



Airway immune responses to COVID-19 vaccination in COPD patients and healthy subjects

Thomas Southworth^{1,2}, Natalie Jackson² and Dave Singh^{1,2}

¹University of Manchester, Division of Infection, Immunity and Respiratory Medicine, Manchester University NHS Foundation Trust, Manchester, UK. ²Medicines Evaluation Unit, Manchester, UK.

Corresponding author: Thomas Southworth (tsouthworth@meu.org.uk)



Shareable abstract (@ERSpublications)

Airway and blood immune responses to COVID-19 vaccination were examined in COPD patients and healthy subjects. Anti-spike IgG, but not IgA, levels were higher in airways post-vaccination, with similar responses in COPD patients and healthy subjects. <https://bit.ly/3zt6D6v>

Cite this article as: Southworth T, Jackson N, Singh D. Airway immune responses to COVID-19 vaccination in COPD patients and healthy subjects. *Eur Respir J* 2022; 60: 2200497 [DOI: 10.1183/13993003.00497-2022].

This single-page version can be shared freely online.

Copyright ©The authors 2022.

This version is distributed under the terms of the Creative Commons Attribution Non-Commercial Licence 4.0. For commercial reproduction rights and permissions contact permissions@ersnet.org

Received: 14 March 2022
Accepted: 6 June 2022

To the Editor:

COPD patients have a higher risk of developing severe illness and mortality following severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection [1]. Vaccination protects against coronavirus disease 2019 (COVID-19) through the development of systemic and airway immune responses. Patients with COPD display altered humoral immunity, with reduced antibody responses compared to healthy controls [2, 3]. We studied SARS-CoV-2 vaccine-specific immune responses in COPD patients *versus* healthy controls, using systemic, nasal and sputum samples.