OPEN PEER REVIEW REPORT 1

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COMMENTS TO AUTHORS

Despite a rationale can be seen in this review article the presentation of the topic is problematic. For instance, the whole paragraph "Pharmacological chracteristics of perampanel" is left practically without reference support. In addition, glutamate receptor subtypes pharmacology is described without the due sequence of physiological effects as well as pathological implications. In fact, NMDA as well as non-NMDA receptors are described as functionally independent species whilst it is mandatory that their description must highligt the concurrent role in normal and pathological neurotransmission. Similarly, The paragraph " Protective mechanism of perampanel against experimental stroke" appears to se the scenario for the drug to be useful only in stroke induced epileptic disorders though the following propositions are centred on neuroprotection. Indeed, this AMPAR antagonist is authorized in clinic for the treatment of partial seizures with no mention at all to post-stroke seizures. In addition, the whole neuroprotective potential of perampanel may simply descend from its fundamental mechanism of action and the whole lot of evidence reported to support the drug as neuroprotectant is anecdotical. For instance, the Authors quote the work of Chen et al., 2017, and report that perampanel upregulates catalase, SOD and glutathione transferase in TBI tough the paper tells as about a different scenario.In other words, as for the whole article the conclusion of the paragraph (see lines 32 to 42) is very much generic and does not offer a mechanism other than epiphenomenological descriptions.