Reviewer’s report

**Title:** Incidence and characteristics of invasive fungal diseases in allogeneic hematopoietic stem cell transplant recipients: a retrospective cohort study

**Version:** 0 **Date:** 26 Oct 2015

**Reviewer:** Guillermo Garcia-Effron

**Reviewer's report:**

The manuscript Incidence and characteristics of invasive fungal diseases in allogeneic hematopoietic stem cell transplant recipients: a retrospective cohort study is well written work where the authors describe the one-year incidence of invasive mycoses in a University Hospital in patients receiving allogenic HSCT. Also, risk factors and the evaluation of the antifungal prophylaxis efficacy were assessed.

Points to consider:

**Results:**

Fungal taxonomy and identification.

a- Please explain how the fungi were identified.

b- Candida species and Aspergillus species should be replaced by the complete identification.

c- Candida glabrata is a species complex. If the identification was performed by phenotypic method it should be named as C. glabrata sensu lato or C. glabrata complex. If molecular identification was performed, it should be named C. glabrata sensu stricto (or C. nivariensis/C. bracarensis). It is not a minor issued since the cryptic species shows higher MIC value.

d- Aspergillus fumigatus and A. niger are species of the Aspergillus section fumigati and A. section nigri, respectively. As for C. glabrata, it is important to molecularly differentiate the species.
The correct identification of these species could explain (at least in part) the reason of the breakthrough infections (e.g. C. nivariensis less susceptible to echinocandins (Gil-Alonso et al Antimicrobial Agents and Chemotherapy 2015 and A. lentulus less susceptible to anphotericin B (Walsh et al ISDA guidelines), etc.

Figure 1: The diagnosis of IFD after allogeneic HSCT was very quick. In other reports (Pappas CID 2010, Omer et al Biol Blood Marrow Transplant 2013, Sun et al Clinical Microbiology and Infection 2013, etc) the median was around +120-180 days for Aspergillus spp. and +50 for Candida spp. (depending on the type of transplant). This point should be discussed.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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