Multicenter Evaluation of Tigecycline Activity in Latin America: Report from the SENTRY Antimicrobial Surveillance Program (2009)

DJ Farrell, HS Sader, SD Putnam, RN Jones JMI Laboratories, North Liberty, Iowa, USA

Abstract #74.006

ICID 2010 JMI Laboratories North Liberty, IA, USA www.jmilabs.com 319.665.3370, 319.665.3371 helio-sader@jmilabs.com

ABSTRACT

Background: Tigecycline, the first glycylcycline, presents a therapy option for emerging multidrug-resistant (MDR) Gram-positive (GP) and -negative (GN) pathogens in complicated intra-abdominal, skin structure, and respiratory infections. Latin American countries have high and increasing prevalence of MDR isolates of Enterobacteriaceae (ESBLs), *Acinetobacter* spp. (carbapenem-resistant) and Gram-positive cocci (MRSA, VRE). The aim of this study was to assess the activity of tigecycline and comparator antimicrobials against recent (2009) isolates from Latin America.

Methods: Ten sites forwarded 2,672 strains to a central laboratory (JMI Laboratories, North Liberty, IA, USA). Infection types (n) were: bloodstream (1139), community respiratory (59), hospitalized pneumonia (424), skin and skin structure (514), GP miscellaneous (536). Country (n sites; n isolates) were: Argentina (2; 641), Brazil (4; 977), Chile (2; 557), and Mexico (2; 497) Susceptibility testing against a large panel of antimicrobials was performed by CLSI methods (M07-A8, 2009). Identifications were confirmed and interpretive/screening criteria were also by CLSI guidelines (M100-S19, 2009), except for tigecycline where United States - Food and Drug Administration (USA-FDA) breakpoints were applied. **Results**: Tigecycline was active against 96-100% of indicated/tabulated species (see Table). Tigecycline MIC_{90} values were not influenced by oxacillin or vancomycin susceptibility patterns for S. aureus and enterococci, respectively (0.25 µg/ml for total S. aureus and enterococci, MSSA, MRSA, VRS, and VRE). Resistance patterns noted were: tetracycline (see Table), ESBL- and fluoroquinolone resistance in Enterobacteriaceae (28.8, 33.7%, respectively), VRE (9.9%), MRSA (47.7%) and Acinetobacter spp. carbapenem (imipenem)-resistant (76.1%).

RESULTS

- Tigecycline was highly active against both oxacillin-resistant and -susceptible *S. aureus* (MIC₅₀ and MIC₉₀, 0.25 µg/ml for both groups). More than 99% of strains were tigecycline-susceptible (MIC, ≤0.5 µg/ml; Table 1). Resistance to either oxacillin or tetracycline did not affect tigecycline in vitro activity against staphylococci.
- Similar to S. aureus, both oxacillin-resistant and -susceptible coagulase-negative staphylococci (CoNS) were very susceptible to tigecycline (MIC₅₀, 0.25 µg/ml and MIC₉₀, 0.5 µg/ml [Table 1]; 99.6% inhibited at ≤0.5 µg/ml).

Table 1. Antimicrobial activity of tigecycline and comparator

- The highest tigecycline MIC value among *Enterococcus* spp. strains was 0.5 μg/ml (MIC₅₀ and MIC₉₀, 0.25 μg/ml; 96.6% susceptible). Linezolid (MIC₅₀ and MIC₉₀ of 2 μg/ml) was also very active against *Enterococcus* spp. (100.0% susceptible), while 9.9% of strains were vancomycin-non-susceptible (VRE). All VRE strains were susceptible to tigecycline (Table 1).
- Tigecycline was highly active against *S. pneumoniae* (highest MIC was 0.12 μ g/ml), including isolates resistant to penicillin and/or tetracycline and/or erythromycin. β -haemolytic and viridans group streptococci were also very susceptible to tigecycline (MIC₉₀, 0.06 and 0.12 μ g/ml, respectively; Table 1).
- As shown in Table 2, *E. coli* (MIC₉₀, 0.25 μg/ml) strains were slightly

Organism	Cum. % inhibited at tigecycline MIC (µg/ml):					Tig	Tet		
(no. tested)	≤0.06	0.12	0.25	0.5	1	2	4	% S ^a	% R ^b
S. aureus (688)	10	46	99	>99	100			99.9	6.7
CoNS (221)	8	35	89	>99	100			99.5	7.7
Enterococci (292)	18	49	97	100				96.6	61.0
<i>E. coli</i> (291)	4	35	90	>99	>99	>99	100	99.7	47.8
Enterobacter (107)	0	4	41	81	98	100		100.0	16.8
Klebsiella (202)	0	3	43	85	95	99	100	98.5	29.2
Acinetobacter (205)	2	5	28	60	89	99	100	98.5	28.3

a. Tigecycline susceptibility by USA-FDA and Jones et al. (2007) criteria.

b. Tetracycline resistance by CLSI criteria.

Conclusions: MDR rates across all GP and GN species have increased in Latin America. However, tigecycline remained very active against these MDR strains. Tigecycline exhibited promising spectrum/potency exceeding currently available agents against sampled isolates from Latin America.

INTRODUCTION

Tigecycline is a glycylcycline that was first licensed by the United States (USA) Food and Drug Administration (FDA) in 2005 and the European Medicines Agency (EMEA) in 2006 as a parenteral agent for the treatment of complicated skin and skin structure infections (cSSSI) and intra-abdominal infections (IAI). This unique agent has stability against mechanisms of tetracycline resistance including increased binding affinity to tetracycline-resistant ribosomes and inhibition of efflux determinants; and represents a therapy option for emerging multidrug-resistant (MDR) Gram-positive and -negative pathogens.

antimicrobial agents when tested against Gram-positive isolates collected in Latin American medical centers.

