

AMR Accelerator Project		Novelty			Mode of Action (MoA)	Description	Development Stage												
Asset Owner	Programme	New Class	New MoA	Discovery			(Pre)-Hit to Lead	Lead to Candidate	Candidate to Phase I	Phase I	Phase 2a - alone or in combination	Phase 2b - Dose ranging	Phase 2b - Regimen selection	Phase 2c - Duration randomization					
ERA4TB €208 m	GSK	Gepotidacin tissue distribution	✓	✓	Topoisomerase type II inhibitor	Demonstrating penetration of gepotidacin in tonsillar and prostate tissues.													
		ERA4TB-01	✓	✓	Cholesterol catabolism.	Molecule targeting mycobacterial cholesterol cycle.													
		ERA4TB-02	✓	✓	<i>Mycobacterium tuberculosis</i> tryptophan synthase	Compound targeting <i>Mycobacterium tuberculosis</i> tryptophan synthase, enzyme that catalyses the final two steps in the biosynthesis of tryptophan.			➡										
		ERA4TB-03			Electron chain transport.	Compounds targeting energy metabolism.							➡						
		ERA4TB-04	✓	✓	Lysine transfer RNA synthase	Compound targeting lysine transfer RNA synthase (Rv3598c), which is an essential gene as assessed by transposon mutagenesis.			➡										
		ERA4TB-06	✓	✓	Mycobacterial membrane protein Large 3 (Mmpl3)	Potent in vitro inhibitory and bactericidal activity against <i>Mycobacterium tuberculosis</i> .			➡										
		ERA4TB-09	✓	✓	Unknown.	Natural product analogs active against <i>Mycobacterium tuberculosis</i> .			➡										
		ERA4TB-10	✓	✓	Targets and covalently inhibits the enzyme Decaprenyl-phosphoryl-ribose 2'-epimerase (DprE1).	Derivative of piperazinobenzothiazinone that acts as an anti-mycobacterial compound.							➡						
		ERA4TB-11	✓	✓	Inhibits leucyl tRNA synthetase (LeuRS)	Small molecule oxaborole.							➡						
		ERA4TB-13	✓	✓	Cholesterol catabolism.	Targets cholesterol cycle in <i>Mycobacterium tuberculosis</i> .							➡						
		ERA4TB-14	✓	✓	Inhibits the mycobacterial cytochrome bc1 complex in the cellular respiration pathway.	Small molecule compound that leads to the depletion of ATP in three mycobacterial species, <i>M. tuberculosis</i> , <i>M. leprae</i> , and <i>M. ulcerans</i>							➡						
		ERA4TB-15	✓	✓	Covalently inhibits the acyl transferase domain of Mtb Pks13, a polyketide synthase involved in mycolic acid biosynthesis via a novel mode of inhibition.	A novel class of small-molecule antibiotics shown to inhibit new targets within the <i>M. tuberculosis</i> mycolic acid biosynthesis pathway.			➡										
		ERA4TB-16	✓	✓	Covalently inhibits the acyl transferase domain of Mtb Pks13, a polyketide synthase involved in mycolic acid biosynthesis via a novel mode of inhibition.	A novel class of small-molecule antibiotics shown to inhibit new targets within the <i>M. tuberculosis</i> mycolic acid biosynthesis pathway.			➡										
		ERA4TB-17	✓	✓	Inhibits FadD32, a key enzyme at the interface between the fatty acid synthase and polyketide synthase biosynthetic pathways and is involved in mycolic acid biosynthesis.	A novel class of small-molecule antibiotics that targets several Mtb biosynthesis pathways.			➡										
		ERA4TB-18	✓	✓	Inhibits FadD32, a key enzyme at the interface between the fatty acid synthase and polyketide synthase biosynthetic pathways and is involved in mycolic acid biosynthesis.	A novel class of small-molecule antibiotics that targets several Mtb biosynthesis pathways.			➡										
GNA NOW €21.6 m	GSK	Gepotidacin	✓	✓	Topoisomerase type II inhibitor	Gepotidacin is a first-in-class triazaacenaphthylene antibiotic that inhibits bacterial DNA replication by a novel mechanism of action and binding site by inhibition of two different Type II topoisomerase enzymes. Thanks to positive PhIII results for other indications (uUTI & gonorrhoea) is investigated by GNA NOW for its suitability to treat severe enteric infections in low- and middle income countries.													
RespiriTB €9 m	JANSSEN	BC1 back up	✓	✓	Cytochrome bc1 complex in the cellular respiration pathway.	Lead optimisation program on BC1 inhibitors.			➡										
		MenG	✓	✓	Inhibits menG, a product of which catalyses methylation of demethylmenaquinone.	H2L medChem for novel menaquinone biosynthesis inhibitors.			➡										
		BDQ LAI	✓		ATPase.	Novel long-acting injectable formulation of bedaquiline for Tb preventive therapy.													
		PASA	✓		Dihydrofolate reductase (DHFR).	Novel para-Aminosalicylic acid (PAS) analogues.			➡										
		HDT	✓	✓	Various.	Exploring known host-directed therapies for TB treatment.			➡										
		Mtr	✓	✓	<i>Mycobacterium</i> transcription regulator (Mtr).	Target exploration of <i>Mycobacterium</i> transcription regulator (Mtr) complex.			➡										
RespiriNTM €8 m	BioVersys AG	BV500			Inhibition of bacterial RNA polymerase.	BV500 program results from BioVersys' proprietary Ansamycin Chemistry platform. The compounds are designed to circumvent intrinsic resistance mechanisms in <i>M. abscessus</i> , while maintaining a broad anti-NTM spectrum of activity			➡										
TRIC-TB €8.3 m	BioVersys and GSK	Alpibectir	✓	✓	Bacterial transcriptional regulation.	Boosts ethionamide efficacy and lowers the dose with small molecule transcriptional modulators to overcome multi-drug resistant tuberculosis infections.													
UNITE4TB €185 m	GSK	GSK656	✓	✓	Suppresses protein synthesis in <i>Mycobacterium tuberculosis</i> by inhibiting the enzyme leucyl t-RNA synthetase (LeuRS).	A first-in-class investigational antitubercular agent is being developed to treat tuberculosis as part of a future combination regimen.													
	Leibniz-HKI/ LMU	BTZ-043	✓	✓	Inhibits an essential enzyme for cell wall synthesis in <i>Mycobacterium tuberculosis</i> .	A first-in-class investigational antitubercular agent is being developed to treat tuberculosis as part of a future combination regimen.													

Accelerating scientific discoveries in the antimicrobial resistance (AMR) field

COMBINE €25 m	Providing learnings derived from shared vaccine and/or antibacterial clinical trial data, and improving understanding of variability and translatability of animal models of bacterial infection.
PrIMAVeRa €9 m	Developing a decision-making tool accessing health and economic outcomes of vaccines on the reduction of AMR.

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