

Identification of priority vaccines for micro-array patches (MAPs) and CTC use

The methodology and outcomes of the vaccine prioritisation exercise for CTC and MAPs have been validated through multiple consultations



COUNTRY CONSULTATION

- To understand priority vaccines for CTC use



PROGRAMMATIC EXPERT CONSULTATIONS

- To provide feedback on the methodology and VIPS vaccine priority lists for CTC and MAPs including programmatic impact



EXPERT CONSULTATION

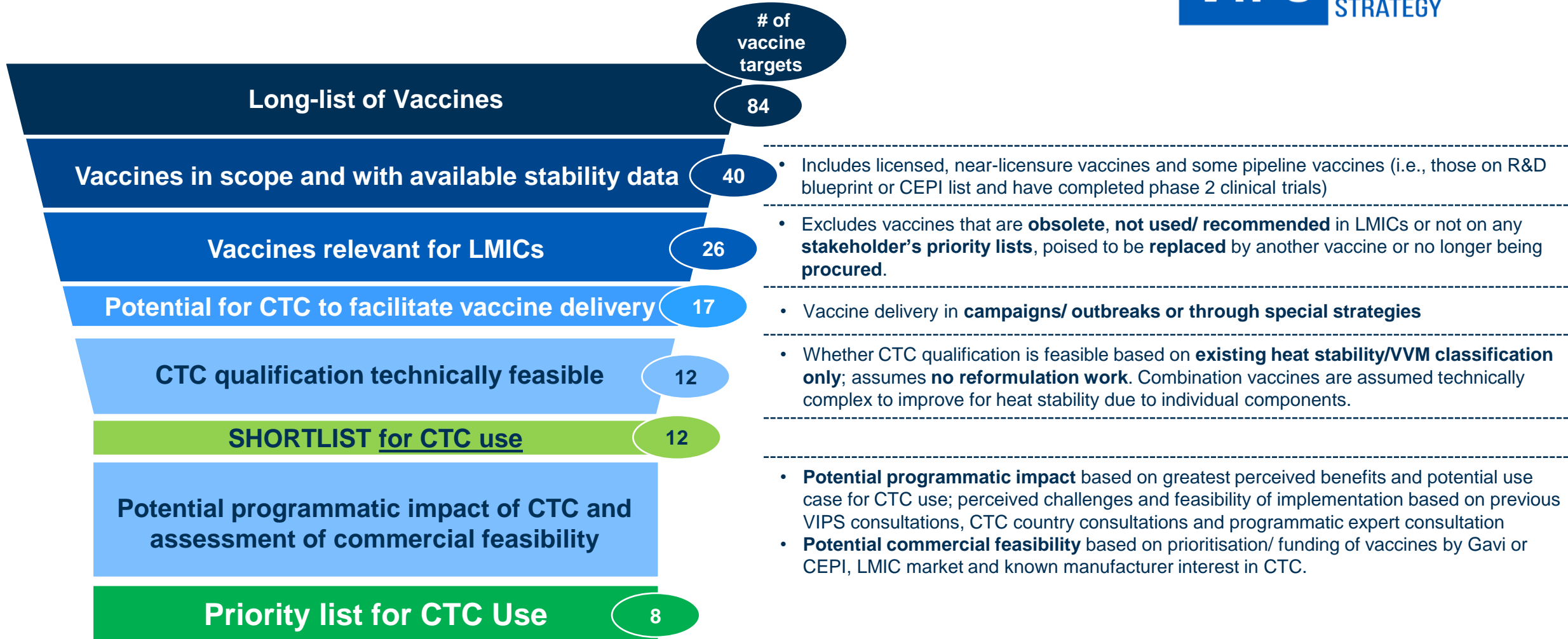
- To provide feedback on the methodology, VIPS vaccine priority shortlist and final list for CTC and MAPs



PUBLIC CONSULTATION

- To provide an opportunity to individuals from broad stakeholder groups to provide feedback on the VIPS vaccine priority list for CTC and MAPs

