Reviewer's report

Title: Distribution of the FY*BES and RH*es alleles in an Argentinean population: implications for transfusion medicine

Version: 1 Date: 28 January 2008

Reviewer: connie westhoff

Reviewer's report:

Discretionary Revisions
1. References to a "black phenotype" is unclear and imprecise terminology.
2. That fifteen individuals tested carried the FYBES allele (page 5) should be clarified that this refers to unrelated individuals.
3. Oriental is not preferred terminology for ethnic groups from Asia or India.

Minor Essential Revisions
1. The terminology for the allele indicated as RH*eS has potential for confusion. Additional mutations are often associated with this designation. Therefore, RHCE*ce (733C>G) is suggested, as this will clearly indicate which mutation is being analyzed.

RHCE*ce (VS) could also be used, and would be consistent with the blood group mutation database, but VS expression occurs on multiple backgrounds.

2. Nucleotide changes are designated by the position followed by the change, for example 125G>A for FYA/B. By convention also, the non-coding regions are designated in small letters, for example -33 t>c for the GATA-1 mutation.

3. That Leu245Val "has always been found" in Dce haplotype is an overstatement. It is "primarily found in the Dce haplotypes". It can also be found in deleted D (ce) haplotypes, for example those encoding Rh43 Crawford.

Major compulsory Revisions
1. How was the ethnic group determined? Importantly, were the subjects asked to indicate their race or ethnic group? It must be clarified if race was determined only by the investigator.

2. The conclusion that 4.68% of the present gene pool is of African origin based on one SNP and testing 200 unrelated individuals from a single region would be seen as an overstatement. It is unclear if the FYBES allele or the 733 mutation has arisen more than once (especially in a locus undergoing profound gene conversion such as RH). Rather, the conclusion should reflect that these alleles presently are primarily associated with African ancestry.
**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