COVID-19 Critical Intelligence Unit

# **Daily evidence digest**

4 January 2022

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

# Reducing self-isolation periods, Omicron breakthrough infections, hospitalisations and vaccine protection

#### Peer reviewed journals

- Randomised controlled trials of:
  - A single dose of recombinant novel coronavirus vaccine (adenovirus type 5 vector) in adults 18+ years <u>here</u> and associated commentary <u>here</u>
  - Monoclonal antibody therapies, sotrovimab and BRII-196 plus BRII-198, for adults hospitalised with COVID-19 <u>here</u> and associated commentary <u>here</u>
- An observational study on GP consultation rates for sequelae after acute COVID-19 here
- Commentary on the intensifying threat of COVID-19 among First Nations People of Australia here
- An editorial on post-acute COVID-19 in primary care here
- Nature research briefings on:
  - o Activity of convalescent and vaccine serum against the Omicron variant here
  - o Antibody evasion manifested by the Omicron variant here
  - o Omicron immune escape here, here and here

#### Letters and correspondence

- Long COVID in children here and here
- Characteristics and outcomes of hospitalised patients in South Africa during the COVID-19 Omicron wave compared with previous waves <u>here</u>
- Effectiveness of the Comirnaty vaccine against Omicron variant in South Africa here
- Third Comirnaty vaccination neutralization of SARS-CoV-2 Omicron infection here
- Plasma neutralisation of the SARS-CoV-2 Omicron variant here

#### **Pre-peer review**

- Early estimates of SARS-CoV-2 Omicron variant severity in Ontario, Canada here
- Short-term projections based on early Omicron variant dynamics in England here
- Forecasting COVID-19 infection trends and hospital admissions in England due to Omicron here
- Rapid increase in Omicron infections in England during December 2021: REACT-1 study here
- The use of rapid antigen testing to reduce the impact of self-isolation periods here
- Outcomes from COVID-19 in US paediatric and adult patients before and after Omicron here



- Vaccines and cellular immunity to the SARS-CoV-2 Omicron variant here
- Recognition of Omicron Spike following COVID-19 mRNA vaccination in pregnancy here
- Increased vaccine breakthrough, decreased hospitalisation rates, and less severe disease caused by Omicron in Houston, Texas <u>here</u>
- Humoral immune responses against SARS-CoV-2 variants including Omicron in solid organ transplant recipients after three doses of a COVID-19 mRNA vaccine <u>here</u>
- Effectiveness of COVID-19 vaccines against Omicron or Delta infection here
- T cell reactivity to the SARS-CoV-2 Omicron variant here
- Effectiveness of mRNA booster vaccines against Omicron in patients with cancer here
- Infectivity and immune escape of Omicron here
- Resistance of Omicron variant to neutralisation by vaccine-elicited and therapeutic antibodies here
- Omicron-specific T- and B-cell responses in COVID-19 vaccine recipients here
- Severity and disease spectrum of COVID-19 in children in NSW during the Delta outbreak here
- Waning of SARS-CoV-2 booster viral-load reduction effectiveness <u>here</u>
- Cross-reactive immune responses in vaccine-breakthrough infection by Omicron here
- Remdesivir, Molnupiravir and Nirmatrelvir against Omicron and other variants of concern here
- T cell responses against Omicron here
- Asymptomatic carriage associated with Omicron here
- Omicron transmission in Danish households <u>here</u>
- Two doses of mRNA vaccine and cross-neutralizing memory B-cells against Omicron here
- Serial interval and basic reproduction number of Omicron in South Korea here
- Saliva swabs for Omicron detection here
- Three doses of Comirnaty vaccine and neutralising antibody capacity against Omicron here
- Neutralizing antibodies to Omicron after third mRNA vaccination and response to a single dose in previously infected adults <u>here</u> and <u>here</u>
- Omicron outbreak at a private gathering, infecting 21 of 33 triple-vaccinated healthcare workers here

## **Guidance and reports**

- The World Health Organization published:
  - An updated interim statement on booster doses for COVID-19 vaccination here
  - Weekly epidemiological update on COVID-19 28 December 2021 here
  - Updated priority actions for enhancing readiness for Omicron (B.1.1.529) here
- The UK Health Security Agency published a technical briefing on SARS-CoV-2 variants of concern and hospitalisation and vaccine effectiveness for Omicron VOC-21NOV-01 (B.1.1.529) <u>here</u>

## News and blogs

- Safety of reducing the self-isolation period <u>here</u> and <u>here</u>
- Single measures aren't enough here
- An urgent call for global "vaccines-plus" action here
- CDC shortens isolation period as US cases hit record high here
- Early studies give hope omicron is milder than other variants here and here



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