Antimicrobial agont 50% 90% Range %87/%Re ¹ Tagesplane' 0.25 0.25 s0.30 - 1 99.9/- Doradilin 1 s.2 90.252 88.1/43.2 Cimicamyon 81.25 s.2 90.252 88.1/43.2 Cimicamyon 80.25 s.2 925 88.1/43.2 Timorophon 90.5 s.0.5			MIC in µg/n	nl	
S aucisis (968) Discription provide	Antimicrobial agent	50%	90%	Range	%S / %R ^a
Tiggeryolinek 0.25 0.20 2.30 1 0.90/	S. aureus (688)				
Data myoin 16 2 20 20 22 24 24 24 25 26 26 26 26 26 25 20 25 2 26 25 20 5 2 26 27 26 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 100.07		0.25	0.25	≤0.03 – 1	99.9 / -
Elindamyoin 20.25 20.2522 04.87.35.0 Linozoldi 2 2 0.52 100.07.1 Timerpointsuffamelhouzole 30.5 40.5 5.4 40.5 20.07.1 Timerpointsuffamelhouzole 30.5 40.5 30.5 90.5 100.07.0 Concolline-Linscoptant 1 1 0.5 2 90.7 100.07.0 Concolline-Linscaptole (80) 1 1 0.5 100.07.1 100.07.0 Concolline-Linscaptole (80) 20.25 0.05 100.07.1 100.07.0 100.07.0 Timestoprimutule-methouzole 22 22 20.5-2 100.77.0 100.07.0 Timestoprimutule-methouzole 20.5 20.5 20.5 100.77.0 100.07.0 Varcomyoin 1 1 0.5-2 100.07.0 100.07.0 Varcomyoin 2 22 20.5 100.5 100.07.0 100.07.0 Varcomyoin 2 20.25 20.25 20.25 100.77.1 100.07.0 <	Oxacillin Erythromycin	1	>2	≤0.25 - >2 <0.25 - >2	52.3/47.7
Levoloxian \$30.5 \$-44 \$0.5 ->4 \$0.25 ^0.38 B Linozold 2 2 2 0.5 = 0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 ^0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 -> \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 \$0.5 -> \$0.5 \$0.5 \$0.5 \$0.5 \$0.5 \$0.5 \$0.5 \$0.5	Clindamycin	≤0.25	>2	≤0.25 - >2	64.8 / 35.0
Linezolid 2 2 0.5–2 1000/- Transportant Jamenbaszele 30.5 90.5–2 1000/- Transportant Jamenbaszele 30.5 90.5–32 061.13 3 Transportant Jamenbaszele 30.5 90.5–32 061.13 3 Transportant Jamenbaszele 30.5 90.5–32 080.13 3 Transportant Jamenbaszele 20.5 90.5–32 080.13 3 Transportant Jamenbaszele 20.5 90.5–32 080.13 3 Linezolid 2 2 0.5 90.5–34 086.43 3 Linezolid 2 2 2 0.5 2 00.0–1 09.7.1 Terapolanin 32.5 90.5 90.5–32 09.2.10 10.0.10 Vancomycin 2 2 2 0.5 2 00.0–1 09.7.1 Terapolanin 2 2 2.2 0.5–2 00.0.1 00.0.10 Vancomycin 2 2 2 2 0.5–2 00.0.1 00.0.10 Trinsethoprimulamethoxazole 30.5 90.5 90.5–32 99.7.17.3 Tetapolanin 3 2 9.2 9.2 00.5–32 99.7.17.3 Tetapolanin 3 2 9.2 9.2 0.25–32 90.0.61 Trinsethoprimulamethoxazole 30.5 90.5 90.5–32 99.7.17.3 Tetapolanin 3 2 9.2 9.2 00.5–32 90.0.1 1 Trinsethoprimulamethoxazole 30.5 90.5–32 99.7.17.3 Tetapolanin 3 2 9.2 9.2 80.25–32 97.7.17.3 Tetapolanin 3 2 9.2 80.25–32 97.7.17.3 Tetapolanin 3 1 4.4 81–16–16 99.27.7.8 Tetapolanin 3 1 4.4 81–16–16 97.7.24.8 Erythromycin 3 2 9.2 80.25–32 90.7.17.3 Tetapolan	Levofloxacin	≤0.5	>4	≤0.5−>4	62.6 / 36.8
lettacginine 32 52 52 52 52 50	Linezolid	2	2	0.5 – 2	100.0 / -
Toto optimise family optimised and	letracycline Trimethenrim/aulfomethewazele	≤2 <0.5	≤2 <0.5	≤2 – >8	92.9 / 6.7
Waresmynin 1 1 0.52 100.0.1.0.0 Tigeopcinel 0.25 0.25 0.02 -2.5 86.1.11.3.3 Clindamyoin 50.25 50.25 90.25 -2.5 86.8.1.3.3 Linozolid 2 2 0.52 90.21.5 -2.5 90.21.5 Trimethoprim/sulfamethoxzolo 20.5 50.5 90.5 -2.4 90.01.00.0 Vancomyoin 1 1 0.52 90.21.6.3 70.01.00.0 Vancomyoin 2 2 2.52 90.21.6.3 70.00.0 Vancomyoin 1 1 0.52 90.01.0 70.00.0 Outclintrresistant (22) 2.52 90.21.6.3 70.00.0 70.5.2 Clindamyoin -2 2.5.5 20.52 90.00.0 70.5.2 Clindamyoin 2 2 2.52 90.7.7.3 71.66.3 Timeehoprim/sulfamethoxazole 2.5 2.2 2.0.252 90.7.7.3 Timeehoprim/sulfamethoxazole 2.2	Teicoplanin	≤0.5 ≤2	≤0.5 ≤2	≤0.5 - <i>></i> 2 ≤2 - 8	90.173.9 100.070.0
Oracelline-isdeceptible (360) D25 0.02 0.01 0.01 Trainedpointsulfamathoxacol 22 22 22 23 22 22 0.01 0.00 Variacmycin 22 22 22 22 22 0.02 0.02 0.00 0.00 Variacmycin 22 22 22 22 22 23 77 33 77 34 77 35 100 <	Vancomycin	1	1	0.5 – 2	100.0 / 0.0
Tigespilate ^k 0.25 0.25 0.06 -0.5 90.02 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.06 ->2 0.00 ->0 ->2 0.00 ->0 ->2 0.00 ->0 ->2 0.00 ->0 ->2 0.00 ->0 ->2 0.00 ->0 ->2 0.00 ->0 ->0 0.00 ->0 ->0 0.00 ->0 ->0 ->0 ->0 ->0 ->0 >>0>	Oxacillin-susceptible (360)				
Erynnomycin 40.25 ->2 0.25 ->2 97.27.28 Lawoloxaan 20.25 ->2 99.27.08 Trenchoptin*outsmethoxacole 20.5 ->2 99.27.08 Treacylarin 22 ->2 20.5 ->2 99.27.08 Treacylarin 22 ->2 20.5 ->2 99.27.08 Treacylarin 22 ->2 20.25 ->2 99.7.07 Treacylarin 22 ->2 20.25 ->2 99.7.7 Treacylarin 22 ->2 20.25 ->2 90.7.7 Treacylarin 22 ->2 20.	Tigecycline ^b	0.25	0.25	0.06 – 0.5	100.0 / -
Landback Low 20 Low 20 <thlow 20<="" th=""> <thlow 20<="" th=""> <thlow 20<="" <="" td=""><td>Erythromycin</td><td>≤0.25 <0.25</td><td>>2 <0.25</td><td>≤0.25 - >2 <0.25 - >2</td><td>86.1 / 13.3</td></thlow></thlow></thlow>	Erythromycin	≤0.25 <0.25	>2 <0.25	≤0.25 - >2 <0.25 - >2	86.1 / 13.3
Linezolid 2 2 0.5–2 100.0/- Tetracycline 22 2 2.52–8 99.27.03 Filecoplanin 22 2 2.52–8 99.27.03 Filecoplanin 22 2.2 2.52–8 99.27.03 Timehoprimysulfamethoxazole 2.2 2.2 2.2–2 90.25–2 23.57.75.9 Clindamysin 2.2 2.2 0.5–2 100.0/- Leverfoxazoli 2.2 2.2 0.5–2 100.0/- Tetracycline 2.2 2.2 2.2–8 99.97.04 Linezolid 2 2 2.0.5–2 100.0/- Tetracycline 2.2 2.2 2.2–8 99.97.04 Tetracycline 2.2 2.2 2.2–8 99.97.04 Tetracycline 2.2 2.2 2.2–8 99.97.04 Tetracycline 2.2 2.2 2.2–8 100.0/- Tetracycline 2.2 2.2 0.5–2 100.0/- Tetracycline 2.2 2.2 0.05–2 100.0/- Tetracycline 2.2 2.2 0.05–2 100.0/- Tetracycline 2.2 2.2 0.025–3 17.76.8 Tetracycline 2.2 2.2 0.025–3 17.76.8 Tetracycline 2.2 2.2 0.025–3 10.00.0/- Docols (2.21) Tetracycline 2.2 2.2 0.025–3 17.76.8 Tetracycline 2.2 2.2 0.025–3 17.76.8 Tetracycline 2.2 2.2 0.025–3 17.76.8 Tetracycline 2.2 2.2 0.05–2 10.00.0/- Totacycline 2.2 2.2 0.05–3 17.76.8 Totacplanin 4.2 8 0.2–51 89.5.0 Stracomycin 2.2 2.2 0.05–3 17.76.8 Tetracycline 2.2 2.2 0.5–2 10.00.0/- Totacycline 2.2 2.2 0.5–2 10.00.0/- Tetracycline 3.8 3.8 22–8 8.30.16.10 Vancomycin 2.2 2.2 0.5–2 10.00.0/- Tetracycline 3.8 3.8 22–8 8.30.16.10 Tetracycline 3.8 3.8 22–8 8.30.16.10 Tetracycline 3.1 4.4 81–3 1.8 31.8 31.8 31.8 31. Linezo	Levofloxacin	<u> </u>	<u> </u>	≤0.5 – >4	95.8 / 3.3
Tertacycline 52 52 52 52 50	Linezolid	2	2	0.5 – 2	100.0 / -
Innerflopinn'sultamethoxazole 9J.0.5 9J.0.5 9J.0.6 9J.0.6 Vancomycin 1 1 0.5-2 100.010.0 Vancomycin 2 2 2.2 4 100.010.0 Dacallin-resultant (328) 100.010.0 100.010.0 100.010.0 Chridamycin >2 2 2025 ->2 235.775.9 Chridamycin >2 2 2.05 ->2 235.775.9 Torracyclino 2 2 2.05 ->2 237.77.5 Torracyclino 2 2 2.02 ->2 237.77.6 Torracyclino 2 2 2.02 ->2 237.77.6 Torracyclino 2 2 2.02 ->2 237.77.6 Torracycline 0.25 3.02 ->2 237.77.6 140.010.0 Construct 4 3.4 9.06.7 140.00.0 Construct 2 2 2.02 ->2 37.77 176.7 Toracycline 2 2 2.02 ->2 37.77 177.7 160.00.0	Tetracycline	≤2	≤2	≤2 — >8	91.9 / 7.2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	I rimethoprim/sulfamethoxazole	≤0.5 <2	≤0.5 <2	≤0.5 – >2	99.2 / 0.8
Oxadilin-Galstant (328) Ozb S Ozb	Vancomvcin	<u> </u>	<u> 1</u>	0.5 – 2	100.0 / 0.0
Tigeopoline* 0.25 0.25 0.03 - 1 99.7/- Epritromyrin 3-2 2 20.252 23.3/75.9 Clindamycin 3-2 2 90.252 23.3/75.9 Linezold 2 2 0.53 26.2/73.5 Linezolain 52 25.2 22.8 100.0 /-0 Vaccomycin 1 1 0.5 - 2 100.0 /-0 Vaccomycin 22 22.5 22.8 100.0 /-0 Vaccomycin 22 22.5 22.5 23.0 /0.7 Clindamycin 3-2 24 20.2524 40.6 /0.0 /-0 Clindamycin 3-2 24 42.524 30.7 /-63.0 Clindamycin 3-2 24 42.524 30.6 /-74.30 Timetotoprim/sulamethoxazole 2 2 20.5 -25 70.43.0 Timetotoprim/sulamethoxazole 2 2 20.5 -25 10.0 /-1 Timetotoprim/sulamethoxazole 2 2 20.5 -2 10.0 /-0 Time	Oxacillin-resistant (328)				
Frythromycin 3-2 32 40,25 ->2 23,677.53 Linezold - 2 2 40,5 ->2 23,970.4 Levoltoxacin 3-4 34 50,5 ->3,6 ->2 25,77.3 Trinentoprim/sultamethoxazole 20,5 50,5 50,5 ->2 23,27.77.3 Teicoplanin 52 22 52 52 52,77.3 Teicoplanin 3-2 32 50,5 50,5 ->2 23,77.7 Teicoplanin 3-2 2-2 50,25 ->2 19,071.06 Tigecycline ¹ 0.25 0.5 50,5 ->2 32,77.78 Teicoplanin 3-2 2-2 50,25 ->2 31,77.6 Tigecycline ¹ 0.25 0.5 50,5 ->4 38,77.16 Tigecycline ¹ 0.25 0.5 50,5 ->4 38,77.16 Teicoplanin 3-2 2-2 50,25 ->2 31,77.6 Tinentoprimsultamethoxazole 2 2-2 50,5 ->2 31,77.17.16 Tiacoplanin 22 2-2 50,5 ->2 33,77.7 Timethoprimsultamethoxazole 2 2-2 50,5 ->2 33,77.7 Timetoplanin 3-2 2-2 50,25 ->2 33,77.7 Timetoplanin 3-2 2-2 50,25 ->2 31,77.7 Timetoplanin 3-2 2-2 50,25 ->2 31,77.7 Timetoplanin 3-2 2-2 50,25 ->2 31,77.7 Tiecoplanin 3-1 4 50,5 ->2 100,07.0 Tieracycline 3-3 8 38,25 ->2 8,34,78.4 Cind	Tigecycline ^b	0.25	0.25	≤0.03 – 1	99.7 / -
	Erythromycin	>2	>2	≤0.25 – >2	23.5 / 75.9
	Levofloxacin	>2 >4	>2	≤0.25 - >2 ≤0.5 - >4	29.3770.4
Tartacycline 52 52 52 52 52 77.73 Terocplanin 50.5 50.5 50.5 50.5 50.7 70.73 Terocplanin 52 52 52 52 52 50.7 70.73 Terocplanin 52 52 52 52 100.07.00 70.73 Terocplanin 52 52 52 177.76 73 Expthromyrin 52 52 52.7 71.768.3 77.74.80 Lavalloxacin 4 42 5252 177.768.3 77.74.161.1 Linezold 1 1 5.5 22 50.72.5 190.07.143.0 Timentopriminsulfamethoxazole 2 2 2.5 2.5 2.5 2.5 100.07.00 Timentopriminsulfamethoxazole 2 2 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2	Linezolid	2	2	0.5 – 2	100.0 / -
