

Dear Editor

We would like to thank the reviewers for their valuable comments. We have revised our manuscript accordingly and we hope that it will be suitable for publication in World Journal of Transplantation.

Below we have provided our point-by-point response for each reviewer:

**Answer to Reviewer #1:**

**Comment 1:** Scientific Quality: Grade B (Very good), Language Quality: Grade A (Priority publishing), Conclusion: Accept (General priority)

Specific Comments to Authors: The topic is important, the design was appropriate, the data collection, analysis and interpretation were sound and the manuscript was written very well. External validity would be low given that the sample was small and it came from a single institution. But this issue was addressed well in the section of Discussion. The manuscript would be ready for publication in a current form.

**Answer 1:** We would like to thank the reviewer for the comments.

**Answer to the Reviewer #2:**

**Comment 1:** Scientific Quality: Grade D (Fair), Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: This is an interesting study. The authors explored the effects of a 6-month exercise training program on glycemic control, lipid profile, and functional capacity of diabetic kidney transplant recipients. They made a conclusion that a 6-month home-based mixed type exercise training program can improve functional capacity, levels of glucose and lipid profile of diabetic KT recipients. However, I have some questions.

**Answer 1:** We would like to thank the reviewer for the comments.

**Comment 2:** The title should be changed. It is not very good in this status.

**Answer 2:** We have done the appropriate correction. Please see revised manuscript, page 1, lines 6: «*Metabolic and functional effects of exercise training in diabetic kidney transplant recipients*».

**Comment 3:** As for RCT, the authors missed much important information, such as the stage of diabetic nephropathy, Living habits, renal function and so on. Additionally, there existed major adverse cardiac and renal events or not. 7 of 28 KT recipients in this study quitted, why?

**Answer 3:** We have done the appropriate correction. Please see revised manuscript, page 9, table 1. In addition, concerning the existed major adverse cardiac and renal events or not, we clearly state in page 4, lines 197-198 that: «*there were no exercise-induced musculoskeletal, cardiovascular, renal or other complications during the study.*». Lastly, concerning the reasons why 7 of 28 KT recipients in this study quitted, the information is reported in the consort diagram, page 4, lines 190-193: «*During the 6 months, 3 patients from the exercise group and 4 patients from the control group withdraw from the study, due to health reasons (such as infection or musculoskeletal problems) or personal reasons (such as lack of time). Therefore 21 patients completed the study (exercise group: n=11; control group: n=10).*»

**Comment 4:** The results should be re-write and subtitle in result section would be recommended.

**Answer 4:** We have done the appropriate correction. Please see revised manuscript, results' section, page 4-5, lines 187-214.

**Comment 5:** The discussion section should be re-organized.

**Answer 5:** We have done the appropriate corrections, please see revised manuscript, discussion section.

**Answer to the Reviewer# 3:**

**Comment 1:** Scientific Quality: Grade C (Good), Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: This randomized controlled trial aimed to investigate the effects of a 6-month home-based exercise training program on functional capacity, glucose levels, and lipid profile of diabetic KT patients. Methods: 21 type II diabetic KT recipients were randomly assigned into two groups: the exercise (n=11, aged 52.9+10.1 years) and control (n=10, aged 53.01+9.5 years). All participants at baseline and the end of the study underwent biochemical tests for fasting plasma glucose (FPG) levels, glycated hemoglobin (HbA1c) and lipid profile, and cardiopulmonary exercise testing for maximum oxygen uptake (VO<sub>2</sub>peak) estimation. The exercise group followed a 6-month supervised home-based aerobic and progressive resistance exercise program, of moderate intensity, 3 times per week, while the control group continued to receive usual care. Results: At the end of the 6-month study, the exercise group had significantly lower values in FBG by 13.4% (from 120.6+28.9 to 104.8+21.9 mg/dl, p=0.01), HbA1c by 1.5% (from 6.7+0.4 to 6.6+0.4 %, p=0.01) and triglycerides by 8.5% (from 164.7+14.8 to 150.8+11.6 mg/dl, p<0.05) and higher values in high-density lipoprotein by 10.2% (from 51.4+8.8 to 57.2+8.7 mg/dl, p<0.05) and VO<sub>2</sub>peak by 4.7% (from 22.7+3.3 to 23.8+4.2, p=0.02) than the control group. There were statistically significant differences between the two groups at the end of the study for FBG (decreased by 9.6%, p<0.05), triglycerides (decreased by 4.5%, p=0.04), and VO<sub>2</sub>peak (increased by 4.4%, p=0.01). Finally, after training, there was a moderate, positive linear relationship between VO<sub>2</sub>peak and HbA1c in the exercise group (r=0.408, p=0.03). Conclusion: The results demonstrated that a 6-month home-

based mixed type exercise training program can improve functional capacity, levels of glucose, and lipid profile of diabetic KT recipients.

In General: it's a good paper and the subject of the manuscript is applicable and useful.

Title: the title properly explain the purpose and objective of the article

Abstract: abstract contains an appropriate summary for the article, language used in the abstract is easy to read and understand, there are no suggestions for improvement.

Introduction: authors do provide adequate background on the topic and reason for this article and describe what the authors hoped to achieve.

Results: the results are presented clearly, the authors provide accurate research results, there is sufficient evidence for each result.

Conclusion: in general: Good and the research provides sample data for the authors to make their conclusion.

Grammar: Need Some revision. (Check The Paper Comments). Please provide the following information in the Paper 1.

Conflict of Interest 2. Source of Funding

Finally, this was an appealing article, in its current state it adds much new insightful information to the field. Therefore, I accept that paper to be published in your journal.

**Answer 1:** We would like to thank the reviewer for the comments. Please see the revised manuscript, we have done a lot of corrections regarding the title, results section and table 1.

### **EDITORIAL OFFICE'S COMMENTS**

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

**Answers to the Science editor:**

**Comment 1:** The manuscript is about the effects of a 6 month sports training program on blood glucose control, blood lipid levels and functional capacity in diabetic kidney transplant recipients. I find it a well-structured interesting study. Please use the three-line table for the format of the table.

**Answer 1:** We would like to thank the Science editor for the comments. Please see the revised manuscript, we have done the appropriate corrections regarding the tables' format.

**Comment 2:** Did the authors carefully examine the different stages of diabetic kidney transplant recipients? Whether the sample size is too small.

**Answer 2:** We have added the stage of diabetic nephropathy for each patient in table 1. Please see the revised manuscript, table 1.

**Comment 3:** Language Quality: Grade B (Minor language polishing), Scientific Quality: Grade C (Good)

**Answer 3:** We would like to thank the Science editor for the comments. Please see the revised manuscript, we have done a lot of corrections to the whole text.

**Answer to the Company editor-in-chief:**

**Comment 1:** I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Transplantation, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. The title of the manuscript is too long and must be shortened to meet the requirement of the journal (Title: The title should be no more than 18 words).

**Answer 1:** We would like to thank the Company editor-in-chief for the comments. We have done the appropriate correction. Please see the revised manuscript, page 1, line 6: «*Metabolic and functional effects of exercise training in diabetic kidney transplant recipients*».

**Comment 2:** Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights.

Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

**Answer 2:** We have added Figure 1 and 2 to the PowerPoint. Please see PowerPoint "74970-Figures.pptx" .

**Comment 3:** Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

**Answer 3:** We have done the appropriate corrections. Please see the revised manuscript and "74970-Tables.docx" file.