AMR Accelerator Project Portfolio - June 2025 **Novelty Development Stage** Mode of Action (MoA) Description Lead to Candidate Candidate to Phase I **AMR Accelerator** New Class New MoA **Asset Owner** Programme Project Demonstrating penetration of gepotidacin in tonsillar and prostate tissues. Gepotidacin Topoisomerase type II inhibitor GSK **AB-Direct** tissue distribution €4 m Cholesterol catabolism. Molecule targeting mycobacterial cholesterol cycle. ERA4TB-01 **ERA4TB** €208 m Compound targeting *Mycobacterium tuberculosis* tryptophan synthase, ERA4TB-02 *Mycobacterium tuberculosis* tryptophan enzyme that catalyses the final two steps in the biosynthesis of tryptophan. Electron chain transport. Compounds targeting energy metabolism. ERA4TB-03 ERA4TB-04 Lysine transfer RNA synthase Compound targeting lysine transfer RNA synthase (Rv3598c), which is an essential gene as assessed by transposon mutagenesis. Mycobacterial membrane protein Large 3 Potent *in vitro* inhibitory and bactericidal activity against *Mycobacterium* ERA4TB-06 (Mmpl3) tuberculosis. Unknown. Natural product analogs active against *Mycobacterium tuberculosis*. ERA4TB-09 Derivative of piperazinobenzothiazinone that acts as an anti-mycobacterial Targets and covalently inhibits the enzyme ERA4TB-10 Decaprenyl-phosphoryl-ribose 2'-epimerase compound. (DprE1). Inhibits leucyl tRNA synthetase (LeuRS) Small molecule oxaborole. ERA4TB-11 Cholesterol catabolism. Targets cholesterol cycle in *Mycobacterium tuberculosis*. ERA4TB-13 ERA4TB-14 Inhibits the mycobacterial cytochrome bc1 Small molecule compound that leads to the depletion of ATP in three complex in the cellular respiration pathway. mycobacterial species, *M. tuberculosis*, *M. leprae*, and *M. ulcerans* A novel class of small-molecule antibiotics shown to inhibit new targets Covalently inhibits the acyl transferase ERA4TB-15 domain of *Mtb* Pks13, a polyketide synthase within the *M. tuberculosis* mycolic acid biosynthesis pathway. involved in mycolic acid biosynthesis via a novel mode of inhibition. Covalently inhibits the acyl transferase A novel class of small-molecule antibiotics shown to inhibit new targets ERA4TB-16 domain of *Mtb* Pks13, a polyketide synthase | within the *M. tuberculosis* mycolic acid biosynthesis pathway. involved in mycolic acid biosynthesis via a novel mode of inhibition. Inhibits FadD32, a key enzyme at the interface | A novel class of small-molecule antibiotics that targets several *Mtb* ERA4TB-17 biosynthesis pathways. between the fatty acid synthase and polyketide synthase biosynthetic pathways and is involved in mycolic acid biosynthesis. Inhibits FadD32, a key enzyme at the interface A novel class of small-molecule antibiotics that targets several *Mtb* ERA4TB-18 between the fatty acid synthase and biosynthesis pathways. polyketide synthase biosynthetic pathways and is involved in mycolic acid biosynthesis. Topoisomerase type II inhibitor Gepotidacin is a first-in-class triazaacenaphthylene antibiotic that inhibits bacterial GSK Gepotidacin **GNA NOW** DNA replication by a novel mechanism of action and binding site by inhibition of €21.6 m 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. Lead optimisation program on BC1 inhibitors. Cytochrome bc1 complex in the cellular JANSSEN BC1 back up RespiriTB respiration pathway. €9 m Inhibits menG, a product of which catalyses H2L medChem for novel menaquinone biosynthesis inhibitors. MenG methylation of demethylmenaquinone. ATPase. Novel long-acting injectable formulation of bedaquiline for TB preventive BDQ LAI therapy. Dihydrofolate reductase (DHFR). Novel para-Aminosalicylic acid (PAS) analogues. PASA Various. Exploring known host-directed therapies for TB treatment. HDT **√** Mtr *Mycobacterium* transcription regulator Target exploration of *Mycobacterium* transcription regulator (Mtr) complex. (Mtr). BioVersys AG | BV500 Inhibition of bacterial RNA polymerase. BV500 program results from BioVersys' proprietary Ansamycin Chemistry RespiriNTM platform. The compounds are designed to circumvent intrinsic resistance €8 m mechanisms in *M. abscessus*, while maintaining a broad anti-NTM spectrum of activity BioVersys and GSK Bacterial transcriptional regulation. Boosts ethionamide efficacy and lowers the dose with small molecule Alpibectir TRIC-TB transcriptional modulators to overcome multi-drug resistant tuberculosis €8.3 m infections. Suppresses protein synthesis in A first-in-class investigational antitubercular agent is being developed to Ganfeborole GSK **UNITE4TB** treat tuberculosis as part of a future combination regimen. *Mycobacterium tuberculosis* by inhibiting €185 m the enzyme leucyl t-RNA synthetase (LeuRS). A first-in-class investigational antitubercular agent is being developed to Inhibits an essential enzyme for cell wall BTZ-043 Leibniz-HKI synthesis in *Mycobacterium tuberculosis*. treat tuberculosis as part of a future combination regimen. A newly discovered molecule with a new mechanism of action that has Inhibits an essential enzyme for OTSUKA Quabodepistat potent antituberculosis activity and a favourable safety profile. *Mycobacterium tuberculosis* to synthesize key components of its cell wall. Ligachem Delpazolid Inhibits protein synthesis and mRNA Delpazolid has in vitro activity against Gram-positive bacteria, including translation. Mycobacterium tuberculosis. Bacterial transcriptional regulation. Alpibectir Boosts ethionamide efficacy and lowers the dose with small molecule BioVersys AG transcriptional modulators to overcome multi-drug resistant tuberculosis infections.

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

COMBINE

PriMAVeRa

€25 m

€9 m

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