Reviewer's report

Title: A Prospective Study of Improvements in Endothelial Activation Biomarkers, Including Plasma Angiopoietin-1 and Angiopoietin-2, in Kenyan Women Initiating Antiretroviral Therapy

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Reviewer: mariola lópez

Reviewer's report:

Due to the mechanisms involved in the cardiovascular disease risk increased in HIV infected patients are not well known, studies like this are the grand interest. Graham et al in this longitudinal study analyze traditional and interestingly potential novel endothelial activation biomarkers which have not assayed previously and they evaluate the impact of treatment on evolution of these dysfunctional endothelial biomarkers. Interestingly, they found a differential evolution of different biomarkers and ICAM-1 and ANG-2 levels could be biomarkers for adverse outcomes in advances HIV- infection.

Minor concerns
Are HIV infected patients naïve after initiating HAART or some of them had on treatment previously? This is important due to the different antiretroviral treatments could present differential effects on the hyper-activation, inflammation, endothelial dysfunction and oxidative stress mechanisms, the authors could clarify this.
In the table 1 long of HIV infection and CD4 levels should be added in the manuscript.
In the figure 1 p value are missed.
In the section on baseline endothelial activation biomarkers, Are there correlations among different dysfunctional endothelial biomarkers with CD4 counts and nadir CD4? The authors should add these data in the manuscript.
Are there significant differences in the different biomarkers levels at month 6 compared to month 12?
In the multivariate analyses have been considered levels of CD4 nadir?

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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'