Reviewer's report

Title: ADAM33 gene silencing by promoter hypermethylation as a molecular marker in breast invasive lobular carcinoma

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Reviewer: khalid Sossey-Alaoui

Reviewer's report:

The authors report the positive correlation between ADAM33 gene silencing by promoter hypermethylation and invasive lobular carcinoma.

The ADAM family of genes is known to be associated with the pathology of the upper respiratory tract including Asthma susceptibility. The authors decided to investigate whether ADAM33 is involved in the pathology of cancer based on published data linking ADAM22, a related gene to ADAM33, to more aggressive forms of breast cancer.

The data presented in this manuscript conclude that gene expression silencing of ADAM33 by promoter hypermethylation is associated with invasive Lobular carcinoma of the breast.

The required experiments to come to this conclusion were adequately conducted, and study clearly fits within the scope of the journal.

The major issue with manuscript is related to the style with which the way the results section was presented. I would suggest the following changes.

1- Remove figure 2a, since it does not bring any new information, especially in this era on advanced bioinformatics.

2- Figure 2c should be part of figure 3, where the methylation specific PCR is presented.

3- I would be curious to know the methylation status of the second CpG Island that the authors decide to just ignore.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests