

# Gavi - Vaccine Investment Strategy (VIS) 2024

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[gavi.org](https://gavi.org)



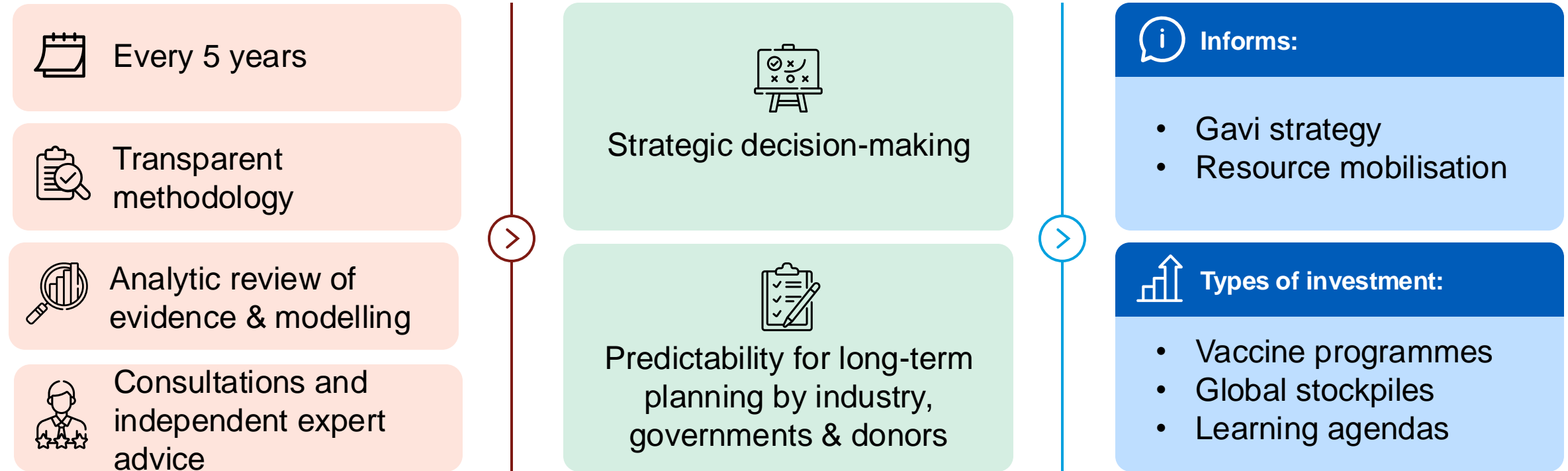
# 1

Vaccine Investment Strategy 2024

# Methodology

# Vaccine Investment Strategy informs Gavi 6.0 (2026–2030)

Evidence-based approach to identify immunisation investments for future strategic cycle(s), while sending valuable advance signals to vaccine developers and suppliers



In response to public health threat or a research and development (R&D) milestone for a priority pathogen, diseases of epidemic/pandemic potential can be evaluated in real time, outside five-year cycle, through VIS epidemics framework.

# Analytical and consultative process with 3 decisions

Extensive consultations

## Process for defining the long list of pipeline vaccines for Gavi VIS

33 Pathogens evaluated  
Products expected to be licensed by 2030: endemic diseases relevant to

### 8 pathogens in VIS 2024 longlist based on WHO landscape analysis

Scope and inclusion criteria

- ✓ Vaccines and immunisation products of relevance to Gavi-eligible countries
- ✓ Licensed but not in Gavi's portfolio
- ✓ With expected impact by 2030



VIS 2024 longlist  
Licensed

- Mpox
- COVID-19

### VIS 2024 Evaluation framework for vaccines for endemic disease

Ranking Criteria		Modulating Criteria	
Criteria	Indicators	Criteria	Indicators
Health impact	Total future deaths averted 2025-2040, and per 100,000 vaccinated	Global health security impact	Epidemic potential of disease Impact on AMR Climate change risks and mitigation
Value for money	Total future DALYs averted 2025-2040, and per 100,000 vaccinated		
Equity and social protection impact	Vaccine Ph: Disproportionate groups		
Gavi comparative advantage	Vaccine Ph: Degree of shaping on Alliance roll		
Economic impact	Direct medical indirect cost		

### Degnue Scorecard: Ranking criteria

Vaccination strategy presented: e.g. vaccination of 9 year olds in routine programme

VIS criteria	Indicator	Results	Evaluation <sup>1</sup>
Health impact	Total deaths averted	~300-720K future deaths averted, 2025-2040	
	Deaths averted per 100K vaccinated	~5,790-6,930 future deaths averted, 2025-2040, per 100K vaccinated population	
	DALYs averted per 100K vaccinated	~5,790-6,930 future DALYs averted, 2025 - 2040, per 100K vaccinated population	
Value for money	Procurement cost averted		
Equity & social protection impact	Impact on vulnerable groups		
Gavi comparative advantage	Vaccine match Alliance role in challenges		
Economic impact	Direct medical indirect cost		

Board predominantly favors health impact and value for money as the key indicators

