Reviewer's report

Title: Latexin is downregulated in human carcinomas of gastric body and cardia and exhibits tumor suppressor potential

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Reviewer: Arzu Ensari

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Major compulsory revisions:

1. Study design: It is not clear why carcinomas of the gastric cardia and those of the stomach were included in the study as separate groups since the authors did not thoroughly compare the two groups of tumors though they clearly have differential patterns of expression of LXN. It seems that they already had a good number of cardia carcinomas and thus wanted to include them in their study without any particular reason. This approach may also interfere with the main aim of their study which is to evaluate the role of Latexin in gastric carcinogenesis.

2. Methods: Though cardia tumors were subclassified according to their grade (differentiation) no such grouping is presented for gastric carcinomas. The methodology of the study as a whole is complicated and since there are far too many steps with various techniques which makes it rather impossible to follow the manuscript. It makes one wonder whether all these steps were absolutely crucial to evaluate the effect of Latexin gene on tumorigenesis.

3. Results: In the section where IHC expression of Latexin was summarized, the authors make a comment in the last sentence which reads “……an inverse correlation of LXN expression and degree of malignancy…..”. This comment seems to be derived from the finding of high LXN expression in well differentiated carcinomas in comparison to intermediate and high grade carcinomas. However, tumor grade is not a marker of degree of malignancy but represents degree of tumour differentiation. Only malignant tumours are graded according to their degree of differentiation.

Minor essential revisions:

4. In the following section the inhibiting effect of LXN on tumour growth in cell lines is presented together with detailed methodology which should be transferred to the methods section.

5. Both figure 2 and figure 3 are too complicated to follow. It would be much better to simplify the figures by leaving out either the graphics or separating images from graphics. However, then the authors will face the problem of having too many figures which they already do. I still believe that the figures and figure legends need simplification and clarification for the readers to follow.

6. In parallel with the above comments regarding the complicated methodology of the study, the discussion is also rather confusing. It is not clear why the 3rd page
(i.e. pg 12) of the discussion section contains information on studies related to AD and brain tissue. Tumour tissue has its own special properties and a degenerative disease model is not relevant to the study model presented in the manuscript and therefore should be made obsolete.

**Level of interest:** An article of limited interest

**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.

**Declaration of competing interests:**

I declare that I have no competing interests.