new targeted drugs, and prevention of further

epidemics (13). The most common symptoms

associated with COVID-19 are fever, cough,

dyspnea, expectoration, headache, and myalgia or

fatigue.

In contrast, less common signs at the time of

hospital admission include diarrhea, hemoptysis, and

shortness of breath (14). Recently, individuals with

asymptomatic infections were also suspected of

transmitting infections, which further adds to the

complexity of disease transmission dynamics in

COVID-19 infections (1). Such efficient responses

require in-depth knowledge regarding the virus,

which currently is a novel agent; consequently,

further studies are required.

Comparing the genome of SARS-CoV-2 with that

of the closely related SARS/SARS-like CoV

revealed that the sequence coding for the spike

protein, with a total length of 1,273 amino acids,

showed 27 amino acid substitutions. Six of these

substitutions are in the region of the receptor-binding

domain (RBD), and another six substitutions are in

the underpinning subdomain (SD) (16). Phylogenetic

analyses have revealed that SARS-CoV-2 is closely

related (88% similarity) to two SARS-like CoVs

derived from bat SARS-like CoVs\_ (bat-SL-

“OVZCAS 1 hat-SL-CoVZXC2 7