Reviewer’s report

Title: Virologic suppression in response to antiretroviral therapy despite extensive resistance within HIV-1 reverse transcriptase after the first virologic failure

Version: 1 Date: 14 May 2018

Reviewer: Shui Shan LEE

Reviewer's report:

This is a descriptive study on the pattern of resistance to antiretrovirals in a cohort of HIV patients on treatment in Brazil. The main observation was that there's extensive resistance to NRTI after first virological failure, but virologic suppression was not affected after 48 weeks of switching to second line regimen. The study involved the examination of samples of 184 patients collected over a 10-year period. The main reason for treatment failure was presumably poor adherence, though this was not further analysed. Likewise there was no investigation into correlation with other potential risk factors associated with resistance, for example, socio-demographics, family support, behaviours, HIV transmission history, drug dosage (was lower dose used for efavirenz?). Understandably this is an important area but the manuscript had not offered any new information nor perspective about antiretroviral resistance which could be of useful reference to other practitioners or researchers.

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

Unable to assess

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