Participants were randomized to receive a 12 session WW referral plus five breast cancer-tailored dietitian led group support (WW Plus group), a WW referral (WW group) or a WW referral after three months (Controls). At two time points (3 and 12 months) the authors measured change in body weight and QoL using the FACT-B questionnaire. I thought that this feasibility study protocol explored a very interesting clinical question and addresses the lack of research investigating weight loss among women with breast cancer. However, I do have a few comments:

**Major Limitations**

1. In the Abstract it states that: "This article reports the feasibility of the procedures and the outcomes of changes in body weight and quality of life in a parallel group-based intervention for women treated for breast cancer." I would suggest rewording this sentence because I feel that it does not truly capture the objective of your trial.

2. I found the discussion of weight gain in women with breast intriguing. It would be interesting if you could add a point on the factors that contribute to weight gain in women with breast cancer.

3. (line 25, page 3) "…teachable moment…” One could also argue that cancer patients could be more motivated to engage in healthy behaviors (ie healthy volunteer bias). This could be mentioned in the Background section.

4. I found that the primary and secondary objectives of the trial were not clearly outlined within the Manuscript. To provide more clarity, I would suggest that the authors incorporate the following sentences from the Methods section into the Background section:
(line 27, page 4) "The research question asked was: Is additional breast cancer-tailored dietetic support with generic WW referral.."

(line 32, page 4) "…The primary outcome assessed was feasibility of the trial procedures from recruitment till trial exit. The secondary outcomes assessed were changes in body weight and quality of life (QoL) (trial outcomes)."

5. It was stated that: (line 7, page 5): "Formal sample size power calculations were not required… programmes and possibility of pregnancy, to assess their eligibility." What was the authors rationale for recruiting 30 patients per arm? Furthermore, 45 patients were enrolled in the trial, which is about half of what the authors expected (N = 90). It would be helpful if the authors could discuss this point and implications for future RCTS.

6. Although it was stated that women were recruited from a breast clinic at ARI, I am unclear of how and when patients consented to join the pilot trial. Furthermore, I am unclear of why baseline measurements were taken prior to randomization. Since this was an open-label trial, there may be a disproportional rate of drop-outs.

7. Although the authors did a good job at explaining the treatment arms of the trial, the manuscript would benefit from a small section describing the trial design and including a statement on when the primary and secondary outcomes were measured (i.e. baseline, trial exit). For instance, the trial exit is introduced on (Line 31, page 7) and (line 33, page 7) yet there is not a clear description in the Methods Section. Also it would be beneficial if the authors could discuss the protocol amendment to extend follow-up to 12 months in this section and what happened to patients after the trial exit.

8. If the information is available, please provide more details on the patient characteristics (Table 3), including: "..completed initial treatment (surgery, chemotherapy and/or radiotherapy) for breast cancer…” was done in the neoadjuvant or adjuvant setting, stage of cancer and how many patients had ongoing treatment during the trial.

9. There appears to be an imbalance in Table 1 for the "Menopausal status at diagnosis". Please comment.

10. It would be interesting if the authors could also discuss RCTs that have assessed the effect of the Mediterranean diet in patients with breast cancer.

11. What is the minimally important difference of the FACT-B questionnaire for this patient population? Also please provide the completion rates for the QoL questionnaire.
12. (line 15, page 6) "The trial was run in two batches: Batch 1 (November 2013- February 2014) and Batch 2 (March-June 16  2014) to avoid a long interval between recruitment, baseline meeting and trial entry." Did recruitment, baseline measurements and randomization occur at these different times? Would future RCTs use this approach?

13. It was stated that (line 13, page 9) "the proportion of patients who had lost 5% or more...." and that (line 28, page 16) "...WW Plus group achieved clinically important >5% loss...". Although it was described in the Discussion section, it would be helpful if the authors could mention the clinical relevance of a ≥ 5% weight loss in the Methods section.

14. For the paragraph (line 17, page 17) "Participants from the WW group (46%, 5/11) reported having attended WW meetings more often than ... vegetables and reduction of the amount of "fattening" foods following trial exit." I feel that this section should be moved to the "Adherence" Results section.

15. The authors should also mention in the Limitations section that a long-term weight loss intervention may be required to observe a difference in weight-loss and an impact on survival.

Minor Limitations

1. Please provide the allocation ratio.

2. It would be helpful if the authors could indicate in the Methods section if any study personal, participants, statisticians were blinded during the trial. This information is scattered throughout the manuscript.

3. A period needs to be added (line 15, page 17): "... finishing the BRIGHT trial Finally..."

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal