Reviewer’s report

Title: High-throughput sequencing analysis of intestinal flora changes in ESRD and CKD patients

Version: 1 Date: 22 Nov 2019

Reviewer: Olga C. Balafa

Reviewer's report:

Dear authors,

you have partially addressed my comments. I believe that your excellent study results deserve a better presentation.

1. The title is still wrong. "High-throughput sequencing analysis of intestinal flora changes in ESRD and CKD hemodialysis CKD patients". "ESRD and CKD" is adequate, omit hemodialysis CKD.

2. In Table 1, you write NYHA 1 20(in 49 patients) 45.5% ??? Check your numbers in NYHA I, II, III, heart failure, hypertension...

3. In Table 1, what do you mean by "chronic renal failure" in primary renal diseases section. All patients have chronic renal failure.

4. Discussion section still presents some weaknesses. Lines "Diabetes was thought to be the main cause of kidney disease, whereas kidney disease is an important risk factor of cardiovascular [24][25]. Studies have shown that diabetic cardiomyopathy influenced the bacterial metabolism and presented as a risk factor of cardiovascular events [26]. Considered that diabetic patients were exclusive and no significantly different was found on cardiac dysfunction, suggested that different dialysis modes were critical contributors to microbiota alterations found in our study." do not make sense to me. Please re-write.

5. Some lines should be re-written, probably asking for help from an English speaker. Eg lines 40-42 in discussion,"...and metabolism, the pattern of renal replacement therapy also appears to influence gut microbiota ", should be re-written like "and metabolism. The pattern of renal replacement therapy also appears to influence gut microbiota."
Please confirm that you have included your review in the ‘Comments to Author’ box? As a minimum standard, please include a few sentences that outline what you think are the authors’ hypothesis/objectives, their main results, and the conclusions drawn. Your report should constructively instruct authors on how they can strengthen their paper to the point where it may be acceptable for publication, or provide detailed reasons as to why the manuscript does not fulfill our criteria for consideration. Please supply appropriate evidence using examples from the manuscript to substantiate your comments. Please break your comments into two bulleted or numbered sections: major and minor comments.

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

- Are all error bars defined in the corresponding figure legends?

- Has a sample size calculation been included, or a description and rationale about how sample sizes were chosen?

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