Reviewer's report

**Title:** Serum galactomannan index for early prediction of mortality in immunocompromised children with invasive pulmonary aspergillosis

**Version:** 1  **Date:** 10 April 2015

**Reviewer:** Xuzhuang Shen

**Reviewer's report:**

- **Major Compulsory Revisions**

  This is a retrospective study to analyze risk factors for mortality in immunocompromised children with IPA, emphasizing the relationship between serum GMIs and the outcome of immunocompromised children with IPA.

  But there are some drawbacks in this article:

  1. There have some similar reports in this field, the article had no innovation.
  2. The title uses 'serum GMI' but both serum samples and bronchoalveolar lavage (BAL) fluid were mentioned in the method. However, positive results of GMI in serum and BAL fluids were defined as $>0.5$ and $>1.0$ respectively, some cases with a negative serum GMI but positive BAL fluid GMI might not be considered in the last three years of the study but how about the first two years?
  3. There are some confusing expression in results and discussion. For example, in the result it says that serum GMIs were higher during the entire period of antifungal therapy while in the conclusion use 'higher serum GMI in the early phase of antifungal therapy'.
  4. P-value of the first week was the lowest didn’t mean that serum GMI at one week after antifungal therapy was most significantly associated with mortality.
  5. I suggest that there should be explanation or figure/table for multivariate analysis between mortality and these factors, and for sensitivity specificity positive predictive value (PPV) and negative predictive value (NPV), which are very important for the results and discussion.
  6. There isn’t anything substantial in the discussion.
  7. The written English needs to be modified.