

PEER-REVIEW REPORT

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Title: Therapeutics for Treatment of SARS-CoV2 (COVID-19): A Safety Perspective

Reviewer's code: 05907822

Position: Peer Reviewer

Academic degree: MD

Professional title: Professor

Reviewer's Country/Territory: China

Author's Country/Territory: United States

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Reviewer chosen by: AI Technique

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Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input type="checkbox"/> Anonymous <input checked="" type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

I have read the manuscript entitled 'Therapeutics for Treatment of SARS-CoV2 (COVID-19): A Safety Perspective', submitted to World Journal of Pharmacology. In this paper, the authors aimed to report a balanced perspective of current evidence for efficacy of these treatments in COVID-19 against the historical safety of these treatments.

I would like to thank and congratulate the authors of this study for the important insight they provide into the treatment for COVID-19 in this critical condition. I have a few comments which I think will improve the paper, which is quite well written.

Minor problems: 1. In Dexamethasone section, the authors discussed the most common adverse effects associated with dexamethasone; However, clinicians may be less familiar with a potentially severe, less common complication: Strongyloides hyperinfection or dissemination syndrome (hyperinfection). I suggest the authors add this rare ADR into the Dexamethasone section. This frequently fatal iatrogenic complication is usually associated with the use of an immunosuppressive drug in persons with unrecognized chronic infection. The most common precipitator is the use of a corticosteroid agent, which appears to be independent of dose or duration of treatment. 2. In Remdesivir section, the authors should add new evidence (Gilead's Veklury (Remdesivir) Associated With a Reduction in Mortality Rate in Hospitalized Patients With COVID-19 Across Three Analyses of Large Retrospective Real-World Data Sets – Real-World Evidence from Nearly 100,000 Hospitalized Patients Provides Clinical Insights on the Use of Veklury for the Treatment of COVID-19) into the discussion. 3. The authors did not provide important information about an rare adverse reaction of Ivermectin. In addition to the common adverse reactions of ivermectin mentioned by the authors in the article, neurologic disorders are another serious adverse reaction for healthcare workers to be vigilant. Ivermectin is remarkably safe due to its ability to be effluxed by the ATP-binding cassette subfamily B member 1 (ABCB1) transporter in the blood-brain



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barrier. But in very rare cases, the loss of ABCB1 transporter in humans can lead to a failure of brain protection and induced high exposure of the central nervous system to ivermectin. Thus, a usual dose or modestly above the standard clinical dose of ivermectin may induce neurologic disorders, which can be fatal. Encephalopathy and coma are well-known side effects of ivermectin treatment in animals. But few cases of neurologic disorders after ivermectin treatment have been reported in humans. Neurologic disorders may include coma, ataxia, pyramidal signs, and binocular diplopia.

I think the article is valuable but the authors should add more new evidence or rare adverse reaction into the discussion. Hence, it is recommended that this manuscript should be Major revised.