

CARB-X Antibacterial Treatment and Prevention Product Portfolio

Sponsor	Product	Novelty			Description	Priority		Development Stage				
		New Abx Class	New Non-traditional Product	New Target		CDC	WHO	Hit to Lead	Lead Optimization	Pre-Clinical	Phase I	
Achaogen	Next-Generation AG				Next-gen AG with extended Gram-negative coverage (<i>Pseudomonas</i>)	✓	✓	Gram-neg activity including <i>Pseudomonas</i>				
Amicrabe	Amicidin-β		✓		Next-generation local antimicrobial	✓	✓	Broad spectrum				
Antabio	PEI		✓	✓	<i>Pseudomonas</i> elastase inhibitor	✓	✓	<i>P. aeruginosa</i>				
Bugworks Research	GYROX	✓			Gyrase-topoisomerase inhibitor	✓	✓	Gram-negative activity				
Cidara Therapeutics	CD201		✓	✓	Bifunctional immunotherapy	✓	✓	<i>Acinetobacter</i> + <i>P. aeruginosa</i> + Enterobacteriaceae				
ContraFect	Gram-negative lysins		✓	✓	Recombinant lysin protein	✓	✓	<i>P. aeruginosa</i>				
Curza	CZ-02	✓		✓	Novel class Gram-negative	✓	✓	Broad Spectrum				
Debiopharm International SA	Debio1453	✓		✓	Narrow-spectrum inhibitors of FabI	✓	✓	<i>Neisseria Gonorrhoeae</i>				
Eligochem	Helical AMP	✓			Helical antimicrobial peptide	✓	✓	Gram-negative activity				
Entasis Therapeutics	ETX0282CPDP				Oral Gram-negative combination	✓	✓	Gram-negative activity				
Entasis Therapeutics	Non-BL PBPI	✓			Non-beta-lactam PBPI	✓	✓	Gram-negative activity				
Forge Therapeutics	FG-LpxC	✓		✓	LpxC inhibitor	✓	✓	Gram-negative activity				
Idorsia	TopESKAPE	✓			Dual-acting topoisomerase inhibitor	✓	✓	<i>Acinetobacter, Pseudomonas, and Enterobacteriaceae</i>				
Inhibrx	INBRX-111		✓	✓	Multi-specific antibody	✓	✓	<i>P. aeruginosa</i>				
Integrated BioTherapeutics	IBT-V02		✓		Multi-valent toxoid vaccine	✓	✓	<i>S. aureus</i>				
Iterum	Sulopenem				Oral and IV penem	✓	✓	Gram-negative activity				
Macrolide	Novel Macrolides				Novel macrolide antibiotics with Gram-negative activity	✓	✓	Gram-negative activity				
Melinta	Pyrolocytosine	✓		✓	Novel class, MDR ESKAPE	✓	✓	Broad spectrum				
Microbiotix	T355 Inhibitor		✓	✓	Virulence modifier	✓	✓	<i>P. aeruginosa</i>				
MicruRx	MRX-8				Soft drug polymyxin	✓	✓	Gram-negative activity				
Seres Therapeutics	SER-155		✓		Microbiome - transplant patients	✓	✓	Broad spectrum activity vs CRE/VRE*				
Shionogi	AGN-BL				Novel gram-negative lactam	✓	✓	Enterobacteriaceae				
Spero Therapeutics	SPR741			✓	Potentiator	✓	✓	Gram-negative activity				
Tetraphase Pharmaceuticals	TP-6076				Next-generation tetracycline	✓	✓	<i>Acinetobacter</i> + Enterobacteriaceae				
Vedanta	VE303		✓		Microbiome	✓		<i>C. difficile</i>				
VenatoRx	VNRX-PBP	✓			β-lactamase resistant PBP inhibitor	✓	✓	Enterobacteriaceae				
Visterra	VIS705		✓	✓	Antibody-drug conjugate	✓	✓	<i>P. aeruginosa</i>				

CARB-X Antibacterial Devices and Diagnostic Product Portfolio

Sponsor	Type	Technology	Description			
			Feasibility Demonstration	Optimization and Preparation for Development	Product Development	System Integration and Testing
Helixbind	Hospital Dx	Automated culture-free pathogen ID	Bloodstream Infections			
MicrobeDx	Near care Dx	CD based microfluidics	Urinary Tract Infection			
Proteus	Rapid POC Dx	Optical bacterial imaging	POC Diagnostic			
Specific Diagnostics	Hospital Dx	Colorimetric Sensor Array to detect VOCs	Bloodstream Infections			
Talis	Point of care Dx	Pathogen ID; Phenotypic AST	AST <i>Neisseria gonorrhoeae</i>	NID NG and <i>Chlamydia trachomatis</i>		
T2 Biosystems	Hospital Dx	Expanded bacteria and resistance panels for T2Dx	Bloodstream infections			

The above projects are Powered by CARB-X utilizing non-dilutive funding from BARDA, Wellcome Trust, & NIAID. Characterizations of new Abx Class and New Target by CARB-X, following Pew pipeline analysis: <http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/antibiotics-currently-in-clinical-development>. Other characterizations by CARB-X experts and external expert opinion. Abx = traditional small molecule antibiotic. Non-traditional Product = not a traditional small molecule antibiotic.