Reviewer's report

Title: An automated in-vitro model for the evaluation of Ultrasound modalities measuring myocardial deformation

Version: 1 Date: 24 June 2010

Reviewer: Quirino Ciampi

Reviewer's report:

The authors described and automated in-vitro model for evaluation the accuracy and reproducibility of Speckle Tracking Ultrasound

The authors have been shown possible to automate a model that can be used for evaluating the in vitro accuracy and precision of ultrasound modalities measuring deformation

The paper is interesting and well written.

However, there are some suggestions:

1. In the results section it is incorrect report as reference unpublished data.
2. In the background section the authors reported: .."before a new ultrasound technology can be adopted in the clinic, accuracy".... The authors should analyzed this important point about clinical implication in the discussion section.
3. The authors should clarify the role of this automated in-vitro model in the improve the reproducibility of Speckle Tracking in the clinical setting.
4. The references should be changed accordingly to the instructions for the authors

Level of interest: An article of limited interest

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