# TB Alliance Overview

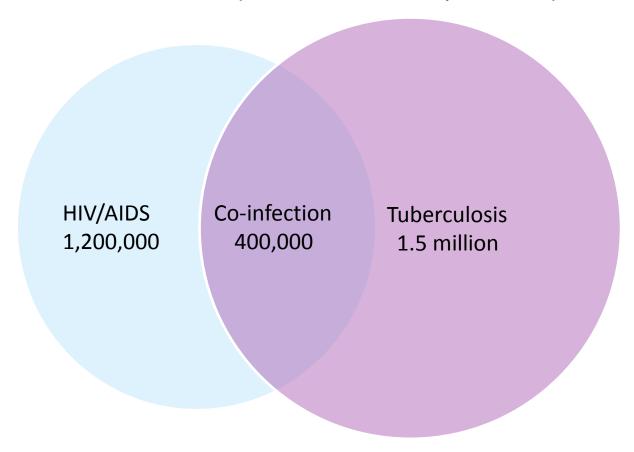
Putting science to work for better, faster TB cures





### TB is the Leading Infectious Disease Killer

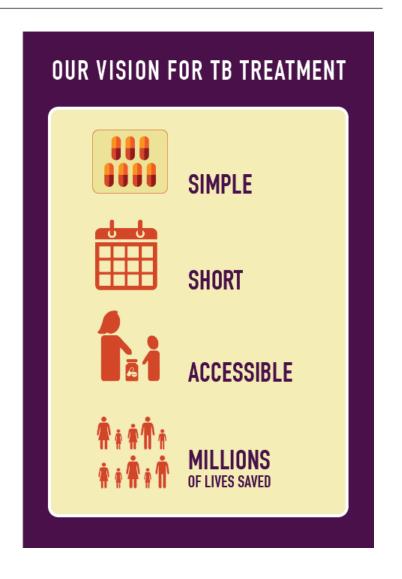
Number of deaths worldwide (WHO Global TB Report 2015)



Without new tools, we cannot stop this global health threat

## Our Vision: Better TB Medicines for All

Dedicated to the discovery and development of better, faster and affordable TB drugs that are available to <u>all</u> who need them



### Collaborative Model Built to Drive Impact

### A network of global partners

- As a not-for-profit Product
   Development Partnership, we
   collaborate with public and
   private partners to advance TB
   drug R&D and access
  - PDPs are a proven model to drive research for neglected diseases
  - PDPs have accelerated promising products more quickly and costeffectively than either public or private sector entities acting alone
- Substantial leveraging of donor funding with partner contributions



### **TB Alliance Supporters and Collaborators**

























































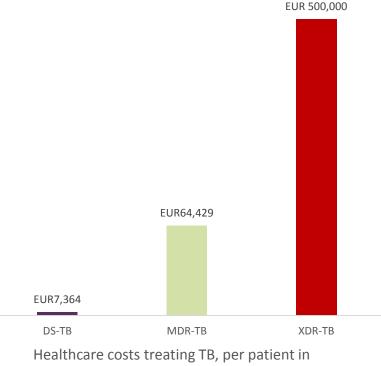




### TB and current treatment

#### benchmark

- 9.6 million new drug-sensitive TB cases per year: needs four drugs for 6 months, with an intensive and follow-up phase, weight banded
- Multi-drug resistant TB needs six months of injections plus at least 5-6 drugs for a minimum of 9 months but often 2 years or more. Only about 20% of patients get treated and of those only 50% are successfully cured
- XDR is virtually impossible to treat: 89% patients fail treatment of which 73% die within 5 years.
- Both MDR and XDR need hospitalization and isolation wards for infection control
- Until recently there were no formulations for children