$\begin{array}{rrrr} Trimethoprim'sulfarenthoxazole s0.5 $0.5 $0.5 $-22 $= 8 $100.070.0 \\ Vancomycin $1 $1 $1 $0.5-2 $100.070.0 \\ Vancomycin $2 $2 $2 $= 8 $100.070.0 \\ Vancomycin $2 $2 $2 $0.03 $-1 $-7.4 \\ Vancomycin $2 $2 $2 $0.02 $2 $10.7168.3 \\ Vancomycin $2 $2 $2 $0.02 $2 $10.7168.3 \\ Vancomycin $2 $2 $2 $0.02 $2 $10.0171.1 \\ Vancomycin $2 $2 $2 $0.02 $2 $100.017.1 \\ Vancomycin $2 $2 $2 $0.02 $2 $100.017.1 \\ Vancomycin $2 $2 $2 $0.02 $2 $10.0171.1 \\ Vancomycin $2 $2 $2 $0.02 $2 $100.017.1 \\ Vancomycin $2 $2 $2 $0.03 $5 $10.017.1 \\ Vancomycin $2 $2 $2 $0.03 $5 $10.017.1 \\ Vancomycin $2 $2 $2 $0.03 $5 $10.017.1 \\ Vancomycin $2 $2 $0.05 $2 $100.07.0 \\ Vancomycin $2 $2 $2 $0.05 $2 $10.07.1 \\ Vancomycin $2 $2 $2 $0.05 $2 $10.07.1 \\ Vancomycin $2 $2 $2 $0.05 $2 $10.17.7 \\ Vancomycin $2 $2 $2 $0.05 $2 $10.17.9 \\ Vancomycin $2 $2 $2 $0.05 $2 $10.07.1 \\ Vancomycin $2 $2 $2 $0.05 $2 $10.07.0 \\$	Tetracycline	≤2	≤2	≤2 – >8	93.9 / 6.1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Trimethoprim/sulfamethoxazole	≤0.5	≤0.5	≤0.5 – >2	92.7 / 7.3
CoNS (22) Construction Construction Tigeopoline ² 0.25 0.5 $\leq 0.025 - s2$ $\leq 10.7/8$ Cindamyein >2 >2 $\leq 0.25 - s2$ $\leq 10.7/8$ Cindamyein >2 >2 $\leq 0.25 - s2$ $\leq 10.0.0^{+}$ Linezold 1 1 $0.5 - s2$ $\leq 0.77.7$ Timethopin/sulfamethoxazole 2 ≥ 2.5 $\leq 0.25 - s2$ $\leq 7.0.7/4.3.0$ Tigeopoline 2 2 $\leq 0.5 - s2$ $\leq 10.0.3 - 0.5$ $\otimes 6.6.7$ Annoomycin 2 2 $\geq 0.25 - s2$ $\approx 10.0.0/1.0$ $\geq 0.25 - s2$ $\approx 10.0.0/1.0$ Consolutionacia 2 ≥ 2.5 $\approx 0.25 - s2$ $\approx 10.0.0/1.0$ $\geq 10.0.0/1.0$ $\geq 10.0.0/1.0$ Consolutionacia 2 ≥ 2.5 $\approx 0.25 - s2$ $\approx 10.7/75.7$ $\geq 10.0.0/1.0$ $\geq 10.0.0/1.0$ Consolutionacia 2 ≥ 2.5 $\approx 0.25 - s2$ $< 10.7/75.7$ $\geq 10.0.0/1.0$ $\geq 10.0.0/1.0$ Vancomycin-susceptible ¹ (263) Tiftacsolutin 1 4	Vancomycin	≤∠ 1	≤∠ 1	≤2 – 8 0 5 – 2	100.0 / 0.0
Tige cycline* 0.25 0.05 s0.03 - 1 -/- Oxaculiin >2 >2 s0.252 31.7 / 48.3 Clindamycin >2 >2 s0.252 31.7 / 48.3 Linexoltoxacin 4 >4 s0.5 - >4 31.7 / 48.1 Linexoltoxacin 4 >4 s0.5 - >4 32.3 / 7.7 Trimethoprim'sulfamethoxacole 2 2 s0.5 - >2 57.0 / 43.0 Teicoplanin 52 8 s2 - >16 96.6 / - Ampicillin 51 >16 56.7 .5 56.6 / - Ampicillin 51 >16 >6.6 / - 100.0 / 10.0 Quinupristin/dafopristin >2 >2 50.5 - >4 66.7 / 131.8 Linexoltoxacin 2 2 50.5 - >4 67.1 / 31.8 Linexoltoxacin 2 2 50.5 - >4 67.1 / 31.8 Linexoltoxacin 1 4 50.5 - >4 67.1 / 31.8 Linexoltoxacin 1 4 50.5 - >4 67.1 / 31.8	CoNS (221)	I		0.0 2	100.07 0.0
$ \begin{aligned} & \text{Drachlin} & >2 & >2 & \text{50} 25 ->2 & 10.0/81.0 \\ & \text{Erythromycin} & >2 & >2 & \text{50} 25 ->2 & 31.7/63.1 \\ & \text{Levolloxacin} & 4 & 4 & 40 & 50.5 ->4 & 37.1/61.1 \\ & \text{Linezolid} & 1 & 1 & 0.5 -2 & 100.0/1.1 \\ & \text{Linezolid} & 1 & 1 & 0.5 -2 & 100.0/1.1 \\ & \text{Timethoprim/sulfamethoxazole} & 2 & >2 & \text{50} 5 ->2 & 57.0/43.0 \\ & \text{Timethoprim/sulfamethoxazole} & 2 & >2 & \text{50} 5 ->2 & 57.0/43.0 \\ & \text{Timethoprim/sulfamethoxazole} & 2 & >2 & \text{50} 5 ->2 & 57.0/43.0 \\ & \text{Timethoprim/sulfamethoxazole} & 2 & 2 & 20.5 ->2 & 57.0/43.0 \\ & \text{Timethoprim/sulfamethoxazole} & 2 & >2 & \text{50} 5 ->2 & 57.0/43.0 \\ & \text{Timethoprim/sulfamethoxazole} & 2 & 2 & 20.5 ->2 & 10.0/10.0 \\ & \text{Enterococcus spp. (282) \\ & \text{Enterococcus spp. (282) \\ & \text{Linezolid} & 2 & >4 & 50.5 ->4 & 67.1/31.8 \\ & \text{Linezolid} & 2 & 2 & 50.25 ->2 & 13.7/75.7 \\ & \text{Tincoplanin} & 52 & >2 & 50.25 ->2 & 13.7/75.7 \\ & \text{Tincoplanin} & 52 & >2 & 50.25 ->2 & 13.7/75.7 \\ & \text{Tincoplanin} & 52 & >2 & 50.25 ->2 & 13.7/75.7 \\ & \text{Tincoplanin} & 51 & 4 & 51 ->16 & 90.2/17.9 \\ & \text{Vancomycin-susceptible' (263) \\ & \text{Vancomycin-susceptible' (263) \\ & \text{Vancomycin-susceptible' (263) \\ & \text{Tigecycline} & >8 & 88 & $22 ->8 & 30.0/61.0 \\ & \text{Vancomycin} & >2 & >2 & 50.25 ->2 & -/. \\ & \text{Linezolid} & 2 & 0.25 ->2 & 50.25 ->2 & -/. \\ & \text{Linezolid} & 2 & 0.25 ->2 & 50.26 ->2 & 8.4/81.0 \\ & \text{Tigecycline} & >8 & 88 & $52 ->8 & 34.6/65.4 \\ & \text{Vancomycin} & >2 & >2 & 50.25 ->2 & 8.4/81.0 \\ & \text{Tigecycline} & >8 & 88 & $52 ->8 & 34.6/65.4 \\ & \text{Vancomycin} & 1 & >4 & $20.5 ->4 & 73.8/251 \\ & \text{Linezolid} & 2 & 0.55 ->2 & $0.77.4 \\ & \text{Levolloxacin} & >4 & $4 & $2.5 - $2 & $0.77.4 \\ & \text{Anpoicillin} & >16 & >16 & $51 = -16 & $27.6/72.4 \\ & \text{Erythromycin} & >2 & $2 & $20.25 ->2 & $0.93.1 \\ & \text{Linezolid} & 1 & $2 & $0.05 - $2 & $0.00.0/ \\ & \text{Anpoicillin} & >16 & >16 & $21 = -16 & $27.6/72.4 \\ & \text{Erythromycin} & $22 & $28 & $22 ->8 & $34.6/65.4 \\ & \text{Vancomycin} & $21 & $51 & $1 & $1 & $1 & $1 \\ & \text{Linezolid} & $1 & $1 & $2 & $0.5 ->2 & $0.9/3.1 \\ & \text{Linezolid} $	Tigecycline ^b	0.25	0.5	≤0.03 – 1	- / -
Erythomycin>2>2S025 ->2S17/78.3Cindamycin>2>2S025 ->280.76.7Linozold110.5437.1/61.1Linozold110.52100.0/-Timethoprim/sultamethoxazole2>220.5 ->257.0/43.0Feicoplanin528 $$2 - >16$ 95.5/0.5Vancomycin220.25 ->257.0/43.0Timethoprim/sultamethoxazole220.25 ->257.0/43.0Vancomycin220.25 ->257.6Ampicilin51>1686.6/13.4Entrococcus spp. (292)7100.7/0.0Quinupristin/dat/opristin>2>20.5 ->2Unoromycin220.5 ->4Quinupristin/dat/opristin>2>220.25 ->16Vancomycin140.25 ->1690.1/8.9Vancomycin220.03 - 0.596.2/-Ampicilin51451 - 71693.2/6.8Cindamycin>2>220.25 ->2100.6/10.0Vancomycin220.05 ->473.8/25.1Linozold220.025 ->210.6/15.21Linozold220.025 ->210.6/16.8Cindamycin>2>20.025 ->210.00/10.0Quinupristin/dat/opristin>2>250.25 ->2100.0/10.0Quinupristin/dat/opristin>2>250.25 ->2100.0/10.0Uinupristin/da	Oxacillin	>2	>2	≤0.25 ->2	19.0 / 81.0
	Erythromycin	>2	>2	≤0.25 – >2 <0.25 – >2	31.7 / 68.3
	Levofloxacin	4	>2	≤0.23 - >2 ≤0.5 - >4	37.1 / 61.1
Terrescycline ≤ 2 4 $\leq 2 - 8$ $\leq 2, -76$ $\leq 2, 70, 43, 0$ Trimetoporinwsultamethoxazole 2 $\geq 0, 5 - 2, 5$ $50, 64, 30$ Enerococcus spp. (292) Tigecycline* 0.25 $50, 03 - 0.5$ $96, 6/$ Ampicillin ≤ 1 > 16 $\delta < 1 - 51$ $\delta < 6, 13.4$ Environcoccus spp. (292) $20, 25 - 52$ $10, 3/, 562$ $20, 25 - 52$ $10, 3/, 562$ Cuorotycin-starodation 2 ≥ 4 $20, 5 - 2$ $100, 0/0.0$ Quinupristin/datopristin ≥ 2 $\geq 22, 25, 2252$ $13, 7/75, 7$ Teicoplanin ≤ 2 $\leq 2, -28$ $30, 0/61, 0$ Vancomycin-susceptible* (263) Tigecycline* 0.25 $0.025 - 52$ $0.7 - 7$ Envelocucin 1 44 $\leq 2 - 28$ $32/2, 6.8$ $73, 8/25, 1$ Linezolid 2 $20, 25 - 22$ $100, 0/0.0$ $74, 73, 8/25, 1$ $100, 0/0.0$ Quinupristin/dat/opristin 2 22 $52, -28$ $34, 6/, 654$ Linezolid 1	Linezolid	1	1	0.5 – 2	100.0 / -
$\begin{array}{l c c c c c c c c c c c c c c c c c c c$	Tetracycline	≤2	4	≤2 – >8	92.3 / 7.7
$\begin{array}{l l l l l l l l l l l l l l l l l l l $	Trimethoprim/sulfamethoxazole	2	>2	≤0.5 - >2	57.0 / 43.0
Entropoccus spp. (292) Image of the second se	Vancomycin	≤2 2	8	$\leq 2 - >16$ 0 25 - 4	95.5 / 0.5 100 0 / 0 0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Enterococcus spp. (292)	L	L	0.20	100.07 0.0
$\begin{array}{l c c c c c c c c c c c c c c c c c c c$	Tigecycline ^b	0.25	0.25	≤0.03 – 0.5	96.6 / -
Elyntromychin >2 >2 >2 >2 $0.25 - >4$ $(0.7)^{2} 0.0 / 0.0$ Quinupristin/daltopristin 2 2 2 $0.5 - >2$ $(0.7)^{7} 7.7$ Teicoplanin ≤ 2 ≤ 2 $\leq 2 - >2$ $\leq 2 - >2$ $(0.5 - >2)$ $(0.7)^{7} 7.7$ Teicoplanin ≤ 2 ≤ 2 $\leq 2 - >2$ $\leq 2 - >16$ $92.1/7.9$ Terracycline >8 >8 $\leq 2 - >8$ $39.0/61.0$ Vancomycin14 $0.25 - >16$ $90.1/6.9$ Vancomycin ≥ 1 4 $\leq 1 - >16$ $93.2/6.8$ Clindamycin >2 >2 $\leq 0.25 - >2$ $10.6/62.1$ Linezolid2 2 $0.5 - >4$ $73.8/25.1$ Linezolid2 2 $0.5 - >2$ $100.0/0.0$ Quinupristin/dalfopristin >2 >2 $\leq 2>2$ $8.4/81.0$ Teicoplanin ≤ 2 >2 $\leq 2>2$ $8.4/81.0$ Teicoplanin <2 >2 $<2.5 - 2$ $6.9/93.1$ Teicoplanin >2 >2 $<2.5 - 2$ $6.9/93.1$ Teicoplanin >2 >2 $<2.5 - 2$ $6.9/93.1$ Levotloxacin >4 2 >4 $6.9/93.1$ Levotloxacin >2 >2 $>0.25 - >2$ $6.9/93.1$ Levotloxacin >2 >2 $>0.25 - >2$ $6.9/93.1$ Levotloxacin >2 >2 $>0.25 - >2$ $6.9/93.1$ Levotloxacin >1 2 $0.2 - >8$ $92 - >8$ Teicoplanin >26 <	Ampicillin	≤1 × 2	>16	≤1 – >16	86.6 / 13.4
Linexold 1 2 2 0.5 - 2 100.0 / 0.0 Quinupristin/dallopristin 2 2 5 2 0.25 - 2 10.7 / 75.7 Tetracycline 2 8 2 2 2 2 2 6 92.1 / 7.9 Tetracycline 2 8 2 2 8 39.0 / 61.0 Vancomycin-susceptible ⁶ (263) Trgecycline ⁶ 0.25 0.25 $\pm 0.3 - 0.5$ 96.2 / - Ampicillin 51 4 ± 116 93.2 / 8.8 Clindarnycin 2 2 ± 2 $\pm 0.5 - 2$ 106. / 52.1 Levofloxacin 1 2 4 $\pm 0.5 - 2$ 100.0 / 0.0 Quinupristin/dallopristin 2 2 ± 2 $\pm 0.5 - 2$ 100.0 / 0.0 Quinupristin/dallopristin 2 2 ± 2 $\pm 0.5 - 2$ 100.0 / 0.0 Quinupristin/dallopristin 2 2 ± 2 $\pm 0.5 - 2$ 100.0 / 0.0 Tetracycline 8 ± 8 ± 8 $\pm 2 - 38$ $\pm 4.81 \cdot 0$ Teicoplanin ± 2 ± 2 $\pm 0.5 - 2$ 100.0 / 0.0 Quinupristin/dallopristin 2 ± 2 $\pm 0.25 - 1$ 100.0 / 0.0 Vancomycin-resistant ⁶¹ (29) Trgecycline ⁶ 0.12 0.25 $\pm 0.03 - 0.25$ 100.0 / 0. Vancomycin 1 2 0.25 - 4 100.0 / 0.0 Vancomycin 2 ± 2 ± 2 $\pm 0.25 - 2$ $\pm 0.3 / 3.1$ Linezolid 2 $\pm 2 - 2 \pm 0.25 - 2 \pm 0.0 / 7.2.4$ Erythromycin 1 2 $0.5 - 2 \pm 0.0 / 0.0$ / 0.0 Vancomycin-resistant ⁶¹ (29) Trgecycline $\pm 4 \pm 4 - 2 - 3 \pm 6.3 / 93.1$ Linezolid 1 $\pm 2 \pm 0.5 - 2 \pm 0.0 / 0.0 / 0.0$ Quinupristin/dalfopristin 1 $\pm 2 \pm 0.25 - 2 \pm 62.1 / 27.6$ Tetracycline $\pm 2 \pm 38 \pm 2 - 38 \pm 79.3 / 20.7$ Vancomycin >16 >16 $\pm 2 - 16 \pm 0.7 / 7.9.3$ Tetracycline $\pm 2 \pm 38 \pm 2 - 38 \pm 79.3 / 20.7$ Vancomycin >16 >16 $8 - 3 - 16 \pm 0.0 / 80.7$ S. pneumoniae (66) Tigecycline ⁶ 0.025 $\pm 0.25 \pm 2 \pm 0.25 - 2 \pm 70.2 / 80.0 / 0.0$ Ceftriaxone $\pm 0.25 \pm 50.25 - 2 \pm 70.4 / 25.8$ Clindamycin $\pm 1 \pm 1 \pm 1 - 4 \pm 95.5 / 0.0$ Ceftriaxone $\pm 0.25 \pm 50.25 - 2 \pm 70.4 / 24.2 / 25.8$ Clindamycin $\pm 0.55 \pm 0.25 \pm 2 \pm 74.2 / 25.8$ Clindamycin $\pm 0.55 \pm 0.25 \pm 2 \pm 74.2 / 25.8$ Clindamycin $\pm 0.55 \pm 0.25 \pm 2 \pm 74.4 / 25.8$ Clindamycin $\pm 0.55 \pm 0.25 \pm 2 \pm 74.4 / 25.8$ Clindamycin $\pm 0.55 \pm 0.25 \pm 0.25 - 2 \pm 74.4 / 25.8$ Clindamycin $\pm 0.55 \pm 0.25 \pm 0.25 + 2 \pm 74.4 / 25.8$ Clindamycin $\pm 0.55 \pm 0.25 \pm 0.25 + 2 \pm 74.4 / 25.8$ Levofloxacin $\pm 1 \pm 1 - 1 0.00.7 - 100.07 - 100.07 - 100.07 - 100.07 - 100.07 - 100.07 - 100.0$	Levofloxacin	>2	>2 >4	≤0.25 - >2 ≤0.5 - >4	10.3 / 56.2 67 1 / 31 8
