

COVID-19 Research Watch
May 11, 2020

PHARMACEUTICAL INTERVENTIONS

[Observational Study of Hydroxychloroquine in Hospitalized Patient with Covid-19](#)¹

This study observed the association between use of hydroxychloroquine and intubation or death in hospitalized Covid-19 patients in New York City. Over a median follow-up period of 22.5 days, 58.9% of 1376 patients received hydroxychloroquine. The study found no significant association between hydroxychloroquine use and intubation or death. However, the authors emphasize that randomized, controlled trials are needed to characterize the effect of hydroxychloroquine in patients with Covid-19.

NON-CLINICAL TRENDS

[Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration – United States, 2020](#)²

According to data from the CDC's Vaccine Tracking System, there was a significant decrease in orders for non-influenza childhood vaccines and for measles-containing vaccines in January-April 2020 in the US, compared to January-April 2019. The decline was especially stark among children older than 24 months. Authors suggest that this puts children and their communities at heightened risk for outbreaks of vaccine-preventable diseases, and that coordinated efforts between health care providers and public health officials at all levels will be needed to achieve rapid catch-up vaccination.

PHARMACEUTICAL INTERVENTIONS

[Interleukin-1 blockade with high-dose anakinra in patients with COVID-19, acute respiratory distress syndrome, and hyperinflammation: a retrospective cohort study](#)³

In this study, 45 patients confirmed positive for COVID-19, with moderate-to-severe ARDS, and hyperinflammation had either received high dose (intravenous) anakinra in addition to the standard treatment of care or only the standard treatment of care, described as twice daily of 200 mg hydroxychloroquine, 400 mg lopinavir, and 100 mg ritonavir. The high dose anakinra, hypothesized to counteract the hyperinflammatory syndrome associated with COVID-19, was associated with clinical improvement in 72% of patients after 21 days of follow-up. The authors recommend randomized controlled trials, larger sample size, and further assessment of long-term outcomes to validate their findings.

PEDIATRIC PRESENTATION

[Multicentre Italian study of SARS-CoV-2 infection in children and adolescents, preliminary data as at 10 April 2020⁴](#)

In this national multicentre study involving 11 paediatric hospitals and 51 paediatric units in Italy, data on 168 laboratory confirmed paediatric cases aged between 1 day and 17 years were reported. The Majority of cases were hospitalised (67.9%), 33 (19.6%) had comorbidities, and fever was the most common symptom (82.1%), followed by cough (48.8%) and rhinitis (26.8%). Gastrointestinal symptoms, like vomiting and diarrhoea, occurred in 18.4% of children and fever was more common in this Italian cohort than what has been reported in Chinese and US children. Overall case-fatality in children was low, which may allow for more conservative diagnostic, clinical, and therapeutic approaches until safer and more effective antiviral treatments become available.

ADDITIONAL RESOURCES

[UCSF Library COVID-19 Research and Information Resources](#)

[UCSF Institute for Global Health Sciences COVID-19 Resources](#)

[UC Davis One Health Institute COVID-19 FAQs](#)

[Harvard Viswanath Lab Myths vs Facts](#)

Note on this Document: This document was assembled by graduate and doctoral students attending the University of California, San Francisco with the intent of facilitating the rapid dissemination of information to the global community in order to help during this time. Johnson Lyimo and Sigal Maya contributed to these summaries. This work is volunteer based.

References:

- 1 Baldwin M, Hripcsak G, Labella A, *et al.* Observational Study of Hydroxychloroquine in Hospitalized Patients with Covid-19. 2020; : 1–8.
- 2 Vol ER, Santoli JM, Lindley MC, *et al.* Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration — United States , 2020. 2020; **69**: 6–8.
- 3 Cavalli G, Luca G De, Campochiaro C, *et al.* Articles Interleukin-1 blockade with high-dose anakinra in patients with COVID-19 , acute respiratory distress syndrome , and hyperinflammation : a retrospective cohort study. *Lancet Rheumatol* 2020; **9913**: 1–7.
- 4 Garazzino S, Montagnani C, Donà D, *et al.* Multicentre Italian study of SARS-CoV-2 infection in children and adolescents , preliminary data as at 10 April 2020. 2020; : 1–4.