

Review Form 1.6

Journal Name:	Journal of Pharmaceutical Research International
Manuscript Number:	Ms_JPRI_80967
Title of the Manuscript:	A Study to Determine an Association Between ABO Blood Groups and Coronavirus Disease 2019
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

<https://www.journaljpri.com/index.php/JPRI/editorial-policy>

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The manuscript reports on the association between the risk of Covid-19 and ABO blood groups from patients at a large hospital in Pune, India. The authors confirm previous observations showing an increase in blood group A frequency and a decrease in blood group O frequency among patients. Although interesting, the manuscript requires improvement as detailed below.</p> <p>Previous observations on the relationships between ABO blood types and Covid-19 are presented in the introduction section. However, many more studies than indicated have been published. These have been reviewed by Goel et al DOI: 10.1111/vox.13076, as well as by Le Pendu et al doi.org/10.3390/v13020160. Likewise, there have been meta-analyses of these data, such as that of Franchini et al DOI: 10.2450/2021.0049-21. These publications should be added to the references list.</p> <p>Even if the severity status is not known at the individual level, it would be important to give the proportion of positive patients diagnosed at the hospital who were not severely affected and required no hospitalization, those who required a short hospitalization in standard care and those who required admission in intensive care. The potential effect of ABO phenotypes might not be the same for these different groups of patients, in particular in light of the associated co-morbidity factors that may be confounding factors.</p> <p>How were blood groups obtained. Were all patients admitted tested for ABO, or was it a subgroup with ABO types known in advance? In the latter case, a bias might have been introduced.</p> <p>The three tables could easily be merged into a single table.</p> <p>The results and discussion sections could also be merged and redundancy avoided.</p> <p>Following the sentence: "Individuals who express a specific HBAG are more susceptible to infection, whereas individuals without it are completely resistant or, at least, protected from severe disease", the appropriate reference should be that of Stowell and Stowell DOI: 10.1111/vox.12787.</p> <p>Correct HBA or HBAG for HBGA throughout (Histo-blood group antigens).</p> <p>Following the sentence: "HBA glycans on target cells can serve as receptors for SARS-COV-2", the reference Wu et al DOI 10.1182/bloodadvances.2020003259 should be cited as these authors showed that the spike protein RBD binds to the A type 1 antigen. This should be merged with the following sentence: SARS-CoV-2 RBD binds the blood group A expressed on respiratory epithelial cells, which could explain the linkage between blood group A and SARS-CoV-2 infection".</p> <p>Following the sentence: "Secondly, anti-A and/or anti-B antibodies present in blood group O individuals could bind to corresponding antigens on the viral envelope and contribute to viral neutralization", the reference Boukhari et al doi: 10.3389/fmicb.2021.799519 should be cited since it reports that ABO incompatibility protects from infection, indicating that anti-A/B antibodies are indeed neutralizing.</p>	
Minor REVISION comments		

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Optional/General comments		
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PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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