Average weighting used for shortlisting

Median and ranges applied as sensitivity analysis

### Shortlist options for PPC/Board consideration

	Option A	Option B	Option C	VIS assessment and SC guidance
Vaccine A	✓	✗	✓	• Benefits and special considerations
Vaccine B	✓			
Vaccine C	✓			
Vaccine D	✓			
Vaccine E	✓			
Vaccine F	✓			

### TB Investment Options

#### Investment Options

- Min: Stockpile size 100k / year**
  - Based on minimum demand calculated from modelling and based on current Proof-of-Concept approach for 100k doses / year (after experience with need in Bentui camp), multiplied by average # of outbreaks per year observed in last 10y (~5)
  - ~ \$485K per year
- Base: Stockpile size 220k / year**
  - Based on a maximum of ~44k doses total demand per outbreak from primary vaccination strategy (vaccination of >16y old and pregnant people) \* average # of outbreaks per year (~5)
  - ~ \$38M per year

#### Learning Agenda

- Burden of disease estimation based on natural history approach
- Proof-of-Concept of stockpile sought by Gates Foundation, awaiting ICG review

1. WHO vaccine landscape analysis

2. VIS candidate longlist

3. Evaluation framework

4. Vaccine analyses

5. Prioritisation methodology

6. Vaccine shortlist

7. Refined analyses

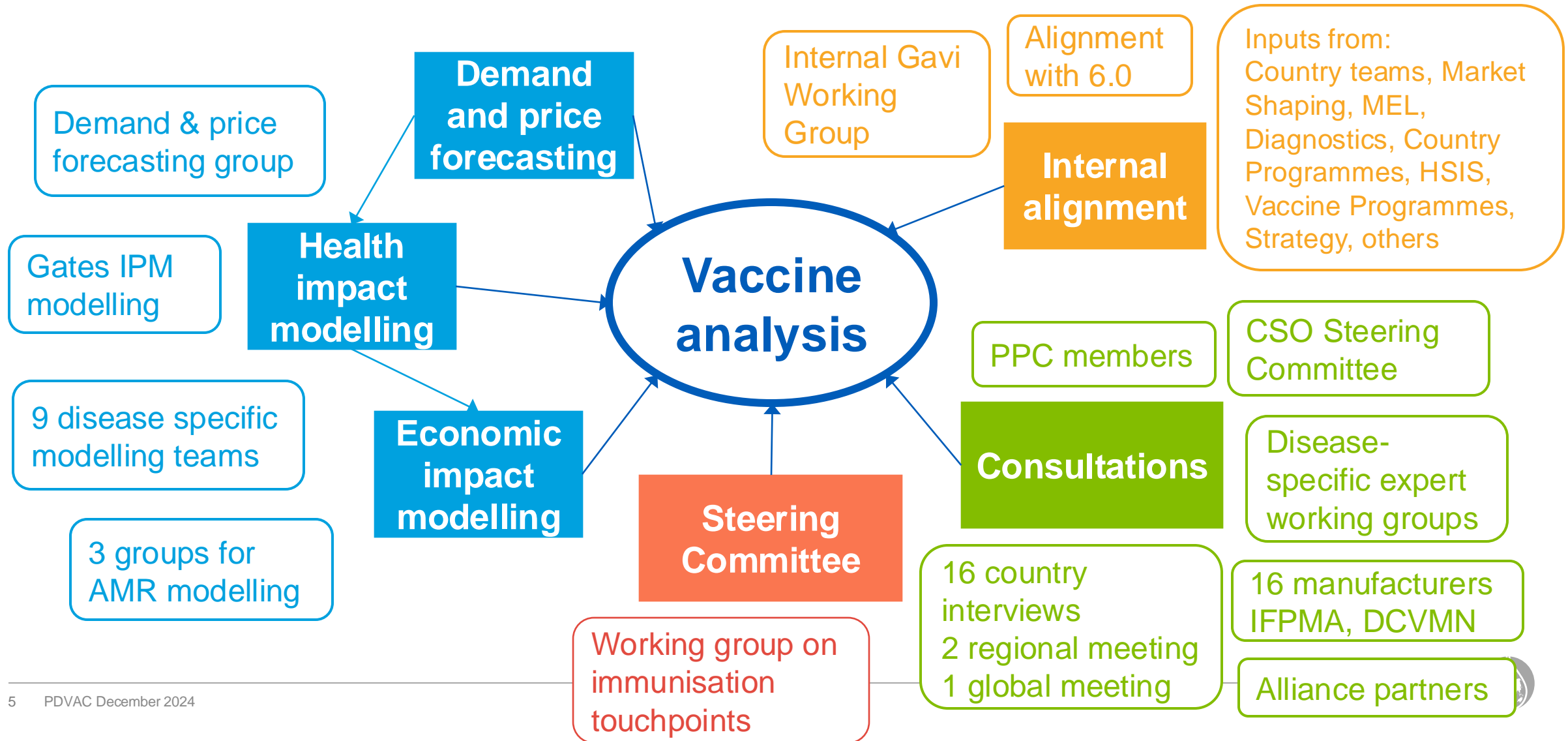
8. Investment Cases

Longlist decision  
June 2023

Shortlist decision  
Dec 2023

Investment decision  
June 2024

# Vaccine analyses have been possible thanks to collaboration and contributions from many stakeholders





# VIS 2024 Evaluation framework for vaccines for endemic disease

## Ranking Criteria

Criteria	Indicators
Health impact	Total future deaths averted 2026-2040, and per 100,000 vaccinated
	Total future DALYs averted 2026-2040, and per 100,000 vaccinated
Value for money	Vaccine Procurement cost per death averted
	Vaccine Procurement cost per DALY averted
Equity and social protection impact	Disproportionate impact of disease on vulnerable groups
	Vaccination contributes to addressing underlying gender-related barriers faced by caregivers, adolescents and health workers and/or gender associated differences in immunisation coverage
Gavi comparative advantage	Degree of vaccine market challenges
	Gavi role in addressing challenges
Economic impact	Direct medical cost averted
	Indirect cost averted

## Modulating Criteria

Criteria	Indicators
<b>Modulate up</b>	
Global health security impact	Epidemic potential of disease
	Impact on AMR
	Climate change risks and mitigation
Other impact	Total U5 deaths averted 2026-2040, and per 100,000 vaccinated
Contribution to global agenda	Fit with global development (SDGs), immunization (IA2030) agendas and other relevant global targets
