Reviewer's report

Title: HLA-DR and HLA-DQ alleles in patients from the south of Brazil: markers for leprosy susceptibility and resistance

Version: 2 Date: 25 March 2009

Reviewer: Anna I. Dubaniewicz

Reviewer's report:

This manuscript require the Major Compulsory Revisions before the acceptation.

1. Regarding the Abstract section:
   • Page 2, lines 20-22: The Authors should be supplemented the Results section with the significant DQ frequency values before Bonferroni correction.
   • Page 2, line 22-24: The Authors have rewritten the Conclusion section: the Authors should be supplement with association particular stages of Leprosy with particular HLA-DR16 alleles.

2. Regarding the Methods section:
   • The Authors should be supplement this section with information concerning number of heterozygotes or homozygotes.
   • In my opinion, the Authors should be multiply p value by number of tested loci inside each locusi, not all loci.

3. Regarding the Results section:
   • In my opinion, the Authors should be add the subtitles.
   • What a connection the current results with a new classification of subgroups of leprosy?

4. Regarding the Discussion section:
   • Page 9, lines 13-18: Are these results the Author’s or Rani et al. ?
   • Page 9, lines 30-32: The Authors should be connect the linkage disequilibrium with obtained results.

5. Regarding the Conclusion:
   • The Authors have rewritten the Conclusion section: the Authors should be supplement with association particular stages of Leprosy with particular HLA-DR16 alleles.

6. Regarding the Tables:
   • Tables 1-3 should be significantly rewritten: In my opinion the Authors should
be introduce the frequency of all tested alleles: n, %, p with only marked significant pc values in all tested subgroups and marked significant OR and CI values. Once more, I also suggest that main headline inside Table 3 is wrong. In the Legend of Table 3 is marked pc>0.05????should be marked only significant pc<0.05!!!

7. Regarding the English:

• The manuscript requires language improvements. The Authors very often used sign”;” before hower in the manuscript.

Level of interest: An article of importance in its field

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

Statistical review: Yes, and I have assessed the statistics in my report.