

structural proteins are potential drug target for COVID-19 treatments. Another potential drug target is the RNA genome. Short interfering RNA (siRNA) molecules interfere with the specific genes by degrading mRNA after transcription and preventing translation [21]. However, current technology cannot support siRNA medication use in a large infected population [22,23]. Among existing broad-spectrum antiviral, protease inhibitors, nucleoside analogues that target RdRp, and several other small-molecule agents may be considered as potential antiviral options for COVID-19. Finally, although significant research is underway, there is no vaccine currently available to prevent SARS-CoV-2 infection. Consequently, it is essential to examine antivirals that are currently available or already in the research pipeline for the treatment of other viruses as 6 potential therapeutic strategies. This article reviews the antiviral medications currently used in the COVID-19 treatments worldwide (especially China and United States) and other potential therapeutic strategies.

CONCLUSION

This review summarizes the current understanding of COVID-19, including the molecular characteristics and potential drug targets for SARS-CoV-2. Evidence-based therapeutic strategies and antiviral medications that could potentially be used in COVID-19 treatment are also described. Three agents, remdesivir, favipiravir, and chloroquine, have some efficacy data against SARS-CoV-2 in vivo or in vitro. However, this evidence is not conclusive enough to support any specific antiviral recommendations and more clinical evidence is needed.

