TUBERCULOSIS: A GLOBAL PRIORITY FOR RESEARCH AND DEVELOPMENT

FIVE REASONS WHY

1. Tuberculosis (TB) is the number one global infectious disease killer today, causing 1.8 million deaths per year. Drug-resistant TB is the most common and lethal airborne AMR disease worldwide today, responsible for 250,000 deaths each year.

2. Patients with multidrug-resistant TB (MDR-TB) need complex and prolonged multidrug treatment with costly, highly toxic, and much less effective second-line medicines. There is a limited number of second-line medicines to treat MDR-TB and only 52% of patients are successfully treated globally.

3. In about 50% of MDR-TB patients worldwide, treatment regimens are already compromised by second-line drug resistance. Treatment of extensively drug-resistant disease (XDR-TB) is successful in only one in three patients at best.

4. Patients with M/XDR-TB face agonising, prolonged suffering and often permanent disability while on treatment, compounded by devastating economic hardship, stigma and discrimination.

5. Only two new antibiotics for treatment of MDR-TB have reached the market in over 70 years. R&D investment in TB—seriously underfunded—is at its lowest level since 2008.

OTHER PRIORITY PATHOGENS

CRITICAL PRIORITY

- Acinetobacter baumannii carbapenem-resistant
- Pseudomonas aeruginosa carbapenem-resistant
- Enterobacteriaceae carbapenem-resistant, 3rd gen. cephalosporin-resistant

HIGH PRIORITY

- Enterococcus faecium vancomycin-resistant
- Staphylococcus aureus vancomycin-resistant methicillin-resistant
- Helicobacter pylori clarithromycin-resistant
- Campylobacter species fluoroquinolone-resistant
- Salmonella species fluoroquinolone-resistant
- Neisseria gonorrhoeae 3rd gen. cephalexin-resistant, fluoroquinolone-resistant

MEDIUM PRIORITY

- Streptococcus pneumoniae penicillin-non-susceptible
- Haemophilus influenzae ampicillin-resistant
- Shigella species fluoroquinolone-resistant

CRITICAL PRIORITY

1 MDR-TB = multidrug-resistant tuberculosis, that does not respond to at least isoniazid and rifampicin, the two most powerful first-line anti-TB medicines.
2 XDR-TB = extensively drug-resistant tuberculosis, defined as MDR-TB plus resistance to fluoroquinolones and injectable second-line anti-TB medicines.