Reviewer's report

Title: Bortezomib and dexamethasone for multiple myeloma: AST and LDH associated with overall survival.

Version: 1 Date: 13 April 2014

Reviewer: Eleni Mayson

Reviewer's report:

Major compulsory revisions
Overall, this manuscript is based on sound research.

1. AST/LDH and overall survival link
However, the title is misleading. The title states that "AST and LDH (are) associated with overall survival", however the conclusion of the manuscript suggests a possible association with a worse prognosis but with further studies needed. I think if the link between AST and LDH is going to form a major point of discussion, it needs to be clarified. I agree that high AST and LDH are likely to reflect high disease burden and therefore plausibly a worse prognosis.

The authors need to clarify the statement (last sentence, paragraph 2 of Discussion "Consistent with this, our data did not reveal a significant impact for Durie-Salmon stage or ISS stage". Do they mean DS-stage or ISS-stage did not correlate with high AST and LDH levels?

2. Did the patients with high AST/LDH have higher stage or other poor prognostic features in their disease that may be acting as confounders to the poor prognosis?

3. Why are a high AST and LDH not also associated with shorter PFS or time to disease progression?

4. Section 2.3 Treatment. The data summarising the % of patients who discontinued therapy, ahd other chemo, had no other treatment or who had radiotherapy is BEST summarised in a table. Would be clearer and easier to read in a table.

5. How were the genetic tests performed (cytogenetics or FISH?) and on what samples (bone marrow?). Can you clarify whether no t(4,14) was detected in any sample (associated with bortezomib responsiveness) or was it not tested for.

6. Authors need to document strengths and weakness of their study, and acknowledge its limitations.

7. Were there any cases excluded from review? If so, why were these cases/patients excluded?
Minor Essential Revisions

1. Please correct spelling errors and grammatical errors (see inserted "sticky notes" on attached PDF)

2. The Figures at the end (survival probability) have no title and are not referred to in the text. Please label with "Figure 1, Figure 2), add a title for each and refer to them in text.

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

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

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