

P1596

Poster Session VI

Resistance surveillance: Gram-positives and others

IN VITRO ACTIVITY OF ANTIMICROBIAL AGENTS TESTED AGAINST ANAEROBIC PATHOGENS FROM THE EUROPEAN TEST PROGRAM DURING 2012-2013

D. Biedenbach¹, M. Hackel¹, I. Morrissey², S. Bouchillon¹, H. Leister-Tebbe³

¹Microbiology, IHMA Inc., Schaumburg, USA ; ²Microbiology, IHMA Europe Sarl, Epalinges, Switzerland ;

³Microbiology, Pfizer Inc., Collegetown, USA

Objectives: Anaerobes can be very difficult to treat, particularly among patients recovering from surgical procedures. Complicated intra-abdominal (cIAs) and skin and skin structure (cSSSIs) infections are major causes of morbidity and can cause significant mortality among patients who develop septicemia. Tigecycline is indicated in the treatment of cSSSIs and cIAs and is microbiologically active against both aerobic and anaerobic pathogens. This study investigated the activity of antimicrobial agents tested against anaerobic isolates collected from European Union (EU) hospitals over the past two years from the TEST program. **Methods:** During the TEST program (2012-2013), 1,250 Gram-positive (GP; 619) and Gram-negative (GN; 631) anaerobic isolates were susceptibility (S) tested against TGC and comparators using agar dilution CLSI methods. EUCAST breakpoint (BP) criteria were applied. Quality control strains were used to verify all results. **Results:** Among the GN anaerobic species %S to clindamycin (CLI), meropenem (MEM), metronidazole (MET) and pip-tazo (TZP) was, 76.1%, 96.4%, 95.4%, and 95.7%, respectively. Among GP anaerobic species, %S was CLI (87.3%), MEM (99.1%), MET (98.6%), penicillin (87.1%), and TZP (98.8%) for species with a defined BP.

The table provides the number of isolates and cumulative % inhibited frequency distribution at each TGC MIC value (mg/L) for GP and GN anaerobes.

Organism (n)	<=0.06	0.12	0.25	0.5	1	2	4	8	16	32
<i>Bacteroides</i> spp. (420)	133	61	69	74	36	25	15	4	2	1
Cum%	31.7	46.2	62.6	80.2	88.8	94.8	98.3	99.3	99.8	100
<i>Parabacteroides</i> spp. (11)	3	1	2	5						
Cum%	27.3	36.4	54.6	100						
<i>Prevotella</i> spp. (200)	93	5	34	17	14	6	1	1		
Cum%	46.5	63.5	80.5	89.0	96.0	99.0	99.5	100		
<i>Clostridium</i> spp. (356)	234	22	43	22	35	14	5	3		
Cum%	65.7	77.8	84.0	93.8	97.8	99.8	99.2	100		
<i>Peptostreptococcus</i> spp. (140)	109	20	6	2	1	1	1			
Cum %	77.9	92.1	96.4	97.9	98.6	99.3	100			
Other GP anaerobes (123)	108	9	4	1	1					
Cum %	87.8	95.1	98.4	99.2	100					

Conclusions: TGC provided significant *in vitro* activity against both GP combined (MIC₉₀; 0.5 mg/L) and GN combined (MIC₉₀; 1 mg/L) anaerobes collected from EU medical centers. This significant collection of anaerobic pathogens from EU countries shows that TGC had activity of >=95% against all species at a MIC value of <=2 mg/L, its FDA susceptible breakpoint, although insufficient evidence exists for a defined EUCAST breakpoint. Continued monitoring of this important group of pathogens is vital to determination of the S profile of TGC and comparator agents.