Reviewer's report

Title: Differential immune responses in individuals after the 2009 pandemic influenza infection and after vaccination with the pandemic influenza vaccine: A prospective study in Sweden

Version: 3 Date: 4 March 2014

Reviewer: Roberto Gasparini

Reviewer's report:

Minor essential Revisions

1) It could be useful to add: Influenza and pandemic in the key words.

2) The terms flu response and immune response are sometimes used in an inappropriate manner, the AA should change with the term: immune status, when appropriate.

3) The AA should delete a part of the second sentence of the discussion, namely: from (which.. to blood, because already said.

4) Finally, it would be useful, in the discussion, that the Authors gave some information on the biological functions of influenza antigens, in particular proteins M1 and M2. For instance: The M2 protein is a proton-selective ion channel protein, integral in the viral envelope of the influenza A virus. The M2 protein brings protons into the virion core. Acidification of virus interior, leads to weakening of electrostatic interaction and leads to dissociation between M1 (matrix protein) and viral ribo nucleo protein (RNP) complexes. (Sakaguchi T, Leser GP, Lamb RA.P (1996). "The ion channel activity of the influenza virus M2 protein affects transport through the Golgi apparatus.". J. Cell Biol. 133 (4): 733–747.)

Discretionary Revisions

The AA should change the title, because it is too long. An alternative title could be: “Difference in immune response in vaccinated and unvaccinated Swedish people after the 2009 Influenza pandemic”.

Level of interest: An article of importance in its field

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

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