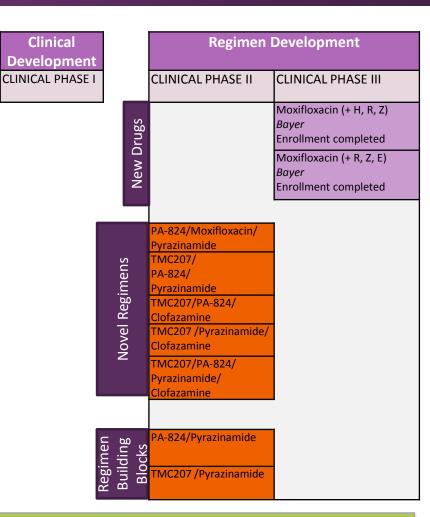


TB Alliance Pipeline – Nov '12

New Drug Discovery						
TARGET OR CELL- BASED SCREENING	LEAD IDENTIFICATION	LEAD OPTIMIZATION				
TB Drug Discovery Portfolio NITD		Mycobacterial Gyrase Inhibitors GSK				
	Whole-Cell Hit to Lead Program GSK	THPP Series GSK				
	Energy Metabolism Inhibitors AZ/U. Penn	Pyrazinamide Analogs Yonsei				
	Whole-Cell Hit to Lead Program <i>AZ</i>	Diarylquinolines Jan/U. of Auck				
	ATP Synthase Inhibitors Scripps	Riminophenazines IMM/BTTTRI				
		DprE Inhibitors Scripps				
		Whole-Cell Leads Sanofi				
		Macrolides Sanofi				
		Cyclopeptides Sanofi				

TBA-354 U. of Auck/ U. III Chi Preclinical TB	Preclinical Development			
U. of Auck/ U. III Chi Preclinical TB				
JHU/U. III Chi	Regimen Testing			



Novel TB regimen development

	Our R&D Partners							
AZ	AstraZeneca	JHU	Johns Hopkins University	U. of Auck	University of Auckland			
Bayer	Bayer Healthcare AG	NITD	Novartis Institute for Tropical Diseases	U. III Chi	University of Illinois at Chicago			
BTTTRI	Beijing Tuberculosis and Thoracic Tumor Research Institute	Novartis	Novartis Pharmaceutical	U. Penn	University of Pennsylvania School of Medicine			
GSK	GlaxoSmithKline	NYMC	New York Medical College	Yonsei	Yonsei University			
IMM	Institute of Materia Medica	Sanofi	sanofi-aventis					
Jan	Janssen (of Johnson & Johnson)	Scripps	Scripps Research Institute					