Accelerating the TB vaccine pathway – from bench to communities

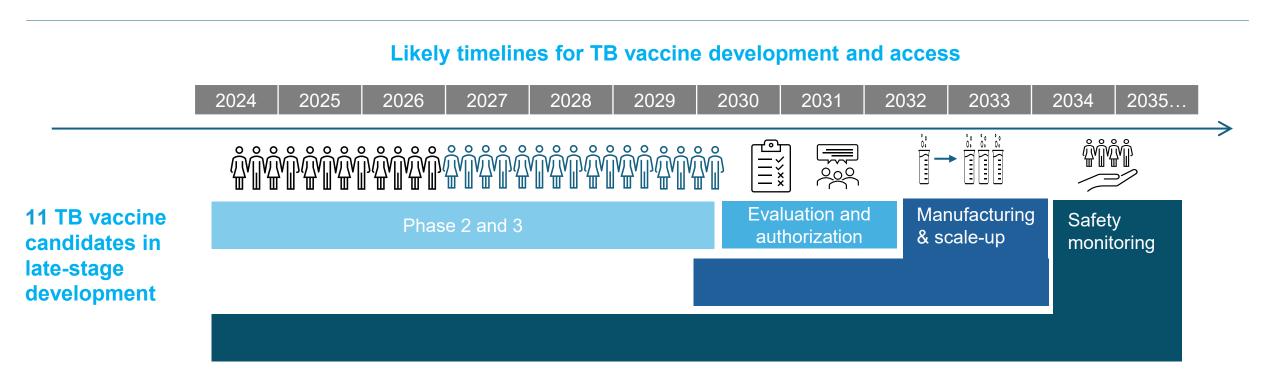
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Tuberculosis is the oldest global pandemic

With about 1.5 million TB deaths (including in PLHIV) in 2023 and 160,000 MDR/RR-TB deaths (2022) — TB is the leading infectious disease killer in the world and remains a global public health crisis.

With promising TB vaccine candidates — world needs to come together and step up coordinated efforts



We are not on track to make vaccines available at the soonest possible while adopting the traditional development pathway

During COVID-19 we achieved the impossible — vaccines were developed at a dizzying pace

Expedited vaccine development and deployment

2019 – Covid-19 pathogen discovered

2020 Jan – Preclinical work begins

2020 July – First Covid-19 vaccine product introduction

2020 Dec – First mRNA vaccine received EUL

2023 Dec – 13.64bn COVID-19 vaccine doses administered

Covid was not business as usual





National research agencies and PPP collaborations expedited clinical trials



Common protocols for comparability



WHO TPP: all regulatory agencies aligned; clear benchmarks; EUA/CMA

We need to adapt lessons from Covid-19 for accelerating TB vaccine development and deployment....

Innovations across vaccine research, development, and implementation can be game-changing in Tackling Tuberculosis

We cannot put all our eggs in one basket...

We need to diversify the TB vaccine pipeline

We cannot continue to experience long delays in trials...

We need harmonized pathways & accelerated timelines for development

We cannot wait for systems to adapt sequentially...

We need proactive efforts for rapid and large-scale deployment

We need global mechanisms for decision-making to ensure a collective scientific response, pooling of strengths and resources

We need to diversify the TB vaccine pipeline.....



Foster innovations in science to tackle TB

- Novel approaches to <u>vaccine discovery</u> proteins, peptides and non-protein antigens
- Greater investments in **Immunobiology studies** CHIM
- Fit-for purpose **animal models**