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Linezolid	2	2	0.5 – 2	100.0 / 0.0
$\begin{array}{l c c c c c c c c c c c c c c c c c c c$	Quinupristin/dalfopristin	>2	>2	≤0.25 ->2	13.7 / 75.7
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	Teicoplanin Tetre eveline	≤2	≤2	≤2 – >16	92.1 / 7.9
Varian of the second of th	Vancomycin	>8 1	>8 4	≤2 >8 0 25 >16	39.0761.0
$\begin{array}{l c c c c c c c c c c c c c c c c c c c$	Vancomycin-susceptible ^c (263)	•	·	0.20 710	00.17 0.0
$\begin{array}{llllllllllllllllllllllllllllllllllll$	Tigecycline ^b	0.25	0.25	≤0.03 – 0.5	96.2 / -
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Ampicillin	≤1 > 2	4	≤1 – >16 <0.25 → 2	93.2 / 6.8
Levofloxacin1>4 $\leq 0.5 - > 4$ $(73.8/25.1)$ Linezolid22 $0.5 - > 2$ $100.0/0.0$ Quinuprisin/dalfopristin>2>2 $\leq 2.5 - > 2$ $8.4/81.0$ Teicoplanin ≤ 2 ≤ 2 $\leq 2.5 - 2$ $8.4/81.0$ Teicoplanin ≤ 2 $\leq 2.5 - 2$ $3.6/65.4$ Vancomycin12 $0.25 - 4$ $100.0/.0$ Vancomycin12 $0.25 - 4$ $100.0/$ Ampicellin>16>16 $51 - >16$ $27.6/72.4$ Erythromycin>2>2 $\leq 0.25 - >2$ $6.9/93.1$ Levofloxacin>4>4 $2 - >4$ $6.9/93.1$ Linezolid12 $0.5 - >2$ $62.1/27.6$ Teicoplanin>16>16 $\leq 2 - >16$ $20.7/79.3$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ Spanmoniae (66)TTigecycline ⁶ 0.06 0.12 $\leq 0.03 - 0.5$ Tigecycline ⁶ 0.06 0.12 $\leq 0.03 - 8$ $97.0/1.5$ Penicillin' ≤ 0.03 0.5 $\leq 0.025 - 2$ $93.9/0.0$ Ceftriaxone ≤ 0.25 $\leq 0.25 - 2$ $93.9/0.0$ Erythromycin ≤ 0.25 $\leq 0.25 - 2$ $93.9/0.0$ Erythromycin ≤ 0.25 $\leq 0.25 - 2$ $93.9/0.0$ Erythromycin <td< td=""><td>Ervthromvcin</td><td>>2</td><td>>2</td><td>≤0.25 - >2 ≤0.25 - >2</td><td>- / - 10.6 / 52.1</td></td<>	Ervthromvcin	>2	>2	≤0.25 - >2 ≤0.25 - >2	- / - 10.6 / 52.1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Levofloxacin	1	>4	≤0.5 - >4	73.8 / 25.1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Linezolid	2	2	0.5 - 2	100.0 / 0.0
Tetracycline S2	Quinupristin/dalfopristin	>2	>2	≤0.25 – >2	8.4 / 81.0
Vancomycin12 $0.25 - 4$ $100.0/10.0$ Vancomycin-resistant ⁶ (29)Tigecycline ^b 0.12 $0.25 - 4$ $100.0/10.0$ Tigecycline ^b 0.12 $0.25 - 52$ $100.0/10.0$ Ampicillin>16>16 $51 - 516$ $27.6/72.4$ Erythromycin>2>2 $50.25 - 52$ $69/93.1$ Levofloxacin>4>4 $2 - 54$ $69/93.1$ Linezold12 $0.5 - 2$ $100.0/10.0$ Quinupristin/dalfopristin1>2 $50.25 - 52$ $62.1/27.6$ Tetracycline 52 8 $$2 - 58$ $79.3/20.7$ Vancomycin>16>16 $8 - 516$ $0.0/89.7$ S. pneumoniae (66)Tigecycline ^b 0.06 0.12 $50.03 - 6.5$ Tigecycline ^b 0.06 0.12 $50.03 - 8$ $77.3/-79.1$ Amoxicillin/clavulanate 51 51 $51 - 4$ $95.6/0.0$ Ceftriaxone 50.25 $50.25 - 2$ $93.9/6.1$ Levofloxacin11 $50.5 - 2$ $60.6/27.3$ Vancomycin 50.25 $52.5 - 52$ $90.1/9.9$ Cliindamycin 50.25 $50.25 - 52$ $90.1/9.9$ Cliindamycin 50.5 52 $50.25 - 52$ $90.1/9.9$ Cliindamycin 50.5	Tetracycline	≥∠ >8	≥∠ >8	≥∠ ≤2 – >8	34.6 / 65.4
$\begin{array}{l c c c c c c c c c c c c c c c c c c c$	Vancomycin	1	2	0.25 – 4	100.0 / 0.0
Tigecycline ^b 0.120.25 $\leq 0.03 - 0.25$ $100.0/-$ Ampicillin>16>16 $\leq 1 - >16$ $27.6/72.4$ Erythromycin>2>2 $\leq 0.25 - >2$ $6.9/93.1$ Linezolid12 $0.5 - 2$ $100.0/0.0$ Quinupristin/dalfopristin1>2 $\leq 0.25 - >2$ $62.1/27.6$ Teicoplanin>16>16 $\leq 2 - >16$ $20.7/79.3$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $79.3/20.7$ Vancomycin>16>16 $8 - >16$ $0.0/89.7$ S. pneumoniae (66)Tigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ Trigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ $77.3/-$ Penicillin* ≤ 0.03 0.5 $\leq 0.03 - 8$ $97.0/1.5$ Penicillin* ≤ 0.03 0.5 $\leq 0.03 - 8$ $97.0/1.5$ Penicillin* ≤ 0.025 $\leq 0.25 - 2$ $93.9/0.0$ Ceftriaxone ≤ 0.25 $\leq 0.25 - 2$ $93.9/0.0$ Critriaxone ≤ 0.25 $\leq 0.25 - 2$ $93.9/0.0$ Ciftriaxone ≤ 0.25 $\leq 0.25 - 2$ $93.9/0.1$ Levofloxacin11 $\leq 0.5 - 2$ $100.0/0.0$ Tigecycline ≤ 2 >8 $\leq 2 - > 8$ $\leq 4.8/21.2$ Vancomycin ≤ 1 ≤ 1 ≤ 1 $100.0/-$ Periacycline ≤ 2 >8 $\leq 2 - 28$ $48.8/12.1$ Trimetoptim/sulfamethoxazole ≤ 0.5 20.25 $\leq 0.25 - >2$ $90.1/9.9$ Clindamycin ≤ 0.25 <td>Vancomycin-resistant^d (29)</td> <td></td> <td></td> <td></td> <td></td>	Vancomycin-resistant ^d (29)				
Amplotini>10>10>10 $S10$ $S1->10$ $S1->10$ $S10/1-2.4$ Erythromycin>2>2 $S0.25->2$ $6.9/93.1$ Linezolid12 $0.5-2$ $100.0/0.0$ Quinupristin/dalfopristin1>2 $S0.25->2$ $62.1/27.6$ Teicoplanin>16>16 $S2->16$ $20.7/79.3$ Tetracycline ≤ 2 >8 $\leq 2->16$ $20.7/79.3$ Tetracycline ≤ 2 >8 $\leq 2->8$ $79.3/20.7$ Vancomycin>16>16 $8->16$ $0.0/89.7$ S. pneumoniae (66)TTigecycline ^b 0.06 $0.12 \le 0.03 - 0.5$ $77.3/-$ Penicillin ⁴ ≤ 0.03 $0.5 \le 0.03 - 8$ $97.0/1.5$ Penicillin ⁴ ≤ 0.03 $0.5 \le 0.03 - 8$ $97.0/1.5$ Penicillin ⁴ ≤ 0.03 $0.5 \le 0.025 - 2$ $93.9/0.0$ Ceftriaxone $\leq 0.25 \le 0.25 \le 0.25 - 2$ $93.9/0.0$ Erythromycin $\leq 0.25 \le 50.25 = 20.25 - 2$ $93.9/0.0$ Erythromycin $\leq 0.25 \le 50.25 = 2$ $93.9/0.0$ Erythromycin $\leq 0.25 \le 50.25 = 2$ $93.9/0.0$ Erythromycin $\leq 0.25 \le 50.25 = 2$ $93.9/0.0$ Itracycline ≤ 2 $>8 \le 2->8$ Vancomycin $1 \le 1 \le 1$ $1 = 0.00.0/0.0$ Tracycline ≤ 2 $>8 \le 2->8$ Vancomycin $\leq 1 \le 1$ $\leq 1 = 0.00.0/-1$ Penicillin $0.015 = 0.06 \le 0.015 = 0.12$ $100.0/-1$ Erythromycin $\leq 0.25 \le 50.25 = 50.25 = 2$ $90.1/9.9$ Clindamyc		0.12	0.25	≤0.03 – 0.25	100.0 / -
Levoltoxacin>4>4 $2 - >4$ $6.9/93.1$ Linezolid12 $0.5 - 2$ $100.0/0.0$ Quinupristin/dallopristin1>2 $20.25 - >2$ $62.1/27.6$ Teicoplanin>16>16 $42 - >16$ $20.7/79.3$ Tetracycline 52 >8 $52 - >16$ $20.7/79.3$ Tetracycline 52 >8 $52 - >16$ $0.0/77.9.3$ Tetracycline 52 >8 $52 - >8$ $79.3/20.7$ Vancomycin>16>16 $8 - >16$ $0.0/89.7$ S. pneumoniae (66)	Frythromycin	>10	>10	$\leq 1 - > 10$ $\leq 0.25 - > 2$	6.9/93.1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Levofloxacin	>4	>4	2->4	6.9 / 93.1
Quinupristin/dalfopristin 1 >2 $\leq 0.25 - >2$ $\epsilon (2.1/27.6)$ Teicoplanin >16 >16 $\leq 2 - >16$ $20.7/79.3$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $79.3/20.7$ Vancomycin >16 >16 $8 - >16$ $0.0/89.7$ S. pneumoniae (66) Tigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ $77.3/-9.1$ Amoxicillin/1 ≤ 0.03 0.5 $\leq 0.03 - 8$ $97.0/1.5$ Penicillin ⁶ ≤ 0.03 0.5 $\leq 0.03 - 8$ $97.0/1.5$ Penicillin ⁶ ≤ 0.03 0.5 $\leq 0.03 - 8$ $97.0/1.5$ Penicillin ⁶ ≤ 0.03 0.5 $\leq 0.03 - 8$ $97.0/1.5$ Penicillin/2 ≤ 0.03 0.5 $\leq 0.03 - 8$ $97.0/1.5$ Ceftroxime ≤ 1 ≤ 1 $\leq 1 - 4$ $95.5/0.0$ Ceftriaxone ≤ 0.25 $\leq 2.5 - 2$ $93.9/0.0$ Erythromycin ≤ 0.25 $\leq 0.25 - 2$ $93.9/6.1$ Levofloxacin	Linezolid	1	2	0.5 - 2	100.0 / 0.0
Tetracycline >10 >10 >22 >8 $22 - >8$ $79.3/20.7$ Vancomycin >16 >16 $8 - >16$ $0.0/89.7$ S. pneumoniae (66)Tigecycline ^b 0.06 0.12 $<0.03 - 0.5$ $77.3/-$ Penicillin ^a ≤ 0.03 0.5 $\le 0.03 - 8$ $97.0/1.5$ Penicillin ^a ≤ 0.03 0.5 $\le 0.03 - 8$ $72.7/9.1$ Amoxicillin/clavulanate ≤ 1 ≤ 1 $\le 1 - 4$ $95.5/.0.0$ Cefuroxime ≤ 1 ≤ 1 $\le 1 - 8$ $92.0/8.0$ Ceftriaxone ≤ 0.25 $\le 0.25 - 2$ $93.9/.0.0$ Erythromycin ≤ 0.25 $\le 0.25 - 2$ $93.9/.0.0$ Erythromycin ≤ 0.25 $\le 0.25 - 2$ $93.9/.0.0$ Levofloxacin11 $\le 0.5 - 2$ $100.0/.0.0$ Tetracycline ≤ 2 >8 $\le 2 - >8$ $84.8/12.1$ Trimethoprim/sulfamethoxazole ≤ 0.5 >2 $\le 0.5 - >2$ $60.6/27.3$ Vancomycin ≤ 1 ≤ 1 ≤ 1 1 $100.0/-$ Penicillin ≤ 0.015 0.06 $\le 0.015 - 0.12$ $100.0/-$ Penicillin ≤ 0.25 $\le 0.25 - >2$ $90.1/9.9$ $100.0/-$ Clindamycin ≤ 0.25 $\le 0.25 - >2$ $90.1/9.9$ Clindamycin ≤ 0.25 $\le 0.25 - >2$ $90.1/9.9$ Clindamycin ≤ 0.25 $\le 0.25 - >2$ $90.1/9.9$ Clindamycin ≤ 0.25 $\le 0.25 - >2$ $90.0/-$ Unizorid11 $0.5 - 2$	Quinupristin/dalfopristin	1	>2	≤0.25 - >2	62.1 / 27.6
