Reviewer's report

Title: Ultrasonic spectrum analysis for in vivo characterization of tumor microstructure changes in the evaluation of tumor response to chemotherapy using low-frequency ultrasound

Version: 1 Date: 25 January 2013

Reviewer: Rachel Sparks

Reviewer's report:

Several grammatical errors: "Malignant tumors is one of the principal diseases", "the histology images of each 400 powers field were saved"

It would be useful for scatter plots or box and whisker plots of treatment groups with imaging and tumor characteristics to be shown to give a sense of the features. For instance it would be useful to show a scatter plot of tumor volume versus ultrasonic spectral parameters and spectral parameters versus histologic changes.

Additionally to make the claims about correlation between histologic changes and ultrasonic changes the authors should perform a regression analysis.

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

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interest