Reviewer's report

Title: An Expanded Age Range for Meningococcal Meningitis: Molecular Diagnostic Evidence from Population-Based Surveillance in Asia

Version: 1 Date: 24 August 2012

Reviewer: MONTSE SORIANO GABARRO

Reviewer's report:

Major Compulsory Revisions

This is a generally well written manuscript which addresses an important clinical and public health question. The burden of meningococcal disease in Asian countries appears to be underestimated. Data providing additional evidence on disease burden in Asian countries and on the use of appropriate laboratory methods for the detection, confirmation and serotype characterization of meningococcal infections are of value.

The study is of descriptive nature and appears to be population based. However, limited information is provided on the specific study sites (e.g. tertiary hospitals?, general hospitals? pediatric hospitals? ) and on the study population under surveillance.

The results section should start with a sentence / paragraph (and table) describing in more detail the study population (demographics, including patients observed, patients with CSF collected, age distribution etc.). Otherwise it is very difficult for the reader to put the microbiological data presented into context (this is especially important given that the number of meningococcal disease isolates is small and that incidence data are also being presented). The clinical information on meningococcal disease cases could then be presented followed by a description of all microbiological findings. I would also suggest presenting incidence data earlier in the results section.

Authors should also address in more detail representativeness of the data. Based on the reading of the manuscript it is difficult to assume adequate/good representativeness.

It would be of value to extend the discussion on the feasibility of routinely using PCR detection methods in real life conditions.

Minor Essential Revisions

Additional comments:

Methods section. Laboratory testing:

Delete “a total of 295 bacterial isolates” in sentence” Prior to molecular analysis of CSF specimens, isolates were sub-cultured to confirm the bacterial species
identity”.

Check spelling of N. meningitides in page 14 (it should read N. meningitidis)

Last sentence in the Conclusions section does not read well: “Future researches that a long-term prospective population-based surveillance with molecular characterization and serogrouping of strains will help”.

**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 hold stocks/shares at GSKBiologics but I do not work in this Company since 2010. GSKBiologics develops meningococcal vaccines.