Last update 06/2024			Nov							velopment	_			
AMR Accelerator Project	Asset Owner	Programme	New Class	New MoA	Mode of Action (MoA)	Description	Discovery (Pre to Le	)-Hit Lead to Candidate	Candidate to Phase I	Phase I	Phase 2a - alone or in combi- nation	Phase 2b - Dose ranging	Phase 2b - Regimen selection	Phase 2c - Duration rando- mization
GNA NOW €21 m	NOSOPHARM	NOSO-502	<ul> <li>Image: A start of the start of</li></ul>	1	Inhibition bacterial ribosome	NOSO-502 is the first clinical candidate in the novel antibiotic class called Odilhorhabdins, inhibiting the bacterial ribosome with a new mechanism of action.								
TRIC-TB €8 m	BioVersys and GSK	Alpibectir	<b>√</b>	1	Transcriptional modulator	Boosting Ethionamide efficacy and lowering the dose with small molecule transcriptional modulators to overcome multi-drug resistant tuberculosis infections and define a new place for Ethionamide in 1st-line tuberculosis treatments.					*			
AB-Direct €4 m		Gepotidacin tissue distribution	<b>√</b>	1	Topoisomerase type II inhibitor	Demonstrating penetration of gepotidacin in tonsillar and prostate tissues.								
ERA4TB €208 m	JANSSEN	ERA4TB-01	<b>√</b>	1	Cholesterol catabolism of mycobacteria	Molecule targeting cholesterol catabolism of mycobacteria.								
		ERA4TB-02	~	1	<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			Energy metabolism	Compounds targeting energy metabolism (electron chain transport).								
		ERA4TB-04	1	1	Lysine transfer RNA synthase	Compound targeting lysine transfer RNA synthase (Rv3598c), which is an essential gene as assessed by transposon mutagenesis.								
		ERA4TB-06	1	1	Mmpl3	Mycobacterial membrane protein Large 3 (Mmpl3) compounds with potent in vitro inhibitory and bactericidal activity against <i>Mycobacterium tuberculosis</i> .								
		ERA4TB-09	<b>√</b>	1	Not known	Natural product analogs active against <i>Mycobacterium tuberculosis</i> .								
		ERA4TB-10	<b>√</b>	1	DprE1	Piperazinobenzothiazinone derivative as anti-mycobacterial compound that targets and covalently inhibits the enzyme Decaprenyl-phosphoryl-ribose 2'-epimerase (DprE1).								
		ERA4TB-11	~	1	LeuRS	Small molecule oxaborole inhibitor of Mtb leucyl tRNA synthetase				Phase II of clinical development Phase I in ERA4TB	,			
		ERA4TB-13	<b>√</b>	1	Cholesterol catabolism of mycobacteria	Targets cholesterol catabolism of <i>Mycobacterium tuberculosis</i> (Mtb)								
		ERA4TB-14	<b>√</b>	1	Inhibits new target within a known pathway (Mtb energy metabolism) via a novel mode of inhibition	Small molecule compound that inhibits the mycobacterial cytochrome bc1 complex in the cellular respiration pathway, leading to the depletion of ATP, in three mycobacterial species, <i>M. tuberculosis</i> , <i>M. leprae</i> , and <i>M. ulcerans</i>								
		ERA4TB-15	<b>√</b>	1	Inhibits new target within a known pathway (Mtb mycolic acid biosynthesis) via a novel mode of inhibition Inhibits new target within a known	Novel class of small-molecule antibiotics shown to covalently inhibit the acyl transferase domain of Mtb Pks13, a polyketide synthase involved in the mycolic acid biosynthetic pathway         Novel class of small-molecule antibiotics shown to covalently inhibit the								
		ERA4TB-16 ERA4TB-17	~	1	pathway (Mtb mycolic acid biosynthesis) via a novel mode of inhibition	acyl transferase domain of Mtb Pks13, a polyketide synthase involved in the mycolic acid biosynthetic pathway         Novel class of small-molecule antibiotics that inhibits FadD32, a key enzyme								
		ERA4TB-17	1	1	H3D-012895 inhibits a new target within	at the interface between the fatty acid synthase and polyketide synthase biosynthetic pathways and involved in the synthesis of mycolic acid Novel class of small-molecule antibiotics that inhibits FadD32, a key enzyme								
		BC1 back up	<b>√</b>	1	a known pathway (Mtb mycolic acid biosynthesis) BC1	at the interface between the fatty acid synthase and polyketide synthase biosynthetic pathways and involved in the synthesis of mycolic acid Lead optimization program on BC1 inhibitors								
RespiriNTM		MenG	<b>√</b>	1	MenG	H2L medChem for novel menG inhibitors								
		BDQ LAI	<b>√</b>	1	ATPase	Novel long acting injectable formulation of bedaquiline for Tb preventive								
		PASA	<ul> <li>Image: A start of the start of</li></ul>		DHFR	therapy Novel PAS analogues								
		НОТ	<ul> <li>Image: A start of the start of</li></ul>		Various	Exploring of known host directed therapies for TB treatment								
		Mtr	<b>√</b>	1	Mtr	Mtr target exploration.								
	ТВА		<ul> <li>Image: A start of the start of</li></ul>	1	not known	Progress novel assets (one FIH start) for Non-Tubercular Mycobacterium								
€8 m UNITE4TB	GSK	GSK656			LeuRS	<ul> <li>(NTM) that may act synergistically with Bedaquiline and cytochrome bc Drugs.</li> <li>A first-in-class investigational antitubercular agent which is being developed for the treatment of tubercularies as part of a future combination regimen.</li> </ul>								
€185 m	Leibniz-HKI/ LMU	BTZ-043	<ul> <li>Image: A start of the start of</li></ul>	1	Cell wall synthesis	<ul> <li>for the treatment of tuberculosis as part of a future combination regimen.</li> <li>New MoA/not regulatory approved product with this MoA. Suppresses</li> <li>protein synthesis in <i>Mycobacterium tuberculosis</i> (Mtb) by inhibiting the</li> <li>enzyme leucyl t-RNA synthetase (LeuRS).</li> <li>A first-in-class investigational antitubercular agent which is being developed</li> <li>for the treatment of tuberculosis as part of a future combination regimen.</li> </ul>								
	LIVU		1	<b>√</b>		for the treatment of tuberculosis as part of a future combination regimen. New MoA/not regulatory approved product with this MoA. BTZ-043 inhibits an enzyme (BTZ-043) with is essential for cell wall synthesis in <i>Mycobacterium tuberculosis.</i>								

## Accelerating scientific discoveries in the antimicrobial resistance (AMR) field



