Reviewer’s report

**Title:** Assessment of left ventricle function in aortic stenosis: mitral annular plane systolic excursion is not inferior to speckle tracking echocardiography derived global longitudinal peak strain.

**Version:** 1  
**Date:** 27 October 2013  
**Reviewer:** Andrejs Erglis

**Reviewer’s report:**

With a great interest I have made the acquaintance with the study manuscript, where the authors have clearly defined the aim of the study with the main goal of assessment of left ventricle function in patients with aortic stenosis, including in comparative analysis mitral annular plane systolic excursion and two-dimensional speckle tracking derived global longitudinal peak strain.

The main question posed by the authors is important and well defined, because of early and timel revealed systolic dysfunction of left ventricle is significant parameter for further patients care and clinical decision making, especially for choosing the appropriate treatment strategy of patients with aortic stenosis, which influences the patient’s risk of future symptoms, heart failure development and prognosis at all. Indirectly, the main problem is focused in this study and the essence of it would be like – „not be too late” in evaluating the patients with valvular heart disease by echocardiography and clinically, and decision making especially for asymptomatic patients with existing valvular pathology.

The methods of the study are appropriate to reveal the problem and discover the defined objectives of the study, showing the methods used be feasible and practical in additional evaluation of defined patients group, despite the development of the more modern echocardiographic technologies.

Results of the study have demonstrated clinical implication of mitral annular plain systolic excursion in assessment of left ventricle longitudinal function in evaluation of the patients with moderate to severe aortic stenosis and mildly reduced left ventricle ejection fraction. The results are clearly stated, presented statistically and substantively meaningful. The authors present concise and accurate summary and interpretation of their findings in discussion part, thoughtfully address the limitations of their study.

The discussion and conclusions are well balanced and adequately supported by the data. At the end, the title and abstract accurately convey the findings reported in the results.

1. Major Compulsory Revisions
   No any.

2. Minor Essential Revisions
   Abtract (part of the results): The abbreviation „AVAI” is first used like abbreviation
without explaining the definition previously in the text.

3. Discretionary Revisions
The question to the authors is – should the study be continued in order to implicate the design of investigation to the larger patients population group?

**Level of interest:** An article of limited interest

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

**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