Update June 2022: management of hospitalised adults with coronavirus disease 2019 (COVID-19): a European Respiratory Society living guideline

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Shareable abstract (@ERSpublications)
The ERS COVID-19 guidelines make recommendations for corticosteroids, anti-IL-6 monoclonal antibodies, baricitinib, anticoagulation and non-invasive respiratory support for hospitalised patients with COVID-19 https://bit.ly/3QgHH7U

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Since the identification of SARS-CoV-2 at the end of 2019, the coronavirus disease 2019 (COVID-19) pandemic has affected more than 410 million people worldwide and killed almost 6 million [1, 2]. The predecessors of COVID-19, *i.e.* the SARS (severe acute respiratory syndrome) and MERS (Middle East respiratory syndrome) outbreaks, had been relatively self-limiting, preventing clinicians and researchers from establishing evidence-based specific therapeutic strategies [3]. Conversely, COVID-19 rapidly proved to be extremely fast spreading, which led stakeholders to encourage, guide, build or fund multidirectional therapeutic research strategies based on both repurposing and development of new agents [4–8]. In parallel, considerable efforts were directed at describing the disease and understanding the underlying mechanisms [9–13]. As a result, there has been a huge generation of evidence, as highlighted by the impressive number of COVID-19 publications (more than 200 000 since the end of 2019). As a consequence, it proved rapidly impossible for any clinician, researcher or decision-maker to gather and analyse all the corresponding literature to derive appropriate guidance [14]. The first step of such a process is to select the relevant high-quality research that can be used to answer the question(s) of interest [15]. Even if limiting the search

to clinical trials, systematic reviews and meta-analyses, almost 4000 papers appear in the PubMed database, as of mid-February 2022. In June and July 2020, the European Respiratory Society (ERS) and the American Thoracic Society (ATS) released early guidance on several aspects of COVID-19 management (*i.e.* rehabilitation, palliative care and acute management); at that time, direct specific evidence was sparse or absent [16–18]. Simultaneously, the ERS launched a living guideline on the management of COVID-19. The format was that of a "short" guideline, as per ERS standards [19, 20], in that the purpose was to release the first iteration within 12 months. However, the number of PICO (Population, Intervention, Comparator, Outcomes) questions to be addressed (n=12) already exceeded markedly what the ERS considers as being feasible during such a short timeframe (*i.e.* n=1–2), which was a direct consequence of the high number of unanswered issues in the field of acute COVID-19 management, all corresponding to outstanding clinical needs. The first version of these guidelines was published in March 2021 and addressed the following potential therapeutic options: corticosteroids, interleukin (IL)-6 receptor antagonists, hydroxychloroquine, azithromycin and both combined, colchicine, lopinavir-ritonavir, remdesivir, interferon-β, anticoagulation and non-invasive ventilatory support [6, 21]. An update of the mortality meta-analyses for corticosteroids, hydroxychloroquine, azithromycin, remdesivir, anti-IL-6 monoclonal antibodies, colchicine, lopinavir/ritonavir and interferon-β was published in December 2021 [22].