Reviewer’s report

Title: Inadequate treatment of ventilator-associated and hospital-acquired pneumonia: Risk factors and impact on outcomes

Version: 1 Date: 30 April 2012

Reviewer: Thiago Lisboa

Reviewer’s report:

Piskin et al. performed a study to identify risk factors to inadequate initial antibiotic therapy for patients with VAP and HAP diagnosis. They found the risk factors are associated with the acquisition of resistant bacteria. Surprisingly, no association between inadequate antibiotic therapy and mortality was described. Study is well designed and well written, and authors have scientific merit in this manuscript. I have a few comments regarding this manuscript:

- Authors should emphasize what makes this study different from many others available in the literature with differente findings, improving discussion section.

- Figures should be constructed more carefully. Quality is low.

- English could be improved

- Definition of appropriateness in negative culture episodes is controversial and could be adding heterogeneity in the study sample. It probably affected results.

- Inappropriate treatment rate is too high, making difficult to assess external validity of the study.

- Full description of the stepwise regression analysis should be provided, with the description of variables excluded in each step of the process. A supplemental material can be used to describe it.

- Several variables described in the results should present colinearity. Did authors assess for colinearity in the variables included in regression model? So, the whole model should be described.

- In table: Acinetocater - is it Acinetobacter?

Level of interest: An article of limited interest

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

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests