Session 4 | Priority Vaccines: Polio, TB, Dengue, Malaria and Salmonella vaccines

Speakers

- Dr. Raches Ella, Head-Business Development & Advocacy-Bharat Biotech
- Dr. Julio Henrique Rosa Croda, Associate Professor, Faculty of Medicine of the Federal University of Mato Grosso do Sul and the School of Public Health at Yale University, Specialist in Science, Technology and Innovation in Public Health, Oswaldo Cruz Foundation
- Ms. Iin Susanti Budiharto, Director for Production & Supply Chain-PT BioFarma
- Dr. Chunlin Xin, Vice President of external R&D-CanSino Biologics Inc.
- Dr. Sushant Sahastrabuddhe, Director for Innovation, Initiatives, and Enterprise Development-IVI
- Mr. Siddhartha Prakash, Head of Global Health-WIPO

Global priority endemic pathogens for vaccine R&D

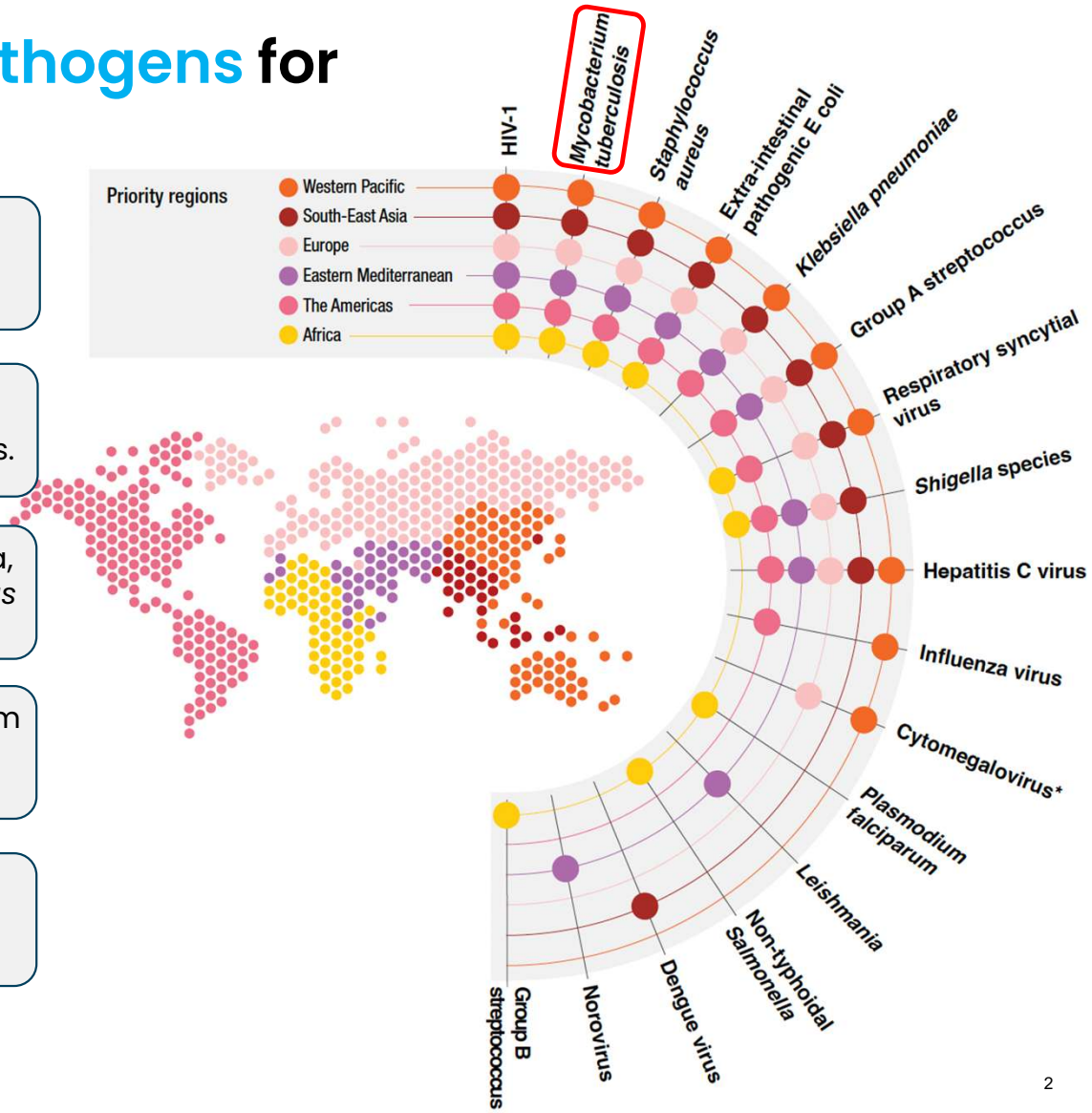
Input from experts to rank pathogens based on how many **lives they affect**, their contribution to **drug resistance**, and the **social and economic toll**.

