COVID-19 Critical Intelligence Unit

Evidence digest

10 February 2023

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

Mortality risk in COVID-19 patients, early treatment with pegylated interferon lambda, ATAGI 2023 booster advice

Peer reviewed journals featured:

- A systematic review on antimicrobial resistance in COVID-19 patients here
- A meta- and network analysis on the risk of mortality in COVID-19 patients here
- Randomised clinical trials of:
 - Methylprednisolone vs intravenous immunoglobulins in children with paediatric inflammatory multisystem syndrome temporally associated with SARS-CoV-2 <u>here</u>
 - Early treatment with pegylated interferon lambda for COVID-19 <u>here</u>
- A narrative review on postural orthostatic tachycardia syndrome in long COVID <u>here</u>
- Observational studies on:
 - o Adherence to healthy lifestyle prior to infection and risk of post-COVID-19 condition here
 - CoronaVac and Comirnaty (Pfizer) vaccine effectiveness against severe outcomes over time in patients with Omicron <u>here</u>
 - o Guillain-Barré Syndrome after COVID-19 vaccination in the US here
 - Outcomes following delivery in pregnant and postpartum patients with severe COVID-19 pneumonitis admitted to ICU in Israel <u>here</u> and associated commentary <u>here</u>
 - The risk of SARS-CoV-2 infection and hospitalisation in vaccinated and previously infected people in Italy <u>here</u>
 - ED presentations during the COVID-19 pandemic in Queensland <u>here</u>
 - Factors associated with hospitalisations and deaths of aged care residents with COVID-19 during the Omicron (BA.1) wave in Queensland <u>here</u>
- Commentary on bivalent COVID-19 vaccines <u>here</u>

Letters and correspondence discussed:

- Antibody response to Omicron BA.4–BA.5 bivalent booster <u>here</u>
- China needs a scientific long COVID recovery-support platform <u>here</u>
- Ignoring SARS-CoV-2 testing performance during COVID-19 here
- Transmissibility, infectivity, and immune resistance of the Omicron XBB.1.5 variant here and here
- Incidence of chronic spontaneous urticaria after COVID-19 vaccine booster in Switzerland here
- Immunogenicity of BA.5 bivalent mRNA vaccine boosters <u>here</u>



Pre-peer review articles featured:

- Long-term symptomology of post-COVID-19 olfactory and gustatory dysfunction here
- Autoantigen profiling in fully recovered and long COVID patients <u>here</u>
- Neutralisation of BQ.1.1 and XBB.1.5 by breakthrough infection sera from previous and current waves <u>here</u>
- Heterologous inactivated virus/mRNA vaccination response to BF.7, BQ.1.1, and XBB.1 here
- Immunogenicity of the BA.1 and BA.4/5 bivalent boosts here
- Severe cerebral venous sinus thrombosis in post-vaccination breakthrough COVID-19 infection here
- Antibody responses post-vaccination and severe COVID-19 outcomes in Scotland <u>here</u>
- Associations of COVID-19 symptoms with Omicron BA.2 and BA.5 subvariants, host status, and clinical outcomes in Sapporo, Japan <u>here</u>
- Bivalent mRNA booster vaccines in patients with haematological neoplasms here

Guidance and reports

- The World Health Organisation published its weekly COVID-19 epidemiological report here
- The Australian Technical Advisory Group on Immunisation (ATAGI) recommendations on:
 - COVID-19 boosters in 2023 <u>here</u>
 - Use of the Pfizer bivalent (Original/Omicron BA.4/5) COVID-19 vaccine here
- A CDC summary of the WHO report on COVID-19 mortality and vaccinating older adults here
- Convalescent plasma to treat immunocompromised COVID-19 patients here

News and blogs

- Newly discovered host-cell factor could be a COVID-19 treatment target here
- Hybrid immunity more protective than prior SARS-CoV-2 infection alone here
- How quickly does COVID-19 immunity fade? here
- COVID-19 drug (molnupiravir) drives viral mutations and some want to halt its use here
- Reduction in payments for NHS staff with long term symptoms <u>here</u>
- FDA removes US authorisation for antibody drug Evusheld here
- The US will end public health emergency on 11 May, says Biden here
- TGA confirms the performance of Australian approved Rapid Antigen Tests with COVID-19 variants
 <u>here</u>

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Living Evidence Tables

Living Evidence tables are up-to-date summaries of emerging evidence. Tables are available on SARS-CoV-2 <u>vaccines</u>, and <u>variants</u> of concern, and <u>post-acute sequelae of COVID-19 (long COVID)</u>.



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