Reviewer's report

Title: Leptospirosis in the Asia Pacific Region

Version: 1 Date: 12 May 2009

Reviewer: Jie Yan

Reviewer's report:

Discretionary Revisions#

Leptospirosis is a worldwide zoonotic infectious disease, especially in developing countries. Since pathogenic leptospires have numerous animal hosts in nature, the disease is impossible to be eliminated. Therefore, the fresh epidemiological data about leptospirosis in different areas is always important for either control or prevention of the disease. However, pathogenic leptospires can be divided into many serogroups, serovars or genotypes, and in different areas there is an obvious diversity for prevalent serovars or genotypes. Further more, in the different areas alteration of the predominant leptospiral serovars or genotypes have been found. So it is not sufficient only to offer disease incidences in the different countries. On the other hand, the leptospiral vaccines used currently are mainly multivalent dead whole-cell mixtures made of several local dominant serovars in different countries and regions because of the limited cross immunoprotection among different leptospiral serovars or serogroups. However, in recent reports some researchers have successfully screen out several common pathogenic leptospires-specific outer membrane protein antigens that have a potential to develop a universal vaccine for preventing leptospirosis. I think it is very important to introduce these superficial protein antigens. The authors should re-review and supply the information listed below.

1. Please summarize the current major pathogenic leptospiral serovars or genotypes in Asia Pacific region and their major animal hosts that having high risk to populations in different courtiers.

2. Please summarize the recent advancement about the pathogenic leptospires-specific protein antigens in the manuscript.

Level of interest: An article of limited interest

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests