Reviewers report

Title: Differential expression of 12 histone deacetylase (HDAC) genes in gliomas: hypoexpression in glioblastomas

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Reviewer: Javier S. Castresana

Reviewers report:

The manuscript presents results concerning the expression of histone deacetylases (HDAC) in glioma samples. Although it might be expected to find overexpression of HDAC in higher grades of glioma, like glioblastoma, the authors found the contrary: association between reduced expression of HDAC (detected by RT-PCR and western blot) and higher grade tumors.

In several tumors other authors have found overexpression of HDAC in high grade tumors, which is in agreement with the idea that deacetylation induces a more compacted chromatin and subsequently a generalized hypo-expression of the genome. Maybe, then, some tumor suppressor genes are functionally knocked down and contribute in such a way to tumor progression.

It occurs the opposite in this manuscript. Maybe the authors might include a kind of explanation considering that HDAC lower expression in higher grades of glioma might turn on a generalized hyper-expression status of the genome. In such a way we might infer that some proto-oncogenes might be overexpressing, and so, inducing cancer progression. Maybe oncogenic actions are as a whole more important than tumor suppressive actions for glioma progression. Or it might be that the expression of some of the most typical oncogenes related to glioma progression, like EGFR or others, are linked to HDAC downregulation. I suggest these comments be included in the Discussion section.

Minor Essential Revisions
- Include comments given above in the Discussion.
- The reviewer found several spelling mistakes along the manuscript. It should be properly corrected.
- The references do not follow the proper format, at least in the titling of the journals cited.

Level of interest: An article whose findings are important to those with closely related research interests

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