Reviewer's report

Title: Recurrent severe invasive pneumococcal disease including meningitis in an adult with previously unknown hyposplenia

Version: Date: 31 December 2014

Reviewer: Ricardo Zotomayor

Reviewer's report:

There are no major nor minor revisions that I can consider worth mentioning.

Comments:

1. I agree with the observation that if an adult suffers from a repeat invasive disease from encapsulated organism, a more thorough evaluation of the immunological status of the patient is in order. These kind of studies are not commonly available in most health care facilities especially in the third world countries and would therefore need referrals to more advanced centers.

2. Protective levels of response from active vaccinations need to be better defined for adults, especially in similar patients as was reported in the case.

In efficacy trials for the development of PCV 13 for adults, geometric mean titers of opsonophagocytosis activity, defined as titer that will result in death of 50% population of inoculum of a specific serotype of pneumococcus, was used to compare the response to the PPV 23 against the response to PCV 13. This might be a better way of evaluating the functional immune response to a vaccine as an intervention to a hyposplenic patient and/or those suffering from multiple levels of immune suppression.

3. Once identified, patients with hyposplenism will probably benefit not only from vaccination against Strep. Pneumoniae but also against H. Influenzae and N. Meningitidis. Polysaccharide vaccines have showed inconsistent benefits for such individuals and are probably better covered with the new conjugated vaccines, if only we have an access to an accurate way of measuring their functional response to such interventions.

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

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

Speaker/ Advisory board member in Asia-Pacific area for Prevenar 13 (PCV13) Pfizer.