Reviewer's report

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

Version: 2 Date: 29 April 2010

Reviewer: Magali Williamson

Reviewer's report:

The authors have addressed three out of four of my major concerns about the paper. Point 2 (knocking down the gene in other ovarian cell lines, to determine if their observation is a general phenomenon for ovarian cancer cell lines) has not been done. However the authors have discussed this matter in the text.

The authors discussion in the text in response to Point 3 needs to be rewritten as it does not make sense. The authors are suggesting that Sema4D/PlexinB1 signalling activates AKT in ovarian cancer cell lines. If this is the case, plexinB1-mediated AKT activation seen in SKOV3 cells in the absence of exogenous sema4D could result from sema4D produced by the cell line, or as a result of overexpression of plexinB1 in the absence of ligand.

Other errors:

p14 INcreased AKT activity is associated with cell growth........
p14 'it has been reported that PlexinB1 IS IMPLICATED IN the process of........
p18 ...dimerisation of plexinB1 is sfficient to induce Rac-dependent activation of Rho........PlexinB1-dependent Rho activation is NOT dependent on Rac, but is dependent on ErbB2.
p19 plexinB1 in SKOV3 cells lead to cell SHRINKAGE and loss .................
p19 however in this report it is uncertain whether.....(miss out that)

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.