Reviewer’s report

Title: Temporal Evolution in Caveolin 1 Methylation Levels During human Esophageal Carcinogenesis

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Reviewer: Ping-Chang Yang

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The paper needs a minor revision:

This study characterizes CAV1 gene in an important human malignancy. It is well written, and supported by carefully performed techniques and interpretation of results. Novel information is derived from this study with potential clinical application.

However, I have the following concerns that should be addressed before accepting for publication:

1. How were these patients followed up to determine the outcome? The authors need to describe it more detail.

2. It is well-known that smoking and alcohol drinking are modifiers of DNA methylation. But it seems that the authors did not take this into account in data analysis. Smoking and alcohol drinking should be shown in Table 1. This issue should also be discussed.

3. The expression of CAV1 on RNA and protein levels should be analyzed to demonstrate "hypermethylation of CAV1 promoter leading to gene silencing..." on patients’ specimen. Post-transcriptional regulation may also exist.

4. The cell line data is limited to one cell line and it is not surprising that a non-specific demethylation agent will increase CAV1 expression levels.

5. How reproducible were these assays?

6. References for the formula of NMV and NRV are missing.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
none to declare