Reviewer’s report

Title: Epigenetic silencing of genes and microRNAs within the imprinted Dlk1-Dio3 region at human chromosome 14.32 in giant cell tumor of bone

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Reviewer: Jianru Xiao

Reviewer’s report:

The authors revealed the down-regulation of Meg3, Dlk1 and some other genes and microRNAs in GCT, and a combined treatment of Aza and PBA could increase the expression of these genes. Furthermore, the author found a frequent hypermethylation within the IG-DMR in GCTSCs. Overall, this study is valuable. However, I have two questions:

1. Do Aza and PBA increase the expression of these genes through targeting IG-DMR CpG 1-13 that the author found as a frequent hypermethylation in GCTSCs?

2. What is the influence of the up-regulation of these genes to GCTSCs, as there is still few reports about them in GCT?

Level of interest: An exceptional article

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.