Vancomycin>16>16 $8 - >16$ $0.0 / 20.7$ S. pneumoniae (66)Tigecycline ^b 0.060.12 $\le 0.03 - 0.5$ $77.3 / -$ Penicillin ^e ≤ 0.03 0.5 $\le 0.03 - 8$ $97.0 / 1.5$ Penicillin ¹ ≤ 0.03 0.5 $\le 0.03 - 8$ $97.0 / 1.5$ Penicillin/clavulanate ≤ 1 ≤ 1 $\le 1 - 4$ $95.5 / 0.0$ Cefuroxime ≤ 1 ≤ 1 $\le 1 - 8$ $92.0 / 8.0$ Ceftriaxone ≤ 0.25 $\le 0.25 - 2$ $93.9 / 0.0$ Enythromycin ≤ 0.25 $\le 2.25 - 2$ $93.9 / 0.0$ Enythromycin ≤ 0.25 $\le 0.25 - 2$ $93.9 / 0.0$ Enythromycin ≤ 0.25 $\le 2.25 - 2$ $93.9 / 6.1$ Levofloxacin11 $\$ 0.5 - 2$ $100.0 / 0.0$ Tetracycline ≤ 2 >8 $\le 2 - >8$ $84.8 / 12.1$ Trimethoprim/sulfamethoxazole ≤ 0.5 >2 $\$ 0.5 - 2$ $100.0 / \beta$ -haemolytic streptococci ⁹ (91)Tigecycline ^b $$0.03$ $0.06 \le 0.03 - 0.25$ $100.0 / -$ Penicillin ≤ 0.25 $\le 0.25 - 22$ $94.4 / 5.6$ Levofloxacin $$0.25$ $$0.25 = -22$ $94.4 / 5.6$ Levofloxacin ≤ 0.5 1 $\le 0.5 - 2$ $90.0 / -19.9$ $100.0 / -16.5$ Clindamycin ≤ 0.25 $\le 0.25 - 22$ $94.4 / 5.6$ $100.0 / -16.5$ Levofloxacin ≤ 0.5 $0.25 - 0.5$ $100.0 / -16.5$ Vancomycin 0.5 0.5 $0.25 - 25.5$ $100.0 / -16.5$ <tr< td=""><td>Tetracycline</td><td>>16 <2</td><td>>10 >8</td><td>$\leq 2 - > 16$ $\leq 2 - > 8$</td><td>20.7 / 79.3 79.3 / 20.7</td></tr<>	Tetracycline	>16 <2	>10 >8	$\leq 2 - > 16$ $\leq 2 - > 8$	20.7 / 79.3 79.3 / 20.7
S. pneumoniae (66) Tigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ 77.3 /- Penicillin ^e ≤ 0.03 0.5 $\leq 0.03 - 8$ 97.0 / 1.5 Penicillin' ≤ 0.03 0.5 $\leq 0.03 - 8$ 72.7 / 9.1 Amoxicillin/clavulanate ≤ 1 ≤ 1 $\leq 1 - 4$ 95.5 / 0.0 Cefuroxime ≤ 1 ≤ 1 $\leq 1 - 8$ 92.0 / 8.0 Cefuroxime ≤ 0.25 $\leq 0.25 - 2$ 93.9 / 0.0 Erythromycin ≤ 0.25 $\leq 2.25 \leq 0.25 - 2$ 93.9 / 0.0 Erythromycin $\leq 0.25 \leq 0.25 \leq 0.25 - 2$ 93.9 / 0.0 Erythromycin $\leq 0.25 \leq 0.25 \leq 0.25 - 2$ 93.9 / 0.1 Levofloxacin 1 1 $\leq 0.5 - 2$ 100.0 / 0.0 Tetracycline ≤ 2 $>8 \leq 2 - >8$ 84.8 / 12.1 Trimethoprim/sulfamethoxazole ≤ 0.5 $>2 \leq 0.5 - >2$ 60.6 / 27.3 Vancomycin ≤ 1 ≤ 1 ≤ 1 100.0 / - Penicillin ≤ 0.015 0.06 $\leq 0.03 - 0.25$ 100.0 / - Penicillin ≤ 0.015 0.06 $\leq 0.25 - 2$ 90.1 / 9.9 Clindamycin $\leq 0.25 \leq 0.25 \leq 0.25 - 2$ 90.1 / 9.9 Clindamycin ≤ 0.5 1 $< 0.5 - 2$ 100.0 / 0.0 Linezolid 1 1 0.5 - 2 100.0 / 0.0 Linezolid 1 1 0.5 - 2 100.0 / - Tigecycline ^b ≤ 0.35 1 $< 0.5 - 2$ 100.0 / - Trimethoprimycin $\leq 0.25 \leq 0.25 > 0.25 - 2$ 90.1 / 9.9 Clindamycin $\leq 0.25 \leq 0.25 \leq 0.25 - 2$ 90.1 / 9.9 Clindamycin ≤ 0.5 1 $< 0.5 - 2$ 100.0 / - Tetracycline ≤ 2 $>8 \leq 2 - >8$ 62.6 / 35.2 Vancomycin < 0.5 0.5 0.25 - 0.5 100.0 / - Tigecycline ^b 0.06 0.12 $< 0.03 - 0.5 $ 95.2 / - Penicillin 0.12 2 $< 0.015 - 16 $ 52.4 / 9.5 Erythromycin $\leq 0.25 > 2 \leq 0.25 - 2 $ 85.7 / 9.5 Levofloxacin 1 2 $< 0.25 - 2 \leq 0.25 - 2 \leq 2.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.5 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 5.4 / 42.9$ Clindamycin $< 0.25 > 2 \leq 0.25 - 2 \leq 6.5 / 7.9 \leq 5.2 / 4.8 < 1.9 < 7.9 < 7.9 < 7.9 < 7.9 < 7.9 < 7.9 < 7.9 < $	Vancomycin	- <u>-</u> >16	>16	8 -> 16	0.0 / 89.7
Tigecycline ^b 0.060.12 $\leq 0.03 - 0.5$ 77.3 /-Penicillin ⁶ ≤ 0.03 0.5 $\leq 0.03 - 8$ 97.0 / 1.5Penicillin ⁶ ≤ 0.03 0.5 $\leq 0.03 - 8$ 72.7 / 9.1Amoxicillin/clavulanate ≤ 1 $\leq 1 - 4$ 95.5 / 0.0Cefuroxime ≤ 1 $\leq 1 - 8$ 92.0 / 8.0Ceftriaxone ≤ 0.25 $\leq 0.25 - 2$ 93.9 / 0.0Erythromycin ≤ 0.25 $\leq 0.25 - 2$ 93.9 / 0.1Levofloxacin11 $\leq 0.25 - 2$ 93.9 / 6.1Levofloxacin11 $\leq 0.25 - 2$ 93.9 / 6.1Levofloxacin $\leq 0.25 - 2$ $\leq 0.5 - 2$ 60.6 / 27.3Vancomycin ≤ 1 ≤ 1 ≤ 1 100.0 / -Penicillin $\leq 0.05 - 2$ 90.1 / 9.9100.0 / -Tigecycline ^b ≤ 0.03 0.06 $\leq 0.03 - 0.25$ 100.0 / -Penicillin $\leq 0.25 - 2$ 94.4 / 5.6100.0 / -Levofloxacin $\leq 0.5 - 1$ $\leq 0.05 - 2$ 90.1 / 9.9Clindamycin $\leq 0.5 - 1$ $\leq 0.03 - 0.5$ 95.2 / -Vancomycin 0.5 0.5 $0.25 - 0.5$ 100.0 / -Uridans group streptococci ^h (21)Tigecycline ^b $\leq 0.25 - 2$ $\leq 2.4 / 9.5$	S. pneumoniae (66)				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Tigecycline ^b	0.06	0.12	≤0.03 – 0.5	77.3 / -
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	Penicillin ^e Penicillin ^f	≤0.03 <0.03	0.5 0.5	≤0.03 – 8 <0.03 – 8	97.0 / 1.5 72 7 / 9 1
$\begin{array}{c c} Cefuroxime & \leq 1 & \leq 1 & \leq 1-8 & 92.0 / 8.0 \\ Ceftriaxone & \leq 0.25 & \leq 0.25 & \leq 0.25 - 2 & 93.9 / 0.0 \\ Erythromycin & \leq 0.25 & \geq 2 & \leq 0.25 - 2 & 74.2 / 25.8 \\ Clindamycin & \leq 0.25 & \leq 0.25 & \leq 0.25 - 2 & 93.9 / 6.1 \\ Levofloxacin & 1 & 1 & \leq 0.5 - 2 & 100.0 / 0.0 \\ Tetracycline & \leq 2 & >8 & \leq 2 - >8 & 84.8 / 12.1 \\ Trimethoprim/sulfamethoxazole & \leq 0.5 & >2 & \leq 0.5 - >2 & 60.6 / 27.3 \\ Vancomycin & \leq 1 & \leq 1 & 1 & 100.0 / - \\ \beta-haemolytic streptococci9 (91) \\ Tigecyclineb & \leq 0.03 & 0.06 & \leq 0.03 - 0.25 & 100.0 / - \\ Penicillin & \leq 0.015 & 0.06 & \leq 0.015 - 0.12 & 100.0 / - \\ Erythromycin & \leq 0.25 & \leq 0.25 & >2 & 90.1 / 9.9 \\ Clindamycin & \leq 0.25 & \leq 0.25 & \leq 0.25 - >2 & 90.1 / 9.9 \\ Clindamycin & \leq 0.5 & 1 & \leq 0.5 - 2 & 100.0 / - \\ Intercolid & 1 & 1 & 0.5 - 2 & 100.0 / - \\ Tetracycline & \leq 2 & >8 & \leq 2 - >8 & 62.6 / 35.2 \\ Vancomycin & 0.5 & 0.5 & 0.25 - 0.5 & 100.0 / - \\ Viridans group streptococcih (21) \\ Tigecyclineb & 0.06 & 0.12 & \leq 0.03 - 0.5 & 95.2 / - \\ Penicillin & 0.12 & 2 & \leq 0.015 - 16 & 52.4 / 9.5 \\ Erythromycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 52.4 / 42.9 \\ Clindamycin & \leq 0.25 & 0.5 & 0.25 - >2 & 61.9 / 33.3 \\ Vancomycin & 0.5 & 1 & \leq 0.12 - 1 & 100.0 / - \\ \end{array}$	Amoxicillin/clavulanate	⊒0.00 ≤1	<u>0.5</u> ≤1	<u> </u>	95.5 / 0.0
$\begin{array}{c ccccccccc} Ceftriaxone & \leq 0.25 & \leq 0.25 & \leq 0.25 - 2 & 93.9 \ / 0.0 \\ Erythromycin & \leq 0.25 & >2 & \leq 0.25 - >2 & 74.2 \ / 25.8 \\ Clindamycin & \leq 0.25 & \leq 0.25 & < 0.25 - >2 & 93.9 \ / 6.1 \\ Levofloxacin & 1 & 1 & \leq 0.5 - 2 & 100.0 \ / 0.0 \\ Tetracycline & \leq 2 & >8 & \leq 2 - >8 & 84.8 \ / 12.1 \\ Trimethoprim/sulfamethoxazole & \leq 0.5 & >2 & \leq 0.5 - >2 & 60.6 \ / 27.3 \\ Vancomycin & \leq 1 & \leq 1 & \leq 1 & 100.0 \ / - \\ Penicillin & \leq 0.015 & 0.06 & \leq 0.03 - 0.25 & 100.0 \ / - \\ Penicillin & \leq 0.015 & 0.06 & \leq 0.015 - 0.12 & 100.0 \ / - \\ Erythromycin & \leq 0.25 & \leq 0.25 & \leq 0.25 - >2 & 90.1 \ / 9.9 \\ Clindamycin & \leq 0.25 & \leq 0.25 & \leq 0.25 - >2 & 90.1 \ / 9.9 \\ Clindamycin & \leq 0.25 & \leq 0.25 & \leq 0.25 - >2 & 90.1 \ / 9.9 \\ Clindamycin & \leq 0.5 & 1 & \leq 0.5 - 2 & 100.0 \ / - \\ Tetracycline & \leq 2 & >8 & \leq 2 - >8 & 62.6 \ / 35.2 \\ Vancomycin & 0.5 & 0.5 & 0.25 - 0.5 & 100.0 \ / - \\ Tetracycline & \leq 2 & >8 & \leq 2 - >8 & 62.6 \ / 35.2 \\ Vancomycin & 0.5 & 0.5 & 0.25 - 0.5 & 100.0 \ / - \\ Viridans group streptococcih (21) \\ Tigecyclineb & 0.06 & 0.12 \ < 0.03 - 0.5 & 95.2 \ / - \\ Penicillin & 0.12 & 2 \ < 0.015 - 16 & 52.4 \ / 9.5 \\ Erythromycin & \leq 0.25 & >2 \ < 0.25 - >2 & 52.4 \ / 42.9 \ Clindamycin & \leq 0.25 \ < 0.25 - >2 \ & 52.4 \ / 42.9 \ Clindamycin & \leq 0.25 \ & 0.25 - >2 \ & 52.4 \ / 42.9 \ Clindamycin & \leq 0.25 \ & 0.25 - >2 \ & 52.4 \ / 42.9 \ Clindamycin & \leq 0.25 \ & 0.25 - >2 \ & 52.4 \ / 42.9 \ Clindamycin & \leq 0.25 \ & 0.25 - >2 \ & 52.4 \ / 42.9 \ Clindamycin & \leq 0.25 \ & 0.5 \ & 0.25 - >2 \ & 52.4 \ / 42.9 \ Clindamycin & \leq 0.25 \ & 0.5 \ & 0.25 - >2 \ & 52.4 \ / 42.9 \ Clindamycin & 1 \ & 2 \ & \leq 0.5 - >4 \ & 95.2 \ / 4.8 \ \\ Linezolid & 1 \ & 1 \ & 0.5 - 2 \ & 100.0 \ / - \ \\ Tetracycline & \leq 2 \ & >8 \ & \leq 2 - >8 \ & 61.9 \ / 33.3 \ \hline Vancomycin \ & 0.5 \ & 1 \ & \leq 0.12 - 1 \ & 100.0 \ / - \ \end{bmatrix}$	Cefuroxime	≤1	≤1	≤1 – 8	92.0 / 8.0
Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $(4.2/25.8)$ Clindamycin ≤ 0.25 $\leq 0.25 - >2$ $93.9/6.1$ Levofloxacin11 $\leq 0.5 - 2$ $100.0/0.0$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $84.8/12.1$ Trimethoprim/sulfamethoxazole ≤ 0.5 >2 $\leq 0.5 - >2$ $60.6/27.3$ Vancomycin ≤ 1 ≤ 1 ≤ 1 $100.0/-$ β-haemolytic streptococci ⁹ (91)Tigecycline ^b ≤ 0.03 0.06 $\leq 0.03 - 0.25$ $100.0/-$ Penicillin ≤ 0.03 0.06 $\leq 0.03 - 0.25$ $100.0/-$ Erythromycin ≤ 0.25 $\leq 0.25 - >2$ $90.1/9.9$ Clindamycin ≤ 0.25 $\leq 0.25 - >2$ $90.1/9.9$ Linezolid11 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $62.6/35.2$ Vancomycin 0.5 0.5 $0.25 - 0.5$ $100.0/-$ Viridans group streptococci ^h (21)Tigecycline ^b 0.06 0.12 $< 0.03 - 0.5$ Tigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ $95.2/-$ Penicillin 0.12 2 $0.05 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4/42$	Ceftriaxone	≤0.25	≤0.25	≤0.25 – 2	93.9 / 0.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Erythromycin	≤0.25 <0.25	>2 <0.25	≤0.25 – >2 <0.25 – >2	/4.2 / 25.8 03 0 / 6 1
Tetracycline ≤ 2 >8 $\leq 2 - > 8$ 84.8 / 12.1Trimethoprim/sulfamethoxazole ≤ 0.5 >2 $\leq 0.5 - > 2$ $60.6 / 27.3$ Vancomycin ≤ 1 ≤ 1 ≤ 1 $100.0 / \beta$ -haemolytic streptococcig (91)Tigecycline ^b ≤ 0.03 0.06 $\leq 0.03 - 0.25$ $100.0 / -$ Penicillin ≤ 0.015 0.06 $\leq 0.015 - 0.12$ $100.0 / -$ Erythromycin ≤ 0.25 $\leq 0.25 - > 2$ $90.1 / 9.9$ Clindamycin ≤ 0.25 $\leq 0.25 - > 2$ $94.4 / 5.6$ Levofloxacin ≤ 0.5 1 $\leq 0.5 - 2$ $100.0 / -$ Linezolid11 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - > 8$ $62.6 / 35.2$ Vancomycin 0.5 0.5 $0.25 - 0.5$ $100.0 / -$ Linezolid11 $0.5 - 2$ $100.0 / -$ Tigecycline ≤ 2 >8 $\leq 2 - > 8$ $62.6 / 35.2$ Vancomycin 0.5 0.5 $0.25 - 0.5$ $100.0 / -$ Viridans group streptococci ^h (21)Tigecycline ^b 0.06 $0.12 \leq 0.03 - 0.5$ $95.2 / -$ Penicillin 0.12 2 $\leq 0.25 - > 2$ $52.4 / 9.5$ Erythromycin ≤ 0.25 > 2 $\leq 0.25 - > 2$ $52.4 / 42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - > 2$ $85.7 / 9.5$ Levofloxacin1 2 $\leq 0.5 - > 4$ $95.2 / 4.8$ Linezolid11 $0.5 - 2$ $100.0 / -$ Tetracyc	Levofloxacin	≤0.25 1	<u>≤</u> 0.25	≤0.25 - >2 ≤0.5 - 2	100.0 / 0.0
