Reviewer’s report

Title: A meta-analysis and The Cancer Genome Atlas data of prostate cancer risk and prognosis using epithelial cell adhesion molecule (EpCAM) expression

Version: 0 Date: 25 May 2019

Reviewer: Alcides Chaux

Reviewer’s report:

In this study, authors present the results of a meta-analysis of EpCAM expression and outcome in patients with prostate cancer. Authors included 7 studies which met their selection criteria. They found that EpCAM was associated with tumor progression, recurrence and dissemination. A few recommendations for the manuscript are provided below.

1. The manuscript needs some language corrections before being ready for publication. Please conduct a grammar check with a native English speaker or consider using an editing service.

2. Systematic review: Please specify if the search included unpublished results from repositories and studies presented at conferences and meetings. If not, please conduct a new search to avoid publication bias.

3. Selection criteria: Please check if the immunohistochemistry protocols used in the included studies are similar or equivalent, as this can be a significant source of heterogeneity.

4. Avoid the term multivariate analysis throughout the manuscript. This term is utterly unspecific and can be confusing (v.g., multivariate regression is a specific type of regression that should not be confused with other types of regression).

5. Justify the rationale of using two statistical packages (STATA and R), considering that a proper meta-analysis can be conducted using any of them. If in doubt, prefer R and publish the code to make the analysis reproducible. Also, please correct the data from the R publishers.

6. RoB: report the results from Egger's test and include funnel plots to assess publication bias.

7. Reported OR are excessively large, please check standard errors. If the standard errors are large, then the ORs are not valid.

8. Please include the results of the sensitivity analyses that were carried out (i.e., the change in the I-squared statistic)

9. Please review the forest plots that include P = 0.000. Report the exact P value.

10. Figure 4 is of low quality and mainly uninformative, as it does not add any significant information that is not included in the text. Please consider removing it.
11. Did the authors conduct a fixed-effects model analysis or they went straight to the random-effects models? Please justify the choice.

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