Table 2. Antibiotics being developed against WHO priority pathogens

Name (synonym)	Phase	Antibiotic class	Route of administration (developer)	Expected activity against priority pathogens				Innovation			
				CRAB	CRPA	CRE	OPP	NCR	CC	T	MoA
Solithromycin	NDA[1]	Macrolide	iv & oral (Melinta/Fujifilm Toyama Chemical)	/	/	/	●	-	-	-	-
Contezolid, Contezolid acefosamil	NDA[2]	Oxazolidinone	oral (MicuRx) iv & oral (MicuRx)	/	/	/	●	-	-	-	-
Sulopenem, Sulopenem etzadroxil/ probenecid	3	Penem	iv (Iterum) oral (Iterum)	○	○	○[3]	/	-	-	-	-
Durlobactam (ETX-2514) + sulbactam	3	DBO-BLI/PBP2 binder + β-lactam-BLI/PBP1,3 binder	iv (Entasis)	●	○	○	/	-	-	-	-
Taniborbactam (VNRX-5133) + cefepime	3	Boronate-BLI + cephalosporin	iv (Venatorx/ GARDP)	○	?	●	/	?	✓	-	-
Enmetazobactam (AAI-101) + cefepime	3	β-lactam BLI + cephalosporin	iv (Allecra)	○	○	○[4]	/	-	-	-	-
Zoliflodacin	3	Topoisomerase inhibitor (spiropyrimidenetrione)	oral (Entasis/GARDP)	/	/	/	●	✓	✓	-	✓
Gepotidacin	3	Topoisomerase inhibitor (triazaacenaphthylene)	iv & oral (GSK)	/	/	/	●	?	✓	-	✓
Afabicin (Debio-1450)	2	FabI inhibitor	iv & oral (Debiopharm)	/	/	/	●	✓	✓	✓	✓
Nafithromycin (WCK-4873)	2	Macrolide	oral (Wockhardt)	/	/	/	●	-	-	-	-
TNP-2092	2	Rifamycin-quinolizinone hybrid	iv & oral (TenNor)	/	/	/	?	-	-	-	-
Benapenem	2[5]	Carbapenem	iv (Sichuan Pharmaceutical)	○	○	○	/	-	-	-	-
Zidebactam + cefepime	1	DBO-BLI/PBP2 binder + cephalosporin	iv (Wockhardt)	●	●	●	/	-	-	-	-
Nacubactam + meropenem	1	DBO-BLI/PBP2 binder + meropenem	iv (NacuGen Therapeutics)	○	○[6]	●	/	-	-	-	-
ETX0282 + cefpodoxime	1	DBO-BLI/PBP2 binder + cephalosporin	oral (Entasis)	○	○	●	/	-	-	-	-
VNRX-7145 + ceftibuten	1	Boronate-BLI + cephalosporin	oral (Venatorx)	○	○	●	/	?	✓	-	-
SPR-206	1	Polymyxin	iv (Spero)	●	●	●	/	-	-	-	-
KBP-7072	1	Tetracycline	oral (KBP BioSciences)	●	○	○	●	-	-	-	-
TP-271	1	Tetracycline	iv & oral (La Jolla Pharmaceutical)	?	○	○	●	-	-	-	-
TP-6076	1	Tetracycline	iv (La Jolla Pharmaceutical)	●	○	?	/	-	-	-	-
EBL-10031 (apramycin)	1[7]	Aminoglycoside	iv (Juvabis)	?	○	?	/	-	-	-	-
TNP-2198	1	Rifamycin-nitroimidazole conjugate	oral (TenNor)	/	/	/	●	-	-	-	-
TXA-709	1	FtsZ inhibitor	oral & iv (Taxis)	○	○	○	●	✓	✓	✓	✓
ARX-1796 (oral avibactam prodrug)	1	DBO-BLI + β-lactam	oral (Arixa Pharmaceuticals)	○	○	●[8]	/	-	-	-	-
PLG0206 (WLBU2)	1	Cationic peptide	iv (Peptilogics)	?	?	?	●	?	✓	?	?
QPX7728 + QPX2014	1	Boronate-BLI + unknown	iv (Qpex Biopharma)	●	?	●	/	?	-	-	-

Pathogen activity:

● active; ? possibly active; ○ not or insufficiently active; / activity not assessed, as the antibiotic is focused and developed for only either Gram-positive cocci or Gram-negative rods. The only agents assessed against OPPs were those that are not active against critical priority pathogens. OPP includes the high- and medium-priority pathogens.

Innovation assessment: ✓ criterion fulfilled; ? Inconclusive data or no agreement among the advisory group; - criterion not fulfilled.

Abbreviations: GSK: GlaxoSmithKline.

[1] NDA submitted in Japan in April 2019.
[2] NDA submitted in China in December 2020.
[3] Active against ESBL-producing cephalosporin-resistant but not carbapenem-resistant Enterobacterales.
[4] Active against ESBL-producing cephalosporin-resistant and some KPC-producing CREs.
[5] Clinical development only for China.
[6] Activity against AmpC-producing and KPC-producing CRPA.
[7] Previously used as an antibacterial treatment in animals.
[8] Active against KPC- but not MBL-producing Enterobacterales.