Reviewer's report

Title: Physical Function and Self-Rated Health Status as Predictors of Mortality - Results from Longitudinal Analysis in the iSIRENTE Study

Version: 1 Date: 3 September 2008

Reviewer: Stefano Volpato

Reviewer's report:

This is a well done and interesting paper addressing an important geriatric topic. The paper is well written. The manuscript could be further improved addressing the following points.

I have only one major concern.

The statistical analysis is affected by insufficient statistical power. As a consequence the risk of overparametrization is not trivial. There are only 71 events and therefore the multivariable models should be limited to 7-8 covariates. From this point of view it would be interesting to run again the analysis using more parsimonious models. Since all the point estimates are in the expected direction this point assumes particular importance.

Minor points

Figure: Although the interaction term is not statistically significant, data presented in the figure do support the presence of such an interaction. Indeed regardless the SRH score, SPPB score discriminates subgroups with different mortality risk, whereas SRH score tends to discriminate only among people with poor physical performance. The authors should comment this finding in the text.

The authors should be more consistent reporting decimal points (I would suggest using only 2 decimal figures) for HR and 95% C.I.

The two upper lines in the figure are almost identical. Please use different patterns.

Please, specify if data presented in table 3 are from a single multivariable model or from different multivariable models. Since all the point estimates are in the expected direction this point assumes particular importance.

Minor points

Figure. Although the interaction term is not statistically significant, data presented in the figure do support the presence of such an interaction. Indeed regardless the SRH score, SPPB score discriminates subgroups with different mortality risk, whereas SRH score tends to discriminate only among people with poor physical performance.
The author should be more consistent reporting decimal points (I would suggest using only 2 decimal figures) for HR and 95% C.I.

The two upper lines in the figure are almost identical. Please use different

Please specify if data presented in table 3 are from a single multivariable model or from different multivariable models

**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 interests