

Review of: "Can Urolithin A Help in Curing COVID-19 Infection?"

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Potential competing interests: No potential competing interests to declare.

The scope of this paper is extremely narrow and is better suited as a commentary or letter to the Editor rather than a mini review on the topic of the potential efficacy of Urolithin A in the attenuation of infection by the SARS-CoV-2 virus.

Regardless, the author's basic assumption and reason for writing this commentary as stated in the abstract "To date, there has been no study investigating UA's role in curing COVID-19 or any viral infection." is incorrect. Therefore, the intent and purpose of this paper is completely nullified.

A brief search on Google Scholar returned at least four in-depth reviews and experimental articles that were published since 2021, before the online publication of this paper. Albeit the publication of the extensive critique on the molecular mechanisms of urolithins A-D in the inhibition of the SARS-CoV-2 virus by Bianconi et al. (August 2023) may have been published around the same time as this paper.

As such, the author may wish to review the following peer-reviewed papers and decide if the present work remains valid and relevant.

<u>Bianconi</u> E.; Gidari, A.; Souma, M.; Sabbatini, S.; Grifagni, D.; Bigiotti, C.; Schiaroli, E.; Comez, L.; Paciaroni, A.; Cantini, F.; et al. The Hope and Hype of Ellagic Acid and Urolithins as Ligands of SARS-CoV-2 Nsp5 and Inhibitors of Viral Replication. J. Enzyme Inhib. Med. Chem. 2023, 38, 2251721.

Suručić, R.; Travar, M.; Petković, M.; Tubić, B.; Stojiljković, M. P.; Grabež, M.; Šavikin, K.; Zdunić, G.; Škrbić, R. Pomegranate Peel Extract Polyphenols Attenuate the SARS-CoV-2 S-Glycoprotein Binding Ability to ACE2 Receptor: In Silico and in Vitro Studies. Bioorg. Chem. 2021, 114, 105145.

<u>Li</u>, H.; Xu, F.; Liu, C.; Cai, A.; Dain, J. A.; Li, D.; Seeram, N. P.; Cho, B. P.; Ma, H. Inhibitory Effects and Surface Plasmon Resonance-Based Binding Affinities of Dietary Hydrolyzable Tannins and Their Gut Microbial Metabolites on SARS-CoV-2 Main Protease. J. Agric. Food Chem. 2021, 69, 12197–12208.

Alexova, R.; Alexandrova, S.; Dragomanova, S.; Kalfin, R.; Solak, A.; Mehan, S.; Petralia, M. C.; Fagone, P.; Mangano, K.; Nicoletti, F.; et al. Anti-COVID-19 Potential of Ellagic Acid and Polyphenols of Punica Granatum L. Molecules 2023, 28.

