Reviewer's report

Title: Fibulin-4 is associated with tumor progression and a poor prognosis in ovarian carcinomas

Version: 3 Date: 7 November 2014

Reviewer: Arthur Cheung

Reviewer's report:

It is an interesting study to investigate the potential of the Fibulin-4 protein to serve as biomarkers in ovarian carcinomas. The Chen et al tried to correlate the expression of the Fibulin-4 with different clinical outcomes of the ovarian carcinoma samples. However, there are several questions about the results need to be addressed by the authors

Major Compulsory Revision

1. For figure 3E, QPCR results show a significant difference of Fibulin-4 expression between the highly invasive and low invasive cell line subclones. However, in the protein level, they author only included the IHC staining to support the differences in Fibulin-4 protein level among different subclone. It is necessary to include WB with appropriate loading control to investigate the difference in Fibulin-4 protein expression between the highly invasive and low invasive cell line subclones.

2. For the Fibulin-4 and the VEGF study, it seems that after statically analysis, Fibulin-4 may associate with VEGF expression in the ovarian tissues. Have your group measured the expression of VEGF (Protein and RNA) in the high and low Fibulin-4-expressing sub clones to confirm the association?

3. In the discussion part, the authors proposed that the Fibulin-4 may promote angiogenesis, it is necessary to provide more evidence to support this hypothesis. For example, performing IHC staining in the same set of tissue with blood vessel marker(s) or other pro-angiogenic proteins to investigate the association between the Fibulin-4 and angiogenesis.

Discretionary Revisions

1. For the IHC staining, it is better to include the description about the subcellular localization of the stained protein.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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 interests