Reviewer's report

Title: The Pathogens and Epidemiology of Community-Acquired Pneumonia among Children in Nanjing, China

Version: 2 Date: 12 November 2014

Reviewer: Pratap Kumar

Reviewer's report:

1. Minor essential revision: Line 34. It is unclear who has undervalued the role of viral and atypical pathogens, or why this is so. The title and background section should clearly state the limitation of this study to the detection of atypical bacteria and viruses.

2. Minor essential revision: Line 159 reads "624 were positive for a positive rate of 51.83%", however from summing the numbers in Table 1 we arrive at 704 positives for a positive rate of 58.47%.

3. Major compulsory revision: The overall positive rate using Pneumoslide IgM ranges from 24% in infants to 47% in toddlers, to 79% in pre-schoolers to 81% in school children. This is a significant difference suggesting high degrees of possible bacterial pneumonias in infants that cannot be detected by the Pneumoslide technology. This variation is not mentioned or discussed by the authors.

4. Minor essential revision: Lines 161-162 read “pathogens ranking second to fourth place were INFA.” This should be INFB, as listed in Table

5. Major compulsory revision: The use of the Chi-squared test is not clear to suggest associations with age and seasons. What distribution do the authors assume in the null hypothesis to test against what is measured? P-values must be reported as <0.0001 and not as 0.000 in Table 2.

6. Major compulsory revision: In lines 209-210, there is no statistical basis to suggest "patients infected with MP were susceptible to other infectious pathogens." Mixed infections with INFB and PIVs are reported. Could the higher rates of mixed infections with MP be just a result of higher rates of infection with MP?

Overall the authors do not make a convincing case of the age-related and seasonal differences in the epidemiology of CAP. The statistics used to show seasonal differences in positive rates for different organisms are unclear.

Level of interest: An article of importance in its field

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.