WHO identified **17 endemic pathogens**, such as tuberculosis and HIV, as top priorities for new vaccines.

We validated **existing priorities**-- TB, HIV, and malaria, and **highlight new**, for example Group A *streptococcus* and *K pneumoniae.*

We categorised pathogens and vaccines against them depending on needs: **research, advance product development, or prepare to implement.**

The findings will help **inform decisions about health policies and research funding.**



In 2023, WHO launched the TB Vaccine Accelerator Council

Aims to support the community of key stakeholders accelerate the development, approval and use effective novel TB vaccines.

Dr Nísia Trindade Lima (Co-chair)
Minister of Health, Brazil

Dr Budi Gunadi Sadikin (Co-chair)
Minister of Health, Indonesia

Mr Aurélien Rousseau
Minister of Social Affairs and Health, France

Dr Susan Nakhumicha Wafula
Cabinet Secretary for Health, Kenya

Ms Dao Hong Lan
Minister of Health, Viet Nam

Dr Malik Mukhtar Ahmed Bharath
Coordinator to Prime Minister on Health, Pakistan

Dr Mathume Joseph Phaahla
Minister of Health, South Africa

Dr Teodoro J. Herbosa
Secretary of Health, Philippines

National Institutes of Health
National Institutes of Health, United States of America

Dr Akinwumi Adesina
President, African Development Bank Group

Dr Trevor Mundel
President of Global Health, Bill and Melinda Gates Foundation

Ms Nadia Calvino
President, European Investment Bank

Dr Juan Pablo Uribe
Global Director for Health, Nutrition & Population and the Global Financing Facility, World Bank