Trimethoprim/sulfamethoxazole ≤ 0.5 >2 $\leq 0.5 - >2$ $60.6 / 27.3$ Vancomycin ≤ 1 ≤ 1 ≤ 1 $100.0 / \beta$ -haemolytic streptococci ⁹ (91)Tigecycline ^b ≤ 0.03 0.06 $\leq 0.03 - 0.25$ $100.0 / -$ Penicillin ≤ 0.015 0.06 $\leq 0.015 - 0.12$ $100.0 / -$ Erythromycin ≤ 0.25 $\leq 0.25 - >2$ $90.1 / 9.9$ Clindamycin ≤ 0.25 $\leq 0.25 - >2$ $94.4 / 5.6$ Levofloxacin ≤ 0.5 1 $\leq 0.5 - 2$ $100.0 / -$ Linezolid1 1 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $62.6 / 35.2$ Vancomycin 0.5 0.5 $0.25 - 0.5$ $100.0 / -$ Uridans group streptococci ^h (21)Tigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ $95.2 / -$ Penicillin 0.12 2 $\leq 0.015 - 16$ $52.4 / 9.5$ $52.4 / 9.5$ Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4 / 42.9$ Clindamycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4 / 42.9$ Clindamycin ≤ 0.25 >2 $\leq 0.5 - >4$ $95.2 / 4.8$ Linezolid1 1 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9 / 33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0 / -$	Tetracycline	≤2	>8	≤2 – >8	84.8 / 12.1
Vancomycin ≤1 ≤1 ≤1 ≤1 100.0 / - β-haemolytic streptococci ^g (91) Tigecycline ^b ≤0.03 0.06 ≤0.03 – 0.25 100.0 / - Penicillin ≤0.015 0.06 ≤0.015 – 0.12 100.0 / - Erythromycin ≤0.25 ≤0.25 ≤0.25 – >2 90.1 / 9.9 Clindamycin ≤0.25 ≤0.25 ≤0.25 – >2 94.4 / 5.6 Levofloxacin ≤0.5 1 ≤0.5 – 2 100.0 / - Linezolid 1 1 0.5 – 2 100.0 / - Tetracycline ≤2 >8 ≤2 – >8 62.6 / 35.2 Vancomycin 0.5 0.5 0.25 – 0.5 100.0 / - Viridans group streptococci ^h (21) Tigecycline ^b 0.06 0.12 ≤0.03 – 0.5 95.2 / - Penicillin 0.12 2 ≤0.015 – 16 52.4 / 9.5 52.4 / 9.5 52.4 / 9.5 Erythromycin ≤0.25 >2 ≤0.25 – >2 52.4 / 42.9 52.4 / 42.9 52.4 / 42.9 52.4 / 42.9 52.4 / 42.9 52.4 / 42.9 52.4 / 42.9 52.4 / 42.9 52.4 / 42.9 53.3	Trimethoprim/sulfamethoxazole	≤0.5	>2	≤0.5−>2	60.6 / 27.3
Finalenticytic streptococcis (91)Tigecyclineb ≤ 0.03 0.06 $\leq 0.03 - 0.25$ $100.0/-$ Penicillin ≤ 0.015 0.06 $\leq 0.015 - 0.12$ $100.0/-$ Erythromycin ≤ 0.25 ≤ 0.25 $\leq 0.25 - >2$ $90.1/9.9$ Clindamycin ≤ 0.25 ≤ 0.25 $\leq 0.25 - >2$ $94.4/5.6$ Levofloxacin ≤ 0.5 1 $\leq 0.5 - 2$ $100.0/-0.0$ Linezolid 1 1 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $62.6/35.2$ Vancomycin 0.5 0.5 $0.25 - 0.5$ $100.0/-$ Viridans group streptococci ^h (21)Tigecyclineb 0.06 0.12 $\leq 0.03 - 0.5$ $95.2/-$ Penicillin 0.12 2 $\leq 0.015 - 16$ $52.4/9.5$ $52.4/9.5$ Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7/9.5$ Levofloxacin 1 2 $\leq 0.5 - >4$ $95.2/4.8$ Linezolid 1 1 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9/33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0/-$	Vancomycin 8 boomolytic strentosocia (01)	≤1	≤1	≤1	100.0 / -
Penicillin ≤ 0.015 0.06 $\leq 0.015 - 0.12$ $100.0/-$ Erythromycin ≤ 0.25 ≤ 0.25 $\leq 0.25 - 2$ $90.1/9.9$ Clindamycin ≤ 0.25 ≤ 0.25 $\leq 0.25 - 2$ $94.4/5.6$ Levofloxacin ≤ 0.5 1 $\leq 0.5 - 2$ $100.0/-$ Linezolid 1 1 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $62.6/35.2$ Vancomycin 0.5 0.5 $0.25 - 0.5$ $100.0/-$ Viridans group streptococci ^h (21) 712 2 $20.015 - 16$ $52.4/9.5$ Erythromycin 60.25 >2 $\leq 0.25 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7/9.5$ Levofloxacin 1 2 $\leq 0.5 - >4$ $95.2/4.8$ Linezolid 1 1 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9/33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0/-$	Tigecvcline ^b	≤0.03	0.06	≤0.03 – 0.25	100.0 / -
Erythromycin ≤ 0.25 ≤ 0.25 $\leq 0.25 - >2$ $90.1/9.9$ Clindamycin ≤ 0.25 $\leq 0.25 - >2$ $94.4/5.6$ Levofloxacin ≤ 0.5 1 $\leq 0.5 - 2$ $100.0/0.0$ Linezolid11 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $62.6/35.2$ Vancomycin0.50.5 $0.25 - 0.5$ $100.0/-$ Viridans group streptococci ^h (21)Tigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ $95.2/-$ Penicillin 0.12 2 $\leq 0.015 - 16$ $52.4/9.5$ Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7/9.5$ Levofloxacin12 $\leq 0.5 - >4$ $95.2/4.8$ Linezolid11 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9/33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0/-$	Penicillin	≤0.015	0.06	≤0.015 – 0.12	100.0 / -
Clindamycin ≤ 0.25 ≤ 0.25 $\leq 0.25 - >2$ $94.4 / 5.6$ Levofloxacin ≤ 0.5 1 $\leq 0.5 - 2$ $100.0 / 0.0$ Linezolid11 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $62.6 / 35.2$ Vancomycin0.50.5 $0.25 - 0.5$ $100.0 / -$ Viridans group streptococci ^h (21)Tigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ $95.2 / -$ Penicillin 0.12 2 $\leq 0.015 - 16$ $52.4 / 9.5$ Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4 / 42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7 / 9.5$ Levofloxacin1 2 $\leq 0.5 - >4$ $95.2 / 4.8$ Linezolid11 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9 / 33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0 / -$	Erythromycin	≤0.25	≤0.25	≤0.25 - >2	90.1 / 9.9
Levonoxacin ≤ 0.5 1 $\leq 0.5 - 2$ $100.0/0.0$ Linezolid11 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - > 8$ $62.6/35.2$ Vancomycin0.5 0.5 $0.25 - 0.5$ $100.0/-$ Viridans group streptococci ^h (21)Tigecycline ^b 0.06 0.12 $\leq 0.03 - 0.5$ $95.2/-$ Penicillin 0.12 2 $\leq 0.015 - 16$ $52.4/9.5$ Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7/9.5$ Levofloxacin12 $\leq 0.5 - >4$ $95.2/4.8$ Linezolid11 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9/33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0/-$	Clindamycin	≤0.25	≤0.25	≤0.25 – >2	94.4 / 5.6
Tetracycline ≤ 2 >8 $\leq 2 - >8$ $62.6 / 2$ $100.0 / -$ Vancomycin0.50.50.50.25 - 0.5 $100.0 / -$ Viridans group streptococci ^h (21)Tigecycline ^b 0.060.12 $\leq 0.03 - 0.5$ $95.2 / -$ Penicillin0.122 $\leq 0.015 - 16$ $52.4 / 9.5$ Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4 / 42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7 / 9.5$ Levofloxacin12 $\leq 0.5 - >4$ $95.2 / 4.8$ Linezolid11 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9 / 33.3$ Vancomycin0.51 $\leq 0.12 - 1$ $100.0 / -$	Levonoxacin Linezolid	⊂0.5 1	1 1	0.5 2 0.5 2	100.0 / 0.0
Vancomycin 0.5 0.5 $0.25 - 0.5$ $100.0 / -$ Viridans group streptococci ^h (21)Tigecycline ^b 0.06 $0.12 \leq 0.03 - 0.5$ $95.2 / -$ Penicillin 0.12 $2 \leq 0.015 - 16$ $52.4 / 9.5$ Erythromycin ≤ 0.25 $>2 \leq 0.25 - >2$ $52.4 / 42.9$ Clindamycin ≤ 0.25 $0.5 \leq 0.25 - >2$ $85.7 / 9.5$ Levofloxacin1 $2 \leq 0.5 - >4$ $95.2 / 4.8$ Linezolid1 $1 0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 $>8 \leq 2 - >8$ $61.9 / 33.3$ Vancomycin 0.5 $1 \leq 0.12 - 1$ $100.0 / -$	Tetracycline	≤2	>8	≤2 ->8	62.6 / 35.2
Viridans group streptococci ^h (21)Tigecycline ^b 0.06 $0.12 \leq 0.03 - 0.5$ $95.2 / -$ Penicillin 0.12 $2 \leq 0.015 - 16$ $52.4 / 9.5$ Erythromycin ≤ 0.25 $>2 \leq 0.25 - >2$ $52.4 / 42.9$ Clindamycin ≤ 0.25 $0.5 \leq 0.25 - >2$ $85.7 / 9.5$ Levofloxacin1 $2 \leq 0.5 - >4$ $95.2 / 4.8$ Linezolid1 $1 0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 $>8 \leq 2 - >8$ $61.9 / 33.3$ Vancomycin 0.5 $1 \leq 0.12 - 1$ $100.0 / -$	Vancomycin	0.5	0.5	0.25 – 0.5	100.0 / -
Ingecycline 0.00 0.12 $\leq 0.03 - 0.5$ $95.2/-$ Penicillin 0.12 2 $\leq 0.015 - 16$ $52.4/9.5$ Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4/42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7/9.5$ Levofloxacin1 2 $\leq 0.5 - >4$ $95.2/4.8$ Linezolid11 $0.5 - 2$ $100.0/-$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9/33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0/-$	Viridans group streptococci ^h (21)	0.00	040		
Erythromycin ≤ 0.25 >2 $\leq 0.25 - >2$ $52.4 / 42.9$ Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7 / 9.5$ Levofloxacin12 $\leq 0.5 - >4$ $95.2 / 4.8$ Linezolid11 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9 / 33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0 / -$	Penicillin	U.U6 () 12	0.12 2	≥0.03 – 0.5 ≤0 01 <u>5 – 16</u>	90.27 - 52 4 / 9 5
Clindamycin ≤ 0.25 0.5 $\leq 0.25 - >2$ $85.7 / 9.5$ Levofloxacin12 $\leq 0.5 - >4$ $95.2 / 4.8$ Linezolid11 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9 / 33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0 / -$	Erythromycin	≤0.25	>2	≤0.25 ->2	52.4 / 42.9
Levotloxacin12 $\leq 0.5 - >4$ 95.2 / 4.8Linezolid11 $0.5 - 2$ 100.0 / -Tetracycline ≤ 2 >8 $\leq 2 - >8$ 61.9 / 33.3Vancomycin0.51 $\leq 0.12 - 1$ 100.0 / -	Clindamycin	≤0.25	0.5	≤0.25 – >2	85.7 / 9.5
Linezond11 $0.5 - 2$ $100.0 / -$ Tetracycline ≤ 2 >8 $\leq 2 - >8$ $61.9 / 33.3$ Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0 / -$	Levofloxacin	1	2	≤0.5 – >4	95.2 / 4.8
Vancomycin 0.5 1 $\leq 0.12 - 1$ $100.0 / -$	Linezoliu Tetracvcline	1 ≤2	۲ ۶۸	0.⊃ – 2 ≤2 – >8	100.0 / - 61.9 / 33.3
	Vancomycin	0.5	1	≤0.12 – 1	100.0 / -

