

Serologic evidence of circulation of six arboviruses (dengue virus, chikungunya virus, Zika virus, Rift Valley virus, yellow fever virus, Crimean-Congo hemorrhagic fever virus) in four regions of Burkina Faso, West Africa.

Authors have addressed a critical component of arbovirus epidemiology and detection. The paper is well-written with clear assumptions throughout the manuscript. Aspects addressed are critical to provide an almost comprehensive a background of arboviruses circulation in Burkina Faso.

Minor

- 1) Use the adequate checklist for this study.
- 2) Arrange the methods section in a logical pathway.
- 3) What was the algorithm whenever a repeat was equivocal?
- 4) Lines 114-116: samples were randomly selected using STATA software...Line 143: Variables were entered using Excel and analyzed using STATA 17.0 (Texas, USA). These sentences look contradictory. Correct.
- 5) Lines 253-255: "In Burkina Faso, women spend most of their time in households that are often close to breeding sites of mosquitoes, which would explain at least the higher exposure to CHIKV, while men might be more exposed to sylvatic DENV". If this is the hypothesis, it means that we should also have more men infected with Chik due to exposure to breeding sites of mosquitoes around houses. If this is not the case, kindly rephrase this sentence.
- 6) Add a prospective on diagnostic tools to be used in the detection of arboviruses and the determination of their real burden in the region/country. Then, authors can suggest not only the integration of new viruses to the testing panel, but overall, they can really bring a relevant contribution to the detection of circulation viruses in the country.
- 7) Correct references 3, 4, 8, 12, etc.