

Since Reviewer #1 rejected the article, we answered only Reviewer #2.

Reviewer #2:

Specific Comments to Authors:

In this paper, the author uses the experiments in silicon to obtain the affinity of Remdesivir with ACE2 and coagulation cascade factors through molecular docking. The stability of drug binding with other factors was evaluated by comparing the affinity. It is proved that Remdesivir can combine with ACE2 and coagulation factor stably. It may be the theoretical basis for Remdesivir to play a pharmacological role and play an anticoagulant role. So that we can better understand the role and application of Remdesivir in the pharmacological treatment of COVID-19.

The occurrence of interaction between Remdesivir and factors of the coagulation cascade is of interest in the treatment of critically ill patients with COVID-19. The critical condition of these patients makes it necessary to have more knowledge about the possible side effects of the medications used in their treatment. Additionally, the analysis of this interaction provides the possibility of studies and new uses (off label) for Remdesivir and similar drugs.

This paper uses the method of in-silicon experiment to transform this pharmacological research into inorganic experiment. And through the affinity between substances, it provides a theoretical basis for the antiviral effect and possible anticoagulant effect of Remdesivir. In the body, the activation of coagulation process and the change of hypercoagulable state is a complex regulatory process. Although, the in-silico analyses indicated that Remdesivir interacts with clotting factors, whether this situation still plays a role in the body is still a long process to be proved.

The goal of using the *in silico* method is to screen for interactions between different chemical molecules. The interaction that we observed between Remdesivir and factors of the coagulation cascade makes further investigation in *in vitro* and *in vivo* models necessary. The *in silico* method does not exclude the other ones, but directs the conduct of experiments reducing financial costs and time, since computer simulation provides reliable data about the target of study.