GM-CSF targeting in COVID-19: an approach based on fragile foundations

Katharina Kohler and Andrew Conway Morris

1Division of Anaesthesia, Department of Medicine, University of Cambridge, Cambridge, UK. 2Division of Immunology, Department of Pathology, University of Cambridge, Cambridge, UK. 3John V Farman Intensive Care Unit, Addenbrooke’s Hospital, Cambridge, UK.

Corresponding author: Andrew Conway Morris (ac926@cam.ac.uk)

Trials of anti-GM-CSF therapies in COVID-19 show divergent results; this may be explained by underlying biology and the fragility of the study findings. Further investigation of the pathophysiology of COVID-19 is required to better target therapies.

Cite this article as: Kohler K, Conway Morris A. GM-CSF targeting in COVID-19: an approach based on fragile foundations. Eur Respir J 2023; 61: 2202091 [DOI: 10.1183/13993003.02091-2022].

This single-page version can be shared freely online.

Coronavirus disease 2019 (COVID-19) arises as a result of a pathological inflammatory response following infection with the coronavirus SARS-CoV-2. Although the majority of people infected with this virus will experience minimal or mild symptoms, a proportion will go on to develop more severe disease requiring hospitalisation and oxygen therapy. The most severe forms produce acute respiratory failure, necessitating mechanical ventilation or extracorporeal membrane oxygenation (ECMO). The advent of SARS-CoV-2 vaccination has substantially altered the risk profile of COVID-19, with marked reductions in the severity of illness and hospitalisation. However, for unvaccinated patients and those who do not mount an effective immune response to vaccination, it remains a potentially lethal infection.