



# GUIDELINES AND RESEARCH UPDATES



## TECHNICAL DOCUMENTS:

### D1. Therapeutics and COVID-19: living guideline (WHO, 22 April) [[LINK](#)]

- The WHO *Therapeutics and COVID-19: living guideline* contains the Organization's most up-to-date recommendations for the use of therapeutics in the treatment of COVID-19. This tenth version of the WHO living guideline now contains 17 recommendations, including two new recommendations regarding nirmatrelvir-ritonavir. It includes a **NEW** strong recommendation for the use of nirmatrelvir-ritonavir in patients with non-severe illness at the highest risk of hospitalization; another **NEW** conditional recommendation against the use of nirmatrelvir-ritonavir in patients with non-severe illness at a low risk of hospitalization; and an **UPDATED** conditional recommendation for the use of remdesivir in patients with non-severe COVID-19 at the highest risk of hospitalization.

### D2. COVID-19 Vaccine Introduction and deployment Costing tool (CVIC tool) (WHO, 21 April) [[LINK](#)]

- The CVIC tool supports credible COVID-19 vaccination costing to facilitate a dialogue with stakeholders, while maintaining sensitivity to protect essential health services. The CVIC tool provides a structured and comprehensive estimation of incremental operational and selected capital costs of introducing and deploying COVID-19 vaccines, in alignment with the National Deployment and Vaccination Plan (NDVP). This is essential for resource mobilization, budgeting, and delivery strategy refinement and optimization. The tool has been pre-populated with data from global databases and provides a total cost estimate over an immunization programme over the period of 2021-2023, after which COVID-19 vaccination is expected to be integrated into national immunization plans. Countries can customize the priority target populations based on WHO SAGE guidance and select multiple delivery strategies and vaccine products.

### **D3. Accelerating COVID-19 Vaccine Deployment: Removing obstacles to increase coverage levels and protect those at high risk (WHO, 20 April) [[LINK](#)]**

- This report, produced to answer that request, has been prepared with the support of six international bodies involved in work to support higher levels of COVID-19 vaccination coverage and the leadership of the COVID-19 Vaccine Delivery Partnership (CoVDP) and ACT-Accelerator Hub. WHO and the World Bank worked in collaboration with the IMF and WTO as members of the Multilateral Leaders Task Force on COVID-19 as well as Gavi and UNICEF as members of the CoVDP to co-produce this report.

### **D4. Consolidated report of country success stories in mitigating the impact of the COVID-19 pandemic on TB services (WHO, 20 April) [[LINK](#)]**

- The response to the COVID-19 pandemic continues to adversely affect essential TB services in many countries. A first report of case studies was published in 2021 comprising 23 examples of innovative interventions implemented by countries to effectively respond to disruptions of TB services caused or exacerbated by the COVID-19 pandemic. This second, consolidated report incorporates new case studies, as well as updates to previously reported case studies.

### **D5. Equitable access to COVID-19 tools- aligning the private sector with national response efforts (WHO, 12 April) [[LINK](#)]**

- This rapid review document seeks to understand why and where there has been swift and proactive action to build better governance of national COVID-19 response, including cross-countries lessons on how to govern the private sector in health to maximize the COVID-19 response. It also focuses on governance as the political processes by which decisions are reached and upheld.

### **D6. Environmental surveillance for SARS-COV-2 to complement public health surveillance - Interim Guidance (WHO, 14 April) [[LINK](#)]**

- Routine diagnostic surveillance for COVID-19 has been augmented with environmental surveillance (ES) in wastewater in many locations. This guidance provides advice on what situations ES has been shown to add value to public health decision making; what is needed to plan and coordinate an effective ES programme; and how to carry out data collection, analysis, interpretation and communication of results.

### **D7. Strengthening hospital resilience in the Eastern Mediterranean region: A policy paper on facility-level preparedness (WHO, March 2022) [[LINK](#)]**

- This document introduces hospital resilience and its critical role in health systems. It outlines the common challenges faced by hospitals in the Eastern Mediterranean Region and provides recommendations for policymakers and hospital managers on improving preparedness for greater resilience.

