Review of: "Evolution of new variants of SARS-CoV-2 during the pandemic: mutation-limited or selection-limited?"

Mohammadali Zolfaghari[1]

1 Tabriz University of Medical Sciences

Potential competing interests: No potential competing interests to declare.

The manuscript demonstrates clear and concise writing, effectively addressing the limitations of the simulation. The primary objective was to examine the evolution of SARS-CoV-2 using epidemiological data, and the findings suggest that the introduction of new variants is constrained by selection rather than mutation. This study holds relevance and has the potential to pave the way for reevaluating other pandemic viruses.

There is one particular aspect pertaining to the mutation rate that I believe warrants attention. It is widely acknowledged that viral mutator lineages can emerge within populations, indicating an elevated mutation rate. Therefore, in the Discussion section, I recommend incorporating references from the supporting literature when the authors assert that "Mutation rates are unlikely to differ significantly across viruses." This would enhance the persuasiveness of their argument and provide a more comprehensive discussion.