Reviewer's report

Title: Epidemiology of serotype 19A isolates from invasive pneumococcal disease in German children

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Reviewer: Carmen Ardanuy

Reviewer's report:

In this paper the authors describe the status of serotype 19A S.pneumoniae isolates collected from children with invasive disease in Germany from 1997 to 2011.

The paper gives a clear overview of this important serotype, and analyses trends in prevalence, antibiotic resistance and clonal spread. The study is well-performed and the methodology is appropriate and well justified by the authors. The results are consistent with other recent reports of this serotype. The main strength of this study is that isolates were collected by a National Reference Laboratory and had isolates from all over the country.

The presented data are of importance to the scientific community, but there are several points that need to be clarified before publication.

1.- The major issue is pneumococcal vaccination. Authors divided the results in two periods, pre-PCV7 and post-PCV7. However, the PCV13 was introduced in Germany in December 2009. Authors should include when PCV7 and PCV13 started in the abstract, methods and results sections, as well as if the PCV10 vaccine is used.

Since PCV13 includes serotype 19A it is important to know the role of this vaccine on this serotype in the last period. Do the authors observed any effect of PCV13 vaccination against serotype 19A?

2.- The second issue is the “imported clone” CC320. Authors emphasized that 3 of 7 isolates of this clone were collected from children who recently came to Germany from other countries. Were these isolates the first ones of this CC detected? What is the origin of the remaining four CC320 isolates? Since this clone has been identified in other European countries this comment could be included only in the discussion section.

3- Pag 13, line 2. CC320 has been identified in other European countries: Poland, Spain, Italy, as you can see at the MLST database.

4.- Table 1. Include PCV13 period.

5.-Table 2, % of change. This data could be excluded and include the statistical significance if appropriate.
6.- Table 3. Revise spelling in diagnosis column. Since macrolide and lincosamide resistance are frequently mediated by the same resistance mechanism (ermB), it could be interesting to know the phenotypes of macrolide resistant isolates better than rates of resistance to clarithromycin and clindamycin.

7.- Figure 2 could be improved including which variables are referred to left or right axis.

**Level of interest:** An article of outstanding merit and interest in its field

**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 declare that I have no competing interests