Reviewer's report

Title: Causative Agent Distribution and Antibiotic Therapy Assessment among Adult Patients with Community Acquired Pneumonia in Chinese Urban population

Version: 1 Date: 13 December 2008

Reviewer: grant waterer

Reviewer's report:

The authors have studied the aetiology of CAP in their communities in China. It is critically important that physicians have local aetiological knowledge and therefore the work clearly has merit.

I do however have a number of concerns about the paper.

1. The title should clearly state that this is non severe CAP. The aetiological agents are very different in the severe spectrum of disease that this study did not capture.

2. It is not stated if blood and sputum cultures were obtained pre antibiotics, or how many were obtained prior to antibiotics. This is critical to the sensitivity of these assays and determining the extent to which pneumococcal disease was present.

3. Only 141 patients had blood cultures. This severely limits the ability of this study to detect pneumococcal disease and clearly biases the results in favour of atypical pathogens being the predominant agents. The results from these 141 should be presented seperately so we can ascertain the the true balance of pathogens.

4. The legionella serology studies are severely indeqaute due to the timing of convalescent serology. At 4 weeks (the maximum time in this study), less than 20% of seroconverters would be positive. This needs to be acknowledged in the discussion.

5. The discussion is extremely long and needs to be pruned down to the key findings. Specifically that mycoplasma is common, copathogens were common and atypical coverage is strongly recommended in China as recommended by all international guidelines and that penicillin resistance remains uncommon.

6. The first whole paragraph on page 18 states that pneumococcal infection was less common in patients receiving antibiotics before admission at the start but that no such difference was observed at the end. This makes no sense.

7. Table 4 is not that helpful given the low numbers in each cell, discussion in text is probably adequare.
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:

I declare I have no competing interests.