Reviewer's report

Title: Lack of association between the chemokine receptor 5 polymorphism CCR5delta32 in rheumatoid arthritis and juvenile idiopathic arthritis

Version: 1 Date: 29 January 2007

Reviewer: Sampath Prahalad

Reviewer's report:

General
Authors try to replicate association between RA, JIA and CCRD32 and could not find an association. The study appears to be sound and has large cohorts of individuals with RA and JIA, as well as controls. The authors provide power calculations to indicate that the lack of association is not due to inadequate power.

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

I dont have any major concerns about this paper.

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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)

Although the authors are correct in stating that three studies did not reveal association between RA and CCR5D32, two of the other studies had only 278, and 163 cases with RA. Thus lack of power in these studies is a major concern and that should be better emphasized.

On page 7, they postulate that the meta-analysis was prone to type 1 error due to publication bias. However published studies included both a negative association and a lack of association. Hence it is unlikely that publication bias played a major role, where only significant associations are published, and studies failing to show associations are rejected for publication. This needs to be clarified.

There are several reasons for non replication of association studies. They should discuss some of these reasons. Specifically the lack of association seen here could be due to true population differences. This needs to be better explained.

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Discretionary Revisions (which the author can choose to ignore)

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: Acceptable

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.