Reviewer's report

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

Version: 2 Date: 7 July 2007

Reviewer: Fransisco Souto

Reviewer's report:

General
Although did not reach significant statistic values, this cohort study is very interesting and adds information about effectiveness of HBV vaccine in an actual set of a Latin American country.

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

I suggest that the authors consider to show important numbers such as the N of groups and the average of follow up time in "Results" and "Abstracts". The readers only can know the total N of groups if calculate the sum of the categories of one of the variables on Table 1.

I am in doubt about the incidence ratio that the authors presented (2.33 per thousand person-years). In the Table 2, we can see that the numerator and the denominator of the non-vaccinated group are 4 and 2,747, respectively. The result is 1.45 instead of 2.33. I think this result (2.33) appears because "half-time between the dates of the last seronegative donation and the positive sorologic test" was considered in case of HBV infection. If it is the explanation for this IR (2.33/1,000)then it would be reasonable to insert another column (between "person-years" and "incidence" showing the denominator in fact considered when the IR was calculated.

I would like to know why authors chose not show a KM survival curve and Cox regression results of this interesting cohort study.

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

"Cirrhosis" appears wrongly written: "cirrhoses".

In the last sentence of the third paragraph of "Background", I suggest change "...recent indication..." for "...recent evidences..."

The last paragraph of Background seems unnecessary since it is just an introduction to the following sections. Is is not necessary to say that the Results and Discussion are following the Methods. It seems to me that the authors should change this paragraph for other one summarizing the goals of the study.
or giving a justification for carrying it out.

Discretionary Revisions (which the author can choose to ignore)
On the third paragraph of "Methods", first sentence, I think the authors changed the position of the two groups "vaccinated" for "non-vaccinated".
I would suggest that the authors consider to introduce a line about "the time average of follow up" on the Table 1.

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

Declaration of competing interests:
I declare that I have no competing interests.