Germany

### Childhood TB medicines: Achieving "AAA Mandate"

# INADEQUATE PEDIATRIC TREATMENT

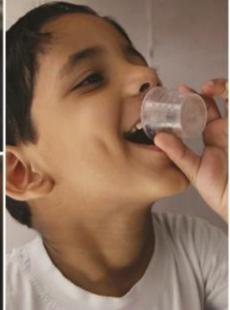


# **NOW AVAILABLE**









**INCORRECT DOSES** 

BROKEN PILLS

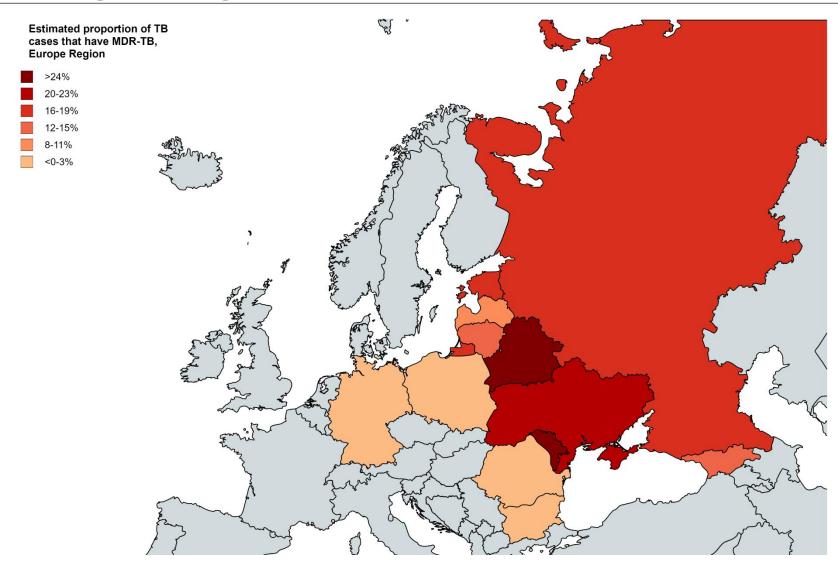


CORRECT DOSES, DISSOLVABLE IN WATER, TASTES GOOD

**CRUSHED PILLS** 

**BAD TASTE** 

# Growing TB drug resistance



### Growing TB drug resistance

- Germany has seen a steady decline over the years 2001 to 2009 (4,444), but there has been a small rise again over the last five years
- In Germany, like everywhere globally, there is a growing threat from drug-resistant TB
- Especially acute is also the situation on the Eastern borders with almost 8,000 DR-TB cases notified per year
- ROI of investment in TB Alliance: new drugs could potentially save EUR 7.5 billion over the next 35 years

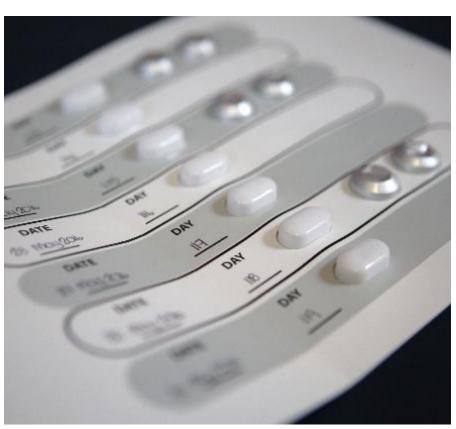
### Shorter, simpler treatment for XDR-TB



bedaquiline, pretomanid, and linezolid



One day of XDR-TB treatment



One week of Nix-TB regimen

### Status of Participants in Nix-TB Trial



- 30 patients completed 6 months of all oral treatment
  - No participants required longer than 6 months of treatment
  - No relapses to date
  - Linezolid dosing adjustments needed but manageable
- 11 patients on treatment
- Extremely sick patients
  - 4 deaths (3-7 weeks on treatment)

This could potentially be

>90%

Success rate!

### NC-005 trial: BPaMZ

Phase 2b trial using bedaquiline, pretomanid, moxifloxacin and pyrazinamide

- 2-month Phase 2b trial completed;
   Enrolled both drug-sensitive and drug-resistant patients (10 sites in South Africa, Tanzania, and Uganda)
- BPaZ and BPaZM active and well tolerated, with 3-4 month cure
- BPaZM shows the most promising data from any TB phase 2 trial in history: in MDR patients
- Next step is getting funding for a phase 3 trial to confirm and register this new regimen



### TB Alliance Immediate Clinical Strategy

