Market & Supply Update
Pentavalent Vaccine (DTwP-HepB-Hib)

Summary
The Pentavalent vaccine (DTwP-HepB-Hib) is primarily a ‘GAVI’ vaccine as it is introduced in all of the GAVI 73 countries plus in addition a few Middle Income Countries. Global demand is estimated at 300 million doses, of which UNICEF procures approximately 50% (2017 forecast). There are currently 7 suppliers of WHO pre-qualified vaccines (fully liquid and lyophilised/liquid formulation in various presentations - 1, 2, 5 and 10 dose vials. The supply situation is secure with ample availability, provided sufficient lead time is allowed. Increased competition in the supply market has contributed to decreasing offered prices to UNICEF (GAVI countries and MICs).

Since 2001, strong collaboration on market shaping across Gavi Alliance partners, including the Bill & Melinda Gates Foundation, WHO and UNICEF, has achieved an affordable and sustainable pentavalent vaccine supply for children in the world’s poorest countries.

General Background
The wP-pentavalent vaccine was developed and targeted by industry primarily for the ‘GAVI’ market, thus manufacturers’ profits are not being made in high income countries.

Supply
Up until 2006 only one product from one supplier was available and supply did not cover demand. In 2006 the first fully liquid product became available. Since 2008 emerging market manufacturers also started obtaining WHO pre-qualification. Over the period 2010-2012 a number of manufacturers were delisted or had their penta vaccine suspended from the WHO prequalification. Supply appears to have stabilized and there are now 6 manufacturers with WHO prequalified penta vaccine.

Demand
Demand through UNICEF peaked in 2015 reaching 235 MDS and is expected to reduce to about 150MDS per year with the self procurement by India.

Looking Forward
UNICEF together with partners in Gavi Alliance, developed a new tender strategy for the period

In order to harvest the benefits of the competitive dynamics in a fair and transparent manner, the tender which, for the first time, also includes the demand from MICs that have indicated a desire to procure through UNICEF was conducted as a multi-phased tender with awards being made in Phases.

This approach enabled the pursuance of the multiple tender objectives in each round and is expected to result in long term competition and demonstrated how collaborative engagement, including with vaccine suppliers, can result in vaccine markets that put children’s health first.

<table>
<thead>
<tr>
<th>Vaccine presentation</th>
<th>2017 (MDS)</th>
<th>2018 (MDS)</th>
<th>2019 (MDS)</th>
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<tbody>
<tr>
<td>1-dose</td>
<td>48</td>
<td>47</td>
<td>45</td>
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<tr>
<td>10 dose</td>
<td>103</td>
<td>103</td>
<td>103</td>
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<tr>
<td>Total</td>
<td><strong>151</strong></td>
<td><strong>150</strong></td>
<td><strong>148</strong></td>
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Challenges
Continued careful monitoring of supply and demand and consultations with vaccine manufacturers will be necessary in order to continue to determine the most effective actions to secure sufficient production levels and efficiencies of scale in order to ensure that the long-term health of the market is maintained.

For further questions or additional information, please contact:
Yalda Momeni
Contracts Specialist
Tel: +45 4533 5975
E-mail: ymomeni@unicef.org