Methodology overview to prioritise vaccines for CTC use



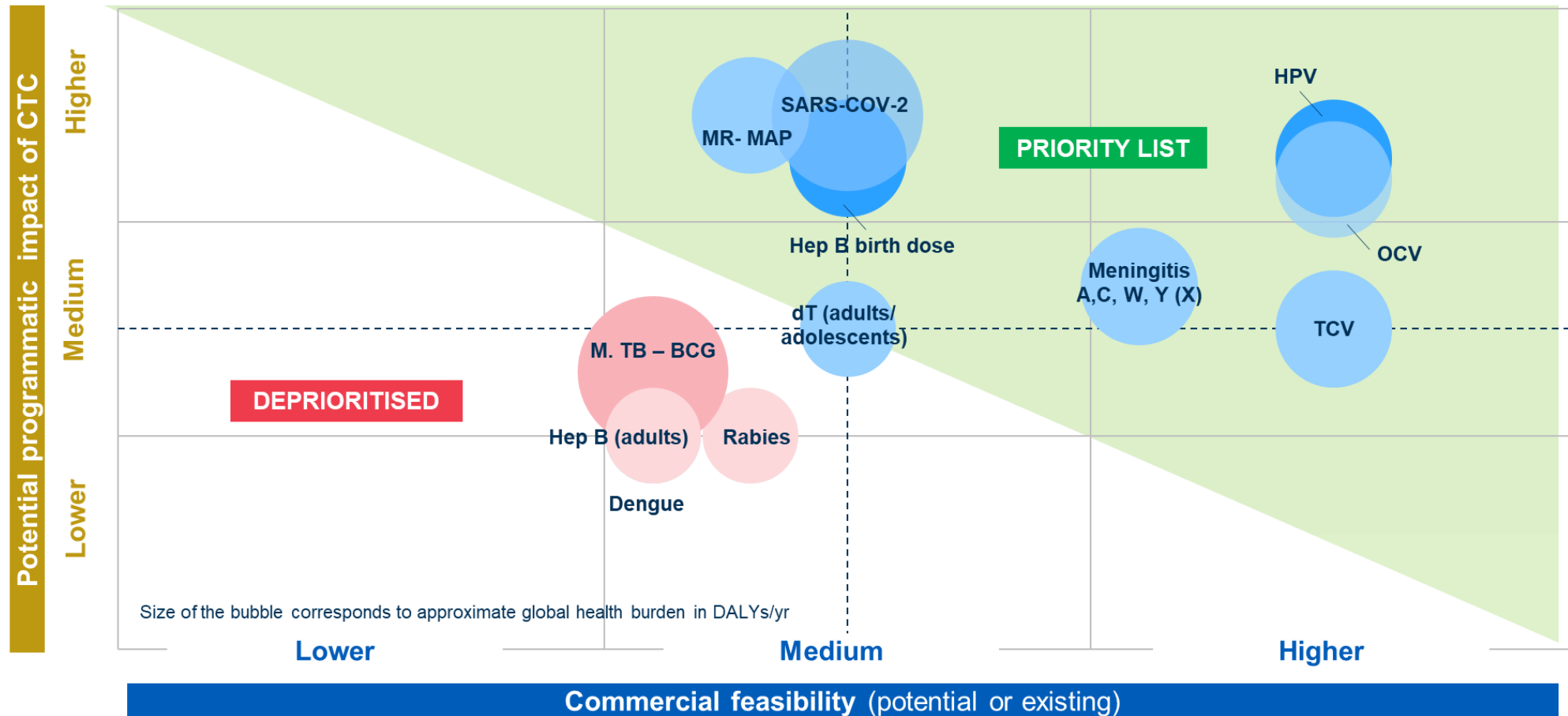
VIPS vaccine target shortlist for CTC use



CTC SHORTLIST in alphabetical order
Dengue
dT (reduced d antigen for adults/adolescents)
Hepatitis B (birth dose)
Hepatitis B (adults)
Human papillomavirus (HPV)
Measles-Rubella (MR)- MAP ¹
Meningitis A,C, W, Y (X)
M.Tuberculosis – BCG
Oral Cholera Vaccines (OCV)
Rabies
SARS-COV-2
Typhoid conjugate vaccine (TCV)

