**Reviewer’s report**

**Title:** Global longitudinal strain is a hallmark of cardiac damage in mitral regurgitation. The Italian arm of the European registry of mitral regurgitation (EuMiClip)"

**Version: 0 Date: 26 Jul 2019**

**Reviewer:** Piotr Lipiec

**Reviewer's report:**

An interesting study with clinically-relevant findings confirming usefulness of GLS to detect early signs of cardiac damage in a wide spectrum of pathologies. Well written manuscript.

My only suggestion is including the figure illustrating the relationship between GLS and pulmonary artery pressure. This relationship forms the basis of authors' conclusion. Such figure seems more important to reader than figures illustrating the relationship between GLS and LVEF, which has been already established in numerous studies. On top of that, the strength of linear correlation between GLS and LVEF is a finding with questionable implications - LVEF represents a relative change in volumes, whereas GLS represents relative change in length, and from a mathematical point of view these parameters are not bound to correlate in linear fashion (we have discussed this in detail in a paper "Should we search for linear correlations between global strain parameters and ejection fraction?" published in Eur Heart J Cardiovasc Imaging, in 2014). Another figure, which seems non-crucial to the manuscript is the one illustrating mean values of GLS and LVEF according to MR etiology. It seems obvious that secondary MR is associated with LV dysfunction, whereas patients with primary MR will have better LV function parameters.

**Level of interest**

Please indicate how interesting you found the manuscript:

An article of importance in its field

**Quality of written English**

Please indicate the quality of language in the manuscript:

Acceptable

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