Open Science to boost science & innovation





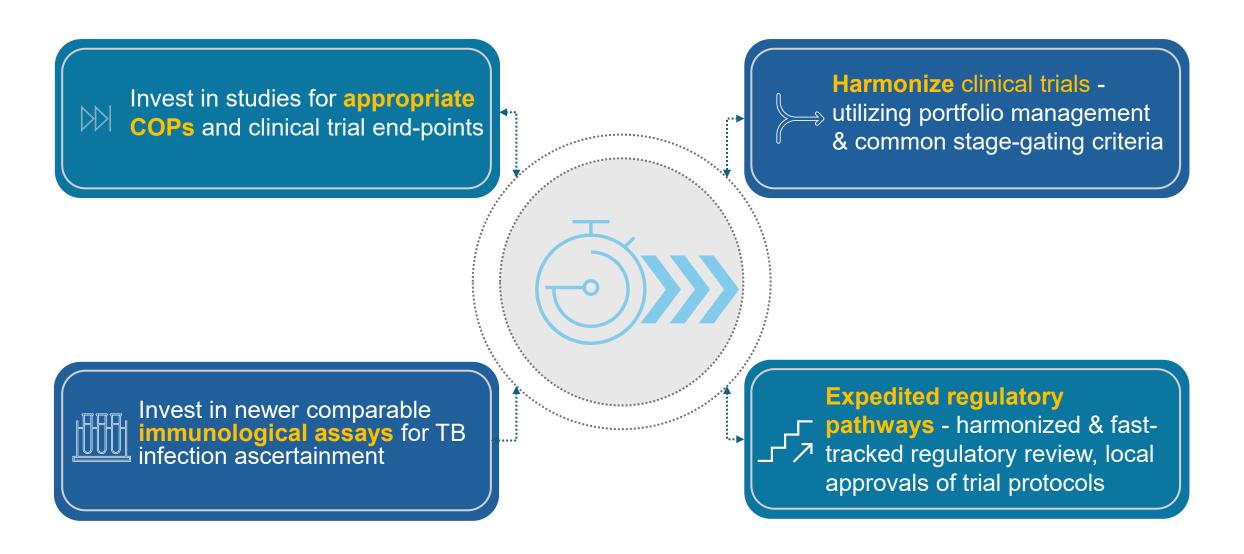


• Publicly searchable database for patents on antigens, adjuvants, platforms, and processes

Global mechanisms for open science collaborations

- Open access databases
- Open access publication of both positive and negative results
- Innovative models of bio-banking

We need harmonized pathways & accelerated timelines for development



We need proactive efforts for rapid and large-scale deployment



Market shaping

Strengthen regional decisionmaking esp. for Asia Pacific region

- Innovative initiatives for manufacturing, pooled procurement, volume guarantees, and deployment (e.g. Africa PAVM, America PAHO, Gavi AVMA etc.)
- Additional procurement mechanisms besides GAVI (e.g. regional development banks)

Enable regional co-operation on key issues (e.g. AU, Africa CDC, PAVM, PAHO), esp. Asia-Pacific region



Timely evidence to enable decision-making

Establish value-proposition

- Business case
- Modelled impact projections
- Demand forecasts

Parallel efforts to plug evidence gaps

- Epidemiological studies
- Pathways for life-course immunization and program integration, especially for highrisk populations
- Drivers for end-user acceptability and uptake

Strategic and reciprocal community partnerships

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Working with Community Advisory Boards and community representatives

Cocreate strategies for trial and vaccine demand; address

- Stigma
- Vaccine hesitancy
- Adherence challenges
- Vaccine related mis- and disinformation
- Effective scientific translation and awareness

Global mechanisms for decision-making to ensure a collective scientific response, pooling of strengths and resources becomes most critical....

WHO TB vaccine accelerator could be a potential host for a global scientific panel to enable decision-making

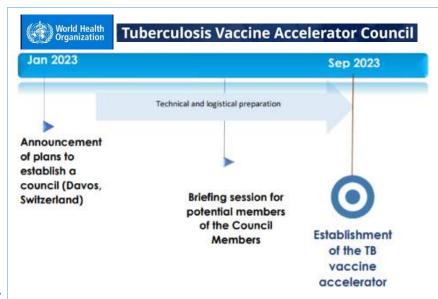
Pooling common strengths and resources across diverse networks

Smart and sciencedriven allocation/reallocation of funds

Global scientific panel

benchmarks for comparability (SoPs; go/no-go criteria)

Quick and harmonized decisions at critical junctures for product development and access



Strategic objectives to ensure –

- 1. Innovative sustainable financing and partnerships
- 2. Market solutions to incentivize development and R&D ecosystem for rapid manufacturing and scale
- 3. Advocate with decision makers for commitment and action

Thank you