

Review of: "The $\alpha 7$ Nicotinic Acetylcholine Receptor: a Key Molecule in Post-COVID Syndrome?"

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Potential competing interests: No potential competing interests to declare.

- 1- The writing exhibits clarity and brevity. Be sure to maintain a consistent verb tense throughout the text. For example, in the sentence, "The classical symptom of COVID-19 is hyperinflammation," consider replacing "is" with "was" to uphold past tense uniformity.
- 2- The explanation regarding the impact of the SARS-CoV-2 spike protein on $\alpha 7$ nAChRs is well-detailed. However, making it more accessible to a wider audience could involve briefly elucidating the significance and relevance of these findings.
- 3- The concept that influencing $\alpha 7$ nAChRs may impede virus entry into cells is intriguing, but, as you pointed out, it requires experimental verification. Consider suggesting potential experiments or studies to validate this hypothesis.
- 4- You mention the interaction between the SARS(674-685) peptide and various nAChR subtypes, but it might be beneficial to clarify why this interaction holds importance or what implications it could carry.
- 5- Smoking and AChE Inhibitors: The discussion on the effects of smoking and AChE inhibitors on COVID-19 is engaging. However, it would be advantageous to briefly define AChE inhibitors and their relevance to the discussion.
- 6- Provide an explanation of what hydroxyurea is and its typical usage to offer context for readers unfamiliar with this drug.
- 7- Explain the significance of the presence of anti-idiotypic $\alpha 7$ -specific antibodies or how they relate to PASC.
- 8- Consider incorporating a sentence that discusses the potential consequences of your findings for future research or clinical practice. What might this imply for the development of treatments for PASC?
- 9- Briefly address the challenges and practical aspects of implementing these treatments in clinical settings.