Reviewer's report

Title: HLA haplotypes associated to the hemochromatosis mutations in the Spanish population

Version: 1 Date: 24 May 2004

Reviewer: Ronald Acton

Reviewer's report:

General
This is a very poorly written article with numerous spelling and grammatical errors. The manuscript needs to be edited carefully to correct these which distract from the scientific merits of the study.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
Correct spelling and grammatical errors.
HFE should be in italics.
The nomenclature for HLA alleles is not correct. Example HLA-A3 should be HLA-A*03, HLA-B44 should be B*44. See: Bodmer, JG Vox sang 1999;77(3): 164.
In the background section, first paragraph line 10: provide references for the frequency of HFE mutations that are found in various populations.
Provide reference for odds ratio.
In the results section table 3 is presented before Table 2. This is confusing present Tables in order that data is discussed.

Although the authors refer to the Barton paper as the only other paper where HLA haplotypes are presented they fail to make a major distinction between the paper by Barton and Acton and their own. The major difference is that the paper by Barton and Acton presents haplotype frequencies assessed by family studies where phase could be set, whereas their paper estimates haplotype frequencies. Haplotype frequencies that are estimated are not as accurate as those determined by family studies. This difference in the two studies should be noted in the discussion.

In the discussion under the section C282Y and H63D mutations:which one is older, second paragraph, line 12 reference is made to "haplotype has broken". I think what the authors mean is that there has been more recombination in the HLA-A29/B44/H63D haplotype than the HLA-A3/B7/C282Y haplotype.

In Tables 1, 2 and 3 odds ratio apppears twice as a footnote.

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

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No

Declaration of competing interests:

None