## COVID-19 Critical Intelligence Unit

### **Daily evidence digest**

1 February 2022

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

# Tocilizumab and corticosteroids, memory B cells after triple vaccination, readmissions and deaths post COVID-19 hospitalisation

#### Peer reviewed journals featured:

- · Systematic reviews on:
  - o Tocilizumab and corticosteroid therapy in treating COVID-19 patients here
  - o Neutralising monoclonal antibodies in COVID-19 outpatients [pre-Omicron] here
- A randomised controlled trial of hyperimmune immunoglobulin for hospitalised patients here
- A narrative review on memory B cell repertoire from triple vaccinees against SARS-CoV-2 here
- Observational studies on:
  - Hospitalisation and death after COVID-19 hospitalisation in England here
  - Three exposures to SARS-CoV-2 spike protein by infection or vaccination elicit superior neutralising immunity to all variants of concern <u>here</u>
  - o Impact of vaccination on the COVID-19 pandemic in the US here
  - o Persistence of SARS-CoV-2 protection up to 9 months after vaccine completion here
- · Commentary on:
  - o Condition specific patient reported outcome measures for post-acute COVID-19 here
  - A call to action for translational sciences in COVID-19 and future pandemics here

#### Letters and correspondence discussed:

 Frequency and risk of emergency medical service interhospital transportation of patients with acute lower respiratory tract illness in COVID-19 in the US <a href="https://example.com/here/">here</a>

#### Pre-peer review articles featured:

- Omicron-related travel policy restrictions <u>here</u>
- A qualitative study of the impact of delaying surgery during COVID-19 here
- Omicron and Delta breakthrough infections and re-activation of vaccine-induced immunity here
- Omicron in highly vaccinated university populations in Massachusetts here
- Characteristics and severity of Omicron variant cases in ICU hospital admissions in Paris here
- Displacement of the SARS-CoV-2 variant Delta with Omicron in the US here
- mRNA vaccine boosting in patients with antibody deficiency syndromes here
- Total and neutralising SARS-CoV-2 spike antibodies after 2 or 3 doses of mRNA vaccine here



- Mucosal immunity against SARS-CoV-2 variants of concern following vaccination <u>here</u>
- Impact of various vaccine boosters on neutralisation against Omicron following prime vaccinations with inactivated or adenovirus-vectored vaccine <a href="here">here</a>
- The spread of the Omicron variant in Italy <u>here</u>
- Hybrid immunity from Delta variant surge and neutralising antibodies against Omicron variant here

#### **Guidance and reports**

 The UK Health Security Agency published an update on SARS-CoV-2 variants of concern and variants under investigation here

#### News and blogs

- Unravelling the conundrum of Omicron and deaths <u>here</u>
- Antibody "signature" could predict the risk of post-acute COVID-19 syndrome here
- Does the world need an Omicron vaccine? here
- A podcast on why T cells have been overlooked <u>here</u>
- Three, four, or more what's the magic number for booster shots? here
- Three key theories on where Omicron came from <u>here</u>

<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 COVID-19</u> (PASC), surgery and COVID-19, rapid testing and risk mitigation strategies.



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