Reviewer's report

Title: Anaemia and thrombocytopenia in patients with prostate cancer and bone metastases

Version: 1 Date: 18 March 2010

Reviewer: bruce Trock

Reviewer's report:

This is a report of a small unselected cohort of men with prostate cancer metastatic to bone marrow, and the occurrence of hematologic events and association with survival. A few clarifications would improve the value of this report.

Major compulsory revisions:

1. The median time to develop Hb<10 g/dL was 24 months, and among those men the median survival from this event was 5.4 months. This is claimed to be an indicator of poor prognosis. Because the median survival for the entire group of 51 patients was only about 29 months (from Figure 1) it would be important to be able to compare survival (i.e. Kaplan-Meier survival curves and median survival) from BM until death for the group that did develop HB<10 and the group that did not.

2. How many possible cut-points were evaluated before arriving at the value of 12 g/dL for the Hb level at diagnosis of BM? If multiple cutpoints were evaluated the analysis should be adjusted for multiple comparisons, such as with a Bonferroni correction, particularly because of the small number (n=5) with Hb<12 g/dL.

3. How were hematological events determined to be temporary and not related to prognosis in men who received chemotherapy or radioisotopes, i.e. were all such events observed to be reversible?

Minor essential revisions:

4. It may be confusing that men whose diagnosis of bone metastasis occurred after their initial treatment are sometimes referred to as "delayed" BM and sometimes as "metachronous" BM; consistent use of a single term may be better.

5. Men who had "low" Hb at diagnosis of BM were not at increased risk of developing Hb<10 g/dL during follow-up. Please use an actual Hb value to define "low." Also, please provide the proportion of men with and without "low" Hb at diagnosis of BM who went on to develop Hb<10 g/dL; since there were only 5 men in the "low" group a statistical test may not have the power to test association with Hb decline.
Discretionary revisions:

6. The Discussion seems to repeat too much of the Results data values. It may be better to focus more on potential limitations, and also the potential clinical implications if these results are validated in larger studies.

7. More descriptive titles for the Tables would be helpful. Generally, the title of a table should have enough information that it can be interpreted on its own by a reader.

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.