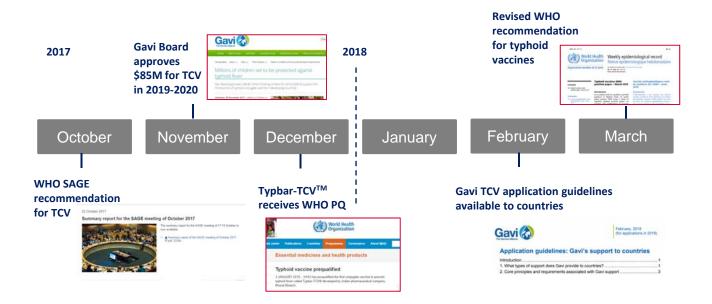
### Gavi Typhoid Programme: History of decision-making, current support & early lessons learned

11th International Conference on Typhoid & Other Invasive Salmonelloses **Adam Soble**March 27 2018, Hanoi



### Global policy and financing for TCV evolved rapidly





# Updated WHO recommendation for typhoid vaccines informed by wide range of data

### **Key data reviewed for updated WHO recommendation:**

#### Disease

Typhoid fever epidemiology

Global and country trends of typhoid fever and its risk factors

AMR of S. Typhi and implications for typhoid fever control

### **Vaccine**

Composition and performance of licensed typhoid vaccines

Systematic review and grading of immunogenicity, efficacy and safety data for typhoid vaccines

### Modelling

Mathematical modelling of typhoid fever transmission and vaccine impact

Cost effectiveness evaluation of TCV



### Historical decisions for Gavi's investment in typhoid

- Original investment decision made to support typhoid-conjugate vaccines (TCV) in 2008 Vaccine Investment Strategy
- Decision was based on assessment against evaluation criteria which included modelled health impact, cost effectiveness, equity, market shaping opportunity
- Following WHO SAGE recommendation in 2017, analysis was refreshed and presented to Gavi Board to open a funding window for TCV



# Support for TCV is closely aligned with Gavi's mission and strategic goals

Impact

- ~1/3 of all cases are among children under five years of age
- Use of TCV can also help the global community to understand its impact on antimicrobial resistance, as well as to identify appropriate immunisation strategies

**Equity** 

- High-income countries have virtually eliminated typhoid (water & sanitation improvements)
- Typhoid it still common in lower-income countries
- Gavi support for TCV can help bridge this equity gap

Market shaping

- Improve available supply of TCV
- Encourage new manufacturers to enter the market
- Increase healthy competition in TCV market



# Gavi provides support for introduction of TCV into routine immunisation and catch-up campaign

	Vaccine support	Financial support	Programmatic guidance
Introduction of single-dose into routine immunisation	Doses co-financed between Gavi and country	Vaccine introduction grant provided by Gavi to support start-up investment costs	Gavi recommends routine TCV administration be linked to MCV1 or MCV2 timepoints
One time single-dose catch-up campaign at time of introduction	Doses fully financed by Gavi	Operational cost support provided by Gavi to support effective implementation of catch-up campaign	Catch-up campaign target population between 9 months and 15 years old

#### **Additional considerations**

- Gavi also offers support to use TCV to respond to typhoid outbreaks that are laboratory-confirmed
- Countries are recommended to use assessment of disease burden and availability of surveillance data, operational feasibility and affordability to select immunisation strategy (e.g. national vs. risk-based; phased implementation).

### Early lessons learned from Gavi programme

#### **Applications to Gavi for TCV support**

- 3 applications reviewed to-date for routine introduction + catch-up campaigns (Liberia, Pakistan, Zimbabwe)
- Limited typhoid surveillance/disease burden data to inform introduction and vaccination strategy decisions
- Robust **guidance**, **tools and support needed to assess typhoid risk** both laboratory-confirmed data and in absence of these data

#### Outbreak response with TCV in Zimbabwe

- Preliminary data shows relatively high overall coverage and very high coverage among school age children
- Low number of reported AEFIs
- Need to identify best practices to reach 9m-15 yo. target population in campaigns (e.g. integration with MoE, school-based vaccination) to reach high coverage among all target age groups

### Gavi typhoid learning agenda

- Evaluation of outbreak response campaign in Zimbabwe will inform future use of TCV in outbreak settings
- Gavi-funded evaluation in early introducing countries will improve understanding of real-world impact and implementation best practices of TCV
  - Outcomes of interest: Changes in bacteriologically confirmed disease burden, impact of vaccination on antimicrobial resistance, identification of best practices for TCV-use
  - Timeline: Proposals due 5th April; intend to finalise agreements by end of April



# Partners are collaborating to help countries with their surveillance challenges

Gavi convened a technical sub team of partners to:

- 1) Support design and development of typhoid programme and
- 2) Support scale-up and implementation of TCV in Gavi-supported countries Improving tools for countries to assess burden of disease has been a key early focus

Updated WHO surveillance standards for Salmonella Typhi

 Countries now have clearer guidance about appropriate ways to confirm disease and perform routine surveillance

WHO / CDC rapid assessment framework for typhoid disease

- Will enable countries to rapidly assess disease burden to inform decision making
- Currently under-development and will be piloted in Q2 2019

Data guidance to countries applying for Gavi NVS

- Application guidelines now include step by step guidance for countries to evaluate local typhoid disease burden to inform decision making
- Includes assessing evidence of both past or current typhoid disease and other data which indicates likely risk of typhoid