Author's response to reviews

Title: The impact of pretransplant 25-hydroxy vitamin D deficiency on subsequent graft function: An observational study

Authors:

Hyunwook Kim (bluejayway@naver.com)
Shin-Wook Kang (kswkidney@yuhs.ac)
Tae-Hyun Yoo (yoosy0316@yuhs.ac)
Myoung Soo Kim (YSMS91@yuhs.ac)
Soon Il Kim (soonkim@yuhs.ac)
Yu Seun Kim (YUKIM@yuhs.ac)
Kyu Hun Choi (khchoi6@yuhs.ac)

Version: 3 Date: 2 April 2012

Author's response to reviews: see over
Dear editor and reviewers

We highly appreciate the referees and editor giving us a chance of the second revision and kind comments on our manuscript “The impact of pretransplant 25-hydroxy vitamin D deficiency on subsequent graft function: An observational study”.

As below, I would like to clarify the points kindly addressed by the reviewers and sincerely hope that the reviewers and the editors will be satisfied with our responses to the comments and the newly revised manuscript.

Sincerely,

Kyu Hun Choi

Department of Internal Medicine, Yonsei University College of Medicine, 134 Shinchon-dong, Seodaemun-gu, Seoul, Korea, 120-752

E-mail: khchoi6@yuhs.ac, Tel: 82-2-2228-1953, Fax: 82-2-364-7655
Reviewer's report
Title: The impact of pretransplant 25-hydroxy vitamin D deficiency on subsequent graft function: An observational study

Version: 2 Date: 31 January 2012

Reviewer: Kyra Borchhardt

Reviewer's report:
Revisions made are acceptable.

Response: We sincerely appreciate you having given us the detailed and invaluable comments, by which we can achieve a substantial improvement in the revised manuscript.
Reviewer’s report

**Title:** The impact of pretransplant 25-hydroxy vitamin D deficiency on subsequent graft function: An observational study

**Version:** 2  **Date:** 16 March 2012

**Reviewer:** Neil Boudville

**Reviewer’s report:**

*The authors need to expressly describe the limitation of their restrictive selection criteria and the effect this may have on generalisability.*

---

**Response:** We thank you for thoughtful comments on our manuscript. As you precisely pointed out, repeated-measures analysis of covariance (ANCOVA), which we used in this study, has some strengths and weaknesses. It provides a more comprehensive description of the time effect. In other words, it allows statistical assessment of whether a condition/treatment makes different response curves over time. In addition, it can also detect whether there is a significant condition/treatment x time ‘interaction’ effect. However, for the best use of this method, missing data (data sets that have unequal intervals between measurements or different numbers of patients per measurement) are not tolerated. Therefore, there are two choices when faced with missing values. 1) imputing missing data or 2) performing the analysis exclusively on the subjects who had full sets of data. The former carries risk of a serious estimation bias, whereas the latter carries risk of a serious sample bias. At this situation, we chose the latter. Because more than 90% of the screened participant had full sets of information about graft function checked at regular intervals during the study period. Therefore, as you noticed, although there must be a chance of sample bias for representativeness, we considered this way to be the best we could do.

So, first, as you suggested, we expressly state the limitations of the restrictive selection and the possible resultant problem of representativeness at the end of discussion section (page 19).

Second, the reason for the restrictive selection, in other words, for the exclusion of the patients whose data are missing (to avoid an estimation bias inevitably accompanied by imputation of missing data) is briefly described in the ‘study population’ in method section (page 6) with the quotation of the excellent review article on analysis of variance (ANOVA)-related statistical methods [1], instead of lengthy explanation.

---