Reviewer's report

Title: Epigenetic regulation of CD44 in Hodgkin and non-Hodgkin lymphoma

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Reviewer: Qian Tao

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Röhrs et al analyzed the epigenetic regulation of CD44 in multiple lymphomas, after screening the methylation of 24 TSGs. They reported that CD44 was epigenetically silenced in multiple lymphoma types, and played a TSG role in the apoptosis of lymphoma cells. This is an important study and the findings indicate that CD44 methylation could be an epigenetic biomarker for lymphomas, although CD44 methylation has been reported in multiple other tumors.

Comments:

1. In Figure 2, the MSP data of CD44 does not match MS-MLPA analysis in some cell lines. Could this be due to the specificity of either assay like MSP primers? The authors should discuss it.
2. Fig4A, the methylation status of each line should be indicated.
3. Besides the relationship between CD44 expression and methylation in cell lines, it would also be interesting to check the correlation of CD44 methylation with its expression in at least some lymphoma samples.
4. It is unclear in Table 2 whether they authors have checked methylation in primary lymphomas. The data should be included.
5. The English needs further polishing. The result and discussion should be more concise to make it clearer.

Level of interest: An article of importance 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