Reviewer's report

Title: CD4 cell count recovery among HIV-infected patients with very advanced immunodeficiency commencing antiretroviral treatment in sub-Saharan Africa

Version: 1 Date: 24 February 2006

Reviewer: Robert clebunders

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
The authors found in the study a significant larger rate of phase 2 recovery of CD4 count and a lower risk of immunological non-response in patients with low CD4 count at baseline. In the discussion of the article the authors mention that this finding can not be explained by survival bias, as the majority of deaths occurred in the first three months. I suspect there was probably a higher mortality in the first four months after starting HAART in patients with a low CD4 count at baseline. Among patients with a low CD4 count at baseline those who did not respond immunological very well on antiretroviral therapy, were probably more at risk of dying within the first four months after starting such therapy. Those with a low CD4 count at baseline who survived were on the other hand immunological good responders. In persons with higher baseline CD4 count levels there has not been this selection because probably fewer people died. This could explain why there was a larger rate of immunological response in patients with CD4 count below 50 during the second phase of recovery.

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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)
Page 3, last paragraph: “Advancing pre-treatment immunodeficiency” I propose “advanced pre-treatment immunodeficiency”.

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I have no competing interest