Reviewer's report

Title: Implication of metastasis suppressor gene, Kiss-1 and its receptor Kiss-1R in colorectal cancer

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Reviewer: Michael Koutsilieris

Reviewer's report:

In this paper the authors for the first time shed light in the intracellular pathway of the Kiss-1/Kiss-1R system (ERK and MMP9) in colon cancer and they verified that the kiss-1 gene is presents anti-metastatic actions in colorectal cancer and its expression is associated with better prognosis in colon cancer patients.

Line 232: Suggest that the presence of Kiss-1R is significantly associated with disease free survival, and at line 234 the authors say that high expression of kiss-1R transcript is associated with poor prognosis. Can the authors please clarify this part?

Figure 4a: It is not clear what is what. It seems that the kiss-1R KD responds to exogenous administration of kisspeptin 10 similarly to the kiss-1 KD. The kiss-1 expression in the cell lines used is quite low (fig 1c western blots) maybe a cell line with a higher expression would represent a better model for the kiss-1 KD study.

A positive control is missing (human placenta maybe?) The results obtained by the authors could be verified by an overexpression experiment in these cell lines used in this study whereas the exogenous administration of a blocking anti-Kiss-1 antibody could verify the autocrine / paracrine effect of kiss-1.

What was the amount of exogenous Kiss-1 used?

Minor comments:
Line 72: references required
Better alignment is required in the WB.
241: “The results that slight difference...support this hypothesis”.

Level of interest: An article of importance in its field

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.
Declaration of competing interests:

I declare that i have no competing interest