## Biological and clinical characteristics of COVID-19 cases detected in a private hospital in Kuching, Sarawak

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## **ABSTRACT**

Introduction: Coronavirus Disease 2019 (COVID-19) is a contagious infection caused by highly transmissible severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) through respiratory droplets. Since its first reported case in December 2019, it has spread rapidly across the globe causing a pandemic. The biological and clinical characteristics of COVID-19 provide an important scientific basis for effective epidemic prevention and control in the local community. Therefore, this cross-sectional study was conducted in a private hospital in Sarawak. Methods: All the 5621 laboratory-confirmed COVID-19 cases detected from August-December 2021 were recruited into this study. Results: The cases were racially diverse with almost equal male-to-female ratio. Most cases were adults (93%), fully or partially vaccinated (88.2%) with a mean age of 37.61 years. Symptomatic cases accounted for 75.1% of the total cases. The three most common presenting symptoms were cough, runny nose and fever. Olfactory and gustatory dysfunction were more common in adults while gastrointestinal symptoms were mainly seen in children. The median duration from onset of symptoms to molecular diagnosis was 3 days. Patients who were unvaccinated, symptomatic and having comorbidities demonstrated significantly lower cycle threshold (Ct) values. Ct values (E and N genes) correlated negatively with age, indicating higher infectivity in older patients. Conclusion: This report summarised the baseline biological and clinical characteristics of mild COVID-19 cases in Sarawak. Our findings showed that despite widespread awareness, patients did present late for testing, which might contribute to sustained viral transmission in the community. Hence, this highlights the importance of vaccination to reduce the occurrence of severe cases.