Broader health system benefits	No specific indicator – evaluated case-by-case
<b>Contextual</b>	
Implementation feasibility	Ease of supply chain integration
	Need for healthcare worker training/ behaviour change
	Requirements of vaccination timepoint
	Need for demand promotion (e.g., acceptability, understanding of disease burden)
	Availability of epidemiological data to inform programmes
Alternate interventions	Diagnostics availability/ needs
	Optimal use of current and future alternative interventions (prevention and treatment)



# Framework for evaluating epidemic-prone diseases (1/2)

	Criteria	Indicators
Disease Risk & Burden	Epidemiology and risk	Frequency, geography and magnitude of outbreaks
		Global risk of outbreaks and epidemic/endemic potential
		Strain stability/adaptability
	Disease burden	Transmission routes, incubation period and disease manifestation
		Health impact (outbreaks, CFR, DALYs, YLLs)
	Economic and social burden	Direct and indirect costs of illness/outbreaks
		Disproportionate burden to women and vulnerable groups
Vaccine Impact and Feasibility	Epidemic risk reduction / mitigation	Vaccine impact and indirect effects (suitability to be used as part of outbreak response, herd immunity, cross strain protection)
		Health systems impact
		Efficacy of other available countermeasures
	Equity and social protection impact	Additional benefit to women and vulnerable groups
	Implementation feasibility	Storage requirements and shelf life
		Dosing schedule and cost of delivery
		Disease surveillance and seroprevalence to guide stockpile use
		Acceptability in target population

# Framework for evaluating epidemic-prone diseases (2/2)

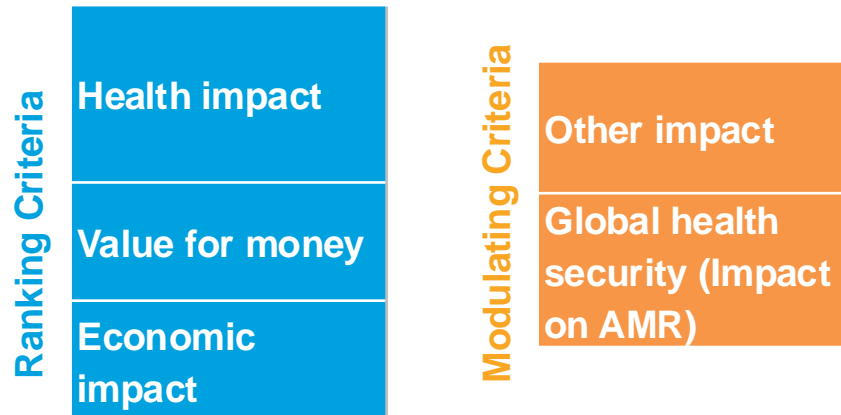
	Criteria	Indicators
Fit for Gavi & Partners	Relevance	Proportion of detected outbreaks in Gavi countries
		Alignment with Gavi's mission and strategy
	Comparative advantage	Role of GAVI market shaping and financing
		Contribution to access and equity Alignment with activities of other donor organisations, Alliance partners, R&D, biosecurity Cost and consequences of inaction
Financial implications	Risk	Major risks and potential mitigation strategies
	Vaccine costs	Procurement costs
	Stockpile / supply arrangement costs	Holding costs (storage and stockpile maintenance)
		Deployment costs
		Coordination and administration costs
	Operational cost	Incremental in-country operational costs Optional learning costs



# Rating vaccine scorecards

The pathogens were rated **red**, **yellow** or **green** against each indicator. The ratings were a result of **comparative ranking** derived from **quantitative analyses** or **subjective scoring** derived from qualitative analyses

