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Omicron Disease Profile

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Omicron shows preference for upper respiratory tract infection

- Omicron appears to show preference for infecting and replicating in the upper respiratory tract, compared to Delta and other strains which prefer the lower respiratory tract.
- This may confer a transmission advantage independent of immune evasion.
- Preliminary studies suggest that Omicron appears to have decreased ability to infect lung tissue, which may be a reason why people infected with Omicron have a less severe disease compared to Delta.
- Early studies from animal models show that Omicron-infected animals show fewer clinical signs and have less severe disease.

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
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</thead>
<tbody>
<tr>
<td>✓ COUGH</td>
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<tr>
<td>✓ FATIGUE</td>
</tr>
<tr>
<td>✓ CONGESTION</td>
</tr>
<tr>
<td>✓ A RUNNY NOSE</td>
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<tr>
<td>✗ HIGH FEVER</td>
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<tr>
<td>✗ A LOSS OR CHANGE IN SMELL OR TASTE</td>
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Omicron has reduced risk of hospitalization compared to Delta, suggest early studies from several countries including Denmark, South Africa, UK, Canada and the USA.

- There is decoupling between case reports and hospitalization in places of high levels of population immunity.
- Omicron infection appears to be associated with lower severity and lower proportion of hospitalized patients compared to previous variants, but the large number of people being infected with it translates into significant number of patients requiring hospital admission, putting strain on healthcare systems.

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But the disease caused by Omicron is not mild

**Table 1:** Weekly change (%) in cases and deaths between EW 52 (2 – 8 Jan) and EW 1 (9 – 15 Jan) by subregion. Region of the Americas.

<table>
<thead>
<tr>
<th>Subregion</th>
<th>Total Cases</th>
<th>Total Deaths</th>
<th>Cases (EW 2)</th>
<th>Deaths (EW2)</th>
<th>Cases (EW 3)</th>
<th>Deaths (EW 3)</th>
<th>% Variation of Cases</th>
<th>% Variation of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean and Atlantic Ocean Islands</td>
<td>2,935,746</td>
<td>30,146</td>
<td>224,156</td>
<td>384</td>
<td>173,442</td>
<td>552</td>
<td>-22.60%</td>
<td>43.80%</td>
</tr>
<tr>
<td>Central America</td>
<td>2,532,920</td>
<td>46,527</td>
<td>88,876</td>
<td>141</td>
<td>131,890</td>
<td>247</td>
<td>48.40%</td>
<td>75.20%</td>
</tr>
<tr>
<td>North America</td>
<td>77,760,733</td>
<td>1,196,010</td>
<td>6,099,299</td>
<td>14,647</td>
<td>5,349,853</td>
<td>17,062</td>
<td>-12.30%</td>
<td>16.50%</td>
</tr>
<tr>
<td>South America</td>
<td>45,694,263</td>
<td>1,202,228</td>
<td>1,886,643</td>
<td>3,251</td>
<td>2,472,606</td>
<td>5,551</td>
<td>31.10%</td>
<td>70.70%</td>
</tr>
</tbody>
</table>

Source: Data published by Ministries of Health and analyzed by PAHO/WHO
Older people and those with underlying conditions remain at risk

- Older people continue to be at greater risk for developing severe disease
- Those with underlying conditions, of any age, are also at risk for developing severe disease
- Omicron can still be lethal among the unvaccinated and immunocompromised

People at greater risk of COVID-19 include those: unvaccinated, with obesity, people over the age of 60, hypertension, Diabetes mellitus, cardiac disease, chronic lung disease, cerebrovascular disease, dementia, mental disorders, chronic kidney disease, immunosuppression, cancer, HIV/AIDS, pregnancy.
Therapeutics and Omicron

- Omicron has multiple Receptor-Binding Domain (RBD) and N-Terminal Domain (NTD) mutations associated with resistance to neutralizing antibodies.

- Preprints and data from respective manufacturers suggest that Monoclonal antibodies cilgavimab and tixagevimab (AZD1061/AZD8895) cocktail, Bamlanivimab and Etesevimab (LYCoV016/LY CoV555, Ely Lilly) cocktail and Regen-Cov (casirivimab and imdevimab) cocktail are partially or fully inactive against Omicron.

- Sotrovimab appears to retain neutralization activity on high-risk, non-hospitalized Patients with mild to moderate COVID-19 within the first five days of the onset of disease.

- Interleukin-6 receptor blockers and corticosteroids are expected to remain effective in the management of patients with severe and critical disease.

- The three pillars of pharmaceutical treatment for patients with severe/critical COVID-19 continue to be Oxygen + Corticosteroids + IL6-Receptor blockers.
Omicron and long Covid

- Around 10%-30% of Covid patients suffer from long Covid.
- Long Covid can happen to anyone who has had COVID-19, even if their illness was mild, or if they had no symptoms.
- It is too soon to determine whether Omicron can cause long Covid, but there is no evidence on the contrary.
- The more people are infected, the higher the possibilities some of them will have long Covid.
Expanding recognition, research and rehab for post COVID-19 condition

Into 2022, 2023 and beyond: all future scenarios will need to manage and care for patients with “Long COVID”

Post COVID-19 condition occurs in individuals with a history of probable or confirmed SARS CoV-2 infection, usually 3 months from the onset of COVID-19 with symptoms that last for at least 2 months and cannot be explained by an alternative diagnosis. Common symptoms include fatigue, shortness of breath, cognitive dysfunction but also others and generally have an impact on everyday functioning. Symptoms may be new onset following initial recovery from an acute COVID-19 episode or persist from the initial illness. Symptoms may also fluctuate or relapse over time.

Early Clinical Care Saves Lives

Into 2022, future scenarios of COVID-19 should include: significant reductions in severe disease and death as clinical care improves and as access to life saving tools increases globally.

- CONFIRM SARS-CoV-2 infection
- ASSESS symptoms, risk factors and severity
- RESPOND with appropriate care and treatment
- EVALUATE clinical response and recovery