COVID-19 Critical Intelligence Unit

Daily evidence digest

17 December 2021

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

Hyperbaric oxygen treatment, Novavax phase 3 trial, the need for updated evidence synthesis, universal COVID-19 vaccines

Peer reviewed journals featured:

- A randomised controlled trial of hyperbaric oxygen as an adjuvant treatment for patients with COVID-19 severe hypoxaemia <u>here</u> and associated commentary <u>here</u>
- A phase 3 trials of Novavax in adults in the US and Mexico here
- · Observational studies on:
 - o The effectiveness of Spikevax (Moderna) against variants (Delta, Alpha and Mu) here
 - The impact of cardiometabolic multimorbidity and ethnicity on cardiovascular and renal complications in COVID-19 patients here
 - The impact of sleep, physical activity, and sedentary behaviour on symptoms of depression and anxiety during COVID-19 here
 - COVID-19 vaccination strategies and networks of social interaction <u>here</u>
- A modelling study on the effect of COVID-19 quarantine and lockdown regulations here
- Commentary on:
 - o The need for updated evidence synthesis for decision makers here
 - Universal COVID-19 vaccines <u>here</u>

Letters and correspondence discussed:

- Combination therapy of infliximab and thiopurines associated with attenuated IgA and neutralisation responses to SARS-CoV-2 in inflammatory bowel disease here
- Estimated effectiveness of mRNA vaccination in older male US veterans here

Pre-peer review articles featured:

- Effectiveness of COVID-19 vaccines against the Omicron variant of concern here
- Reduction of humoral responses to Omicron and resistance to clinical immunotherapeutics here
- The impact of Omicron on SARS-CoV-2 dynamics and public health burden here
- Cellular and humoral immune responses in heterologous and homologous vaccination here
- Modelling the recovery of elective waiting lists following COVID-19 in England here
- The risk of myopericarditis in COVID-19 patients and vaccine recipients here
- Spikevax (Moderna) booster and Omicron escape from neutralising antibodies here



Guidance and reports

• The World Health Organization published its weekly COVID-19 epidemiological report here

News and blogs

- Symptoms of post-acute COVID-19 syndrome after a year here
- Why parents still hesitate to vaccinate their children against COVID-19 here
- Study probes outcomes of COVID-19 patients given hydroxychloroquine here
- A NEJM audio interview on the level of protection provided by prior SARS-CoV-2 infection here

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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 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.

