and preventive strategies, including vaccines,

immunotherapeutics, and antiviral drugs, have been

exploited against the previous CoV\_ outbreaks

(SARS-CoV and MERS-CoV) (8, 104, 164-167).

These valuable options have already been evaluated

for their potency, efficacy, and safety, along with

several other types of current research that will fuel

our search for ideal therapeutic agents against

COVID-19 (7, 9, 19, 21, 36). The primary cause of

the unavailability of approved and commercial

vaccines, drugs, and therapeutics to counter the

earlier SARS-CoV and MERS-CoV seems to owe to

the lesser attention of the biomedicine and

pharmaceutical companies, as these two CoVs did

not cause much havoc, global threat, and panic like

those posed by the SARS-CoV-2 pandemic (19).

Moreover, for such outbreak situations, the

requirement for vaccines and \_ therapeutics/drugs

exists only for a limited period, until the outbreak is

controlled. The proportion of the human population

infected with SARS-CoV and MERS-CoV was also

much lower across the globe, failing to attract drug

and vaccine manufacturers and producers. Therefore,

by the time an effective drug or vaccine is designed

against such disease outbreaks, the virus would have

been controlled by adopting appropriate and strict