more susceptible to tigecycline compared to *Klebsiella* spp. and *Enterobacter* spp. (MIC₉₀, 1 μ g/ml for both organisms). Among these frequently isolated enteric pathogens, 98.5-100.0% of strains were susceptible to tigecycline.

- Tigecycline was active against Enterobacteriaceae isolates with ESBL or AmpC derepressed phenotypes found within this collection of isolates (data not shown).
- Tigecycline exhibited limited activity against *P. aeruginosa* isolates (Table 2). In contrast, greater tigecycline activity was observed against *Acinetobacter* spp. (MIC₉₀, 2 µg/ml and 98.5% of isolates inhibited at ≤2 µg/ml) and *S. maltophilia* (MIC₉₀, 1 µg/ml and 95.0% inhibited at ≤2 µg/ml).

Table 2. Antimicrobial activity of tigecycline and comparatoragents tested against Gram-negative organisms collectedin Latin American medical centers.

		MIC in µ	g/ml	
Antimicrobial agent	50%	90%	Range	%S / %R ^a
<i>E. coli</i> (291)	0.05	0.05	0.00	
	0.25	0.25	0.06 – 4	99.7 / 0.0
Piperacillin/tazobactam	2	32	≤0.5 - >64	86.6 / 3.1
Ceftazidime	≤1	>16	≤1 – >16	84.9 / 10.3
Ceftriaxone	≤0.25	>32	≤0.25 – >32	73.5 / 23.4
Gentamicin	≤2	>8	≤2 – >8	79.4 / 19.9
Levofloxacin	≤0.5	>4	≤0.5 – >4	55.0 / 42.6
Imipenem	0.25	0.25	≤0.12 – 1	100.0 / 0.0
Polymyxin B ^c	≤0.5	≤0.5	≤0.5 – >4	99.7 / 0.3 ^c
Klebsiella spp. ^d (202)				
Tigecycline ^b	0.5	1	0.12 – 4	98.5 / 0.0
Piperacillin/tazobactam	4	>64	1->64	68.3 / 19.8
Ceftazidime	≤1	>16	≤1 – >16	69.8 / 23.8
Ceftriaxone	<0.25	>32	<0.25 ->32	57 9 / 39 1
Gentamicin	<2	>8	<2 - >8	68 8 / 25 2
Levoflovacin	- <u>-</u> <0.5	>0	<0.5 - >1	66 3 / 31 2
	<u> </u>	24 05	<0.12 \ 2	00.0 / 1.0
	0.25	0.5 <0.5	$\leq 0.12 - >0$	
POlymyxin B°	≥0.5	20.5	≤0.5 - >4	97.073.0°
Enteropacter spp. ° (107)	o =	4	0.40	
	0.5	1	0.12 – 2	100.0 / 0.0
Piperacillin/tazobactam	4	>64	1 – >64	79.4 / 10.3
Cettazidime	≤1	>16	≤1 – >16	67.3 / 28.0
Ceftriaxone	0.5	>32	≤0.25 ->32	59.8 / 23.4
Gentamicin	≤2	>8	≤2 – >8	84.1 / 13.1
Levofloxacin	≤0.5	>4	≤0.5 – >4	84.1 / 14.0
Imipenem	0.5	1	≤0.12 – 2	100.0 / 0.0
Polymyxin B ^c	≤0.5	>4	≤0.5 – >4	85.0 / 14.0 ^c
S. marcecens (56)				
	1	2	0.25 ->4	94.6 / 3.6
Piperacillin/tazobactam	2	16	1 ->64	92.9/3.6
Ceftazidime	_ <1	8	≤1 – >16	929/36
Ceftriaxone	<0.25	>32	<0.25 - >32	71 4 / 14 3
Centamicin	<u>−</u> 0.20 <2	>02	<2 - >8	83.0 / 12.5
	<u> </u>	>0	= 2 - >0	03.9/12.3
	<u>≤0.5</u>	24 1	$\leq 0.0 - 24$	100.0 / 0.0
	1	. 1	0.25 - 2	100.070.0
Polymyxin B	>4	>4	>4	- / -
P. Mirabilis (38)	0			707/50
	2	4	0.25 ->4	/3.//5.3
Piperacillin/tazobactam	≤0.5	2	≤0.5 – 4	100.0 / 0.0
Ceftazidime	≤1	8	≤1 – 8	100.0 / 0.0
Ceftriaxone	≤0.25	32	≤0.25 – >32	78.9 / 7.9
Gentamicin	≤2	>8	≤2 – >8	71.1 / 28.9
Levofloxacin	≤0.5	>4	≤0.5−>4	65.8 / 34.2
Imipenem	1	2	0.25 - 4	100.0 / 0.0
Polymyxin B	>4	>4	>4	- / -
Acinetobacter spp. (205)				
Tigecycline ^f	0.5	2	≤0.03 – 4	98.5 / 0.0 ^f
Piperacillin/tazobactam	>64	>64	≤0.5 – >64	9.3 / 87.8
Ampicillin/sulbactam	>16	>16	≤2 – >16	13.7 / 78.0
Ceftazidime	>16	>16	≤1 – >16	12.2 / 84.4
Ceftriaxone	>32	>32	≤0.25 - >32	3.9/88.8
Levofloxacin	>4	>4	≤0.5 - >4	137/844
Amikacin	>32	>32	0.5 - 32	25 9 / 62 9
Tohramycin	16	>0Z	0.5 ->52	20.0702.0 163/512
Iminenem	~8	>10	<0.23 >10	23.0 / 76.1
	>0 <0 5	>0 <0 5	=0.12 - 20	23.9770.1
Polymyxin D Decruginese (200)	20.5	20.5	20.0 - 24	90.07 2.0
P. aeruginosa (299)	4	A	0.00 4	1
	>4	>4	0.06 ->4	- / -
Piperacillin/tazobactam	16	>64	1 ->64	/5.3/24./
Ceftazidime	8	>16	≤1 – >16	58.9 / 29.4
Levofloxacin	4	>4	≤0.5 – >4	48.8 / 46.5
Amikacin	4	>32	0.5 – >32	68.6 / 27.4
Tobramycin	1	>16	≤0.12 – >16	60.2 / 39.1
Imipenem	2	>8	≤0.12 – >8	58.2 / 32.8
Polymyxin B	1	1	≤0.5 – 4	99.7 / 0.0
S. maltophilia (20)				
	0.5	1	0.25 – 4	95.0 / 0.0 ^f
	8	>16	<u>≤1</u> – ≤ 16	60 0 / 35 0
Ceftazidime	* /	~ 10		05.0, 00.0
Ceftazidime	<0 5	2	<() 5 _ </td <td>Mn II / n II</td>	Mn II / n II
Ceftazidime Levofloxacin Polymyzin B	≤0.5 2	2 _1	≤0.5 – >4 <0 5 <u>– </u> <1	90.0 / 0.0 62 0 / 01 10
Ceftazidime Levofloxacin Polymyxin B Ticarcillin/cloy/ulonate	≤0.5 2	2 >4	≤0.5 – >4 ≤0.5 – >4 <16 ⇒ 129	95.075.0 63.2721.1°

