Reviewer's report

Title: Weight change during chemotherapy is a poor prognostic in early stage breast cancer

Version: 1 Date: 19 February 2010

Reviewer: Crystal Tyler

Reviewer's report:

Is the question posed by the authors well defined?
The purpose of the manuscript was to investigate the prognostic value of weight variation during chemotherapy treatment. This question was well defined and explained in the introduction.

Are the methods appropriate and well described?
Kaplan Meier and Cox proportional hazards models, which were appropriate for the data and study questions, were used for analyses. The authors did not indicate whether the proportionality assumption was checked additionally did not state the type of p-values used. Authors also failed to test for effect modification or if effect modification was examined, the authors did not so mention in the text (specifically with respect to menopausal status).

Are the data sound?
Data appear to be sound but information on the quality of data was not included in the text.

Are the discussion and conclusions well balanced and adequately supported by the data?
The discussion and conclusions are supported by the data but there is no mention of potential limitations of the study

Are limitations of the work clearly stated?
Limitations of the study are not stated at all

Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Authors conducted a thorough review of European, Asian and North American literature and included studies which agreed and disagreed with their findings. Authors also included possible reasons for differing results between studies.

Do the title and abstract accurately convey what has been found?
The title used "Weight change during chemotherapy is a poor prognostic in early stage breast cancer" is a bit confusing because it may lead one to think that weight change is not a prognostic factor when examining breast cancer survival, when in fact, the authors found that weight change is predictive of decreased
survival. The authors should consider modifying the title to indicate this.

Is the writing acceptable?
The manuscript could use some minor editing, especially in the discussion section.

The following are Minor Essential Revisions for the authors consideration:

Methods:
Please include the number of individuals excluded from analyses in the population section.
Indicate whether weight was measured by the hospital at each chemotherapy session or self-reported by the breast cancer patient?
Is there information available on the patient’s usual adult weight (i.e., before breast cancer diagnosis)
A clearer explanation should be given on why negative weight change and positive weight change was grouped together. It seems to me that these would represent different circumstances and reactions to chemotherapy.
Were other BMI categories or continuous BMI measurements considered for analyses?
Please indicate which variables were statistically significant and included in the multivariate models
Did you have information on smoking status?

Results:
Are the estimates presented in table 2 HRs or RRs?
It would be clearer if the number of patients in each category along with the point estimates were included in table 2.

Discussion:
Is there evidence that indicates that anthracycline-based therapy has a differential influence on weight gain than non-anthracycline-based therapy? If so, please cite.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.