¹ MR-MAP is included here due to the stage of development and the thermostability data available, but all other vaccines prioritised under the vaccine MAPs prioritisation exercise would be targets for CTC

Looking at both programmatic impact and commercial feasibility provided a CTC priority list of 8 vaccine targets



Proposed VIPS priority list of vaccine targets for CTC use



CTC PRIORITY LIST

in alphabetical order

dT (reduced d antigen for adults/adolescents)

Hepatitis B (birth dose)

Human papillomavirus (HPV)

Measles-Rubella (MR) - MAP¹

Meningitis A,C, W, Y (X)

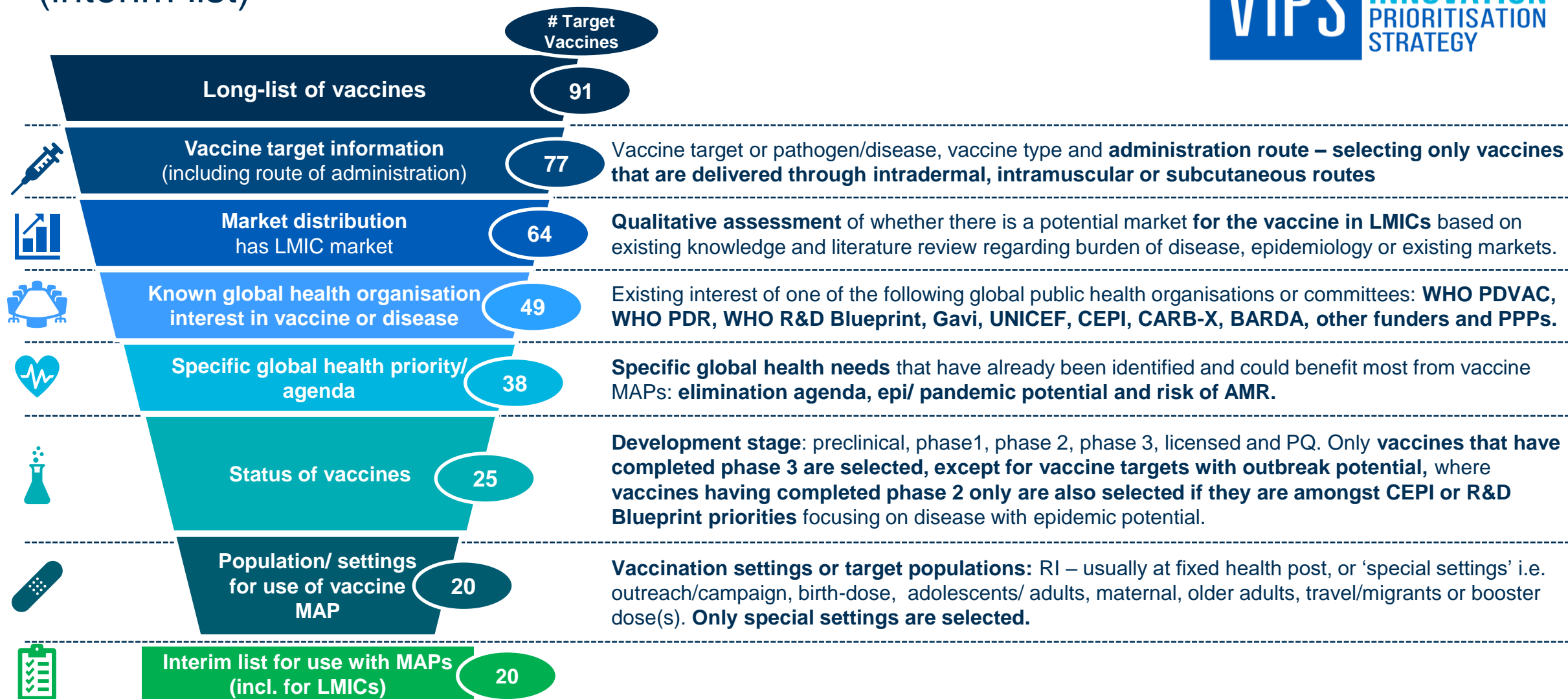
Oral Cholera Vaccines (OCV)

