Reviewer's report

Title: Association between Left Ventricular Global Longitudinal Strain and Natriuretic Peptides in Outpatients with Chronic Systolic Heart Failure

Version: 4 Date: 16 June 2015

Reviewer: Knut Matre

Reviewer's report:

This much improved version has still some errors and room for improvement.

Major
1. If you by LV GLS mean the average value of 17 segments from 3 different planes, GLS is a global index describing the function of the whole chamber (LV) and not a regional measure. Segmental strain in one or a limited number of segments would be a regional index of function. Several statements in the text should be changed according to this definition: eg. Page 3/line 55: …and it allows for both regional and global assessment….. Strain analysis does allow for this but not GLS which is used for global index.
2. Conclusion: “GLS is easy to measure.....”
   - With only 80 % of the recorded cine loops being useful for speckle tracking analysis – is it correct to say “easy”?
   - What was the reason for excluding 20% of the patients?

Minor essential revision
3. Abstract/line 36: GLS should have units %
4. Page 3/line 55: Regional and global? Please correct according to the comments above.
5. Page3/line 57: “in the area” should be changed to: in the region....
6. Page 4 line 76: last part of sentence missing?
7. Page 4 line 93/94: correct name of company: GE Vingmed Ultrasound, Horten, Norway
8. Page 5/line 112: change to: ..analyzed for 17 standardized segments...
9. analyse/standardize.....Please be consistent.
10. Page 6/line 120: These results should be moved to the Result section
11. Page 8/line 178: what is “a similar association”? The same? Please clarify this point for the reader.
12. Figure 1, right bar title, should be: GLS above median.

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