Reviewer's report

Title: Health-related quality of life after myocardial infarction: the role of left ventricular function

Version: 1 Date: 7 June 2008

Reviewer: Roger Davis

Reviewer's report:

This is a well-written paper describing an analysis of the association between LVEF at the time of MI and quality of life 2.5 years later. The question is interesting and the general approach to analysis is appropriate. There are a few minor modifications suggested to the analysis and several minor editorial recommendations.

Minor Issues:

1. In the demographics section, it is not clear what test was used to compare LVEF levels between the responders and non-responders. The test used should be specified. Since the summary is presented categorizing LVEF into 3 groups, I am assuming that a chi-square test of independence was used (as that is the only method described for categorical data). That test is not the best choice since it does not take the ordering of the categories into account. There are a number of better alternatives. There is a test of trend for ordinal categories, or one could use a Wilcoxon rank-sum test on the categories. Another option is to use the actual LVEF values and test using a t-test or Wilcoxon rank-sum test.

2. In table 1, localization is a categorical variable with 3 possible values. Instead of doing a separate test comparing proportions for each location, there should be a single test done. Specifically, to compare LVEF measured versus LVEF not measured, you should do a chi-square test of independence on the 2 x 3 table of LVEF measured (Y/N) by localization. For LVEF level by localization, you could do a Kruskal-Wallis test (essentially a non-parametric analysis of variance).

Editorial:

3. Throughout the paper, you should use ‘multivariable’ rather than ‘multivariate’.

4. Instead of ‘R2’ you should use ‘R^2’ or ‘R-square’

5. Methods section of Abstract: ‘KCCQ clinical summary score was’ should be ‘KCCQ clinical summary scores were’

6. Second paragraph of Questionnaire section: ‘and its psychometric properties is documented’ should be: ‘and its psychometric properties have been documented’
7. Statistical analysis: change ‘bivariate’ to ‘bivariable’ or ‘unadjusted’
8. Statistical analysis: ‘multicolinearity’ should be ‘multicollinearity’
9. Statistical analysis: change ‘stepwise forward’ to ‘forward stepwise’
10. First paragraph of discussion: '10 an 17 points respectively' should be '10 and 17 points, respectively'

**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'