Reviewer's report

Title: Genes Associated With Prognosis After Surgery For Malignant Pleural Mesothelioma Promote Tumor Cell Survival In Vitro

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Reviewer: Peter Szlosarek

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- Major Compulsory Revisions

This is a technically well-conducted study in a therapeutic area that is in great need of innovation by a major established group in mesothelioma research. The authors have pointed out the major limitation of this study, namely the choice of WI38 and A459 cell lines to model the potential biological role of the 4 genes linked to prognosis in mesothelioma. Of note, hTERT immortalized human mesothelial cells are now available in some centers for study (via Prof Gazdar, Texas). Bearing this in mind and based on the available literature, the following revisions are indicated.

1) Knockdown of PKM2 mRNA has been shown recently to induce apoptosis in the A549 cell line in vitro and in vivo (Shi et al, Cancer Sci 2010 101(6):1447-53). In view of the use of the same cell line with differing results, this paper should be referenced and discussed in the current manuscript.

2) Knockdown of ARHGD1A triggered apoptosis in both the normal and the malignant cell line, thereby questioning the utility of ARHGDIA as a suitable therapeutic target in cancer - especially in view of the renal failure noted in ARHGDIA (-/-) mice. The conclusions are therefore only pertinent to COBLL1 and TM4SF1 as potential tumor specific targets.

3) The role of surgery, such as EPP, in MPM remains debatable and this should be acknowledged in the manuscript using more circumspect language.

- Minor Essential Revisions

1) Grammar: paragraph 6 of discussion: "belongs to a family"

2) The second sentence of paragraph 8 of the discussion "Although Experimentally" is long and needs revising.

3) Remove "due primarily to excessive variability" in paragraph 7 of the discussion.

Declaration of competing interests:
I have no conflicts of interest to report.