Update on SARS-COV-2 and Omicron VOC

9 December 2021

ACT Accelerator Facilitation Council
Global Situation
(as of 8 December 10H CET)

• **Cumulative:**
  - 266,504,411 confirmed cases.
  - 5,268,849 deaths.
WHO African Region
(as of 8 December 10H CET)

• Previous 24 hours:
  – 29,210 new confirmed cases from 29 countries.
  – 143 new deaths from 16 countries.
  – 4.2% of new global cases and 1.9% of new global deaths

• Cumulative:
  – 6,408,551 confirmed cases.
  – 153,503 deaths.

Countries with the highest number of new cases in previous 24 hours

<table>
<thead>
<tr>
<th>Country</th>
<th>New Cases</th>
<th>Total Cases</th>
<th>New Deaths</th>
<th>Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>13,147</td>
<td>3,051,222</td>
<td>27</td>
<td>90,002</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>6,586</td>
<td>145,632</td>
<td>8</td>
<td>4,718</td>
</tr>
<tr>
<td>Mauritius</td>
<td>6,194</td>
<td>62,500</td>
<td>58</td>
<td>652</td>
</tr>
<tr>
<td>Eswatini</td>
<td>507</td>
<td>48,358</td>
<td>0</td>
<td>1,248</td>
</tr>
<tr>
<td>Madagascar</td>
<td>470</td>
<td>44,800</td>
<td>5</td>
<td>972</td>
</tr>
<tr>
<td>Namibia</td>
<td>430</td>
<td>129,938</td>
<td>1</td>
<td>3,574</td>
</tr>
<tr>
<td>Cameroon</td>
<td>401</td>
<td>107,549</td>
<td>19</td>
<td>1,823</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>334</td>
<td>16,334</td>
<td>4</td>
<td>290</td>
</tr>
<tr>
<td>Algeria</td>
<td>197</td>
<td>211,859</td>
<td>3</td>
<td>6,114</td>
</tr>
<tr>
<td>Mali</td>
<td>141</td>
<td>18,113</td>
<td>1</td>
<td>619</td>
</tr>
</tbody>
</table>

Trend line shown for the past 12 months
Trends of SARS-COV-2 cases and hospitalizations South Africa

Increase in hospitalisations most prominent in Gauteng – centre of Omicron outbreak

7-day moving average number of new cases by province and date of reporting, 12 April 2020 to 06 Dec 2021, South Africa

Courtesy of NICD South Africa
Proportion of SARS-CoV-2 VOCs variants over time: Globally and South Africa

Source: Nextstrain based on GISAID data [nextstrain.org/ncov/global]
Under an IMST, WHO is assessing the threat of VOCs (including omicron). 3 key properties of a variant are likely to influence the overall threat from it.

- **TAG for Virus Evolution** is assessing its effect on transmission, disease severity, vaccines, therapeutics and diagnostics, and the effectiveness of PHSMs.

- **The R&D Blueprint for Epidemics** is convening researchers to identify knowledge gaps, and studies needed to answer the most pressing questions. 
  - Omicron variant assays & animal models study tracker

- **The WG on vaccines TPPs** is reviewing current desirable and minimum criteria for vaccines.

- **WHO BioHub system** is a reliable, safe, and transparent mechanism to voluntarily share novel biological materials.

- **Regulatory convergence via ICMRA** is for evaluation of variant specific vaccines.

- **The Joint Advisory Group on Therapeutics Prioritization** is analyzing the possible effects on treatment of hospitalized patients.

- **WG for Clinical Management Networks** is assessing impacts of VOCs on current vaccines and WHO Global Clinical Platform for COVID.

- **WG on outpatient platform trials** is reviewing trial designs and challenges.

- **TAG for COVID-19 Vaccine Composition** is assessing impacts of VOCs on current vaccines and determining whether changes to the composition of vaccines are needed.

- **SAGE for vaccines** is reviewing data to develop evidence-based recommendations on the vaccination policies and target populations.

**Thousands of researchers around the world are contributing their data and expertise to the deliberations.**
Omicron implications for diagnostics and therapeutics

- Focus initial research efforts on:
  - antigen binding and virus neutralization by antiviral monoclonal antibodies
  - characterization of the COVID-19 phenotype caused by infection with Omicron variant

<table>
<thead>
<tr>
<th>Therapeutic</th>
<th>Experiment Type</th>
<th>In vitro</th>
<th>In vivo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antiviral assessment</td>
<td>Live virus neutralization</td>
<td>Binding IgG</td>
<td>mAb efficacy</td>
</tr>
<tr>
<td>Neutralizing monoclonal Antibody</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Antivirals</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>
From VOC designation to policy recommendations for variant specific vaccines

**Virus evaluation**

**Vaccine composition**

**Variant-specific vaccine**

**Target population, schedule**

**Monitoring & surveillance**

**TAG-VE**
- Which variants warrant further investigation
- Defines VOIs or VOCs
- Assess impact on interventions & tools

**Assess impact of VOCs**

**TAG-COVAC**
- Determine whether changes to vaccine composition are needed

**Evaluates variant-specific vaccine**

**EUL/PQ**
- Determine whether evidence on modified vaccine permits regulatory approval

**Provides policy recommendations**

**SAGE**
- Define goals of vaccination, target populations and vaccine schedules

**Define priority research agenda**

**R&D Blueprint Expert Groups**
- Live critical appraisal of emerging data
- Design of methods for evaluation of variant specific vaccines (pre-clinical & clinical)
Priorities

• Coordinated characterization, risk assessment and required research and innovation leading to evidence-based decision-making and policy formation
• Intensify efforts to drive down/keep down transmission – strengthen PHSM
• Accelerating higher, verified COVID-19 vaccines coverage, among the most vulnerable populations and HCWs, supported by strong risk communication and community engagement
• Supporting all countries to enhance clinical pathways, surveillance and laboratory systems including genomic sequencing, with a particular focus on LMICs
Thank you
B.1.1.529 Variant of Concern: Omicron

Clinical Data Platform - for severity monitoring CRF UPDATED
The WHO Global Clinical Platform for COVID-19
COVID_ClinPlatform@who.int