Reviewer's report

Title: Association of Fascin-1 with Mortality, Disease Progression and Metastasis in Carcinomas: a Systematic Review and Meta-analysis

Version: 4 Date: 6 December 2012

Reviewer: sarah donegan

Reviewer's report:

Sarah donegan comments

1. Re-review point 13: The quality of all 26 included studies should be assessed.

Authors’ response: We have now assessed the quality of all 26 included studies. The results of the quality assessment are shown in additional file 1 and a summary of the quality of the studies is given on page 11. As stated in the Discussion (page 23), ??the high quality studies showed a positive association between fascin-1 expression and mortality (pooled fixed effects HR: 1.43 (1.26-1.63; p<0.001), that was similar in magnitude to the association observed when all 18 studies were pooled (pooled random effects HR: 1.44 (1.24-1.68; p<0.001).

Reviewer response 1: Good. Results from the quality assessment are given for each study as requested.

2. Re-review point 15: When there is significant heterogeneity (chi-square p-value <0.1), use the random effects model i.e. figures 2, and 3 (overall). The result from the random effects model is equivalent to the result from the fixed effects model when there is no heterogeneity, so if there is a difference between the results from each model, you could use the random effects model.

Authors’ response: We have made the changes according to the reviewer’s request. Because the decision to carry out fixed or random effects meta-analysis is an area of considerable controversy, we have presented both the fixed and random effects results in the forest plots (when the I2 value was more than 50% or when the chi-squared p-value was less than 0.1) to allow readers to make their own judgement.

Reviewer response 2: I disagree with presenting the results from the fixed effects model when there is heterogeneity because the underlying assumption of homogeneity is violated and therefore the result is misleading. I do agree that it is useful to compare results of fixed effects and random effects models as part of the assessment of the underlying homogeneity assumption, however, in my opinion, only the result of one model (fixed or random effects) should be presented to help readers avoid misinterpreting the results. The review author appears to have focused only on the random effects model in the results text,
which should help avoid readers misinterpreting the evidence, therefore I am happy with the authors changes and response.

3. Re-review point 16: When there is significant heterogeneity, do not report the fixed effects meta-analysis in the forest plot because the confidence intervals are artificially narrow.

Authors’ response: As stated above, we have now presented both the fixed and random effects results in the forest plots when the I² value was more than 50% or when the chi-squared p-value was less than 0.1, to allow readers to make their own judgement.

Reviewer response 3: See response 2. I am happy with the authors changes and response.

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests