ribavirin, penciclovir, nitazoxanide, nafamostat, and

chloroquine, tested in comparison to remdesivir and

favipiravir (broad-spectrum antiviral drugs) revealed

remdesivir and chloroquine to be highly effective

against SARS-CoV-2 infection in vitro (194).

Ribavirin, penciclovir, and favipiravir might not

possess noteworthy in vivo antiviral actions for

SARS-CoV-2, since higher concentrations of these

nucleoside analogs are needed in vitro to lessen the

viral infection. Both remdesivir and chloroquine are

being used in humans to treat other diseases, and

such safer drugs can be explored for assessing their

effectiveness in COVID-19 patients.

Several therapeutic agents, such as

lopinavir/ritonavir, chloroquine, and

hydroxychloroquine, have been proposed for the

clinical management of COVID-19 (299). A

molecular docking study, conducted in the RNA-

dependent RNA polymerase (RdRp) of SARS-CoV-2

using different commercially available

antipolymerase drugs, identified that drugs such as

ribavirin, remdesivir, galidesivir, tenofovir, and

sofosbuvir bind RdRp tightly, indicating their vast

potential to be used against COVID-19 (305). A

broad-spectrum antiviral drug that was developed in

the United States, tilorone dihydrochloride (tilorone),