Reviewer’s report

Title: Elevated C1orf63 expression is correlated with CDK10 and predicts better outcome for advanced breast cancers: a retrospective study

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Reviewer: Gerwin Heller

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In the manuscript entitled "Elevated C1orf63 expression is correlated with CDK1 and predicts better outcome for advanced breast cancers: a retrospective study" Hong et al. describe results of C1orf63 expression analyses in breast cancer cell lines and in clinical samples of a large number of breast cancer patients. Overall, the manuscript is well written, however, some points should be reconsidered:

Major Compulsory Revisions

1. In the section "Impact of C1orf63 expression on OS in all breast cancer patients" the authors compare C1orf63 expression levels with OS of all breast cancer patients included in their project. However, since breast cancer is a heterogeneous disease with defined subtypes, I suggest to perform this analysis separately for luminal A, luminal B and basal-like tumors.

2. The authors describe a trend towards better outcome of C1orf63 positive patients, however, no statistical significance was reached. I suggest to use the kmplot tool (http://kmplot.com/analysis/) and search for associations between C1orf63 expression and PFS / OS of breast cancer patients. This database includes expression data of more than 3000 breast cancer patients which can be classified according to PAM50 and other scores.

3. The authors describe a positive correlation between C1orf63 expression and CDK10 expression based on Affymetrix microarray data. Although p-values were statistically significant, R values indicate only weak correlations. To strengthen their findings, I suggest to repeat this analysis using RNA-seq data from TCGA using the cBio portal (http://www.cbioportal.org).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests