Overview

- VIS process
- Vaccine candidates
- Evaluation criteria for endemic disease vaccines
- Analyses and shortlisting
- Vaccines for epidemic preparedness
- IPV post-eradication
- Longer-term priorities
- Next steps in 2018
Gavi’s vaccine portfolio has diversified to include investments beyond routine immunisation

Routine Immunisation / mass preventive campaigns
- Pentavalent
- Hepatitis B
- Hib
- YF routine

Hib
- Rotavirus
- PCV
- Measles 2nd dose
- YF campaigns

Outbreak response
- YF stockpile
- Meningitis stockpile
- Measles campaigns
- YF campaigns

Learning agenda

Elimination/eradication


Year of investment decision

Elimination/eradication
- IPV

Learning agenda
- Cholera pilots
- Rabies / cholera studies

Outbreak response
- YF stockpile
- Meningitis stockpile
- Measles campaigns
- YF campaigns

Routine Immunisation / mass preventive campaigns
- Pentavalent
- Hepatitis B
- Hib
- YF routine

Gavi’s vaccine portfolio has diversified to include investments beyond routine immunisation
VIS is an evidence-driven, consultative process to identify new vaccine opportunities and priorities

Board meeting
29-30 November 2017
20 diverse candidates require a differentiated evaluation approach

<table>
<thead>
<tr>
<th>Link to current investment</th>
<th>New disease area</th>
</tr>
</thead>
</table>
| **Endemic Disease Prevention** | • Diphtheria  
• Tetanus  
• Pertussis  
• Hepatitis B  
• Oral cholera vaccine  
• Meningitis C, Y, W, X  
• Rabies  
• Rabies Ig/mAb  
• Malaria | • Hepatitis A  
• Dengue  
• Influenza  
• RSV  
• RSV mAb |
| **Epidemic Preparedness** | • Ebola | • Chikungunya  
• Zika  
• Pandemic influenza  
• Hepatitis E |
| **Polio Eradication** | • IPV (post-2020) |  
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Board meeting  
29-30 November 2017

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Gavi  
The Vaccine Alliance
The table outlines the criteria to evaluate vaccines for endemic disease control through planned/routine immunisation. The ranking criteria include Health impact, Economic impact, Equity and social protection impact, Global health security impact incl. AMR, and Value for money. Draft indicators for these criteria are as follows:

- **Health impact**: Future deaths and cases averted
- **Economic impact**: Financial risk protection
- **Equity and social protection impact**: Gender, wealth, geography
- **Global health security impact incl. AMR**: Epidemic potential, antimicrobial resistance (AMR)
- **Value for money**: Cost per death and case averted

The secondary criteria include Other impact, Gavi comparative advantage, Broader health systems benefits, Implementation feasibility, Alternate interventions, Vaccine cost, Operational cost, and Additional implementation cost. Draft indicators for these criteria are as follows:

- **Other impact**: U5 deaths averted, DALYs averted, cost per DALY averted
- **Gavi comparative advantage**: Market shaping need and catalytic effect
- **Broader health systems benefits**: Opportunity to strengthen health system or vaccination time point
- **Implementation feasibility**: Ease of supply chain integration, health care worker behaviour change, feasibility of vaccination time point, need for demand promotion
- **Alternate interventions**: Current and future alternative interventions
- **Vaccine cost**: Procurement cost
- **Operational cost**: Operational cost
- **Additional implementation cost**: Surveillance, technical assistance, etc.
Following vaccine analyses, consultations to determine criteria weighting, options for PPC

**Step 1:** evaluate & compare vaccines

**Step 2:** Consultations on shortlisting

“vaccines with AMR impact should get extra ‘points’”

**Step 3:** Options for PPC review

"vaccines that are very difficult to implement should not be prioritised"

Comparison of total future cases averted

<table>
<thead>
<tr>
<th>Vaccines</th>
<th>Total future cases averted, 2015-2030 (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>75</td>
</tr>
<tr>
<td>Influenza</td>
<td>5.0</td>
</tr>
<tr>
<td>Cholera</td>
<td>3.3</td>
</tr>
<tr>
<td>Dengue</td>
<td>2.7</td>
</tr>
<tr>
<td>Hep B</td>
<td>1.6</td>
</tr>
<tr>
<td>Hep D</td>
<td>1.0</td>
</tr>
<tr>
<td>Hep A</td>
<td>0.8</td>
</tr>
<tr>
<td>Yellow Fever</td>
<td>0.3</td>
</tr>
<tr>
<td>Measles</td>
<td>0.3</td>
</tr>
<tr>
<td>Malaria</td>
<td>0.3</td>
</tr>
<tr>
<td>IPV</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Threshold:
- Red: >4
- Green: <2

