Reviewer’s report

Title: NEPHA: A prospective, randomised, multicentre study to compare enteral and parenteral nutrition supports for patients with malignant haemopathy undergoing allogeneic haematopoietic stem-cell transplantation

Version: 1 Date: 30 December 2014

Reviewer: Andrew Vickers

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NEPHA study for Trials

I found this to be a weak protocol. Too many data is taken on too few patients; the statistical plan is vague and ambiguous.

1) Too many data. If you look at table 2, there are 27 endpoints (one of which has several domains) repeated up to 10 times. There are therefore nearly as many endpoints as patients.

2) Too few patients. The authors have set the event rates as 17% and 5%, suggesting that over 70% of the deaths in this patient group are due to correctable nutritional problems. That strikes me as extremely implausible.

3) Statistical plan too vague. The ideal for a statistical analysis plan is that two independent statisticians receiving the trial data set could follow the plan and come up with virtually identical sets of results. This cannot be the case if the protocol states that although one test is planned, another might be used “if necessary” and that a third approach “could be envisaged”. In some cases (e.g. time to event) two separate analyses are planned (log rank and Cox regression). The plans for many endpoints are extremely vague (the protocol states only that they will be analyzed using mixed models). The protocol should explicitly state a single analysis planned for each and every hypothesis with a justification for each.

4) The statistical approaches are questionable in many cases. Some endpoints to be assessed by t-test (e.g. number of days of re-hospitalization) are Poisson in nature, and should be tested by Poisson or negative binomial. Some endpoints, such as survival, are described in terms of Cox or log rank even though the protocol states that these are binary endpoints at one year.

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

none