Dr Sania Nishtar
Chief Executive Officer, Gavi, the Vaccine Alliance

Mr Peter Sands
Executive Director, Global Fund

Dr Philippe Duneton
Executive Director, Unitaid

Dr John-Arne Røttingen
Chief Executive Officer, Wellcome Trust

Dr Lucica Ditiu
Executive Director, Stop TB Partnership

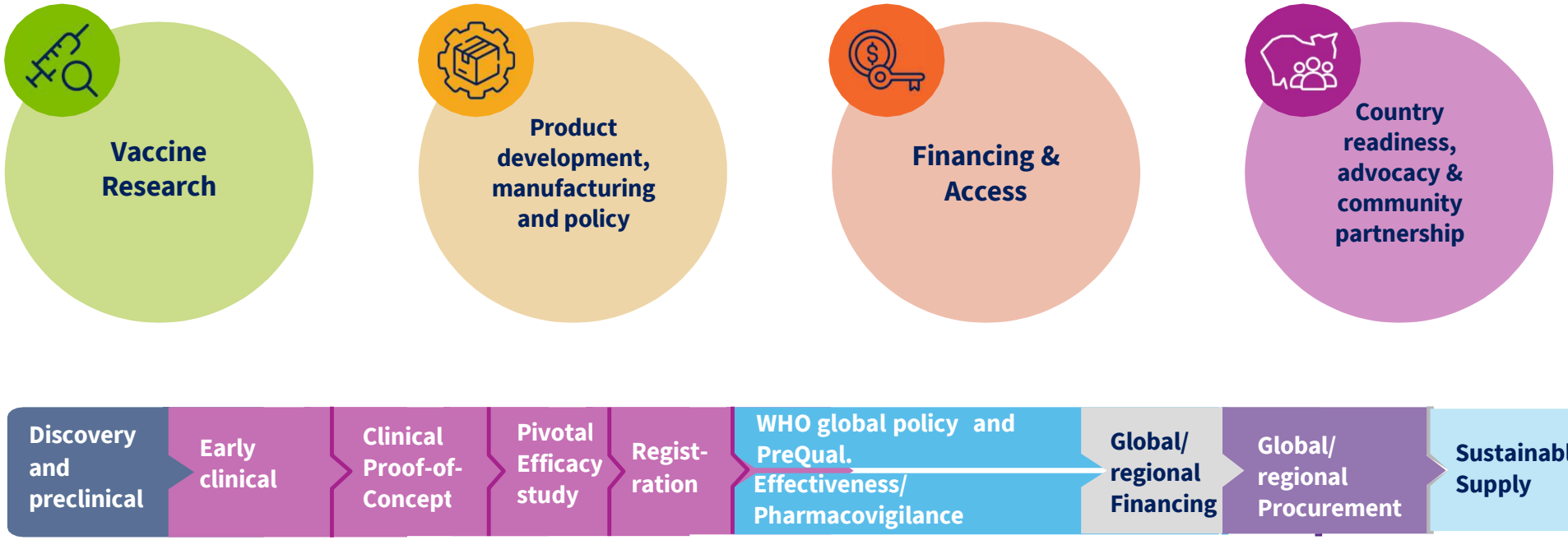
Mike Frick
Co-Director of Tuberculosis Project, Treatment Action Group

World Health Organization

Committment to convene stakeholders in 2025 to discuss **options for procurement and financing of late-stage vaccines**

To inform the council we propose to:

Establish 4 key technical and strategic working groups across the TB vaccine value chain



Scope of the working groups is highly integrated

Activities and assumptions of one depend on inputs from another

WHO Accelerator Council

- identifies needs for, and types of innovative sustainable financial solutions
- advocates with decision makers in the public, private, philanthropy and other relevant sectors to strengthen commitment

WHO Report on the role of vaccines in reducing AMR

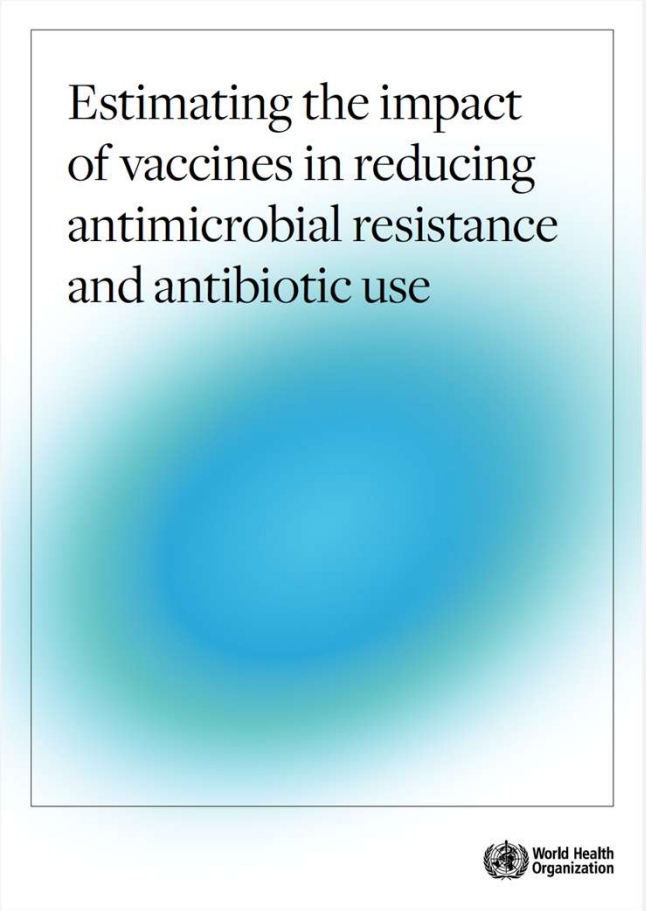
The report summarizes the evidence on the role of 44 vaccines against 24 pathogens in reducing AMR

