Reviewer’s report

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

Version: 0 Date: 25 Aug 2018

Reviewer: Jaroslav Bendl

Reviewer's report:

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.

No

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

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
In this study, the authors report on a case-only study performed on 192 HIV-infected individuals of South Africa origin. Except for two variants, all other reported ones show a higher prevalence compared to known prevalence for African population. Noteworthy, some of those variants have been previously associated with HIV progression. Unfortunately, the absence of control cohort from Limpopo province has not allowed them to draw stronger conclusions about the importance of differences in frequencies of those variations in relation to HIV. On the other hand, their report will be a valuable resource for designing and evaluating further studies of APOBEC3 genes.

Minor revision:
I would suggest using Fisher’s exact test to assess the differences in the allele frequencies between 192 HIV-infected South Africa’s individuals and the others world’s populations and Africa subpopulations (i.e., to extend Table 4 and 5). This would help to prioritize variations for further investigation.

Typo

dpSNP -> dbSNP (Table 3 - legend)

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