

# 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.

The participation of  $\alpha 7$  nAChRs ( $\alpha 7$  Nicotinic Acetylcholine Receptor) in the development of Post Acute Sequelae of COVID-19 (PASC), according to the authors, based on previous evidence described in other publications and their own, is very interesting as an explanation based on the presence of anti- $\alpha 7$  antibodies that may or may not be idiopathic in nature, given that fragment 674-685 of the SARAS-CoV-2 S protein has homology with specific  $\alpha 7$  ligands. This same explanation serves as support to propose as a possible therapeutic option for the control of PASC the use of selective  $\alpha 7$  agonists that stimulate  $\alpha 7$  nAChRs signaling. This information, in my opinion, could serve as a basis for carrying out in silico studies and/or proofs of concept in animal modeling, which greatly contributes to the development of the understanding of PASC and its therapeutic approach. In this sense, I consider that the manuscript should be published.