Reviewer's report

**Title:** Prognostic impact of Skp2, ER and PGR in male and female patients with soft tissue sarcomas

**Version:** 1  **Date:** 29 November 2012

**Reviewer:** Andrew H Beck

**Reviewer's report:**

Major Compulsory Revisions:
1. Several of the authors' primary conclusions involve differences in prognostic associations of markers by gender. However, the authors do not formally test for this interaction but rely on whether the individual p values are "significant" in men and/or in women. They should instead directly test the statistical significance of the interaction.

This important issue is discussed in these refs:
http://www.nature.com/neuro/journal/v14/n9/full/nn.2886.html

For a directly relevant example, see:
http://clincancerres.aacrjournals.org/content/15/14/4665.long

in which the investigators test for an interaction between CDX2 expression and family history in predicting prognosis.

Discretionary Revisions:
1. Table 6 (multi-variate analysis) should explain in more detail the differences between the individual factor-level p values vs. the overall significance p value.

2. The study includes ~30 reported (raw) P-Values from a variety of sub-analyses. Many of these p-values are near the threshold of 0.05 and deemed significant if below this cut-off. The authors should consider correcting for multiple hypotheses (by Bonferroni, for example), in which case only a few of their most significant associations would remain significant at the 0.05 level. It would also help the readability of the paper if the authors stated their primary hypotheses and focused presentation of results and interpretation on these, prior to also reporting all of the sub-analyses.

**Level of interest:** An article of importance in its field

**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'