Reviewer's report

Title: Effectiveness of DNA-recombinant anti-hepatitis B vaccines in blood donors: a cohort study.

Version: 2 Date: 30 July 2007

Reviewer: Leslie H. H Tobler

Reviewer's report:

General
I have a problem with premise that the authors but forward, effectiveness of DNA-recombinant anti-HBV vaccine among blood donors. In my opinion there is no reason to believe that the effectiveness of DNA vaccination should be any different among blood donors compared to other groups that have been monitored. What the authors are really concerned with is transfusion-transmission of HBV in Brazil and the benificial impact of wide spread, government sponsored, HBV vaccination of blood donors in HBV endemic areas of Brazil. Unfortunately, the authors never use the terms “transfusion recipients” or “transfusion recipient safety”. It is my opinion that this issue should be addressed in both background and discussion sections of the manuscript.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

I see no need for any major compulsory revisions beyond the one mentioned in my general comments.

I need to state that I do not feel capable of addressing any statistical mistakes.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

There are though out the manuscript a number of errors involving the wrong use of the English language:

Abstract:
Background: " a group of great importance for reducing the transmission of hepatitis B" should be changed to " a group of significant importance in the reduction of transfusion-transmitted hepatitis B".

Methods:
"double cohort study of repeated blood donors" should be changed to "double cohort study of repeat blood donors".

Manuscript:
Background:
"a group of special importance to prevent HBV transmission" should read "a group of special importance in preventing HBV transmission"
"state capital Florianopolis has reduced considerably" should read "state capital Florianopolis has been reduced considerably"
"Another reason to incentive vaccination" should read "Another reason to strongly encourage (or strongly promote) vaccination"

Discussion:
1."Brazilian blood donors should be systematically encouraged to take up anti-HBV vaccine" should be changed to "Brazilian blood donors should be systematically encouraged to get vaccinated with the DNA-recombinant anti-hepatitis B vaccine".
2."thus leaving a period of several moths before anti-HBC" spelling error should be corrected.
3. "The incidence of this order has left more space for its reduction due" should be changed to "An incidence of this order could be significantly reduced by vaccination compared to the impact of vaccination in low endemic areas".
4."to minimize the impact of confunding" should be changed to "to minimize the impact of confunding factors".
5."providing important information for reduction of HBV infection in adult population" should be changed to "providing important information about the reduction of HBV infection in the adult population".

Conclusion:
1. Something about recipient safety should be added to the first sentence of this section. An example would be "The results showed a very high effectiveness of DNA-recombinant anti-hepatitis B vaccination among blood donors resulting in the enhancement of recipient safety in the State of Santa Catarina."

No discretionary revisions necessary

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

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

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 declare that I have no competing interests.