## **JOURNAL ARTICLES**

### **J1. Severity of omicron variant of concern and effectiveness of vaccine boosters against symptomatic disease in Scotland (EAVE II): a national cohort study with nested test-negative design (The Lancet, 22 April) [[LINK](#)]**

- In this study, the authors investigated the severity of omicron and the extent to which booster vaccines are effective in preventing symptomatic infection. They conclude that early data suggest that omicron is associated with a two-thirds reduction in the risk of COVID-19 hospitalisation compared with delta. Although offering the greatest protection against delta, the booster dose of vaccination offers substantial additional protection against the risk of symptomatic COVID-19 for omicron compared with 25 weeks or more after the second vaccine dose.

### **J2. Intramuscular AZD7442 (Tixagevimab-Cilgavimab) for Prevention of Covid-19 (The New England Journal of Medicine, 20 April) [[LINK](#)]**

- The monoclonal-antibody combination AZD7442 is composed of tixagevimab and cilgavimab, two neutralizing antibodies against severe SARS-CoV-2. In an ongoing phase 3 trial, authors conclude that A single dose of AZD7442 had efficacy for the prevention of Covid-19, without evident safety concerns.

### **J3. Covid-19's Devastating Effect on Tuberculosis Care — A Path to Recovery (The New England Journal of Medicine, 21 April) [[LINK](#)]**

- Tuberculosis services have been disproportionately affected during the Covid pandemic compared to other aspects of global health. Authors opine that world leaders should reaffirm their commitment to ending the tuberculosis epidemic, work harder to mitigate the effects of the pandemic, and address the social, environmental, and economic determinants of tuberculosis infection and mortality

### **J4. An antibody class with a common CDRH3 motif broadly neutralizes sarbecoviruses (Science Translational Medicine, 19 April) [[LINK](#)]**

- The devastation caused by SARS-CoV-2 has made clear the importance of pandemic preparedness. To address future zoonotic outbreaks due to related viruses in the sarbecovirus subgenus, the authors identified a human monoclonal antibody, 10-40, that neutralized or bound all sarbecoviruses tested

in vitro and protected against SARS-CoV-2 and SARS-CoV in vivo. Comparative studies with other receptor-binding domain (RBD)-directed antibodies showed 10-40 to have the greatest breadth against sarbecoviruses, suggesting that 10-40 is a promising agent for pandemic preparedness. Elicitation of this class of antibodies may not be overly difficult, an observation that bodes well for the development of a pan-sarbecovirus vaccine.

**J5. Population Immunity and Covid-19 Severity with Omicron Variant in South Africa** (The New England Journal of Medicine, 7 April) [[LINK](#)]

- The study determined the seroprevalence of SARS-CoV-2 IgG through sero-epidemiological survey in Gauteng province, South Africa. The result shows widespread underlying SARS-CoV-2 seropositivity before the omicron-dominant wave of Covid-19. The authors suggest that the 70% vaccine effectiveness against severe disease with BNT162b2 in South Africa might well be due to the hybrid cell-mediated (rather than antibody-mediated) immunity induced by vaccination and natural infection.

**J6. Risks of deep vein thrombosis, pulmonary embolism, and bleeding after covid-19: nationwide self-controlled cases series and matched cohort study** (British Medical Journal, 6 April) [[LINK](#)]

- The study quantified the risk of deep vein thrombosis, pulmonary embolism, and bleeding after covid-19. The findings suggest that covid-19 is a risk factor for deep vein thrombosis, pulmonary embolism, and bleeding. These results may impact recommendations on diagnostic and prophylactic strategies against venous thromboembolism after covid-19.

**J7. Attitude, perceptions and willingness to receive COVID-19 vaccine and its associated factors among general population of Uttar Pradesh, Northern India** (Clinical Epidemiology and Global Health, 7 April) [[LINK](#)]

- The study assessed the willingness to receive COVID-19 vaccine and identify the factors associated with it among the general population of Uttar Pradesh, North India. The finding indicate that during the second wave of COVID-19 pandemic, high acceptance for COVID-19 vaccination was found among the general population. Younger age-group (18-44 years), female gender, absence of any co-morbidity, lower education level, current employment status, positive history of confirmed COVID-19 infection in the person and positive history of confirmed COVID-19 infection in any family member/friend were the factors found to be significantly associated with the willingness to receive a COVID-19 vaccine.