



SARS-CoV-2 Omicron Variant: Current Perspectives and New Developments

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Message from the Guest Editors

Dear Colleagues,

The original SARS-CoV-2 first identified at the end of 2019 has evolved rapidly, and a variety of variants have emerged. After the Omicron variant (BA.1) was first identified in South Africa in November 2021, it quickly spread worldwide and immediately raised global concerns about its transmissibility, pathogenicity, and immune evasion. Omicron comprised three lineages, BA.1, BA.2, and BA.3. BA.1 caused most of the infections in South Africa and was later replaced by BA.2. Subsequently, BA.2 was a predominant subvariant worldwide and in some countries was responsible for a great number of cases, hospitalization, and deaths. Recently, BA.4 and BA.5 were identified in South Africa, and they are becoming much more efficient in transmission and more likely to evade immunity than other Omicron subvariants. The Special Issue aims to provide scientists and professionals worldwide with the latest research developments in the fields of Omicron variant epidemic characteristics, host susceptibility, intervention measures, immune response and evasion, vaccine administration, differential detection, genome surveillance, antiviral drug design, and evolutionary investigation.

