Reviewer’s report

Title: Expression of the RON receptor tyrosine kinase and its association with tumourigenic phenotypes in gastric carcinoma

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Reviewer: Maria Flavia Di Renzo

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Zhou et al. report the analysis of RON receptor expression in an archival series of gastric cancers and the study of the RON spliced variants, described as more oncogenic, in a different series.

As stated by these authors the importance of the RON receptor in the onset and progression of human cancer should be assessed, given that tyrosine kinases are easier to inhibit than other molecules involved in cancer and anti-RON reagents have been developed and are under pre-clinical scrutiny.

Thus, the topic is important in the field.

However, some points need be addressed to make the manuscript acceptable.

The Authors did not mention the name of the anti-RON mouse monoclonal antibody used for IHC. However, the two mouse monoclonal antibodies available from Santa Cruz are both raised against the extracellular domain of the receptor. Although some intracellular staining might be expected in over expressing cells, membrane staining is expected. Unfortunately, membrane staining is not visible in their figures. In addition, labeling of paraffin embedded material is not anticipated.

Therefore the authors should perform a more accurate analysis of the specificity of the antibody. They should

1) demonstrate the ability of this monoclonal Ab to label paraffin embedded, RON positive, cultured cells.
2) show that another antibody, for which peptide used for immunization is available, labels similarly the same specimens and that staining could be displaced by the above peptide;
3) if possible, show a similar ratio between the intensity of labeling of each specimen with IHC and the amount of protein detected by WB

Some typos should be corrected (such as metatasis)

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