

Therapeutics and Drugs

There is no currently licensed specific antiviral treatment for MERS- and SARS-CoV infections, and the main focus in clinical settings remains on lessening clinical signs and providing supportive care ([183–186](#)). Effective drugs to manage COVID-19 patients include remdesivir, lopinavir/ritonavir alone or in a blend with interferon beta, convalescent plasma, and monoclonal antibodies (MAbs); however, efficacy and safety issues of these drugs require additional clinical trials ([187, 281](#)). A controlled trial of ritonavir-boosted lopinavir and interferon alpha 2b treatment was performed on COVID-19 hospitalized patients (ChiCTR200029308) ([188](#)). In addition, the use of hydroxychloroquine and tocilizumab for their potential role in modulating inflammatory responses in the lungs and antiviral effect has been proposed and discussed in many research articles. Still, no fool-proof clinical trials have been published ([194, 196, 197, 261–272](#)). Recently, a clinical trial conducted on adult patients suffering from severe COVID-19 revealed no benefit of lopinavir-ritonavir treatment over standard care ([273](#)).

The efforts to control SARS-CoV-2 infection utilized defined strategies as followed against MERS and SARS, along with adopting and strengthening a