COVID-19 Critical Intelligence Unit

Evidence digest

14 April 2023

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

This is our final COVID-19 Evidence Digest. We are transitioning the Digest to be more focused on significant advances and innovations in healthcare, rather than limited to the topic of COVID-19. To receive the new reformulated Digest weekly, please <u>subscribe</u>.

Paxlovid, obesity and COVID-19 mortality correlations, COVID-19 detection from wearables

Peer reviewed journals featured:

- · Randomised clinical trials of:
 - Nirmatrelvir (Paxlovid) and risk of hospital admission or death <u>here</u>
 - The effect of angiotensin-converting enzyme inhibitor and angiotensin receptor blocker initiation in hospitalised COVID-19 patients <u>here</u>, <u>here</u> and <u>here</u>
- Observational studies on:
 - Prevalence and characteristics associated with post–COVID-19 condition in nonhospitalised adolescents and young adults here
 - o Performance of antigen lateral flow devices here
 - o Adverse events of special interest in 24 million COVID-19 patients here
 - Ethnic differences in cellular & humoral immune responses to COVID-19 vaccines here
 - o Risk factors and vectors for SARS-CoV-2 household transmission here and here</
 - Obesity and COVID-19 mortality correlations <u>here</u>
 - Long COVID identified from electronic health records and the RECOVER initiative here
 - Real-world effectiveness of monoclonal antibodies for COVID-19 treatment here
- Commentary on:
 - Effectiveness of non-pharmaceutical interventions <u>here</u>
 - o Machine learning COVID-19 detection from wearables here
 - Support for clinicians with moral loss after the pandemic here
 - o Drug repurposing and observational studies of antivirals for COVID-19 treatment here

Letters and correspondence discussed:

- Stroke, myocardial infarction, and pulmonary embolism after bivalent booster here
- SARS-CoV-2 neutralising antibodies after bivalent versus monovalent booster here



- Long-term outcomes in patients with COVID-19 supported with ECMO here and authors' reply here
- Definition of post–COVID-19 condition in published research studies here and commentary here
- Death risk in hospitalised US COVID-19 patients vs seasonal influenza in fall-winter 2022-2023 here
- Durability of bivalent boosters against Omicron subvariants <u>here</u>

Pre-peer review articles featured:

- Effect of glucocorticoids on the development of COVID-19-associated pulmonary aspergillosis here
- COVID-19-related adolescent mortality and morbidity in 19 European countries here
- Clinical Frailty Scale in predicting return-to-home in patients admitted due to COVID-19 here
- Viral and immunologic evaluation of smokers with severe COVID-19 here
- Humoral profiles of toddlers and young children following mRNA COVID-19 vaccination here
- Association between SARS-CoV-2 variants and post COVID-19 condition in Belgian adults <u>here</u>
- The association of COVID-19 with cognitive impairment <u>here</u>
- Performance in SARS-CoV-2 nucleic amplification testing here
- The benefit of COVID-19 vaccination after previous infection in aged 5–11-year-olds in the UK here
- Infants and young children antibody responses to SARS-CoV-2 infection here
- Incidence of symptoms associated with long COVID in non-hospitalised vaccinated patients receiving nirmatrelvir-ritonavir here
- Pre-infection neutralising antibodies, Omicron BA.5 breakthrough infection, and long COVID <u>here</u>
- Lower prevalence of post-COVID-19 condition following Omicron infection <u>here</u>
- The re-emergence of influenza following the COVID-19 pandemic in Victoria here
- Risk of adverse maternal and foetal outcomes associated with COVID-19 variants of concern here
- Long-term outcomes of COVID-19 infection in children and young people here

Guidance and reports

- The World Health Organization published:
 - A policy brief on COVID-19 surveillance here
 - Guidance on considerations for implementing and adjusting public health and social measures in the context of COVID-19 here
 - Its weekly COVID-19 epidemiological report <u>here</u>

News and blogs

- Cold virus provided cross-reactivity against SARS-CoV-2 in children here
- Stitching together the emotions of COVID-19 <u>here</u>
- Study reports no significant increase in deaths after vaccination but raises questions over AstraZeneca's vaccine here
- Updated WHO guidance for prioritising COVID-19 vaccines <u>here</u>



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