Reviewer’s report

Title: Living-donor transplantation leads to a major improvement in physical functioning: an observational study on the impact on potential donors and their recipients

Version: 0 Date: 29 Dec 2018

Reviewer: Suceena Alexander

Reviewer's report:

This study is much needed comparison of physical activity, physical functioning, body composition and health related quality of life scores between living donor transplant recipients and their donors. It looks at both subjective and objective parameters at baseline (prior to kidney transplant) and longitudinally till one year post transplant. The interesting finding is that recipients showed significant improvements in physical functioning and health related quality of life scores by three to six months post transplantation, while living kidney donation did not show any deterioration of the these parameters thus supporting the benefits of living donor kidney transplantation. The study is well designed and conducted with sound statistical analyses.

Major Comments

How was the sample size calculated and add a description and rationale about how sample sizes were chosen?

Figure 3, 4 and 5: Kindly provide error bars for each plotted value.

Minor Comments

A. Overall the English grammar and sentence constructs need attention. It would be good if it is overseen by a professional editing group. You may even ask the journal editorial office for help. Some of the corrections are given below:

1. Abstract para 1 "first year post- operative in both groups." to be changed to "first post- operative year in both groups."

2. Abstract Conclusion section "......supporting little impact for well-screened donors, with on the opposite high benefits for transplant recipients." to be changed to "......supporting little impact for well-screened donors, while there is high benefit for transplant recipients."

3. Page 6 Last line "For recipients whom already started hemodialysis (HD) therapy measurements were taken contralateral of the shunt arm." to be changed to "For recipients who had already
started hemodialysis (HD) therapy ......................

4. Page 7, para 1 "The SF-36 questionnaire is the most widely used tool to measure HRQOL in the field of nephrology worldwide" to be changed to "The SF-36 questionnaire is the most frequently............."

5. Page 7, para 1 "These 36 items provide a measure of physical and mental health item ranging from 0" to be changed to ".........physical and mental health ranging............."

6. Page 7, para 1 "Questionnaires were scored using by the algorithm of by Ware et al." to be changed to "Questionnaires were scored using the algorithm of Ware et al."

7. Page 7, para 2 "No differentiation was made between data collected on week or weekend days, both were included in the analyses for all participants." to be changed to ".................data collected on weekdays or weekends, .............."

8. Page 7, para 3 "For recipients whom already started dialysis therapy measurements were taken contralateral to the shunt in HD patients or with a full abdomen in peritoneal dialysis (PD) patients for practical reasons (pre-KTx)." to be changed to "For recipients who had already started dialysis therapy measurements were taken contralateral to the shunt in HD or with a full abdomen in peritoneal dialysis (PD) for practical reasons (pre-KTx)."

9. Page 8, para 1 ".....CKD-EPI equation based on serum creatinin [28]." to be changed to ".....CKD-EPI equation based on serum creatinine [28]."

10. Page 9, para1 "Prednisolon was continued...... " to be changed to "Prednisolone was continued......"

11. Page 9, para 1 "One of these two patients withdraw consent....." to be changed to "One of these two patients withdrew consent....."

12. Page 9, para 1 "The other patient withdraw consent....." to be changed to "The other patient withdrew consent....."

13. Page 10, para 1 "........comparable to their donors already three months post-KTx." to be changed to "........comparable to their donors by three months post-KTx."

14. Page 12, para 1 "......unique insight in for the impact of the procedure in......... " to be changed to "......unique insight into the impact of the procedure in........."

15. Page 12, para 3 "...........the healthy donor group showed no significant decrease in parameters of PF, PA and BC in the first year after donation............." to be changed to "..........the healthy donor group was accompanied by significant decrease in parameters of PF, PA and BC in the first year after donation.............."

16. Page 12, para 3 "........first three to twelve months, leads to significant improvements in parameters............" to be changed to "..........first three to twelve months, led to significant improvements in parameters............"
17. Page 12, para 4 "Whereas LTM decreases after KTx, and not reach baseline values until twelve months post-KTx, ............" to be changed to "Though LTM decreases after KTx, and does not reach baseline values until twelve months post-KTx, ............"

18. Page 12, para 4 "..........such as reversal of uremic myopathy after KTx due to the reversal of the uremic state." to be changed to "..........such as improvement of uremic myopathy after KTx due to the reversal of the uremic state."

19. Page 12, para 4 "Earlier studies already described........" to be changed to "Earlier studies have already described........"

20. Table 1 "Origin of end-stage renal disease" to be changed to "Native kidney disease"

21. Figure legend- "Figure 1. Recruitment flow participants" to be changed to "Figure 1. Recruitment and flow of participants"

22. Figure legend- "Figure 2. Overview visits and measurements" to be changed to "Figure 2. Overview of visits and measurements"

B. Page 7, para 3- Clarify whether the BCM was taken pre or post HD in patients prior to transplant and was it standardised?

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- Are the description of any error bars and probability values appropriate?  
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