

aminotransferase, bilirubin, and, especially, D-dimer (244). Middle-aged and elderly patients with primary chronic diseases, especially high blood pressure and diabetes, were found to be more susceptible to respiratory failure and, therefore, had poorer prognoses. Providing respiratory support at early stages improved the disease prognosis and facilitated recovery (18). The ARDS in COVID-19 is due to the occurrence of cytokine storms that results in exaggerated immune response, immune regulatory network imbalance, and, finally, multiple-organ failure (122). In addition to the exaggerated inflammatory response seen in patients with COVID-19 pneumonia, the bile duct epithelial cells derived hepatocytes upregulate ACE2 expression in liver tissue by compensatory proliferation that might result in hepatic tissue injury (123).

CORONAVIRUSES IN ANIMALS AND ZONOTIC LINKS—A BRIEF VIEWPOINT

Coronaviruses can cause disease in several species of domestic and wild animals, as well as humans (23). The different animal species that are infected with CoV include horses, camels, cattle, swine, dogs, cats, rodents, birds, ferrets, minks, bats, rabbits, snakes, and various other wild animals (20, 30, 79,