Vaccines could avert annually:

- 2.5 billion doses of antibiotics– 22% of burden
- 515 000 deaths associated with AMR
- $30 billion in hospital costs associated with AMR

Key recommendations:

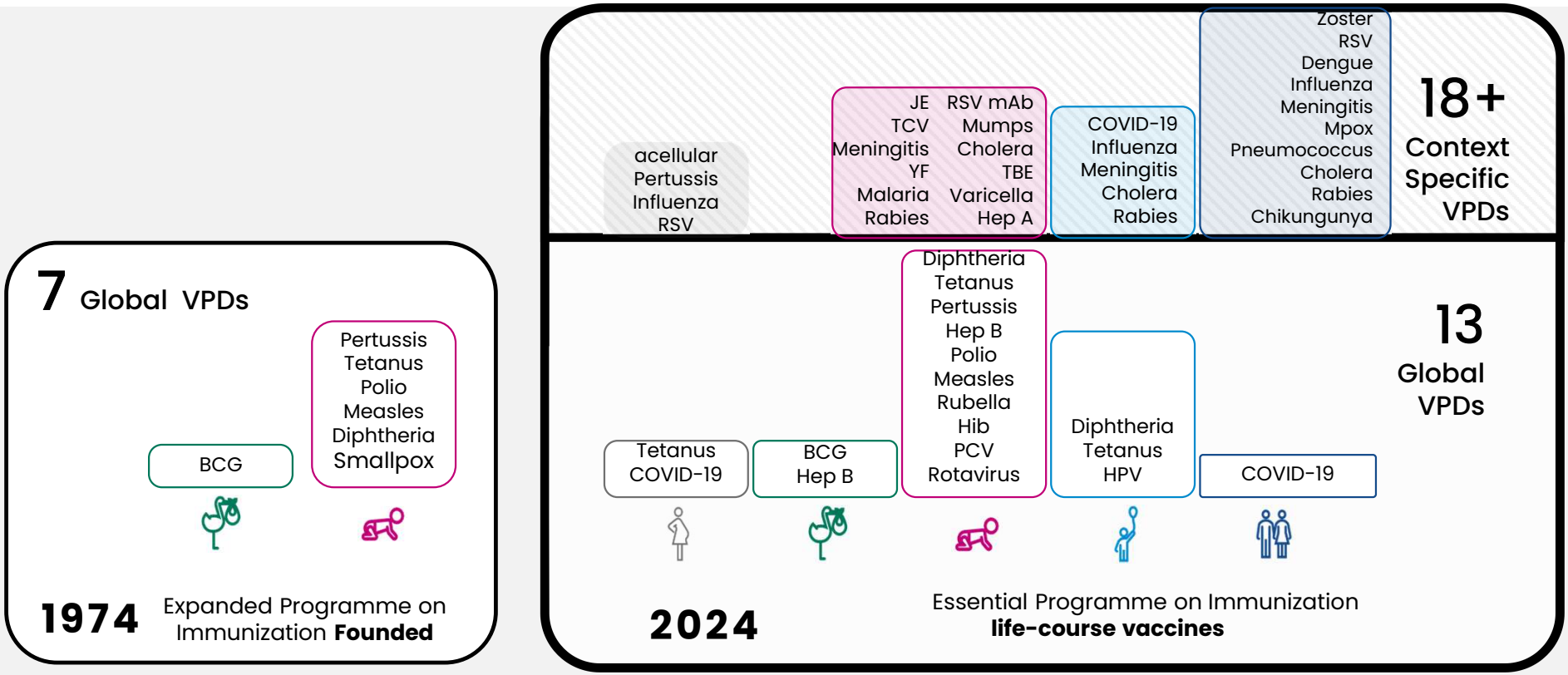
- Introduce, scale up, and monitor the impact of existing vaccines
- Prepare for vaccine introduction
- Enable vaccine development, delivery and implementation
- Integrate the role of vaccines alongside other approaches



https://www.who.int/teams/immunization-vaccines-and-biologicals/product-and-delivery-research/anti-microbial-resistance

