COVID-19 Critical Intelligence Unit

Evidence digest

16 December 2022

The evidence digest collates recently released reports and evidence – provision of these links does not imply endorsement nor recommendation.

COVID-19 and excess mortality, inflammatory bowel disease and COVID-19 outcomes, Omicron BQ.1 and XBB

Peer reviewed journals featured:

- Meta-analyses and systematic reviews on:
 - Inflammatory bowel disease and COVID-19 outcomes <u>here</u>
 - Effectiveness of heterologous and homologous COVID-19 vaccine regimens <u>here</u>
 - o Early versus late intubation in patients with acute respiratory distress syndrome here
 - Awake prone positioning in COVID-19 hypoxemic respiratory failure <u>here</u> and commentary <u>here</u>
- Observational studies on:
 - o Excess mortality associated with the pandemic here and commentary here and here
 - Risks of postural orthostatic tachycardia syndrome diagnoses after COVID-19 vaccination and SARS-Cov-2 infection <u>here</u> and associated commentary <u>here</u>
 - o Molecular states during COVID-19 reveal distinct aetiologies of long-term sequelae here
 - Alarming antibody evasion properties of rising BQ and XBB subvariants <u>here</u>
 - Nirmatrelvir plus ritonavir (Paxlovid) for early COVID-19 in a US health system here
 - Risk factors and symptoms associated with COVD-19 and rhinovirus test positivity <u>here</u>
 - The utility of telemedicine in managing patients after COVID-19 here
 - Effectiveness of BNT162b2 vaccination in prevention of hospitalisations and severe disease in adults with Delta (B.1.617.2) and Omicron (B.1.1.529) variants <u>here</u>
 - Fourth BNT162b2 and mRNA1273 COVID-19 vaccine doses; 3-month follow-up here
 - SARS-CoV-2 infection and persistence in the human body and brain at autopsy <u>here</u>
 - o Inverse association between blood pressure and pulse oximetry accuracy here
 - Post COVID-19 irritable bowel syndrome <u>here</u>
- Commentary on:
 - o COVID-19 vaccination in individuals with inflammatory rheumatic diseases here
 - o Urgent need for next-generation COVID-19 vaccines here
 - Hong Kong's devastating fifth wave here
 - o Careful, kind care is our compass out of the pandemic fog here
 - o Pandemic justice: fairness, social inequality and healthcare priority-setting here
- Updated best practice guide on COVID-19 here



Letters and correspondence discussed:

- Evaluation of publication of COVID-19–related articles initially presented as preprints here
- Omicron XBB and neutralising antibodies in recipients of BNT162b2 or CoronaVac vaccines <u>here</u>
- Funding pandemic prevention, preparedness, and response through partnership models here
- Humoral immune evasion of the omicron subvariants BQ.1.1 and XBB <u>here</u>
- Tixagevimab/cilgavimab (Evusheld) for patients with haematologic diseases <u>here</u>
- Cardiac and vascular serious adverse events after tixagevimab–cilgavimab here and response here
- A COVID-19 milestone attained a correlate of protection for vaccines here

Pre-peer review articles featured:

- Risk evaluation of COVID-19 outbreaks in public indoor environments: A meta-analysis here
- Emergence and spread of variants of concern in Canada: clinical and wastewater data here
- Detection of healthcare worker infection with Omicron variants by rapid antigen tests here
- Duration of viral shedding of Omicron in asymptomatic and mild COVID-19 cases from China here
- Physical and mental health disability associated with long-COVID here
- Emergence and antibody evasion of BQ and BA.2.75 SARS-CoV-2 sublineages here
- COVID-19 treatment with nirmatrelvir-ritonavir or molnupiravir among US veterans here
- Impact of post-COVID-19 syndrome on health-related quality of life and associated factors here
- Time from symptom onset to remdesivir is associated with the risk of ICU admission here
- Molnupiravir and nirmatrelvir-ritonavir and mortality or sepsis in hospitalised Omicron patients here
- COVID-19 associated invasive fungal infections among critically-ill intubated patients here
- The impact of large-scale social media advertising campaigns on COVID-19 vaccination here

Guidance and reports

- WHO Weekly epidemiological update on COVID-19: 14 December 2022 here
- UK Health Security Agency published:
 - o A risk assessment for BQ.1 and XBB here
 - o an evaluation of daily testing for contacts here

News and blogs

- China is relaxing its zero-COVID policy what scientists think here
- Winter surge feared as China lurches away from zero-COVID <u>here</u>
- WHO member states agree to draft international pandemic accord <u>here</u>

This is the final digest for 2022 and the service will resume on 13 January 2023. Should there be any highly significant developments, interim digest editions will be issued. Upon resumption of services, key publications released during the break will be collated and a summary distributed.

We hope you have a very happy and healthy holiday break!



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