## Quantitative analyses



- Projections based on different scenarios and assessment of uncertainty
- Ranked outcomes across pathogens to determine relative score

## Qualitative analyses



- Informed by disease experts
- Thresholds evaluated on whether they are more or less likely to suggest Gavi investment

# Ranking criteria colours determine scoring of vaccines

VIS criteria	Indicator	Evaluation	Points	
Health impact	Total deaths averted	Green	1	1
	Deaths averted per 100K vaccinated	Red	0	
	DALYs averted per 100K vaccinated	Green	1	
Value for money	Procurement cost per death averted	Green	1	2
	Procurement cost per DALY averted	Red	0	
Equity & social protection impact	Impact on vulnerable groups	Green	1	
	Addresses gender-related barriers	Yellow	0.5	3
Gavi comparative advantage	Vaccine market challenges	Yellow	0.5	
	Alliance role in addressing challenges	Yellow	0.5	
Economic impact	Direct medical cost averted	Green	1	3
	Indirect cost averted	Green	1	
Total			X%	
Modulating Criteria	e.g. Elimination agenda by 2030, no alternative interventions			

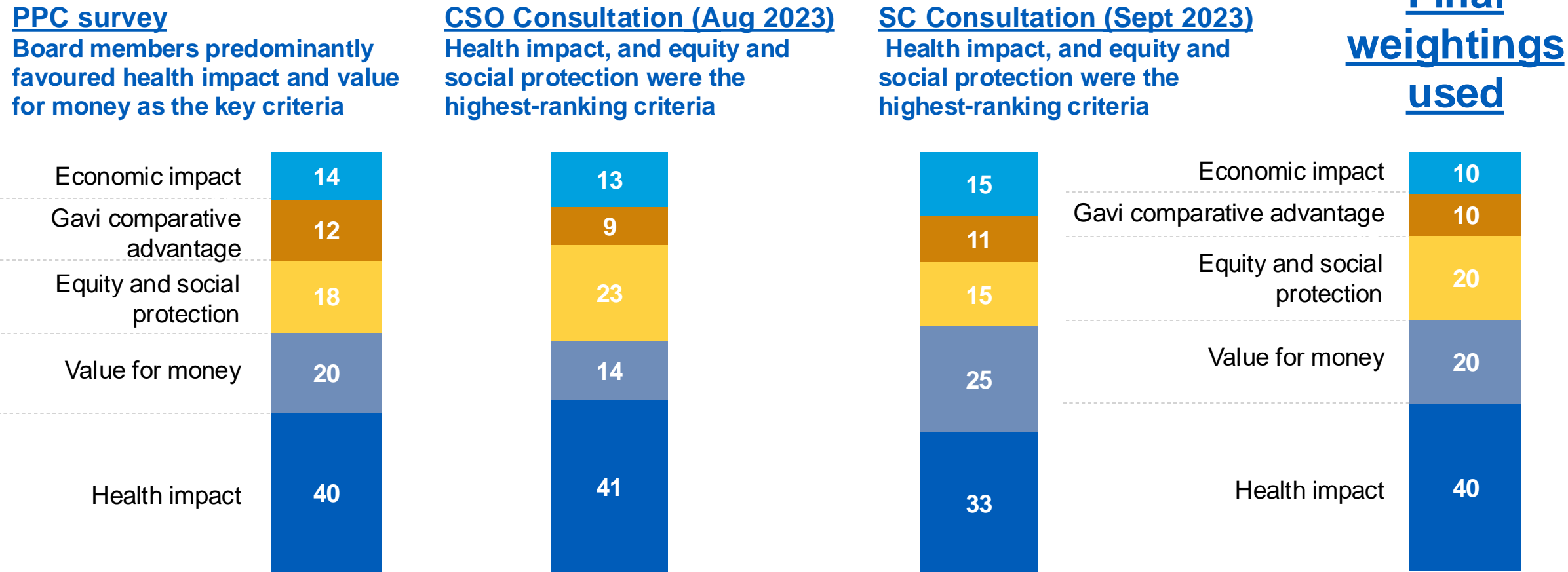
Assign points to each vaccine based on its color on each of the ranking criteria on scale of 0 to 1

