COVID-19 Critical Intelligence Unit

Evidence digest

22 July 2022

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

Drug treatments for COVID-19, endemic paediatric viral illnesses after COVID-19 disruption, duration of shedding of culturable Omicron

Peer reviewed journals featured:

- · Systematic reviews on:
 - o Drug treatments for COVID-19 (updated) here
 - o Myocarditis & pericarditis after COVID-19 vaccination here and associated editorial here
 - The prevalence of psychological stress in student populations during COVID-19 <u>here</u>
- A narrative review on the origin, features and intervention of Omicron sublineages <u>here</u>
- Observational studies on:
 - o Comirnaty (Pfizer) vaccine effectiveness against Omicron in 5 to 11 years of age here
 - Safety of heterologous vaccnation with Vaxzevria (AstraZeneca) & mRNA vaccines here
 - o Immune responses to mRNA vaccinations in patients with multiple sclerosis here
 - Effectiveness of a fourth dose of mRNA vaccine against all-cause mortality in long-term care facility residents and in the 'oldest old' here
 - High-density lipoprotein-cholesterol levels and susceptibility to COVID-19 here
 - o Effectiveness of 2, 3, and 4 mRNA vaccine doses in immunocompetent adults here
 - Long-term immune response to SARS-CoV-2 infection after mild infection here
 - Reactogenicity of simultaneous mRNA booster and influenza vaccination <u>here</u> and associated commentary <u>here</u>
 - o Immune responses in Omicron breakthrough infection in vaccinated adults here
 - Early detection and surveillance of SARS-CoV-2 genomic variants in wastewater here
 - o Impact of mild COVID-19 on balance function in young adults here
 - o COVID-19 and the risk of atrial fibrillation in inpatients here
 - o COVID-19 and risk of neurodegenerative disorders here
 - o Effect of statins on COVID-19 risk, severity and fatal outcome here
 - o The sequences of 150,119 genomes in the UK Biobank here
 - Safety of first mRNA vaccine booster doses in immunocompromised persons here
 - Comparative effectiveness of Vaxzevria (AstraZeneca) vs Comirnaty (Pfizer) vaccines in health and social care workers in England here
 - Comirnaty (Pfizer) & Vaxzevria (AstraZeneca) vaccines following second dose <u>here</u>
 - Burden of SARS-CoV-2 infection in healthcare workers and impact of vaccines in England here and associated editorial here
- A case report of cutaneous manifestations of COVID-19 here



- An editorial stating the NHS is not living with COVID-19, it's dying from it here
- Commentary on:
 - Endemic paediatric viral illnesses after COVID-19 disruption <u>here</u>
 - o COVID-19 and the Dunning-Kruger effect here
 - One year on from UK's "Freedom Day," what have we learnt? here
 - A 7-point plan to suppress COVID-19 infections and reduce disruptions in the UK here
 - How COVID-19 unmasked the autoinflammatory PFAPA syndrome here

Letters and correspondence discussed:

- Duration of shedding of culturable virus in Omicron (BA.1) infection here
- Efficacy of antibodies and antiviral drugs for Omicron BA.2.12.1, BA.4, and BA.5 subvariants here
- Omicron neutralisation from inactivated and ZF2001 vaccines here
- Protection associated with previous SARS-CoV-2 infection in Nicaragua here
- Neutralisation sensitivity of Omicron subvariants to therapeutic monoclonal antibodies <u>here</u> and <u>here</u>

Pre-peer review articles featured:

- Long COVID in cancer patients here
- SARS-CoV-2 infections during BA.1 wave and subsequent immunity in Gauteng, South Africa here
- Fc effector activity and neutralisation against Omicron BA.4 subvariant here
- Neutralisation sensitivity of Omicron BA.2.75 to therapeutic monoclonal antibodies <u>here</u>

Guidance and reports

- The World Health Organization published:
 - Its weekly epidemiological report on COVID-19 here
 - Updated guideline on drugs for COVID-19 here
- The UK Health Security Agency released its SARS-CoV-2 therapeutics technical briefing 4 here
- The Australian Technical Advisory Group on Immunisation (ATAGI) released its weekly update here
- The Canadian National Collaborating Centre for Methods and Tools published a rapid review of COVID-19 testing requirements in healthcare and long-term care settings here
- The Therapeutic Goods Administration (TGA) issued provisional approval to Moderna COVID-19 vaccine (SPIKEVAX) here and SPIKEVAX (elasomeran) here for use in children from 6 months

News and blogs

- High prevalence and lack of hospital beds putting "intense pressure" on ambulances in UK <u>here</u>
- Antimicrobial resistance rose dangerously in US during pandemic here
- An NHS doctor's personal pandemic experience here
- The COVID-19 Recovery trial set to lose funding as proposal to examine flu drugs is rejected here
- Omicron BA.5 variant is now dominant in US as infections rise here
- The hunt for drugs for mild COVID-19 <u>here</u>
- One coronavirus infection ward off another here



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