Reviewer's report

Title: Different metastatic pattern according to the KRAS mutational status and site-specific discordance of KRAS status in patients with colorectal cancer

Version: 1 Date: 27 March 2012

Reviewer: Ramon RZ Salazar

Reviewer's report:

This is an elegant work looking at a clinically relevant molecular issue, mainly concordance of KRAS mutational analysis spiked with a not so robust clinicopathological correlation effort.

Major compulsory revisions: 4 questions

1- add p value in the analysis where there seems to be higher relapse rate on the few metachronic cases in mutant KRAS, irrespective of which the numbers are too small to claim a clinically significant and relevant difference

2- Same for the analysis where it appears that Metastasis sites appear more frequent in WT when synchronic, which does not make sense and is subsequent to the higher percentage of KRAS wild type colorectal cancer

3- Please Revise discussion accordingly to these previous remarks 1 and 2

4- Finally in the last paragraph of the discussion section in my opinion the recommendation on guiding surveillance and biopsing lung metastases, albeit only suggested, is still too strong: data are not so robust and need to be further independently validated. Regarding lung mets biopsies, these are not without serious risk of complications, therefore I would strongly suggest to avoid such recommendation before other independent data adds to the current evidence, and in any case, a discussion/exploration on more sensitive assays on the primary should be prioritized.

Level of interest: An article of importance in its field

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'