

Reservantibiootikumid

Kõik laborid

20.10.2023

Rakvere



Enterobacterales – activity vs mechanisms of resistance

Antibiotics	ESBL	AmpC	KPC	MBL	OXA-48
Ceftazidime-avibactam	+	+	+	-	+
Meropenem-vaborbactam	+	+	+	-	(+/-)
Imipenem-relebactam	+	+	+	-	-
Cefiderocol	+	+	+	+	+
Colistin (combination)	+	+	+	+	+
Fosfomycin (<i>E. coli</i>)	+	+	+	+	+

Susceptibility of OXA-48 producers

- Avibactam inhibits OXA-48
- Ceftazidime is not affected by hydrolysis – rather resistance is conferred by other enzymes
- MER-VAB can often be *in vitro* susceptible, but this is not related to VAB inhibition of OXA-48 – rather to OXA-48 susceptibility to high exposure of meropenem
 - In some animal models MER-VAB has shown inferior efficacy vs OXA-48, compared to ceftazidime-avibactam (Asempa T. JAC 2023)
- Cefiderocol: no advantage over CAZ-AVI
- Yahav D et al. Clin Microbiol Rev. 2020; 34: e00115

P. aeruginosa – activity vs mechanisms of resistance

Antibiotics	AmpC	Class A carba-penem ase	MBL (class B)	Porin loss
Ceftolozane-tazobactam	+	-	-	+
Ceftazidime-avibactam	+	+	-	+
Meropenem-vaborbactam	+	+	-	-
Imipenem-relebactam	+	+	-	+
Cefiderocol	+	+	+	+

+ = contrary to imipenem alone remains stable

Võimalus määrata laborite lõikes

Preparaat	ITK	PERH	TÜL	LTKH
Ceftazidime-avibactam	+	+	+	+
Ceftolozane-tazobactam	+	+	+	+
Meropenem-vaborbactam	-	-	-	-
Imipenem-relebactam	-	-	-	-
Cefiderocol	+	+	+	+
Colistin	+	+	+	+
Fosfomycin	+	+	+	+
Fidaxomicin	-	-	-	-