TECHNICAL DOCUMENTS

D1. Therapeutics and COVID-19: Living guideline (WHO, 6 July) [LINK]

 WHO living guideline contains most up-to-date recommendations for the use of therapeutics in the treatment of COVID-19. This is the fifth version and it contains seven recommendations with a new recommendation regarding interleukin-6 (IL-6) receptor blockers, including both tocilizumab and sarilumab. This latest update has been initiated in response to the publication of the RECOVERY and REMAP-CAP trials addressing IL-6 receptor blockers as a potential treatment for COVID-19.

D2. WHO Global Clinical Platform for the Clinical Characterisation of COVID-19: Statistical analysis plan (WHO, 7 July) [LINK]

 This document presents a succinct description of the proposed analytic plan to generate statistics at global, regional and national levels, including among subpopulations, on the different clinical characteristics associated with COVID-19 and the risk factors associated with poor clinical outcomes. The reports generated and published from these proposed analyses will help clinicians and national programmes prepare appropriate management and response strategies.

D3. Implementation guidance for assessments of frontline service readiness: strengthening real-time monitoring of health services in the context of the COVID-19 pandemic (WHO, 1 July) [LINK]

• This is a new collection of tools for health facilities and communities to support rapid and accurate monitoring of current, surge, and future frontline service

capacities throughout the different phases of the COVID-19 pandemic. The document consists of modules that can be used to prioritise actions and decision-making at the health facility, subnational and national levels.

D4. Technical considerations for implementing a risk-based approach to international travel in the context of COVID-19: Interim guidance (WHO, 2 July) [LINK]

This updated interim guidance document provides national authorities with key
considerations for establishing their policies for international air, sea or land
travel between countries and sub-national areas. The guidance aims to support
countries as they gradually increase the volume of international travel with the
objective of reducing travel-associated exportation, importation and onward
transmission of SARS-CoV-2.

D5. Considerations for strengthening legal frameworks for digital contact tracing and quarantine tools for COVID-19 (WHO, 6 July) [LINK]

 This document aims to support countries to review, develop and monitor their legal frameworks for digital contact tracing and quarantine (DCTQ) tools, guided by the ethical principles for digital proximity tracking technologies suggested by WHO.

D6. Modelling the health impacts of disruptions to essential health services during COVID-19 (WHO, 9 July) [LINK]

This document provides an overview of several epidemiological models created
to assess the potential impact of disruptions to essential health services caused
by COVID-19 on morbidity and mortality from conditions other than COVID-19
illness. The focus is on what the various models do, how they do what they do
and the underlying assumptions on which they are based.

D7. Diagnostics, therapeutics, vaccine readiness, and other health products for COVID-19: Interim guidance (WHO, 12 July) [LINK]

This guidance tool has been developed to assess present and surge capacities
for the treatment of COVID-19 in health facilities. It allows health facilities to
assess the availability and status of stockout of critical COVID-19 medicines,
equipment and supplies on site and to identify areas that need further attention
to enable the facility to respond effectively to the pandemic.

JOURNAL ARTICLES

- J1. New infections by SARS-CoV-2 variants of concern after natural infections and post-vaccination in Rio de Janeiro, Brazil (Elsevier, 10 July) [LINK]
- The study assessed the prevalence of different variants of concern (VOCs) among recent infections at the Brazilian National Cancer Institute with focus on reinfections and post vaccination breakthrough infections of SARS-CoV-2. The study concludes that all vaccinated and re-infected subjects carried VOCs, irrespective of the vaccine type taken, the number of doses taken, IgG titers, or being previously infected during the first wave of the Brazilian pandemic. It also highlights several examples of how natural infections or vaccination may not be fully capable of conferring sterilising immunity against VOCs.
- J2. Neutralising capacity against Delta (B. 1.617.2) and other variants of concem following Comirnaty (BNT162b2, BioNTech/Pfizer) vaccination in health care workers, Israel (Eurosurveillance, 1 July) [LINK]
- The study describes the neutralising response of sera from healthcare workers without prior SARS-CoV-2 infection following a second vaccine dose against viral isolates of the Delta VOC and compared it to the response against isolates of the original, Alpha, Beta and Gamma VOCs. The findings suggest that vaccination with Comirnaty is effective against Alpha, Beta and Gamma VOCs, albeit at different degrees. The study results suggest that despite somewhat reduced neutralisation capacity, Comirnaty vaccination induces a substantial antibody response also for the Delta VOC.
- J3. Predicted dominance of variant Delta of SARS-CoV-2 before Tokyo Olympic Games, Japan (Eurosurveillance, 8 July) [LINK]

• The study used a renewal-equation-based model to describe the adaptive evolution among multiple variants, i.e., R.1, Alpha and Delta variants in addition to ordinary variant, in Japan to inform risk-assessment ahead of the Summer Olympic Games in Tokyo starting on 23 July 2021. The study demonstrated that the SARS-CoV-2 Delta VOC possesses greater transmissibility than the R.1 and the Alpha VOC. The Delta VOC possesses almost 1.6- and 1.4-times higher transmissibility than the R.1 and the Alpha VOC, respectively.

J4. Neutralisation of Beta and Delta variant with sera of COVID-19 recovered cases and vaccinees of inactivated COVID-19 vaccine BBV152/Covaxin (The Journal of Travel Medicine, 6 July) [LINK]

 The study assessed the neutralisation of sera from COVID-19 recovered cases and BBV152 vaccinated cohort against Beta and Delta variants. The findings demonstrated that despite a reduction in neutralisation titers with BBV152 vaccinated sera against Beta and Delta variants, its neutralisation potential is well established.

J5. Association between administration of IL-6 antagonists and mortality among patients hospitalised for COVID-19: A meta-analysis (JAMA, 6 July) [LINK]

• This study compared 28-day all-cause mortality outcome after administration of IL-6 antagonists with usual or placebo. The findings suggest that the administration of IL-6 antagonists, compared with usual care or placebo, was associated with lower 28-day all-cause mortality in Covid-19 patients.

J6. Association between BNT162b2 vaccination and incidence of SARS-CoV-2 infection in pregnant women (JAMA, 12 July) [LINK]

 The study explored the association between the receipt of BNT162b2 messenger RNA vaccine and the risk of SARS-CoV-2 infection among pregnant women. The findings suggest that, BNT162b2 mRNA vaccination compared with no vaccination, was associated with a significantly lower risk of SARS-CoV-2 infection.

- J7. Estimating global and regional disruptions to routine childhood vaccine coverage during the COVID-19 pandemic in 2020: a modelling study (The Lancet, 14 July) [LINK]
- The study estimated disruptions in vaccine coverage associated with the pandemic in 2020, globally and by Global Burden of Disease (GBD) super-region.
 It observes that routine immunisation services faced stark challenges in 2020, with the COVID-19 pandemic causing the most widespread and largest global disruption in recent history.