COVID-19 Critical Intelligence Unit

Daily evidence digest

26 April 2022

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

Evusheld for COVID-19 prevention, awake prone positioning, outcomes associated with non-invasive ventilation, high-flow oxygen and CPAP

Peer reviewed journals featured:

- A systematic appraisal of good practice statements in COVID-19 guidelines <u>here</u>
- Randomised controlled trials of:
 - o Intramuscular Evusheld (tixagevimab-cilgavimab) for COVID-19 prevention here
 - o Indomethacin for mild and moderate hospitalised COVID-19 patients here
- A non-randomised controlled trial on awake prone positioning in COVID-19 patients here
- Observational studies on:
 - Mortality and intubation rate in COVID-19 patients treated with non-invasive ventilation compared with high-flow oxygen or CPAP here
 - Association of psychiatric disorders with SARS-CoV-2 breakthrough infection here
 - o Surveillance of safety of three doses of COVID-19 mRNA vaccination here
 - Retinal vascular occlusions after COVID-19 diagnosis here and commentary here
 - Vaccine effectiveness in immune-mediated inflammatory diseases <u>here</u> and commentary <u>here</u>
 - Occupation, work-related contact and SARS-CoV-2 serological status here
 - App-based COVID-19 syndrome surveillance and prediction of hospital admissions <u>here</u>
 - o Memory B-cell potency and breadth after a SARS-CoV-2 mRNA boost here
- Editorials on:
 - Unethical studies of ivermectin for COVID-19 here
 - o Socio-economic conditions and the epidemiology of COVID-19 in Australia here
- Commentary on
 - o Communicating with patients about health-related conspiracy theories here
 - Universal biosafety standards here
 - The delivery plan for tackling the COVID-19 backlog of elective care in the UK <u>here</u>

Letters and correspondence discussed:

- Acute upper airway disease in children with the Omicron variant here
- Changes in injury presentations during the COVID-19 pandemic in the US here
- Short-term adverse events after third dose of Comirnaty (Pfizer) in adults aged 60+ years here
- Rates of COVID-19 among unvaccinated adults with prior COVID-19 here



Pre-peer review articles featured:

- · Systematic reviews on:
 - Antidepressants and severity of COVID-19 <u>here</u>
 - Methodologies to assess non-pharmaceutical interventions during COVID-19 here
 - o Takotsubo (stress) cardiomyopathy following COVID-19 vaccination here
- A phase-4 open label trial on immune response to two-dose BNT162b2 vaccination and risk of SARS-CoV-2 breakthrough infection (Shieldvacc-2 study) here
- A quality assessment of randomised controlled trials published on COVID-19 here
- Observational studies on:
 - o Coding long COVID using an ICD-10 lens here
 - o Coronavirus infection in neonates and neurodevelopmental outcomes here
 - o Comparison of viral loads in Omicron infections by vaccination status here
 - Comparison of Comirnaty (Pfizer) booster elicitation of humoral responses by the interval between first two doses here
 - Wastewater to clinical case (WC) ratio of COVID-19 in urban communities <u>here</u>
 - o Neutralising activity against Omicron BA.2 from mRNA booster vaccination here
 - Association between community asymptomatic rapid antigen testing and COVID-19 hospital admissions <u>here</u>
 - Monoclonal antibodies for treatment of SARS-CoV-2 infection during pregnancy <u>here</u>
 - Accuracy of CDC COVID-19 forecasting models <u>here</u>
 - Vaccine effectiveness studies:
 - against hospitalisations in children and adolescents during Omicron <u>here</u>
 - of primary and booster COVID-19 mRNA vaccination against Omicron in people with a prior SARS-CoV-2 Infection here
 - of a fourth dose of COVID-19 vaccine in long-term care residents here
 - against severe disease from Omicron BA.1 and BA.2 here
 - against SARS-CoV-2 infection and COVID-19-related hospitalisation with the Alpha, Delta and Omicron SARS-CoV-2 variants <u>here</u>
 - Duration of mRNA vaccine effectiveness against severe disease <u>here</u>

Guidance and reports

- The National COVID-19 Clinical Evidence Taskforce released updates here
- The World Health Organization published updates of its weekly epidemiological report here and COVID-19 vaccine tracker here

News and blogs

- UK approves the whole virus inactivated Valneva vaccine for adults aged under 50 years here
- Mask mandate is struck down although US cases are rising here
- Global COVID-19 death toll may be triple the reported deaths <u>here</u>



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