Reviewer’s report

Title: MRI texture analysis in differentiating luminal A and luminal B breast cancer molecular subtypes - a feasibility study

Version: 1 Date: 21 Nov 2017

Reviewer: Pål Erik Goa

Reviewer's report:

The authors have improved the manuscript significantly. I only have a few comments at this stage, mainly concerning the interpretation and conclusions:

p7 line 28: Check FOV versus matrix. I suspect is should read FOV = 320 mm, matrix 448, so that voxel-dimension is 0.7 mm. This is consistent with a minimum accepted lesion size of 7 mm diameter, which corresponds to the ROI radius of 5 voxels. I still think the authors should state the voxel size explicitly.

p10 Results: Can you in table 2 add information about which subtype has the higher values for each of the texture features. For example, is both Correlation and Entropy highest for luminal B, or is Correlation lower and Entropy higher for luminal B versus luminal A?

p14 lines 2-6: I do not agree with this sentence. Based on a correlation one cannot infer a causal relationship (the use of the word "affect" indicate causality). Please revise this sentence and remove statement of causality.

p14: Please add in the limitation-part a comment about that the reported p-values are not corrected for multiple comparisons, and so for the high number of comparisons made in this study there will be some false positive findings.

P14 lines 50-51: I would recommend to revise the first sentence of this paragraph towards something like "In conclusion, our results indicate that pre-contrast T1w images contain textural features that can be used for sub typing of breast cancer."

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.

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

No

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:

Acceptable

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