

Therapeutic interventions in the treatment of SARS-CoV-2: A review

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Abstract

SARS-CoV-2 has emerged as a life-threatening virus claiming number of lives and adversely affecting the physical, mental health and economic growth world-wide. There is an urgent need to treat this life threatening condition as it is adversely affecting the mankind. Because of the pandemic, the global economic rate has declined by several folds. Initially, FDA approved drugs for other diseases have been repurposed for treatment, but these therapeutic strategies do not provide targeted treatment to treat Covid-19. Broad spectrum antiviral drugs, their combinations and life supporting systems provide effective result to inhibit viral entry and replication. Other therapeutic options like Angiotensin converting enzyme-2 (ACE2) blockers and Transmembrane protease, serine 2 (TMPRSS2) inhibitors and plasma therapy have proven to have greater potential to target the virus. In this review, we have discussed a number of therapeutic interventions like use of antiviral drugs, drug combination therapy and other therapeutics that are currently exhibiting effective results and helping to lower the mortality rate significantly. Vaccine is the best option as it elicits immune response and provides long-term immunity to fight against such infections. This review also focuses on the current vaccine development scenario practiced worldwide.

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