Reviewer's report

**Title:** Characterization of Beta2-Microglobulin Expression in Different Types of Breast Cancer

**Version:** 1  
**Date:** 18 August 2014

**Reviewer:** Jinjun Li

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In this manuscript (MS), the authors reported that although the expression of beta-2-microglobulin (#2-M) mRNA demonstrated no significant differences in the four molecular subtypes of breast cancer and no significant correlations with age, clinical stage or lymph node metastasis, #2-M mRNA expression demonstrated a positive correlation compared to Bcl-2 transcript expression. The #2-M protein expression was significantly higher in breast cancer compared with those in benign breast tumors. Importantly, there was a significant differential expression of #2-M in the four molecular subtypes of breast cancer, and between the ER+ and ER- groups of breast cancer. They concluded that the expression of #2-M had a significant difference in four molecular subtypes of breast cancer, and a negative correlation with ER protein expression. The current study is an interesting study that has a potential to be published for providing novel insights into the relationship between #2-M and ER expression in breast cancers. Follow these tips maybe help to improve the manuscript's quality and effectiveness.

**Minor points:**

1. It needs to confirm and correct the sample numbers of breast cancer patients in Tables;
2. It needs to add the PCR primer sequences and sequences for #2-M siRNA fragments.
3. In order to avoid confusion, "breast benign tumors" should be replaced with "benign breast tumors".
4. "liquid tumors" also called blood cancer, which include leukemia and lymphoma, in this MS, it is best to replace "liquid tumors" with "leukemia";
5. There are some spelling mistakes need to be corrected, for examples: " B cell lymphoma/leukemia-2 (Bcl-2)" should be " B-Cell Lymphoma/Leukemia 2 (Bcl-2)" in Abstract, "straining" should be "staining" on Page 8 (two places) and in Table 1 (one place), and so on.

**Level of interest:** An article of outstanding merit and interest 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.
Declaration of competing interests:

I declare that I have no competing interests