Reviewer's report

Title: Epigenetic alterations of the keratin 13 gene in oral squamous cell carcinoma

Version: 2
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Reviewer: Stefan M Willems

Reviewer's report:

This is an interesting paper which aims to assess the mechanisms by which Keratin 13 (KRT13) is repressed in oral cancer. This repression had been identified in previous papers, but the mechanism (and potential target for therapy) remained unknown. This manuscript sets out to do that, though several points should be clarified to make this manuscript publishable.

- Major Compulsory Revisions

1. Results, paragraph “Alterations of histone H3…”: Why is only the SAS cell line compared with the HaCaT cell line, instead of comparing also the other two OSCC cell lines. If HSC4 cells show different histone H3 methylation patterns than HSC3 and SAS cells, this would make your point that aberrant targeting of PRC2 to the KRT13 promoter may cause the observed KRT13 gene repression in HSC3 and SAS cells, but not in HSC4 cells stronger.

2. Results, paragraph “KRT13 gene reactivation…”: although DZNep restored KRT13 mRNA levels, no information of restoring of protein levels of KRT13 have been shown (yet). Therefore, the statement of “reactivates KRT13 expression” in both this paragraph and the conclusion should be rephrased and correct conclusions should be drawn (or restore of KRT13 protein level by western blot or immunofluorescence should be shown).

3. Discussion, paragraph two: As mentioned in (1), current data are insufficient to support the statement that additional event such as histone modification is responsible for KRT13 gene silencing in OSCC.

- Minor Essential Revisions

Minor issues not for publication:

1. Methods, Cells and drug treatment; type error “HCS3” should be “HSC3”.
2. Results, KRT13 promoter methylated in OSCC cells; “Figure 2A” and “Figure 2B” should be “Figure 3A” and “Figure 3B”.

- Discretionary Revisions

none
**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'