Reviewer's report

Title: Quantifying Longitudinal Right Ventricular Dysfunction in Patients with Old Myocardial Infarction by Using Speckle-tracking Strain Echocardiography

Version: 1 Date: 22 March 2013

Reviewer: Luna Gargani

Reviewer's report:

Major revisions.
The paper addresses an interesting topic, which is right ventricular function in patients with a previous left ventricular myocardial infarction. The paper is well written but has a few major limitations:

- Even though this is retrospective study, the selection of patients should be more clearly defined. They do not seem to be consecutive, since the number is rather small. If not consecutive, the inclusion criteria and not only the exclusion criteria should be better determined.

- The time interval between the acute myocardial infarction (AMI) onset and the echographic evaluation is very different among patients (range 1-35 years). Please, specify whether results are different between subgroups of patients with similar time interval.

- There is no information about AMI treatment, nor on residual ischemia. The modality and quality of revascularization is an important parameter that should be taken into account. These data should be added in the analysis and discussed.

- You rightly excluded patients with coexisting RV infarction. However, it would be interesting to add the analysis of patients with RV infarction.

- How many patients are in the BNP subgroups? You should exclude the possibility that the different results among the three subgroups are due to a different numerosity.

Minor revisions.
- Since the paper deals with strain imaging, you could cite the ASE/EAE Consensus Statement on Cardiac Mechanics.

- How did you estimate mean right atrial pressure?

- Table 2: some parameters miss the unit of measurement.

- Page 13 and 14: “remodling” is misspelled

Level of interest: An article whose findings are important to those with closely related research interests
**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.