Last update 06/2024

| | | | Novelty | | | | Development Stage | | | | | | | | |
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| **AMR Accelerator Project** | **Asset Owner** | **Programme** | **New Class** | **New MoA** | **Mode of Action (MoA)** | **Description** | **Discovery** | **(Pre)-Hit to Lead** | **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 €31 m** | NOSOPHARM | NOSO-502 | ✓ | ✓ | 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 | ✓ | ✓ | 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** | GSK | Gepotidacin tissue distribution | ✓ | ✓ | Topoisomerase type II inhibitor | Demonstrating penetration of gepotidacin in tonsillar and prostate tissues. | | | | | → | | | | |
| **ERA4TB €208 m** | | ERA4TB-01 | ✓ | ✓ | Cholesterol catabolism of mycobacteria | Molecule targeting cholesterol catabolism of mycobacteria. | | | | | → | | | | |
| | | ERA4TB-02 | ✓ | ✓ | Mycobacterium tuberculosis tryptophan synthase | Compound targeting Mycobacterium tuberculosis 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 | ✓ | ✓ | Lysine transfer RNA synthase | Compound targeting lysine transfer RNA synthase (Rv3598c), which is an essential gene as assessed by transposon mutagenesis. | | | → | | | | | | |
| | | ERA4TB-06 | ✓ | ✓ | Mmpl3 | Mycobacterial membrane protein Large 3 (Mmpl3) compounds with potent in vitro inhibitory and bactericidal activity against Mycobacterium tuberculosis. | | | → | | | | | | |
| | | ERA4TB-09 | ✓ | ✓ | Not known | Natural product analogs active against Mycobacterium tuberculosis. | | | → | | | | | | |
| | | ERA4TB-10 | ✓ | ✓ | DprE1 | Piperazinobenzothiazinone derivative as anti-mycobacterial compound that targets and covalently inhibits the enzyme Decaprenyl-phosphoryl-ribose 2'-epimerase (DprE1). | | | | | → | | | | |
| | | ERA4TB-11 | ✓ | ✓ | LeuRS | Small molecule oxaborole inhibitor of Mtb leucyl tRNA synthetase | | | | | Phase II of clinical development, Phase I in ERA4TB | | | | |
| | | ERA4TB-13 | ✓ | ✓ | Cholesterol catabolism of mycobacteria | Targets cholesterol catabolism of Mycobacterium tuberculosis (Mtb) | | | | → | | | | | |
| | | ERA4TB-14 | ✓ | ✓ | 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, M. tuberculosis, M. leprae, and M. ulcerans | | | | | → | | | | |
| | | ERA4TB-15 | ✓ | ✓ | Inhibits new target within a known pathway (Mtb mycolic acid biosynthesis) via a novel mode of inhibition | 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 | | | → | | | | | | |
| | | ERA4TB-16 | ✓ | ✓ | Inhibits new target within a known pathway (Mtb mycolic acid biosynthesis) via a novel mode of inhibition | 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 | | | → | | | | | | |
| | | ERA4TB-17 | ✓ | ✓ | Inhibits a new target within a known pathway (Mtb mycolic acid biosynthesis) | Novel class of small-molecule antibiotics that inhibits FadD32, a key enzyme at the interface between the fatty acid synthase and polyketide synthase biosynthetic pathways and involved in the synthesis of mycolic acid | | | → | | | | | | |
| | | ERA4TB-18 | ✓ | ✓ | H3D-012895 inhibits a new target within a known pathway (Mtb mycolic acid biosynthesis) | Novel class of small-molecule antibiotics that inhibits FadD32, a key enzyme at the interface between the fatty acid synthase and polyketide synthase biosynthetic pathways and involved in the synthesis of mycolic acid | | | → | | | | | | |
| **RespiriTB €9 m** | JANSSEN | BC1 back up | ✓ | ✓ | BC1 | Lead optimization program on BC1 inhibitors | | | → | | | | | | |
| | | RespiriTB | ✓ | ✓ | Mtr | Mtr target exploration. | → | | | | | | | | |
| | | BC1 back up | ✓ | ✓ | BC1 | Lead optimization program on BC1 inhibitors | | | → | | | | | | |
| | | MenG | ✓ | ✓ | MenG | H2L medChem for novel menG inhibitors | | → | | | | | | | |
| | | BDQ LAI | ✓ | ✓ | ATPase | Novel long acting injectable formulation of bedaquiline for Tb preventive therapy | | | | → | | | | | |
| | | PASA | ✓ | | DHFR | Novel PAS analogues | | → | | | | | | | |
| | | HDT | ✓ | | Various | Exploring of known host directed therapies for TB treatment | → | | | | | | | | |
| | | Mtr | ✓ | ✓ | Mtr | Mtr target exploration. | → | | | | | | | | |
| **RespiriNTM €8 m** | TBA | | | | not known | Progress novel assets (one FIH start) for Non-Tubercular Mycobacterium (NTM) that may act synergistically with Bedaquiline and cytochrome bc Drugs. | | → | | | | | | | |
| **UNITE4TB €185 m** | GSK | GSK656 | ✓ | ✓ | LeuRS | A first-in-class investigational antitubercular agent which is being developed for the treatment of tuberculosis as part of a future combination regimen. New MoA/not regulatory approved product with this MoA. Suppresses protein synthesis in Mycobacterium tuberculosis (Mtb) by inhibiting the enzyme leucyl t-RNA synthetase (LeuRS). | | | | | | | | → | |
| | Leibniz-HKI/ LMU | BTZ-043 | ✓ | ✓ | Cell wall synthesis | A first-in-class investigational antitubercular agent which is being developed 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 mycobacteria tuberculosis | | | | | | | → | → | |

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

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| **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. |

*This Phase 2a proof of concept trial is funded by the European & Developing Countries Clinical Trials Partnership and supported by the European Union.