Outliers = malaria

Shortlist A: 1. .... 2. .... 3. .... 4. .... 5. ....
Shortlist B: 1. .... 2. .... 3. .... 4. .... 5. ....
Shortlist C: 1. .... 2. .... 3. .... 4. .... 5. ....
Ongoing vaccine assessments in close cooperation with technical partners

**Demand Forecasting**
- Vaccine products
- Vaccination strategy
- Schedule/dosing
- Delivery strategy
- Target population
- Country introduction
- Coverage

**Impact Modelling**
- Burden of disease
- Case fatality rate
- Efficacy
- Duration of protection

**Price Forecasting**
- Products
- Supplier projections
- Price projections

**Other quantitative analysis**
- Vaccine cost projections
- Operational costs
- Value for money
- Economic Impact: cost of illness, financial risk protection

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**Logos:**
- Bill & Melinda Gates Foundation
- Johns Hopkins University
- PATH
- London School of Hygiene & Tropical Medicine
- WHO
- University of Cambridge
- Imperial College London
- Vaccine Impact Modelling Consortium
- CDC
- CLINTON HEALTH ACCESS INITIATIVE
- Swiss TPH
- Center for Disease Analysis
Unpredictability of epidemic diseases necessitates tailored evaluation criteria

Unpredictable nature of disease make vaccine impact projections uncertain

**Global deaths: Relative trends, not same scale**

- **Ebola**
- **Malaria**

**PPC guidance:**

- Present criteria + review process at May/June PPC and Board
- Pre-licensure vaccines: not Gavi’s mandate to fund, noting Board can take exceptional decisions as required (e.g., Ebola)
- All vaccines assessed case by case, including those funded through CEPI or other initiatives
Gavi’s role in polio eradication post-2020

2020 (?)

Gavi supports IPV with funding from the Global Polio Eradication Initiative (GPEI)

New funding needed for any future support for IPV, surveillance, stockpiles, etc.

Approach:

- Review value of IPV as ‘global public good’
- Develop scenarios for application of policies for IPV support (for guidance June 2018)
- Consider Gavi role in hexavalent and potentially other polio investments
- Investment decisions – Nov 2018 Board
Need for longer-term view in light of vaccine development timelines

Gavi’s 5-year strategic cycle sits within longer vaccine development timelines

2018

- Vaccines already available
  - e.g. Dengue
  - e.g. Mening
  - e.g. Cholera

- Vaccines potentially available in VIS 2018 timeframe
  - e.g. RSV
  - e.g. Rabies mAb
  - e.g. Zika

2023

- Vaccines available beyond VIS 2018 timeframe
  - e.g. 2nd gen TB
  - e.g. HIV
  - e.g. GBS

Scope of vaccines under consideration for current VIS

Potential future vaccine priorities

Board meeting
29-30 November 2017
Next steps 2018

For June 2018 Board

- Finalise indicators
- Consultations on criteria weighting and application
- Vaccine assessments, including modelling

FOR DECISION: Shortlist of vaccines for endemic disease prevention

For Nov 2018 Board

- Updated and more in-depth analyses
- Interdependencies and trade-offs in investments across categories

FOR DECISION

- New vaccine investments

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Endemic disease prevention

- Expert consultations to refine criteria

FOR DECISION: Evaluation criteria and approach for epidemic preparedness vaccines

Epidemic preparedness

- Update situational analysis: timelines, supply, hexa
- IPV policy/financing considerations and options

FOR GUIDANCE: IPV scenarios

Polio eradication
Recommendation

The Gavi Alliance Programme and Policy Committee recommends to the Gavi Alliance Board that it:

a) **Approve** the evaluation criteria for potential new investments in vaccines and other immunisation products primarily intended for endemic disease prevention; these include ranking criteria (health impact, economic impact, equity and social protection impact, global health security impact, and value for money), secondary criteria (other impact, Gavi’s comparative advantage, broader health systems benefits, implementation feasibility, and alternate interventions) and cost criteria (vaccine cost, operational cost, and additional implementation costs) as further described in Table 1 and Section 4 of Doc 07 to the PPC [as included in Annex C to Doc 12 to the Board];

b) **Request** the Secretariat, in consultation with WHO and other experts, to develop evaluation criteria for potential new investments in vaccines for epidemic response for PPC review and Board approval.
THANK YOU