COVID-19 Critical Intelligence Unit

# **Evidence digest**

24 February 2023

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

# Past SARS-CoV-2 infection as protection against re-infection, comorbidities, multimorbidity and COVID-19, AI for SARS-CoV-2 variants

## Peer reviewed journals featured:

- A systematic review on past SARS-CoV-2 infection as protection against re-infection here
- Randomised clinical trial of higher-dose ivermectin for 6 days vs placebo on time to sustained recovery in COVID-19 outpatients <u>here</u> and associated commentary <u>here</u>
- A narrative review on comorbidities, multimorbidity and COVID-19 here
- Observational studies on:
  - o Using haplotype-based artificial intelligence (HAI) to identify SARS-CoV-2 variants here
  - o Communication via interactive simulation vs text with vaccine-hesitant adults here
  - o Association of post-COVID-19 condition symptoms with employment status here
  - o Hospital outcomes of community-acquired Omicron infection vs influenza here
  - Immunoglobulin, glucocorticoid, or combination therapy for multisystem inflammatory syndrome in children <u>here</u>
  - o Breakthrough infections in cancer patients following 2-3 doses of mRNA vaccines here
  - o Comirnaty (Pfizer) COVID-19 vaccine in children younger than 5 years of age here
  - First-year impacts of the NHS COVID-19 app in England and Wales here
  - o Assessing the impact of one million COVID-19 deaths in America here
- Editorials on:
  - The £2bn private sector NHS COVID-19 contract here and associated commentary here
  - o Antithrombotic therapy in COVID-19 patients here
  - o The impact of the COVID-19 pandemic on emergency department presentations here
- Commentary on:
  - When to update COVID-19 vaccine composition <u>here</u>
  - Human rights and the COVID-19 pandemic here
  - Rethinking how and where care is best delivered after COVID-19 <u>here</u>

#### Letters and correspondence discussed:

- Use of convalescent plasma in the treatment of COVID-19 here
- Antibiotic receipt during outpatient visits for COVID-19 in the US <u>here</u>
- Balancing the medical and social needs of children during COVID-19 here and here



#### **Pre-peer review articles featured:**

- Effectiveness of a telerehabilitation intervention using Recovery APP of long COVID patients here
- Modelling high booster uptake on COVID-19 burden and healthcare costs in New York <u>here</u>
- Brain alterations revealed by susceptibility-weighted magnetic resonance imaging <u>here</u>
- Real-world effectiveness of nirmatrelvir/ritonavir on COVID-19 hospitalisation in Québec here
- Protective effect from prior Omicron infection against BA.5 subvariant symptomatic reinfection here
- Serum brain injury biomarkers in people with mild-moderate COVID-19 and long COVID here
- Early treatment, inflammation and post-COVID conditions here
- Pre-infection sleep quality and quantity associated with long-term symptoms post COVID-19 here

# **Guidance and reports**

- The World Health Organization published its weekly COVID-19 epidemiological report here
- The UK Health Security Agency published an update on SARS-CoV-2 variants of concern and variants under investigation <u>here</u>
- The National Clinical Evidence Taskforce released updated recommendations and flowcharts here
- The Therapeutic Goods Administration (TGA) issued provisional approval to Moderna's COVID-19 bivalent (SPIKEVAX bivalent original/Omicron BA.4-5) booster dose vaccine <u>here</u>

### News and blogs

- Which SARS-Cov-2 variants should be included in the FDA's proposed annual COVID-19 vaccines remains unclear <u>here</u>
- Long COVID linked with unemployment in new analysis <u>here</u>
- Most COVID-19 deaths worldwide were among older people here
- Evusheld unlikely to prevent infection with current or future variants here

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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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