- Red = 0
- Yellow = 0-0.5<sup>1</sup>
- Green = 1

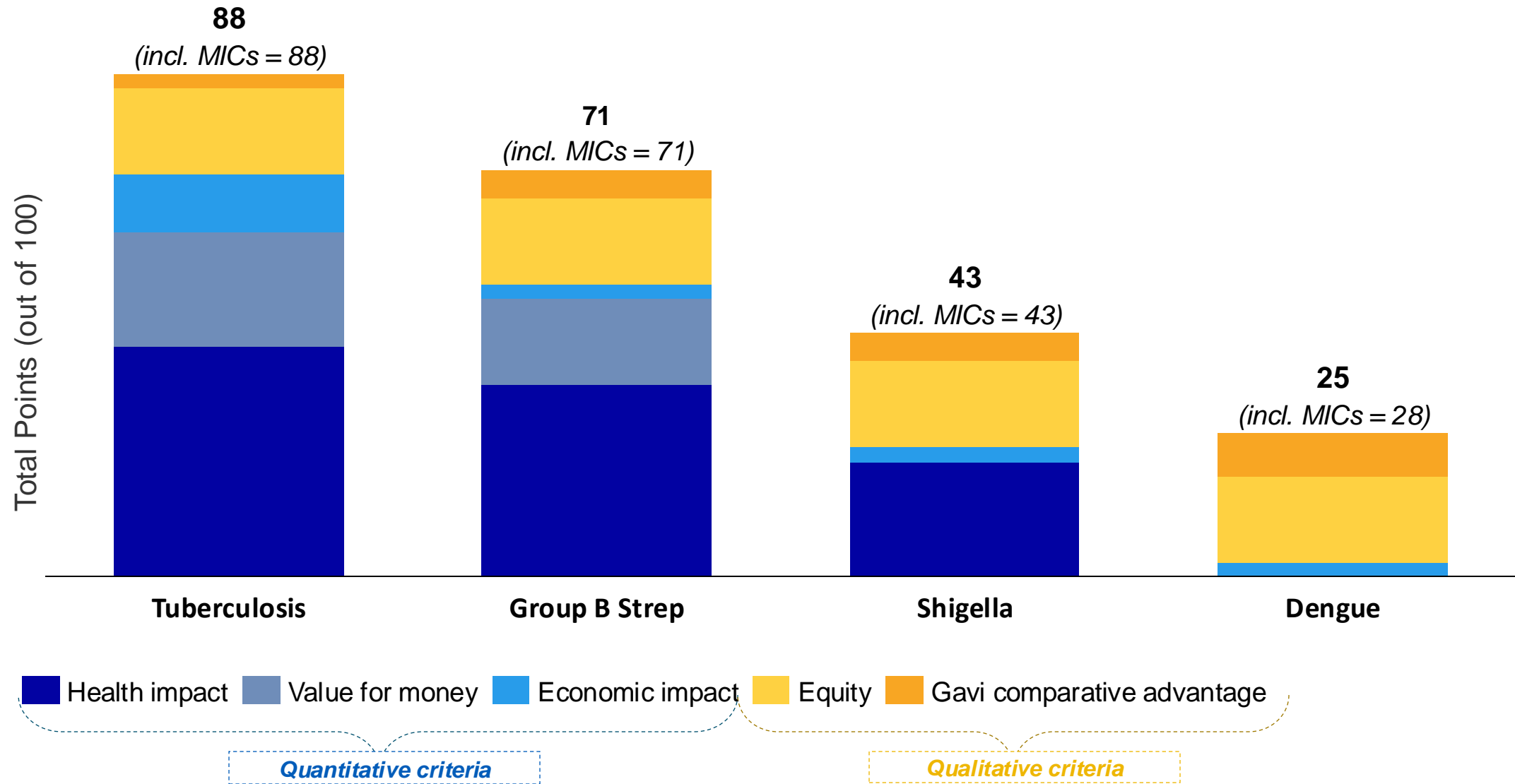
Weight the score for each criterion based on weighting<sup>2</sup> from Steering Committee and PPC consultations and add up point tally of each vaccine

Modulating criteria can be used to adjust the ranking of a vaccine

# Countries, CSOs, the Steering Committee and PPC have input into weightings for ranking criteria



# Vaccine scores from assessment against ranking criteria



Please note that a score of 0 on a quantitative criteria does not imply no impact, only that it scores lowest of the four vaccines assessed

# The VIS process identifies priority learning agendas to guide efficient and impactful vaccine rollouts

**Learning agendas:** A set of critical evidence needs/gaps required for key research areas that Gavi in collaboration with partners may support to provide evidence for the launch, implementation, and effective scale-up of a vaccine programme or stockpile



## EXAMPLE: RABIES

**VIS 2013:** Gavi approved a Rabies PEP learning agenda which evaluated the operational feasibility, public health impact, and cost (in several countries, including Bhutan, Chad, India).



**VIS 2018:** The learning agenda supported the VIS 2018 decision to include Rabies PEP in Gavi's portfolio. Gavi's has now opened a funding window.

## EXAMPLE: MPOX

**VIS 2024:** Gavi approved a learning agenda to start in 2025 and is currently seeking an expert provider to assess the supply and demand generation needs for mpox vaccines in Gavi-eligible countries.

