Reviewer’s report

**Title:** Peak systolic velocity using color-coded tissue Doppler imaging, a strong and independent predictor of outcome in acute coronary syndrome patients

**Version:** 1 **Date:** 2 February 2013

**Reviewer:** victoria delgado

**Reviewer’s report:**

The present manuscript evaluated the prognostic value of average value of peak systolic velocity of 6 basal LV segments assessed with TDI in a cohort of patients with acute coronary syndrome. The prognostic value of this parameter was compared to other well-known echocardiographic parameters such as LVEF, WMSI and novel measurements such as global 2D longitudinal strain. The authors used a combined end point of death, readmission for acute coronary syndrome or heart failure. The article is well written and presented. Comments:

1.-The study population is not well described. Admission for acute coronary syndrome includes many different scenarios. In table 1 index admission divides into myocardial infarction and STEMI. Please adhere to current definition of myocardial infarction.

2.-There is not mention to the therapies used. Were all patients treated with primary coronary intervention? This should be specified and if not, it needs to be included in the multivariate analysis. It is expected that the patient who did not undergo coronary angiography and was treated conservatively may have higher risk for reinfarction. Likewise, knowing the coronary anatomy one can predict that patients with multivessel disease may have higher risk for heart failure. Please improve the description of the patient population.

3.-were patients in atrial fibrillation or with significant valvular heart disease excluded?

4.-Table 5. Please indicate which type strain is. Is it global longitudinal strain?

5.-Figure 2. Please add the number of patients at risk below the X-axis

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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