

# UC San Diego

## Skaggs School of Pharmacy and Pharmaceutical Sciences

October 23, 2020

Dear Editor:

Please find the attached manuscript entitled “**A cysteine protease inhibitor blocks SARS-CoV-2 infection of human and monkey cells**” that we wish to have considered for publication in the Proceedings of the National Academy of Sciences (PNAS). The manuscript highlights the efficacy of a protease inhibitor (K777) in blocking SARS CoV-2 infection of several human and primate cell types. The mechanism of action is confirmed as specific inhibition of cathepsin L to prevent host cell processing of the viral spike protein, a requirement for viral cell entry. The inhibitor that is the focus of this manuscript has been approved by the FDA as a clinical-stage compound.

This is a multi-author manuscript with the following **Acknowledgements**:

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**There are 25 references and the word count is 4562**

One of the authors, Felix Frueh, is Co-Founder and CSO of Selva Therapeutics. Selva provided partial funding to the Texas Medical Branch for some of the studies reported. James McKerrow is a consultant for Selva Therapeutics. None of the other authors have conflicts of interest related to this manuscript.

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Sincerely,



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