Reviewer’s report

Title: Breast masses diagnosis from dynamic contrast-enhanced and diffusion-weighted MR: assessment of accuracy across two patients groups under different imaging protocol

Version: 2 Date: 25 November 2013

Reviewer: Xiaobo Zhou

Reviewer’s report:

General comments:
This study investigated the prognostic capabilities of image characteristics, estimated from two image modalities, DWI MRI and DCE-MRI for breast masses. Similar researches have been reported early. One of the main contributions of this paper is that the medical data was evaluated in the second patient group, though the later one was not obtained under the same imaging protocol to the first one. The author also suggested three critical questions related to the discrimination power of the data and analyzed them individually. The paper are well formatted and clearly presented. The experimental results are nice in that the false positive is largely decreased. The main findings are important to those with closely related research interests. Therefore, I recommend accepting it after minor essential revisions, listed in bellow:

1 The title did not accurately in defining the two patients group datasets.
2 The author should elaborate more on the medical implication and method advantages/disadvantages in Conclusion.
3 Remove the vertical line in Tables unless necessary.
4 The classification model used in paper should be described simply.
5 The author should elaborate more on the Discussion Section to stress on the medical implications.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests.