

P1874 *In vitro* activity of eravacycline and comparators against Gram-positive bacteria collected from European hospitals in 2017

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Background: Eravacycline is a novel, fully-synthetic, fluorocycline antibacterial of the tetracycline class that has recently obtained approval in the US and Europe for the treatment of complicated intra-abdominal infections in adults. Eravacycline has shown activity against a broad range of Gram-negative, Gram-positive and anaerobic organisms. The purpose of this present study was to demonstrate the *in vitro* activity of eravacycline and comparators against Gram-positive bacteria isolated from European patients in 2017.

Materials/methods: Non-duplicate, non-consecutive, single-patient clinical isolates causing gastro-intestinal, urinary-tract and respiratory infections were collected in 2017 from hospitals in Europe as part of an on-going surveillance study of eravacycline activity. MICs were determined by CLSI broth microdilution.

Results: Summary MIC data for eravacycline and tigecycline are shown in the Table. Eravacycline MICs were generally 2 to 4-fold lower than tigecycline MICs.

Organism	N	Eravacycline MIC (mg/L)				Tigecycline MIC (mg/L)			
		MIC ₅₀	MIC ₉₀	MIN	MAX	MIC ₅₀	MIC ₉₀	MIN	MAX
<i>E. faecalis</i>	195	0.06	0.06	0.008	0.12	0.12	0.12	0.015	0.25
<i>E. faecium</i>	191	0.03	0.06	0.015	0.25	0.06	0.12	0.03	1
VRE	48	0.03	0.06	0.015	0.25	0.06	0.12	0.06	1
<i>S. aureus</i> , MR	114	0.03	0.06	≤ 0.008	0.25	0.12	0.25	0.03	1
<i>S. aureus</i> , MS	103	0.03	0.06	0.015	0.12	0.12	0.25	0.06	1
Viridans streptococci	209	0.03	0.06	0.004	0.12	0.06	0.12	≤ 0.008	> 1

MIC_{50/90}, minimum inhibitory concentration required to inhibit growth of 50/90% of isolates, respectively.
VRE, vancomycin-resistant enterococci. MR, methicillin-resistant. MS, methicillin-susceptible

Conclusions: Overall, eravacycline MIC₉₀ for enterococci, *S. aureus* and viridans streptococci isolates was 0.06 mg/L and was unaffected by MR or VRE phenotype. Eravacycline shows excellent *in vitro* activity, with lower MICs than tigecycline, against Gram-positive cocci, including resistant phenotypes, in patients from Europe.