Reviewer's report

Title: An Ins/Del polymorphism in the HA-1 gene as detected by melting temperature assay without oligonucleotide probes

Version: 1 Date: 7 April 2005

Reviewer: Els Goulmy

Reviewer's report:

General

The authors describe HA-1 allelic frequencies in the Italian population and show that it is possible to determine allelic differences making use of the Ins/Del polymorphism via melting curve analysis. Since melting curve analysis seems to work well for the determination of the H/R polymorphism in HA-1 and it is such a simple method it could be a welcome addition to the various techniques already in use to determine the polymorphism. The simplicity of the test would allow the analysis of very large sample groups, of course taking into account the occurrence of haplotype D described by the authors.

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

The 5 nucleotide Ins/Del polymorphism is NOT new. It has been reported by Arostegui et.al (ref 8 in the manuscript). The latter paper also describes the co occurrence of the Del with the HA-1H encoding allele and the Ins with the HA-1R encoding allele. Reading the manuscript it appears to me that the authors claim this as their original finding. This needs to be rectified with clear reference to Arostegui et al.

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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)

In the conclusion section the authors state the following "whether the observed sequence diversity, besides HA-1R/H, might influence allogeneic recognition by cytotoxic T cells remains to be determined. All polymorphisms observed are either synonymous or in intronic regions. It is therefore highly unlikely that they could influence allogeneic recognition. I would therefore like to advice to add the above described fact or to remove the sentence.

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Discretionary Revisions (which the author can choose to ignore)

It would be fair to discuss the occurrence of haplotype D and the consequences of it performing melting curve analysis based on the Ins/Del polymorphism also in this respect taking into account the findings of Arostegui et al.

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: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

Genomic typing of the HA-1 polymorphism has been patented by our research group. This fact does however not lead to any competing interest with regards to the reviewed manuscript.