

October 12, 2016

Dear Editor,



Please find enclosed the edited manuscript in Word format.
(file name: 26787-review.doc)

Title: Stabilization of estimated GFR in kidney transplantation from deceased donors with acute kidney injuries

Author: Punlop Wiwattanathum, Atiporn Ingsathit, Surasak Kantachuvesiri, Nuttapon Arpornsujaritkun, Wiwat Tirapanich, Vasant Sumethkul

Name of Journal: *World Journal of Transplantation*

ESPS Manuscript NO: 02528845

The manuscript has been improved according to the suggestions of reviewers:
1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

Reviewer's code: 00289581

(1) Page 6, I would take out the definition of AKI in the introduction.

Response: We have already revised the manuscript.

(2) Page 6, Need to include total charts reviewed and which were excluded. Why did you include 111 patients? Page 6 Need to include dates of study, this may influence the immunosuppression regimen used.

Response: Total charts reviewed were 243. We excluded 115 charts due to living related KT, 8 charts due to age < 15 years, 1 chart due to combined organ transplantation and 8 charts due to not met creatinine criteria. We added further information on page 6 Materials and Methods, part patients (paragraph 1).

(3) Was regression analysis done to include the different Induction and Maintenance immunosuppression?

Response: We included only Induction immunosuppression in regression analysis.

(4) Why did not the donors have pre-implantation renal biopsies?

Response: There has no protocol for routine pre-implantation biopsies at our center.

(5) Would discuss the decrease eGFR in ECD in more detail, this is an important finding in this study.

Response: ECD might have more chronic irreversible changes of the allograft that could not be reversible like AKI donor. Rate of DGF was highest in ECD group and some of ECD had AKI on top and could make the allograft function worsen. The eGFR of ECD at discharge, one-year and two-year were 35.5 ± 17.9 , 33.9 ± 17.3 and 29.9 ± 19.2 ml/min. (shown in Table 2, page 16).

(6) Figure 1. Where is the line for AKI?

Response: Line for AKI and SCD were overlapped. We added additional label on Figure 1.

Reviewer's code: 02454185

(1) The authors used logistic regression analysis, but why not using Cox regression analysis since the outcome is survival data.

Response: Primary outcome of this study were eGFR at one year of recipients that were continuous variables, so we have used multivariate regression analysis as described on page 8 line 14. We have not use logistic regression analysis for survival data. However, the survival data which is the secondary end point are analyzed by Kaplan-Meier survival analysis. (page 8, statistical analysis)

(2) How eGFR was estimated?

Response : We estimated eGFR from serum creatinine by CKD-EPI equation as described on page 8 line 4.

(3) AKIN criteria have limitations because it is based on serum creatinine and urine output, and this is most commonly used in critical care setting. Are there some other biomarkers available for donors? Such as cyslatin C, NGAL? These biomarkers have

potential to better reflect kidney injury than serum creatinine.

Response: We have collected the urine and blood test for biomarkers study of interest. However, the result is not available at present.

- (4) Some abbreviations in table 1 is not expanded in the footnote.

Response: We have revised the abbreviations in table 1.

- (5) In table 4, it is the best to report Odds ratio for logistic regression model. Furthermore, the eGFR is a continuous variable that can be addressed with linear regression model, why use logistic regression? How eGFR was transformed to a binary variable?

Response: Primary outcome of this study were eGFR at one year of recipients that were continuous variables, so we used multivariate regression analysis as we described on page 8 line 14. We have not used logistic regression analysis in Table 4. These are more clearly defined in revised Table 4.

- (6) There are three groups in figure 1, but lines only show two groups. Are any two of them overlapped?

Response: Line for AKI and SCD were overlapped. We added additional label on Figure 1.

Reviewer's code: 00503255

- (1) Abstract page 2, line 15: "DDKT" should be changed to "deceased donor kidney transplantation"

Response: We have already revised in manuscript. (now on page 4, line 6 "deceased donor kidney transplant recipients (DDKT)" and use abbreviation "DDKT" at page 4, line 10 and elsewhere)

- (2) Abstract page 2, line 15: "PRA" should be changed to "panel-reactive antibody"

Response: We have already revised in manuscript. (now on page 4, line 11)

(3) Materials and methods page 6, line 12: "DDKT" should be changed to "deceased donor kidney transplantation (DDKT)"

Response: We have already revised in manuscript.

(4) Materials and methods page 6, line 14: "PRA" should be changed to "panel reactive antibodies (PRA)"

Response: We added abbreviation PRA for panel reactive antibodies (PRA) on page 4, line 10

(5) Page 7, line 12: "DGF" should be changed to "delayed graft function (DGF)"

Response: We have already revised in manuscript. (now on page 8, line 4)

Reviewer's code: 00503215

(1) The article is well written and relevant. Please do spell check as there are some spelling mistakes.

Response: We have already checked all spelling.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Transplantation*.

Sincerely yours,



Vasant Sumethkul, MD

Division of Nephrology, Department of Medicine,

Faculty of Medicine, Ramathibodi Hospital, Mahidol University,

Bangkok, 10400, Thailand

vasant.sum@mahidol.ac.th

Telephone +66-02201-1400