

Reviewer B

INTRODUCTION

It is important to mention what is the implication in the virulence or tropism of HIV, the presence of subtypes and their classification.

Why it is important to know the circulation of subtypes in certain geographic areas.

A paragraph is necessary about the importance of the Marajo region and its geographical or social implications.

We see your point of view, but we opted to write an introduction in a concise and focused way. Additionally, we make reference on the importance of subtypes on the virulence when we describe the consequence of the high genetic variability of HIV-1 is the emergence of strains with antiretroviral (ARV) resistance mutations, which has been a major concern because the transmission of these variants to other individuals may alter the progression of the infection and limit treatment options over time. Anyway, we expanded the introduction talking more about the Marajo Island and its social characteristic that make this geographic area susceptible to the ISTs as HIV-1.

MATERIAL AND METHODS

It is important to know how these patients were recruited. Health campaign? Was it a specific population such as school or universities?

This data is important to assess the prevalence

More information was added in the text.

DISCUSSION

Highlight the finding that of three samples, one corresponds to subtype D and the need to evaluate the primary resistance in this region.

It was done.

CONCLUSION

I suggest that you focus on finding the presence of this subtype in such a small sample of participants.

It was done. A new text was provided.

"The occurrence of transmitted PI resistance mutations in subtype D strain is still observed. ARV resistance mutations may limit treatment options, and certain subtypes appear to influence the progression to AIDS"

Reviewer C

ABSTRAC

In the case of DRV / r, the resistance level is potentially low

Dear Reviewer, according to the HIVDB 9.0 DRV/r is reported as Intermediate Resistance.

BRPA_116	
Drug resistance interpretation: PR	
HIVDB 9.0 (2021-02-22)	
PI Major Resistance Mutations:	V32I, M46I, I47V, V82A
PI Accessory Resistance Mutations:	K43T
Other Mutations:	K20I, R41K, I62V, L63S, I64V, E65D, T74A
Protease Inhibitors	
atazanavir/r (ATV/r)	High-Level Resistance
darunavir/r (DRV/r)	Intermediate Resistance
fosamprenavir/r (FPV/r)	High-Level Resistance
indinavir/r (IDV/r)	High-Level Resistance
lopinavir/r (LPV/r)	High-Level Resistance
nelfinavir (NFV)	High-Level Resistance
saquinavir/r (SQV/r)	Intermediate Resistance
tipranavir/r (TPV/r)	Intermediate Resistance

DISCUSSION

Currently Saquinavir is used very little, it is usually taken as the reference of the PI group to Darunavir / r

We see your point of view, but at this point we cited two references that make references to saquinavir.

TABLE

Version 9.0 of the Stanford algorithm reports:

lopinavir / r high level of resistance, atazanavir / ritonavir intermediate resistance and darunavir / ritonavir potentially low level of resistance.

Dear reviewer as demonstrated above the level of resistance to atazanavir is high and darunavir is intermediate.