# 2

Vaccine Investment Strategy 2024

# Outputs



# Summary of Board decisions for VIS 2024

VACCINE	POPULATION	IN-PRINCIPLE INVESTMENT	LEARNING AGENDA
<b>Tuberculosis</b>	Adolescents and Adults	✓	✓
<b>Group B streptococcus</b>	Pregnant women	✓	✓
<b>Dengue</b>	2–16-year-olds Conditional on burden data in Africa	✓	✓
<b>Hepatitis E</b>	High-risk populations in outbreak response	✓	✓ from Gavi 5.1
<b>Mpox</b>		✓	✓ from Gavi 5.1
<b>Shigella</b>	Infants	x	✓
<b>Chikungunya</b>	Outbreak response	x	x
<b>COVID-19</b>	High-risk populations	<b>No continued investment post-2025</b>	

# Key questions were identified for each future learning agenda:

## ? Group B streptococcus (GBS):

- Programmatic and financial requirements for a strong maternal immunisation
- Burden of disease and surveillance capacity

## ? Dengue (Focus on Africa):

- Clinical characteristics
- Burden of disease (seroprevalence & diagnostics integration)
- Vaccine safety and acceptability

## ? Tuberculosis:

- Integration of TB vaccines with other health services
- Acceptability and uptake by older adolescents
- Identify priority groups
- Evaluate cost-effectiveness

## ? Hepatitis E:

- Effectiveness & duration of protection
- Integration of diagnostics for outbreak detection
- Assess costs and feasibility of vaccine delivery

## ? Mpox:

- Supply and demand generation needs for mpox vaccines in Gavi-eligible countries

## ? Shigella:

- Burden of disease & impact of climate change
- Programmatic feasibility
- Vaccine demand

# 3

Vaccine Investment Strategy 2024

## **Next steps**

# Vaccines are re-evaluated for Board approval once investment conditions for in-principle decisions are met or nearly fulfilled



## **In-Principle Decisions:**

Conditional Board Approvals given by Gavi's Board to provide support for a vaccine, product, or program contingent upon certain investment conditions being met



## **Purpose:**

Allows Gavi to begin market signalling and preparedness activities in advance, accelerating access to lower-income countries so new vaccines can be deployed as soon as they are available

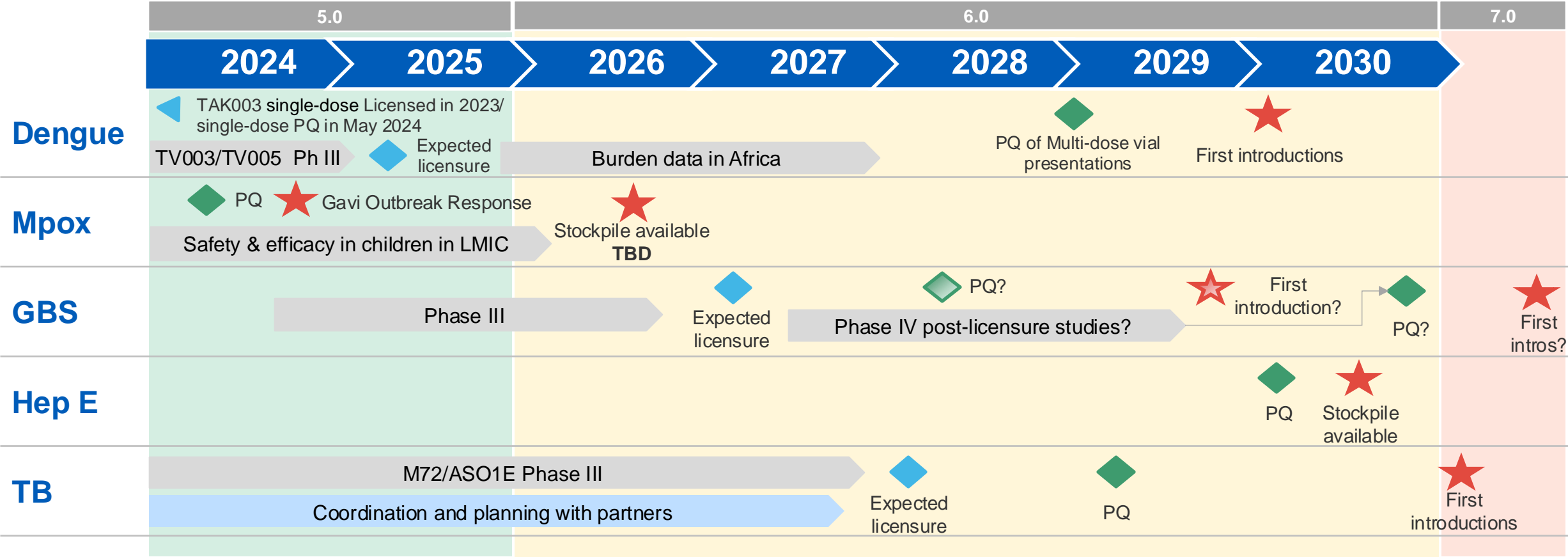


## **Board Approval:**

When defined conditions are met or nearly fulfilled, the programme goes back to the Board for full approval

