

P0327

Paper Poster Session

Susceptibility trends for old and new antibiotics

Antimicrobial susceptibility profiles of bacterial isolates from intra-abdominal and skin and skin structure infections in Eastern and Western Europe

Doug Biedenbach<sup>1</sup>, Daniel Sahm\*<sup>1</sup>, Meredith Hackel<sup>1</sup>, Heidi Leister-Tebbe<sup>2</sup>

<sup>1</sup>International Health Management Associates, Inc., Schaumburg, Illinois, United States

<sup>2</sup>Pfizer, Inc., Collegeville, Pennsylvania, United States

**Background:** The Tigecycline European Surveillance Trial (TEST) monitors the *in vitro* activity of tigecycline and other antimicrobials against clinically-relevant pathogens collected globally. This study reports on the activity of tigecycline and comparators against IAI and SSTI isolates collected in Eastern and Western European (EU) countries.

**Material/methods:** Non-duplicate clinical *E. coli* and *Klebsiella* spp. isolates from IAI (2915) and *S. aureus* and  $\beta$ -hemolytic streptococci from SSTI (9365) were collected from medical centers in Eastern (13 countries) and Western (16 countries) EU during 2004-2015. Organism identification and antibiotic susceptibility testing was performed by the local laboratories. Susceptibility (S) testing was performed using broth microdilution according to CLSI guidelines and categorical interpretation of results was done using EUCAST breakpoints.

**Results:** The table provides MIC<sub>90</sub> and (% S) data for tigecycline and comparators against key pathogens by the two EU regions.

Organism (n)	MIC <sub>90</sub> (%S) Eastern/Western EU				
IAI	TGC	MEM	TZP	LVX	AMK
<i>E. coli</i> (165/1223)	0.5(98.8)/0.5(99.4)	0.12(99.3)/ $\leq$ 0.06(99.3)	32(83.0)/16(88.1)	>8(71.5)/>8(74.2)	16(89.7)/8(97.2)
<i>Klebsiella</i> spp. (121/988)	2(89.3)/2(87.6)	1(90.7)/1(91.7)	>128(63.6)/>128(72.5)	>8(68.6)/>8(76.7)	16(89.3)/8(90.4)
SSTI	TGC	MIN	LVX	VAN	
MSSA (805/4503)	0.25(100)/0.25(100)	0.5(92.3)/0.5(96.0)	0.5(96.0)/0.5(91.6)	1(100)/1(100)	
MRSA (334/1825)	0.25(100)/0.25(100)	8(76.1)/0.5(90.4)	32(21.6)/32(19.2)	1(100)/1(100)	
$\beta$ -strep (220/1678)	0.12(100)/0.06(100)	8(13.6)/>8(33.8)	1(97.3)/1(95.7)	0.5(100)/0.5(100)	

\*TGC (tigecycline), MEM (meropenem), TZP (piperacillin-tazobactam), LVX (levofloxacin), AMK (amikacin), MIN (minocycline), VAN (vancomycin)

\*\*Drugs with >90% S are shaded in darker grey

**Conclusions:** Regardless of European region TGC exhibited potent *in vitro* activity against both the gram-negative and gram-positive species evaluated. However, given the ability of many of these species to develop antimicrobial resistance, ongoing monitoring of activity on a regional basis is warranted.