Reviewer's report

Title: Evolving epidemiology and antimicrobial resistance in spontaneous bacterial peritonitis: a two-year observational study

Version: 2  Date: 15 February 2014

Reviewer: Gavin Barlow

Reviewer's report:

Major compulsory:
1. I do appreciate the authors concerns expressed, but I think readers will want to know crude mortality statistics in those receiving initial appropriate antibiotic therapy versus inappropriate stratified by SBP and bacteriascites; you clearly have these data - please add - thanks.

Minor compulsory:
1. In the Patients and Methods section under Study Design, please define how many "multiple classes of antibiotics" was; what was the minimum?
2. How did you account for patients admitted with SBP, but who had a delayed aspirate beyond 48h of admission; these patients will have been wrongly defined as health care associated or did this not happen!? What was the cut-off for "recent hospitalisation"?
3. Please provide clear definitions for nosocomial and health care related infections; i.e. what the differences were?
4. In the Results section, I'm a bit confused by line "...increased the expected coverage of most beta-lactams by 10 to 15%". That does not make sense given the figures in the table; could you explain/review?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
Nil