SARS-COV-2

Typhoid conjugate vaccine (TCV)

¹ MR-MAP is included here due to the stage of development and the thermostability data available, but all other vaccines prioritised under the vaccine MAPs prioritisation exercise would be targets for CTC

Methodology overview to prioritise vaccines for MAPs (interim list)



Expert feedback narrowed down the interim list of 20 vaccines to 11 priority vaccines for MAPs



	Interim list of 20 vaccine targets for use with MAPs (incl. for LMICs)	Inclusion in final list	Feedback from Expert Group: rationale for excluding from the list
Legacy High volumes of vaccines available with low unit price	Hepatitis B virus	✓	The low price point of BCG makes it an unfavorable target for MAPs In the next 10 years it is likely that there will not be a large market for IPV as a standalone as it may be replaced by Hexavalent vaccine.
	Measles, mumps and rubella viruses (MR and MMR)	✓	
	Mycobacterium tuberculosis (BCG)	X	
	Poliovirus, inactivated	X	
	Rabies virus	✓	
	Salmonella Typhi	✓	
	Yellow Fever	✓	
Evolving Not commoditised/ higher price vaccines, or vaccines still in development	Group B streptococcus (GBS), S agalactiae	✓	There is no surrogate of efficacy identified for this target, so it would be a very risky choice from a development perspective There is no surrogate of efficacy identified for this target, so it would be a very risky choice from a development perspective
	Human papillomavirus	✓	
	Malaria	X	
	Mycobacterium tuberculosis (next generation)	X	
	Neisseria meningitidis A,C,W,Y (X)	✓	
Streptococcus pneumoniae	✓		
Outbreak Vaccine targets with unpredictable demand driven by outbreaks	Chikungunya virus	X	All outbreak vaccines present a very challenging business case , and some are still at a relatively early development stage. Clinical trials are also complex as for some of these targets, having enough cases/ transmission to conduct a clinical trial can be challenging. Therefore, only influenza (pandemic and seasonal) and SARS-CoV-2 will be kept as representative antigens of outbreak vaccines as they are also either used in endemic settings or will likely be.
	Ebola virus	X	
	Influenza virus, pandemic	✓	
	MERS coronavirus (MERS-CoV)	X	
	Rift Valley fever virus (RVF)	X	
	SARS-CoV-2	✓	
	Zika	X	

Additional considerations on MAPs regulatory pathway, potential programmatic impact and financial sustainability/ funders interest were taken into consideration



