Reviewer's report

Title: Older age does not influence CD4 cell recovery in HIV-1 infected patients receiving Highly Active Anti Retroviral Therapy.

Version: 1 Date: 23 February 2004

Reviewer: mario Clerici

Reviewer's report:

General

Tumbarello and colleagues examine HAART-induced immune reconstitution in HIV infected individuals of different ages in the attempt to understand if the effect of therapy is different in older patients. The study is interesting although faulty and should be rewritten by an English mother tongue person.

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

The selection criteria that led to studying a subset of 62 elderly vs. 124 younger patients have to be more convincingly described.
The analysis are not complete: the authors must include data on the effect of HAART on % of CD4 cells; on CD8 counts and % at baseline; and on the effect of HAART on CD8 T cells.
The criteria used to define immunological success is not convincing (it is not enough to say that success = CD4>200 at the end of follow-up; the delta CD4 should be included as well).
The immunologic effect of NNRTI and PI is different, thus the criteria used to match case and controls are not acceptable.
HIV viral load decreased in cases from 4.98 to 2.08 copies ml and from 4.91 to 1.7 in controls, yet fig 3 shows exactly overlapping values at the end of the follow-up period; where is the error?

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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)

Any of the patients received immunomodulants (e.g. IL-2)?

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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