Reviewer's report

Title: Expression levels and promoter methylation of mismatch repair genes in sporadic colorectal cancer in the Czech Republic

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Reviewer: Hideo Baba

Reviewer's report:

The authors have presented an interesting study of the relationship between expression levels and promoter methylation of mismatch repair genes in sporadic colorectal cancer. However, there are crucial problems described below. We believe that the manuscript is not suitable for publication in the BMC Medical Genetics.

1. Because methylation of promoter region was detected only in MLH1, the authors can not prove between mRNA expression levels of mismatch repair genes and their promoter methylation. The authors should inquire whether the title is appropriate.

2. In supplementary table S2, significantly lower mRNA levels were observed in tumor tissues when compared with adjacent healthy mucosa with regard of EXO1. However, the result is the opposite in supplementary table S3a. The authors should analyze this problem.

3. The expression level of mismatch repair genes increase in the cancer compared with healthy mucosa. Can the authors prove that there is the close relationship between cancer and mismatch repair genes by this results? The authors should show whether the same tendency is also observed in Lynch Syndrome.

4. There seems to be no significant difference with the EXO1 expression in figure 1, as error bar is high. The authors should explain this point.

Level of interest: An article of limited interest

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.