Reviewer’s report

Title: LGR5 Overexpression Confers Poor Relapse-free Survival in Breast Cancer

Version: 1 Date: 09 May 2017

Reviewer: Mieke Van Bockstal

Reviewer’s report:

This study reports the immunohistochemical evaluation of LGR5 expression in invasive breast cancer. Current knowledge on LGR5 expression in breast cancer is limited, so the authors have explored a relatively unknown subject. The study set-up looks good, but this manuscript could be significantly improved by some clarifications.

1. The manuscript needs extensive language editing, as the text contains many grammatical errors. I advise the authors to contact a native speaker or a language editing service.

2. Please include page numbers as this would facilitate the review process.

3. Introduction line 58: please clarify the abbreviation "PCNA".

4. Introduction line 23: "... then used a specific LGR5 antibody for performing immunohistochemistry..." Please explain in the materials & methods section which tests you have performed to assess the specificity of the antibody. Did you use positive controls? If yes: were these controls batch controls or on-slide controls?

5. Patients line 10: please mention clearly in which circumstances patients were censored.

6. Patients: please specify whether your study population contains invasive ductal carcinoma only (=invasive breast cancer, no special type). Were there lobular cancers included? Were there any special types?

7. Immunohistochemistry and scoring, line 42: please clarify why you used a cut-off at score 6. Was this cut-off arbitrarily chosen? If not: how did you determine this cut-off?

8. Line 14 "Tumor size and lymph node tumor are corelated with high LGR5 expression". You initially compared LGR5 expression between invasive ductal breast carcinoma and breast adenocarcinoma, but these invasive ductal carcinoma is an adenocarcinoma of the breast. Is this a typo? Did you use any normal breast tissue in your comparison? This part of the text is not clear.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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