**Example:** RSV was approved in-principle through VIS 2018 and is being presented to the Board in June 2025.

# VIS 2024 vaccines may only available later in 6.0 – market signaling and preparedness activities required earlier



PQ dates based on earliest expected dates based on expert input

# VIS 24 Learning Agendas – Next steps

## Mpox and Hepatitis E

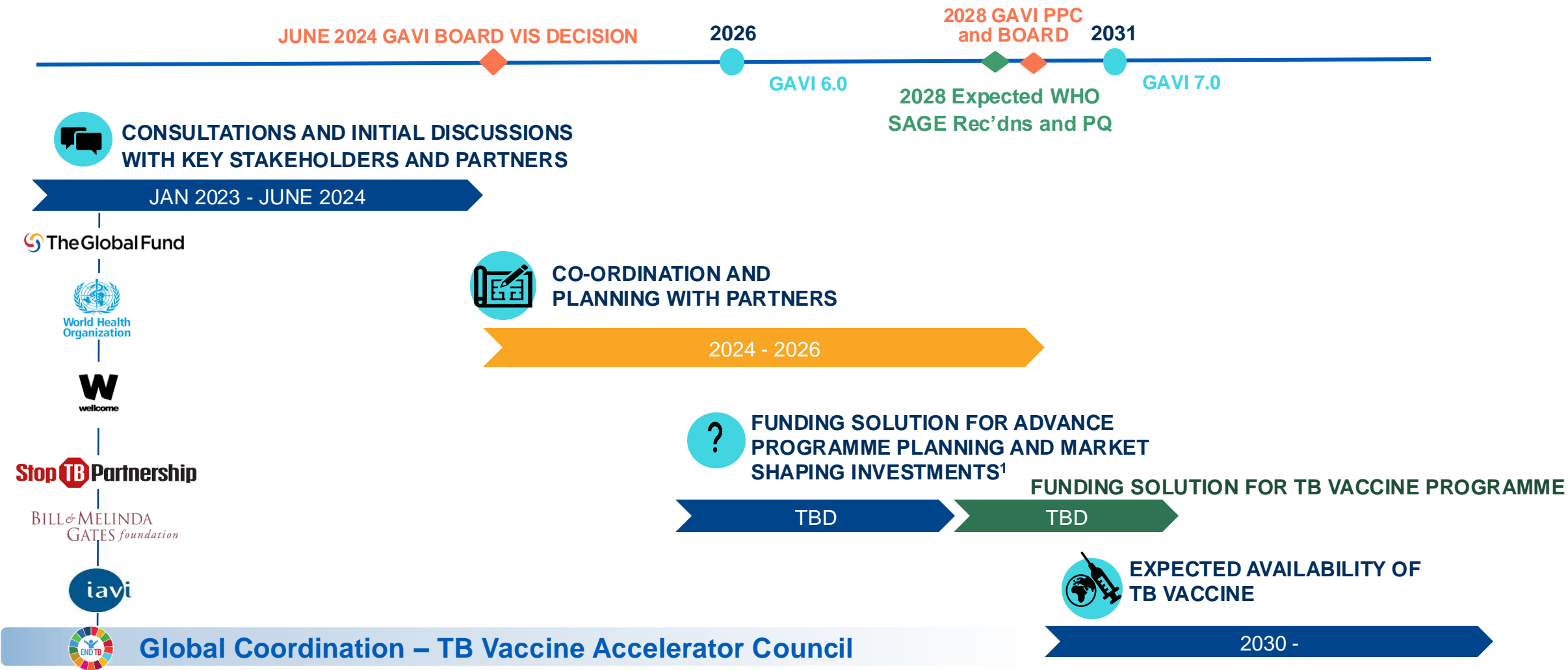
- Both approved for 5.1 (2025).
- Given mpox 2024 PHEIC and Gavi's role in supporting the outbreak response, mpox learning agenda was prioritized. Activities are set to begin in Q1 2025, focusing on:
  - ✓ Assessing demand, health impact, and stockpile size for a potential Gavi Mpox vaccine stockpile.
  - ✓ Designing and developing contextual demand-generation and implementation strategies for Mpox vaccine uptake in targeted populations and geographies.

## Other VIS 24 Learning agendas

- Contingent on Gavi's 6.0 replenishment and subsequent prioritization process.
- Upon approval, the Policy Team and Measurement, Evaluation, and Learning Team will reassess key questions, conduct additional consultations, and develop RFPs for publication.

