Reviewer's report

Title: Weight change following breast cancer: evidence from a prospective, population-based, breast cancer cohort study

Version: 2
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Reviewer: Alexandra White

Reviewer's report:

General comments

This manuscript, Weight change following breast cancer: evidence from a prospective, population-based breast cancer cohort study, is well-written investigation into weight changes, and predictors of weight changes, 6-72 months after a breast cancer diagnosis. Obesity is particularly relevant to breast cancer survivors; obese cancer survivors may have a poorer prognosis. This study compares breast cancer survivors to age-matched population and found that breast cancer survivors tended to gain more weight and that their weight gain was associated with certain treatment factors. I think that this research is really interesting and useful evidence for the specific implementation of weight maintenance among breast cancer survivors. However, I have some significant concerns that need to be addressed prior to publication; chiefly, the authors need to discuss the large proportion of the cohort that was lost to follow up and whether these women tended to be more overweight. Secondly, the authors should also discuss why they used 6-months post diagnosis as their baseline rather than the pre-diagnosis weight.

Major Compulsory Comments:

Lost to follow-up in this cohort was high. This needs to be mentioned in the limitations and the authors should address and discuss whether lost to follow-up was or may have been associated with weight?

Using 6 month post-diagnosis weight may not be the best comparison. Women’s weight may have already changed to no longer reflect her pre-diagnosis ‘normal’ weight. Perhaps the authors should considering using a pre-diagnosis weight or at least justify the use of a 6-month post diagnosis?

Minor Essential Revisions:

Methods, Page 4, Data collection. Weight was measured but also self-reported. Are self-reported measurements ever used? If so, this should be more clearly stated in the statistical analysis section.

Methods, Page 4, Data collection. If the authors have information on pre-diagnosis weight change, wouldn’t that be a more informative baseline measurement then 6 months after diagnosis?
Methods, Page 5. Statistical Analysis. More information on the predictive model building would be helpful here. List variables included in predictive model. Were there other variables that were dropped?

Results, Page 6. Study Participants. ‘Demographic and clinical characteristics of the women who provided self-report and clinically-assessed data were similar to those women who provided self-reported data only (n=287)’ – Is this sample size correct? It doesn’t match with numbers in the methods.

Table 3. Clarify the definition for clinically associated in a footnote.

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

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.