The #vaccine preventable diseases has massively expanded

From 7 VPDs in 1974 (mostly for infants)…… to >13 (through life-course) in 2024

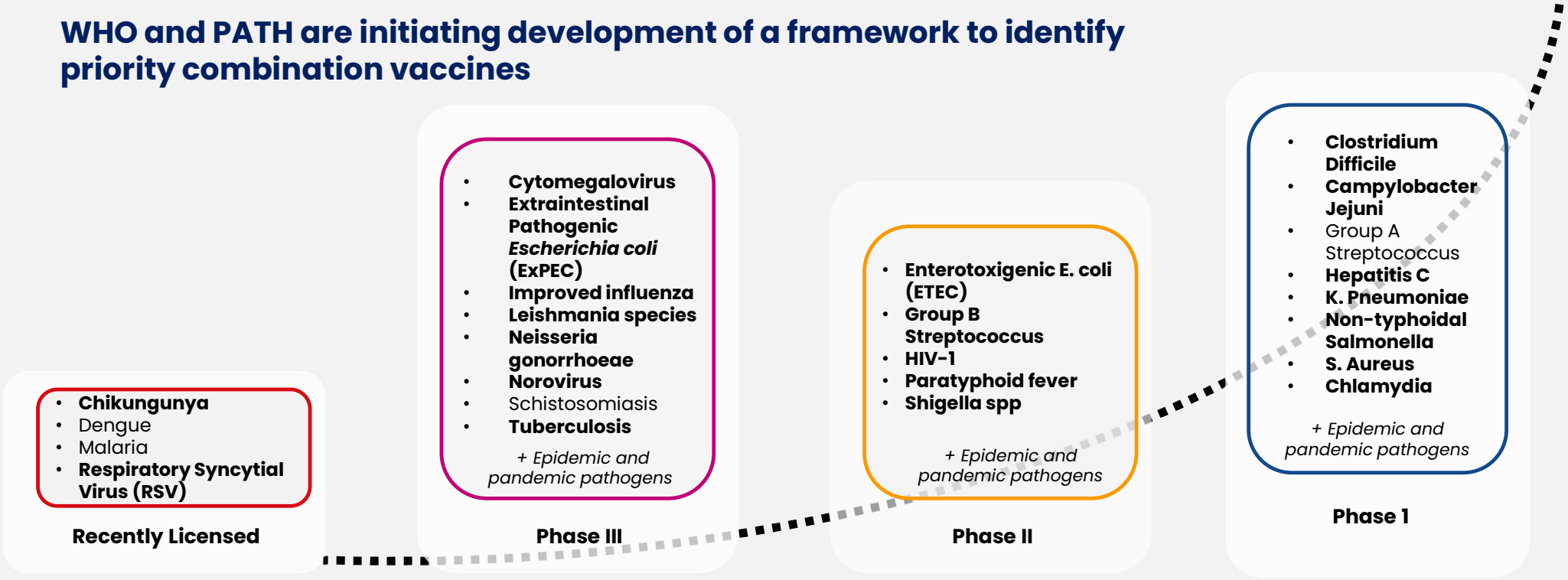


Note: *BCG: bacillus Calmette–Guérin; Hib: Haemophilus influenzae type b; HPV: human papillomavirus; JE: Japanese Encephalitis; PCV: pneumococcal conjugate vaccine; RSV: respiratory syncytial virus; TBE: Tick-Borne Encephalitis; TCV: typhoid conjugate vaccine; YF: yellow fever. Not all context specific VPDs have a WHO SAGE recommendation.

Recommended Schedule | Maternal | Neonates | Infants & toddlers | Childhood & adolescents | Adults & older adults

….. and the adult vaccine portfolio is likely to expand in the short and medium term

WHO and PATH are initiating development of a framework to identify priority combination vaccines



Note: **In bold** those vaccines targeting adolescent/adult population. Not exhaustive list. Source: WHO Bacterial vaccines in clinical and preclinical development 2021.; Pipeline of bacterial vaccines for priority drug-resistant pathogens (who.int)

2024 WHO Product Development for Vaccines Advisory Committee

https://www.who.int/groups/product-development-for-vaccines-advisory-committee

9-11 December hybrid

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