Reviewer's report

Title: Serotypes and Antibiotic Resistance of Streptococcus pneumoniae Isolates from Patients at a General Hospital in Guangzhou, from 2011 to 2013

Version: 2  Date: 25 March 2015

Reviewer: Jo MC Jefferies

Reviewer's report:

Minor essential revisions

Abstract

Line 35
Sentence should start “Fifteen serotypes” rather than “15 serotypes”

Line 43
Numbers less than five should be written as text

Line 45
“13-valent pneumococcal conjugate vaccine could cover most of the isolates, especially for penicillin-resistant ones, and PCV13 showed the highest efficiency in the prevention of pneumococcal disease

This sentence does not read well It is not clear what is meant by “efficiency”.
I suggest, “13-valent pneumococcal conjugate vaccine covers the majority of serotypes in our sample”

Line 48
remove “the” from this sentence

Caution should be taken clinically in order to avoid the multi-drug resistance (MDR).

Intro.

Line 57
Please change “posed” to “poses”

Line 60
HIV should be considered as a chronic disease

Line 61
Please correct grammar in the following sentence, it mixes past and present tense.
“About 70-100 million children under the age of five years old died of S. pneumoniae infection, and 90% of which occur in developing countries worldwide every year”
S. pneumoniae

“supply the scientific basis for independent development of vaccine in Guangzhou” – Do the authors mean development of vaccine or development of vaccine policy in this region? It would be unusual to develop a vaccine for use in a particular sub-national region.

Methods

Line 128
Change “Britain” to “UK”

Results

Line 187
Please move the comparison with results from other countries to the discussion section

Discussion

Line 270 – please correct grammar in this sentence, which currently suggests that death is located in the nasopharynx, throat and oral cavity.

Line 288-292
“Xue et al. recently reported that the most common serotypes of IPD isolates in Chinese pediatric patients were 19F, 14, 19A, 6B and 23F [18]. Totally different from those data, we have shown that 19F (42.6%) is the main serotype in the study, followed by 19A (8.5%), 3 (8.5%), 6B (7.4%), 23F (4.3%) and 15 (2.1%), suggesting that regional difference of serotype distribution is dramatic.

The authors suggest that their findings are dramatically different from those of Xue et al, however, as the sample size in this study is fairly small and no confidence intervals are presented for either set of data, it is overstating the case to conclude that the results are totally different, given that 19F, 19A, 6B and 23F are common serotypes in both datasets.

Please re-word this section accordingly.

Line 298 – begins with “Because” but does not link to a logical argument. Please revise, I suggest

“As S. pneumoniae spreads in the community serotype distribution among one age group could directly and indirectly affect the distribution in other age groups dependent on mixing patterns.”

Line 405
Remove the word “the”

Level of interest: An article whose findings are important to those with closely
related research interests

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

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I have received research funding and conference support from vaccine manufacturers.