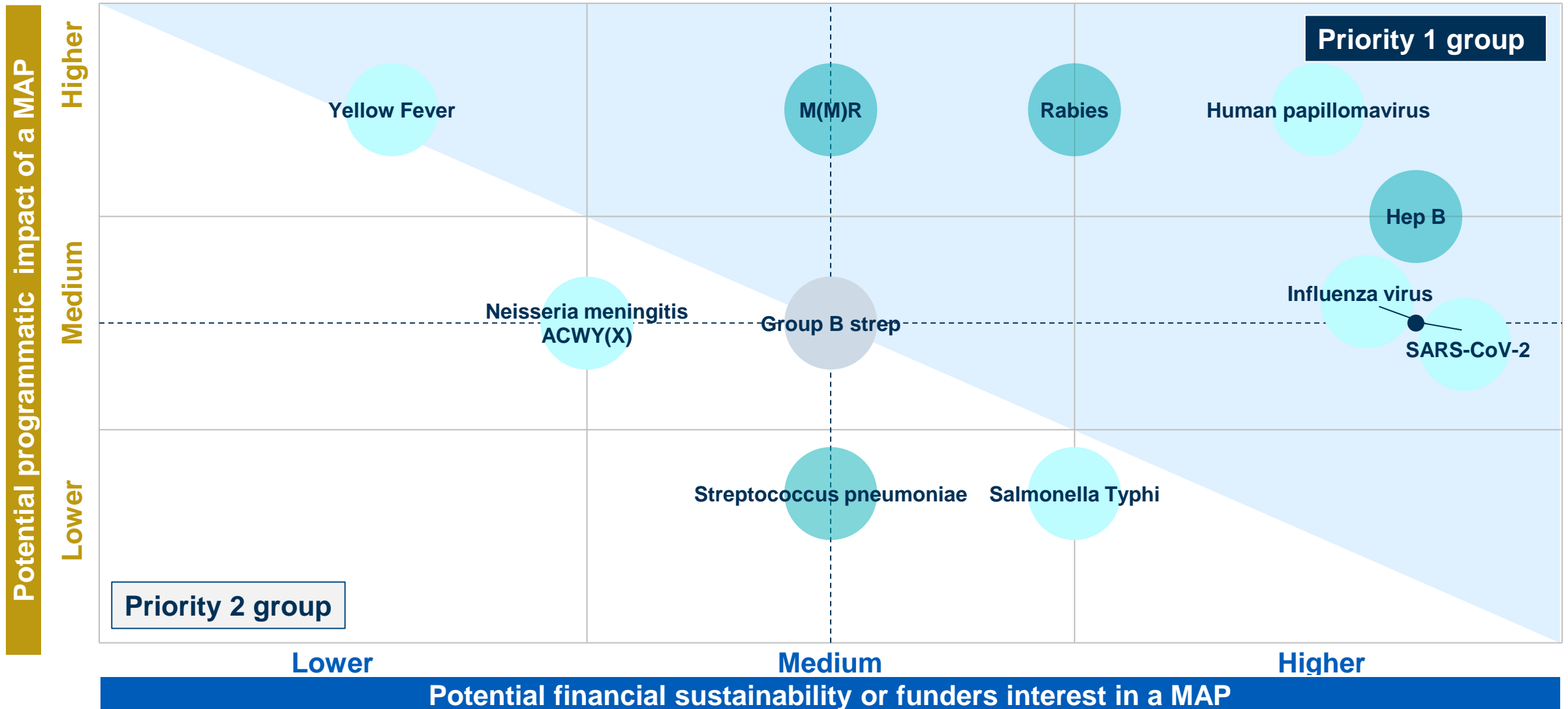
	Potential vaccine targets for use with MAPs	Estimated regulatory pathway complexity	Potential programmatic impact	Potential financial sustainability or funders interest
Legacy High volumes of vaccines available with low unit price	Hepatitis B virus	Low	Moderate-high	High
	Measles and rubella viruses	Low	High	Medium
	Measles, mumps and rubella	Medium	High	High
	Rabies virus	Low	High	Medium-high
	Salmonella Typhi	Medium	Low	Medium-high
	Yellow Fever	Medium	High	Medium-low
Evolving Not commoditised/ higher price vaccines, or vaccines still in development	Group B streptococcus (GBS), S agalactiae	High	Moderate	Medium
	Human papillomavirus	Medium	High	High
	Neisseria meningitidis A,C,W,Y	Medium	Moderate	Medium-low
	Neisseria meningitidis A,C,W,Y,X	Medium	Moderate	Medium-low
	Streptococcus pneumoniae	Low	Low	Medium
Outbreak Vaccine targets with unpredictable demand driven by outbreaks	Influenza virus, pandemic and seasonal	Medium	Moderate	High
	SARS-CoV-2	Medium	Moderate	High

The additional considerations allowed to define two groups within priority vaccines for MAPs



Additional considerations: regulatory pathway, programmatic impact, financial sustainability/ funders interest

Estimated regulatory pathway complexity ● Low ● Medium ● High



Proposed VIPS priority list of vaccine targets for MAPs

PRIORITY LIST of vaccine targets for MAPs

Priority 1 group

- Hepatitis B virus
- Measles, rubella (MR)/ Measles, mumps and rubella (MMR) viruses
- Human papillomavirus
- Rabies virus
- Yellow fever
- Influenza virus, seasonal and pandemic
- SARS-CoV-2

Priority 2 group

- Group B streptococcus (GBS), S agalactiae
- Neisseria meningitidis A,C,W,Y,(X)
- Salmonella Typhi
- Streptococcus pneumoniae