Reviewer's report

Title: Health related quality of life in patients in dialysis after renal graft loss. Effect of Gender.

Version: 1 Date: 7 December 2013

Reviewer: Cynthia Gross

Reviewer's report:

This is an interesting paper that presents new information. The data appear sound and in general, strengths and weaknesses of the paper are well described by the authors. However, several problems with the analysis, interpretation and presentation should be addressed.

Major compulsory revisions

1. The interaction analyses are not adequately described and reported. Based on the Methods, interaction terms should have been included in the analyses shown in Table 4, and the results reported with the other coefficients and associated p values.

2. The plots to explain the interaction term would be more consistent with the interpretation if gender were along the x axis and prior transplant status shown by color.

3. List all covariates investigated but not significant in a footnote to the tables.

4. A parallel analysis for male patients to that depicted in Table 5 for females is essential to place the Table 5 results in context.

5. In their interpretation of the significant interaction terms found, authors consider only one mechanism, graft loss, as causal. Their cross-sectional design cannot eliminate other explanations. Given that women report lower HRQOL than men in the general population and in other studies of transplant and dialysis patients, alternative explanations should be pointed out in the Discussion. Longitudinal confirmation is needed.

6. Response shift has been associated with HRQOL perceptions after pancreas transplantation. Address issue of response shift in QOL assessment after kidney graft loss.

7. Analysis of BMI should be based on standards for under/overweight and obesity, not a median split, to facilitate a meaningful interpretation of findings.

Minor essential revisions

8. In the Results, for every finding, be explicit about whether the analysis was or was not adjusted, and make the direction of the relationship clear, and for clarity, replace “reduced “ effect of kidney disease with “poorer” or “worse”; otherwise it sounds like greater comorbidity was associated with better HRQOL on the effect of KD and other subscales.
9. Include the number of men and women with graft loss to the abstract.
10. Use “loss” not “failure” in the short title.
11. In the Methods, state how missing data are handled.
12. Considerable editing is needed to remove problematic word choices and fix the grammar. A partial list includes:
   a) Abstract – have not has in line 3 of abstract and reword this sentence clarify that transitions may affect HRQOL, they will not affect the sex of the patient.
   b) Drop or Reword to replace the term “gender-wise” in the Abstract and Methods
   c) Page 9 – Sentence beginning “In addition to graft loss…” does not make sense - reword.
   d) Refer to the rates of “missing data” on the SF-36 and KDQOL; these are not response rates.
   e) Page 13 – replace mill with million
   f) Page 14 – replace manifold (which means diverse) with many times

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

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.