COVID-19 Critical Intelligence Unit

Daily evidence digest

14 December 2021

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

COVID-19 and anti-TNF treatments, droplet digital PCR, breakthrough infections with Omicron variant despite mRNA booster

Peer reviewed journals featured:

- Systematic reviews on:
 - COVID-19 outcomes in patients receiving anti-TNF treatments <u>here</u>
 - Droplet digital PCR (ddPCR) in COVID-19 patients <u>here</u>
 - Clinical practice guidelines for pharmacologic treatments for hospitalised COVID-19 patients <u>here</u> and associated commentary <u>here</u>
- A meta-analysis on current treatments for severe COVID-19 patients <u>here</u>
- An observational study on serological responses and vaccine effectiveness for extended COVID-19 vaccine schedules <u>here</u>

Letters and correspondence discussed:

Tolerability and impact of COVID-19 vaccination in elite athletes <u>here</u>

Pre-peer review articles featured:

- Breakthrough infections with Omicron variant despite mRNA booster vaccination here
- Estimates of reduced vaccine effectiveness against Omicron variant here
- Reduced neutralisation of Omicron variant by post-immunisation serum <u>here</u>
- Omicron variant evades neutralisation by sera from vaccinated and convalescent individuals <u>here</u>
- The Omicron variant and CD8+ T cell epitopes in COVID-19 convalescent individuals here
- Adolescent vaccination with Comirnaty (Pfizer) and effectiveness of the first dose <u>here</u>
- Changes in the trajectory of post-acute COVID-19 syndrome symptoms following vaccination <u>here</u>
- Modelling health policy decisions and disease incidence, hospitalisation and mortality <u>here</u>

Guidance and reports

• The World Health Organization published:

Health

- A brief on enhancing readiness for Omicron (B.1.1.529) here
- An updated COVID-19 vaccine tracker <u>here</u>
- The UK Health Security Agency published an update on SARS-CoV-2 variants of concern and variants under investigation <u>here</u>



News and blogs

- Do vaccines work against Omicron and other questions answered here
- COVID-19 and pregnancy here
- Monoclonal antibodies authorised in US as alternative to vaccines for certain groups here
- A podcast on vaccines and post-acute COVID-19 syndrome here

<u>Click here</u> to subscribe to the daily evidence digest.

Living Evidence Tables

Living Evidence tables are up-to-date summaries of emerging evidence. Tables are available on <u>COVID-19 transmission</u>, SARS-CoV-2 <u>vaccines</u>, and <u>variants</u> of concern, <u>post-acute sequelae of</u> <u>COVID-19 (PASC)</u>, <u>surgery and COVID-19</u>, <u>rapid testing</u> and <u>risk mitigation strategies</u>.

The final digest for 2021 will be released on 17 December and the service will resume on 17 January 2022. Upon resumption of services, key publications released during the break will be collated and a summary distributed.



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