



Discovery

Early Development

Late Development

LEAD IDENTIFICATION	LEAD OPTIMIZATION	PRECLINICAL DEVELOPMENT	PHASE 1	PHASE 2A	PHASE 2B	PHASE 3	PHASE 4
ATP Synthesis Inhibitors <i>Calibr</i>	Macrolides <i>Sanofi</i>	Preclinical TB Regimen Development <i>JHU</i>	TBA-354	Linezolid Dose-Ranging Study	NC-005 Pretomanid/ Bedaquiline/ Pyrazinamide (BPAZ)	STAND Pretomanid/ Moxifloxacin/ Pyrazinamide (PaMZ)	Optimized Pediatric Formulations Ethambutol/ Rifampicin/ Pyrazinamide for children > 5kg Isoniazid/ Rifampicin for children > 5kg Ethambutol for children > 5kg Isoniazid for children > 5kg Pyrazinamide for children > 5kg
Whole-Cell Hit-to-Lead Program <i>Sanofi</i>	Ureas <i>Sanofi</i>		Pharmacokinetics of first-line drugs in children < 5kg <i>Stellenbosch University</i>				
Whole-Cell Hit-to-Lead Program <i>GSK</i>	Diarylquinolines <i>Janssen/University of Auckland/UIC</i>						
RNA Polymerase Inhibitors <i>Rutgers University</i>	Indazoles <i>GSK</i>						
Energy Metabolism Inhibitors <i>AZ/UPenn</i>	Thiophene Carboxamides <i>Calibr</i>						
POA Prodrugs <i>Yonsei</i>	DprE1 Inhibitors						
InhA Inhibitors	Cyclopeptides <i>Sanofi</i>						
Hit ID Program <i>Takeda</i>	Mmpl3 Inhibitors						
Hit ID Program <i>Daiichi Sankyo</i>	Oxazolidinones <i>IMM</i>						
Hit ID Program <i>Shionogi</i>	Pyrimidines <i>GSK</i>						

TB Alliance R&D Partners:

Beijing Tuberculosis and Thoracic Tumor Research Institute (BTTRI)	Rutgers University
Calibr	Sanofi
Cornell University	Schrodinger
Daiichi Sankyo	Shionogi
GlaxoSmithKline (GSK)	Stellenbosch University
Institute of Materia Medica (IMM)	Takeda Pharmaceuticals
IMPAACT	TB Drug Accelerator (TBDA)
Janssen [Johnson & Johnson]	University College London (UCL)
Johns Hopkins University (JHU)	University of Auckland
Medical Research Council (MRC) at UCL	University of Illinois at Chicago (UIC)
(US) National Institutes of Health (NIH)	University of Pennsylvania School of Medicine (UPenn)
OP-BIO	Yonsei University
Roche Pharmaceuticals	