



SHAREABLE PDF

Confronting and mitigating the risk of COVID-19 associated pulmonary aspergillosis

Darius Armstrong-James^{1,13}, Jonathan Youngs², Tihana Bicanic², Alireza Abdolrasouli³, David W. Denning ⁴, Elizabeth Johnson⁵, Varun Mehra⁶, Tony Pagliuca⁶, Brijesh Patel⁷, Johanna Rhodes⁸, Silke Schelenz⁹, Anand Shah ^{8,10}, Frank L. van de Veerdonk¹¹, Paul E. Verweij¹¹, P. Lewis White¹² and Matthew C. Fisher^{8,13}

Affiliations: ¹Dept of Infectious Diseases, Imperial College London, London, UK. ²Institute of Infection and Immunity, St George's University of London, London, UK. ³Dept of Medical Microbiology, North West London Pathology, Imperial College Healthcare NHS Trust, London, UK. ⁴Faculty of Biology, Medicine and Health, The University of Manchester, National Aspergillosis Centre, Wythenshawe Hospital and Manchester Academic Health Science Centre, Manchester, UK. ⁵Mycology Reference Laboratory, Public Health England National Infection Service, Bristol, UK. ⁶Dept of Haematological Medicine, Kings College Hospital NHS Foundation Trust, London, UK. ⁷Dept of Surgery and Cancer, Faculty of Medicine, Imperial College London, London, UK. ⁸MRC Center for Global Infectious Disease Analysis, School of Public Health, Imperial College London, London, UK. ⁹Infection Sciences, Kings College Hospital NHS Foundation Trust, London, UK. ¹⁰Royal Brompton and Harefield NHS Foundation Trust, London, UK. ¹¹Dept of Medical Microbiology and Centre of Expertise in Mycology Radboudumc/CWZ, Radboud University Medical Centre, Nijmegen, The Netherlands. ¹²Mycology Reference Laboratory, Public Health Wales Microbiology Cardiff, Cardiff, UK. ¹³D. Armstrong-James and Matthew C. Fisher contributed equally to this article as lead authors and supervised the work.

Correspondence: Darius Armstrong-James, Imperial College London, Dept of Infectious Diseases, Flowers Building, London, SW7 2AZ, UK. E-mail: d.armstrong@imperial.ac.uk



@ERSpublications

Cases of COVID-19 associated pulmonary aspergillosis (CAPA) are being increasingly reported and physicians treating patients with COVID-19-related lung disease need to actively consider these fungal co-infections <https://bit.ly/3feuGsQ>

Cite this article as: Armstrong-James D, Youngs J, Bicanic T, *et al.* Confronting and mitigating the risk of COVID-19 associated pulmonary aspergillosis. *Eur Respir J* 2020; 56: 2002554 [<https://doi.org/10.1183/13993003.02554-2020>].

This single-page version can be shared freely online.

The coronavirus disease 2019 (COVID-19) virus caused a wide spectrum of disease in healthy individuals, as well as those with common comorbidities [1]. Severe COVID-19 is characterised by acute respiratory distress syndrome (ARDS) secondary to viral pneumonitis, treatment of which may require mechanical ventilation or extracorporeal membrane oxygenation [2]. Clinicians are alert to the possibility of bacterial co-infection as a complication of lower respiratory tract viral infection; for example, a recent review found that 72% of patients with COVID-19 received antimicrobial therapy [3]. However, the risk of fungal co-infection, in particular COVID-19 associated pulmonary aspergillosis (CAPA), remains underappreciated.