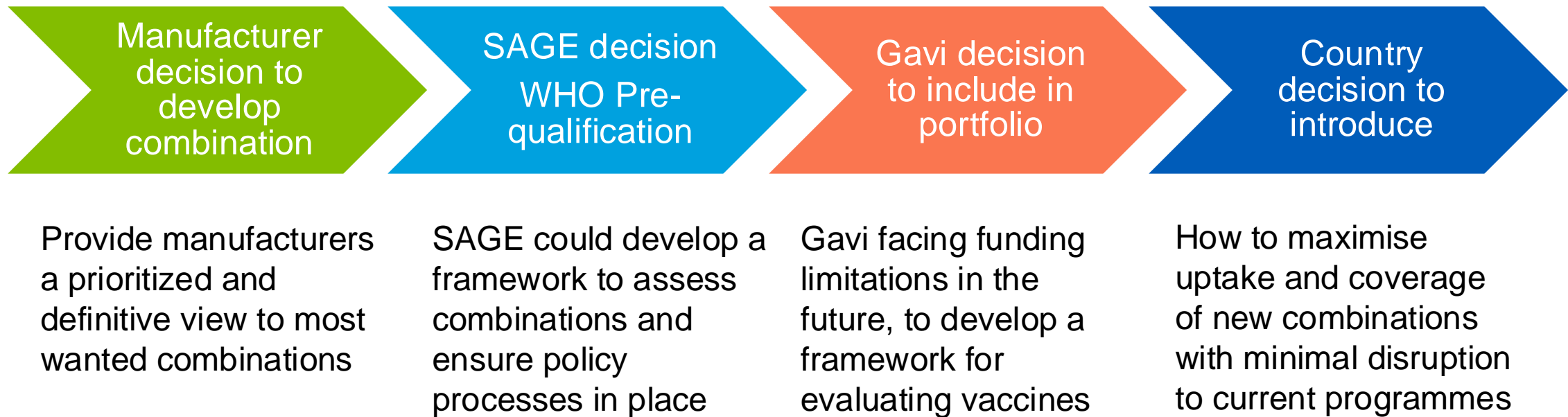


# TB Vaccine Programme Implementation Planning




21 <sup>1</sup>If the vaccine will become available in late 6.0, a specific funding solution will need to be assessed, including the need for potential market-shaping interventions to secure adequate capacities.

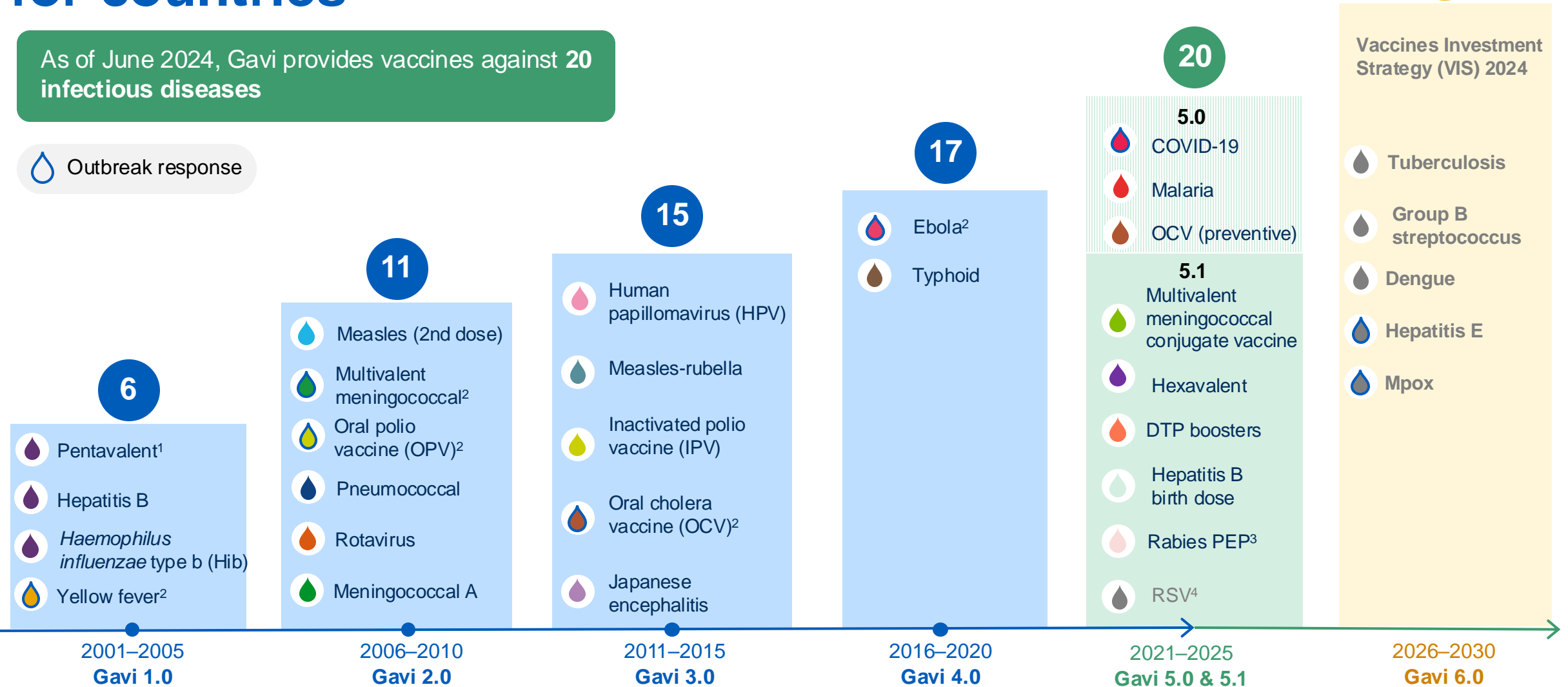
# Combination vaccines & innovations: Gavi has a decision pathway, but key bottlenecks must be addressed to seize upcoming opportunities



# Gavi's vaccine portfolio has grown over time: making vaccine prioritisation and portfolio optimisation critical for countries

As of June 2024, Gavi provides vaccines against **20 infectious diseases**

 Outbreak response



# Thank you