Author’s response to reviews

Title: MORBIDITY AND MORTALITY RELATED TO PNEUMONIA AND TRACHEOBRONCHITIS IN ICU AFTER LUNG TRANSPLANTATION

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Author’s response to reviews:

To Prof. Nicolini

Handling Editor BMC Pulmonary Medicine

Dear Prof. Nicolini,

Thank you again for reviewing our manuscript entitled “MORBIDITY AND MORTALITY RELATED TO PNEUMONIA AND TRACHEOBRONCHITIS IN ICU AFTER LUNG
Editor Comments:

BMC Pulmonary Medicine operates a policy of open peer review, which means that you will be able to see the names of the reviewers who provided the reports via the online peer review system. We encourage you to also view the reports there, via the action links on the left-hand side of the page, to see the names of the reviewers.

Reviewer reports:

Vikram Balakumar Balakumar, MD (Reviewer 1): The authors have satisfactorily addressed my previous concerns. I do have a couple of revisions to recommend in the Discussion section as mentioned below.

Page 13: under Links between BRI, tracheobronchitis, pneumonia and outcome:
- No need to repeat lines 41-43 since it has already been emphasized earlier.

These sentences have been removed.

Page 14:

Lines 1-2: 'Purulent sputum seems to be the only useful clinical criterion to distinguish tracheobronchitis from pneumonia' - the authors need to be careful in coming to this inference from their limited dataset especially with a retrospective study especially in a LT population. In Table 4, while it is evident that the pneumonia group had a very high rate of purulent sputum - note must be made that it is a very subjective decision to note sputum as purulent. Moreover,
fever/hypothermia was also significantly higher in their population while not to that extent. The authors must modify this statement.

These modifications have been done in the manuscript (e.g Discussion section).

lines 17 - if the authors are talking about 21% mortality rate in the small proportion of patients (i.e n = 14) that never developed BRI and the 21% 28-day mortality and 42% 1-year mortality reflect the rates in them then that they must mention that to avoid ambiguity to the reader.

We have added this comment in the text (e.g discussion section).

Ademola Fawibe (Reviewer 2): Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format.

Please overwrite this text when adding your comments to the authors.

We thank the reviewer for his comments. We are a bit confused by his statement since we followed the journal’s recommendations for answering reviewer’s comments. In order to fulfill his expectations, we now provide a response with all comments in the box.

1. The method section should start with statement stating unambiguously that it is a retrospective study and also specify the exact period covered by the review (months and years eg. September 2006-April 2012).

This point has been added to the methods section: “Between January 2006 and December 2012, all consecutive adult patients undergoing LT and admitted to the intensive care unit for postoperative care for at least 24 hours were retrospectively included in a database”.

2. The fact that respiratory colonization samples were taken more than 6 months prior to transplantation might have impacted on the results and so this should be mentioned in the limitations.

In our center, respiratory colonization samples were performed in a large proportion of patients more than 6 months before transplantation, which may be a source of bias. Information about species during the last 6 months in our practice might be interesting, especially to determine the antibiotic prophylaxis during the first 48 hours following transplantation.

These comments have been added to the limitations section “Fifthly, respiratory colonization samples performed in a large proportion of patients more than 6 months before transplantation may have been a source of bias. Information about species during the last 6 months in our practice might be interesting, especially to determine the most appropriate antibiotic prophylaxis during the 48 hours following transplantation”.

3. Page 9 paragraph 1 lines 10-12 under results: 2nd and 3rd sentences should be reframed in order to make it clearer to the readers eg Overall, 161 (92%) patients were mechanically ventilated of which 64% had BRI

We have rephrased these sentences: “161 (92%) patients required mechanical ventilation during their ICU stay and 64% of patients were mechanically ventilated at the time of diagnosis of BRI”.

4. Refs: there should be uniformity eg where there are more than 6 authors then the 1st 6 should be listed followed by et al as against the haphazard way the authors listed some 6 and et al while some are more than 6 and then followed by et al.

As suggested by the reviewer, these changes have been made.

5. Tables and Figures:

a. Table 1 page 22: the authors need to look closely and make necessary corrections. For example, under underlying diseases, a total of 70 patients were said to have had Emphysema/COPD but 5 without BRI and 64 with BRI. Where is the remaining 1 patient? Further analysis of this same group of patients showed that 14 patients had pneumonia and 51 had tracheobrochitis only making 65 patients which is higher than the 64 patients reported to have had BRI. Similarly for IPF, a total of 66 patients: 7 without BRI and 58 with BRI making 65 patients leaving 1 patient unaccounted for. However, 9 were said to have had pneumonia and 50 with tracheobrochitis only making 59 patients with remaining unaccounted for. Similar irregularities also affect the others group as well as single lung transplantation.

Thank you for this important comment. We have checked our data and found a number of mistakes:

- 70 patients had emphysema/COPD; 5 without BRI and 65 with BRI.
- 66 patients had IPF, 7 without BRI and 59 with BRI.
- 118 patients were men; 6 without BRI and 112 with BRI.
- No mistake was found concerning type of LT (single or double).

These points have been corrected in Table 1 with new statistical analyses.

b. Authors should indicate significant p values with a sign eg asterisk and interpret it in legend below the Tables. Also abbreviations should be interpreted in legends because the readers should be able to interpret Tables and Figures without referring back to the main article.
We are a bit confused by this remark, as adding asterisks does not correspond to the way the results are presented in the papers recently published in BMC Pulmonary Medicine.

Abbreviations have been modified in the tables in line with the reviewer’s comments.

c. Table 5 should be properly titled not just outcome!

We have modified the title of Table 5: “Outcome date (LOS in ICU, duration of MV and mortality)”. 