symptoms were noticed in those patients that are

infected by human-to-human transmission (14).

The initial trends suggested that the mortality

associated with COVID-19 was less than that of

previous outbreaks of SARS (101). The updates

obtained from countries like China, Japan, Thailand,

and South Korea indicated that the COVID-19

patients had relatively mild manifestations compared

to those with SARS and MERS (4). Regardless of

the coronavirus type, immune cells, like mast cells,

that are present in the submucosa of the respiratory

tract and nasal cavity are considered the primary

barrier against this virus (92). Advanced in-depth

analysis of the genome has identified 380 amino acid

substitutions between the amino acid sequences of

SARS-CoV-2 and the SARS/SARS-like

coronaviruses. These differences in the amino acid

sequences might have contributed to the difference

in the pathogenic divergence of SARS-CoV-2 (16).

Further research is required to evaluate the possible

differences in tropism, pathogenesis, and

transmission of this novel agent associated with this

change in the amino acid sequence. With the current

outbreak of COVID-19, there is an expectancy of a

significant increase in the number of published

studies about this emerging coronavirus, as occurred