Reviewer's report

Title: The risk of AIDS-defining events is decreasing over time in the German HIV-1 Seroconverter Cohort

Version: 3 Date: 14 October 2011

Reviewer: Maria Dorrucci

Reviewer's report:

Major compulsory Revisions
This study shows that that free-AIDS survival following HIV seroconversion has continued to improve (even if not linearly) over calendar time with an overall 80% reduction in the risk of AIDS defining events compared with pre-1997 (when mono- or dual- therapies were used). And this is in part confirmed by other studies. Besides this is the first study that shows a significant reduction in the risk of AIDS after 2007. The draft is well written and presented; methods are appropriated. However, one main question arise about important data not shown in the draft.

The main issue that authors should address regards the follow-up: for how many person years of follow-up individuals have been followed in each calendar period? And how many events for each calendar period? In table 1 only 214 individuals have been followed in the pre-1997 that is really much lower than those followed in recent years at least n=465 in 2005-2006 and n=731 in 2007-2010. The doubt is: was the pre-1997 cohort representative of those seroconverted before 1997?

A second issue about data: no mention of the number of deaths has been done. Which is the trend of pre-AIDS mortality? pre-AIDS mortality is a competing-event that can affect results.

Another issue regards statistical analysis: no clear definition of follow-up has been given. I suppose that individuals were censored at last visit? Or when?

Minor essential revisions

Methods
-table 1 1997-2000 was repeated twice

Statistical analysis
-The presence of HCV or HBV infections were not considered as a covariate, and authors should add in the model. If they have no information about these infections, they would consider as a limit in the discussion.

Results
-The follow-up distribution was not well described. Median follow-up and range should be shown.
**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests