Reviewer’s report

Title: Prevalence of vancomycin resistant enterococcus fecal colonization among kidney transplant patients

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Reviewer: Giorgina Barbara Piccoli

Reviewer’s report:

General
The study by Freitas and co-workers addresses an interesting and rather neglected point in clinical transplantation: colonization by pathogens potentially causing severe, and eventually lethal disease. The study has some strength, but also several weak points, that limit its interest in the present form.

Strengths:
- novelty of the study
- potential clinical impact
- large number of cases analysed
- careful statistical analysis

However, these points are counterbalanced by some limits-flaws that are, in my opinion, more important at the present state, than the potential importance of the study

In conclusion, this is a potentially interesting study, with some limits in the definition of these study population, and a great gap between “colonization” (the study target) and “infection” the hard end point discussed in the background- discussion and conclusion.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

- the definition of the methods and of the quality of sampling is not clear.
  In the methods (abstract) it is started that two samples are collected in all patients; however, two samples were collected in only half of the cases. The same ambiguity is present in the description of the methods, where the initial decision to analyse two samples per patient is described. The low compliance with this program is described in the result section; however, only general data on the motivation is given. Furthermore, the sentence “in group 1, 60% of the specimens were collected more than 7 days apart” is not fully motivated, nor data on group 2 and 3 is given.
- the data are gathered in a 2 year period. The patients are studied at different times after renalgraft. Giving the timing of the sampling and the enrolment period, most of the patients could have been analysed more than once. However, in no place in the study there is any mention of the possibility of considering patients once or more.
- the tables are redundant and the 2-3-4 tables could be summarised in one only. The multivariate analysis is performed considering all cases at one time; however, no summary data is supplied. A single table with the analysis per groups and all together could be more interesting, and could clarify data better. As it is the hypothesis is an interesting fishing expedition, but the basic hypothesis is not clearly stated.
- there is a great gap, both in the background and in the discussion, between the results, assessing the prevalence of the presence of VRE, and the implications on the clinical risks of disease. In no place in the study there is any mention of infectious diseases (the hard or clinically significant end-point) in the study population. However, discussion and conclusions imply that VRE colonization is a risk factor for clinical disease. This is an interesting, and logical hypothesis, but needs to be proven. As no data on clinical disease is supplied, these conclusions are not supported by the study.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The tables are redundant, and the study could be condensed in a more targeted short analysis, focused on
colonization, and limited the hypotheses to what data actually support, leaving what goes beyond these limits to suggestions for research.

Discretionary Revisions (which the author can choose to ignore)

language editing could be of help

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No

**Declaration of competing interests:**

I have no competing interest.