Reviewer’s report

Title: Characterization of APOBEC3 variation in a population of HIV-1 infected individuals in northern South Africa

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Reviewer: Nurten Akarsu

Reviewer's report:

Matume et al. characterize polymorphisms in APOBEC3 genes, namely A3D, A3F, A3G and A3H, which are implicated in the restriction of HIV-1 replication. A total of 192 HIV-1 positive individuals from Limpopo province of South Africa are studied. In addition to known variants, novel variants and haplotypes, mainly in A3D and A3F, are now reported. APOBEC3 variants and its role in HIV enfection are well discussed in the literature. Thus, the paper does not provide an extensive contribution to existing knowledge. Furthermore, lack of functional characterization of these variants is the major weakness of the study as authors stated in the MS. On the other hand, population genetics and diversity are well studied and presented. The molecular data is strong. The data is traceable in Ensembl and other databases. Thus, I believe that these variant/haplotype informations will lead future functional studies in order to understand dual effect of APOBEC3 polymorphic changes on HIV infections. I am in favor of publication.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics
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Acceptable

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