MARKET UPDATE- Rotavirus vaccine
• From 2011 to 2022, UNICEF procured 279 million courses of rotavirus vaccine. Most of these doses were allocated to countries that receive support from Gavi, with just 1% allocated to middle-income countries not supported by Gavi.

• In 2011, there was one manufacturer, while there were two from 2012 to 2018. From 2019 to 2021, the number rose to four, but currently there are three.

• Currently, UNICEF has three LTAs established for Gavi-supported countries.

• For the last 12 years, the WAP has shown continual improvement.

• Unawarded doses are reserved for countries that have yet to introduce the rotavirus vaccine into their immunisation programs.
By 2023, the rotavirus vaccine has been introduced in 49 countries supported by Gavi. While four countries are still pending introduction, seven more countries are eligible for Gavi support, but they have not applied yet.

Additionally, since 2014, 17 MICs have procured rotavirus vaccines through UNICEF, including 9 Pacific Island countries (PICs).
• UNICEF procures **5 presentations** out of **14 WHO pre-qualified RV** vaccines from three manufacturers.

• Liquid presentations are currently preferred by countries over frozen and lyophilized.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Presentation</th>
<th>Formulation</th>
<th>Shelf life</th>
<th>Schedule</th>
<th>Cold Chain Vol / Course</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bharat Biotech</td>
<td>RV1-5 dose vial</td>
<td>Liquid-frozen</td>
<td>24 months</td>
<td>3 doses</td>
<td>12.6 cm³</td>
<td>-20°C</td>
</tr>
<tr>
<td></td>
<td>RV1-10 dose vial</td>
<td>Liquid-frozen</td>
<td>24 months</td>
<td>3 doses</td>
<td>9.6 cm³</td>
<td>-20°C</td>
</tr>
<tr>
<td>GlaxoSmithKline</td>
<td>RV1-1-dose tube</td>
<td>Liquid</td>
<td>24 months</td>
<td>2 doses</td>
<td>34.2 cm³</td>
<td>2-8°C</td>
</tr>
<tr>
<td>Serum Institute of India</td>
<td>RV5-2-dose vial</td>
<td>Lyophilised</td>
<td>30-months</td>
<td>3 doses</td>
<td>31.62 cm³</td>
<td>2-8°C</td>
</tr>
<tr>
<td></td>
<td>RV5-2 dose vial</td>
<td>Liquid</td>
<td>24-months</td>
<td>3 doses</td>
<td>42.90cm³</td>
<td>2-8°C</td>
</tr>
</tbody>
</table>
UNICEF currently holds 5 Long-Term Agreements (LTAs) for RVs obtained from PQ manufacturers, and an LTA is available for humanitarian purposes.

Most MICs procuring through UNICEF tend to confirm their demand annually rather than making multi-year commitments.
Market Challenges and Opportunities

- Countries can choose from various product presentations for their programmes, but manufacturers may experience decreased production efficiency.
- Ensuring a consistent supply of countries' preferred Rota products has been difficult, as well as vaccine manufacturing capacity.
- Since 2017, at least 20 countries have faced supply disruptions, resulting in forced switches or delayed introductions.
- Limited interchangeability among Rota products creates challenges for countries.
- It would benefit the Rota market to have suppliers from various locations instead of just suppliers based in the same country.
- It can be challenging to establish procurement measures if there isn't a consistent demand from middle-income countries.
- There is still a need for continued research and development to improve vaccine efficacy and coverage (Next Generation Rotavirus vaccines, offering the potential for improved efficacy with reduced doses).
QUESTIONS

DISCUSSION
THANK YOU