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: 12 Apr 2018

Reviewer: Cleophas Chimbetete

Reviewer's report:

1. Authors must ensure that all abbreviations are first defined at first use. Throughout the manuscript they have repeatedly used abbreviations without first defining them.

2. In the abstract: Line 20, Please clarify whether the AVV> 36 months is total time on ARVs or time on rescue therapy.

Introduction

1. Line 67: The sentence beginning with "However..... since 2001" does not make sense, please revise.

2. Line 23: Clarify what is immune-troubling.

3. Line 33: Please revise, WHO guidelines recommend 1st line of 2NRTIS (t) and 1 NNRTI.

4. Line 37: Sentence starting with "These factors does not read well, kindly revise.

5. Line 41: What is ITRN MAR (t).

Methodology

1. Less than 50% of records were included in the analysis. How representative is this?

2. Line 19: Sentence beginning with "After 48 weeks ... is not clear. Please revise.

Results

1. Major Comment: Why were 59 records without MAR excluded yet they had resistance test results? This is an important source of bias in the study. I propose that these be included in the analysis.

2. Why did the authors use poison regression for cross-sectional data?
3. The sub-heading "Factors associated with genotypic......." is not appropriate. I recommend revision to "Factors associated with MAR"

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

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

Needs some language corrections before being published

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