Reviewer's report

Title: Plexin-B1 silencing inhibits ovarian cancer migration and invasion

Version: 1 Date: 6 March 2010

Reviewer: Gomez Roman Jose Javier

Reviewer's report:

I think this is a very interesting paper that shows some remarkable data and it can be published but there are some aspects than must be revised before it.

Major Compulsory Revisions:

1. In results section and in general in all the parts of the manuscript I think there is a problem with the terms the authors use that can be confusing. The term malignant carcinoma is not adequate because it is redundant. All the carcinomas by definition are epithelial malignant neoplasms. Probably, they would be better to use the term ovarian carcinomas when they discuss about the epithelial malignant cases.

2. The figure 1B shows only blood channels and mesenchimal tissue and it seems like the ovarium hilia was the source of the photograph instead of a benign ovarian lesion as it is stated in the figure legend. Otherwise, in figure 1A a proliferation of epithelial tissue is shown. Is it possible that a mistake could occur between the two photographs? This is an aspect the authors must clarify before publishing. Moreover, the 1C figure is not clear because the quality of staining is poor. It would be better a higher magnification picture where the membrane staining was clearly demonstrated in the borderline tumor.

3. On the other hand the authors do not specify the benign conditions that they have studied. It is of interest because they are discussing about epithelial neoplasms and it is not the same to evaluate an ovarian fibroma or a thecoma than a cystadenoma.

4. Otherwise the authors do not mention the percentage of mucinous and serous carcinomas that are included in the series. It could be of interest to analyse the possible differences between the two histological types.

Minor Essential Revisions

1. In results, the authors have found that: Plexin-B1 expression level of SKOV3 cells was the highest, while negative expression was found in OV2008 cells and they present the figure 1 E and 1F where RT-PCR and western blot results can be analysed. In western blot, the cell line OV2008 seems to have some kind of protein expression although RT-PCR seems like negative.


3. In results section, the sentence: “Although Plexin-B1 immunoreactivity
evaluated gradually from stage I (45%) to stage IV (70%), there were no significant differences” must be changed in order to clarify its meaning.

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 hold a patent about Plexin-B1 role in renal cell carcinomas. In the patent no comment is made about that gene in other kind of neoplasms