



Asthma, COPD and SARS-CoV-2 infection (COVID-19): potential mechanistic insights

Peter A.B. Wark ^{1,2}, Prabuddha S. Pathinayake ¹, Mathew Suji Eapen ³ and Sukhwinder Singh Sohal³

¹Priority Research Centre for Healthy Lungs, Hunter Medical Research Institute and School of Medicine and Public Health, University of Newcastle, Newcastle, Australia. ²Dept of Respiratory and Sleep Medicine, John Hunter Hospital, Newcastle, Australia. ³Respiratory Translational Research Group, Dept of Laboratory Medicine, School of Health Sciences, College of Health and Medicine, University of Tasmania, Launceston, Australia.

Sukhwinder Singh Sohal (sssohal@utas.edu.au)



Shareable abstract (@ERSpublications)

Patients with asthma are somewhat protected from COVID-19 complications compared to COPD. This may be due to variability in viral attachment protein, ICS use, smoking/vaping status, a skewed inflammatory pattern, and dysregulated endocytic machinery. <https://bit.ly/3qOcyNb>

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To the Editor:

We read with interest the manuscripts [1, 2] and the accompanying editorial [3] describing the risk of severe disease and infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and asthma, but are struck by the difference seen with risk of complications from asthma and coronavirus disease 2019 (COVID-19) compared to the experience during the 2009 influenza pandemic, where people with asthma were clearly at heightened risk, at least of hospitalisation [4]. In contrast, those who smoke or have COPD, appear at greater risk. Observational studies will never be able to provide evidence of cause and effect and a greater understanding of the mechanisms of susceptibility to infection with SARS-CoV-2 is also required. Hence, we would like to take this further and enhance discussion on potential mechanisms (figure 1).