Latin American countries have high and increasing prevalence of MDR isolates of Enterobacteriaceae (extended spectrum β -lactamase [ESBL] and AmpC derepressed), *Acinetobacter* spp. (carbapenem-resistant) and Grampositive cocci (methicillin-resistant *Staphylococcus aureus* [MRSA] and vancomycin-resistant enterococci [VRE]). The aim of this study was to assess the activity of tigecycline and comparator antimicrobials against recent (2009) isolates from Latin American medical centers participating in the SENTRY Antimicrobial Surveillance Program.

MATERIALS AND METHODS

<u>Organisms</u>: Clinical isolates of aerobic bacteria were collected from 10 Latin American medical centers distributed throughout nine cities (six countries): São Paulo, Florianópolis, Porto Alegre and Brasília, Brazil (977 isolates); Buenos Aires and San Isidro, Argentina (641 isolates); Santiago (two centers), Chile (557 isolates); and Guadalajara and Durango, Mexico (497 isolates). The participant medical centers were directed by protocol to collect isolates from consecutive patients from specific sites of infections. The sites forwarded 2,672 strains to a central laboratory (JMI Laboratories, North Liberty, IA, USA). Infection types were (no. of isolates): bloodstream (1139), community respiratory tract infection (59), hospitalized pneumonia (424), skin and skin structure infection (514), miscellaneous Gram-positive infections (536).

<u>Susceptibility testing</u>: Susceptibility testing of antimicrobials was performed by CLSI methods (M07-A8, 2009). Identifications were confirmed and interpretive criteria were also by Clinical and Laboratory Standards Institute (CLSI, formerly NCCLS) guidelines (M100-S19, 2009), except for tigecycline where USA-FDA breakpoints were applied. Quality control measures were utilized by testing *Streptococcus pneumoniae* ATCC 49619, *S. aureus* ATCC 29213, *Enterococcus faecalis* ATCC 29212, *Escherichia coli* ATCC 25922, and *Pseudomonas aeruginosa* ATCC 27853.

SELECTED REFERENCES

- 1. Clinical and Laboratory Standards Institute (2009). *M07-A8. Methods for dilution antimicrobial susceptibility tests for bacteria that grow aerobically; approved standard: eighth edition.* Wayne, PA: CLSI.
- 2. Clinical and Laboratory Standards Institute (2009). *M100-S19. Performance standards for antimicrobial susceptibility testing: 19th informational supplement.* Wayne, PA: CLSI.
- 3. Fraise AP (2006). Tigecycline: the answer to beta-lactam and fluoroquinolone resistance? *J Infect* 53: 293-300.
- 4. Sader HS, Mallick R, Kuznik A, Fritsche TR, Jones RN (2007). Use of in vitro susceptibility and pathogen prevalence data to model the expected clinical success rates of tigecycline and other commonly used antimicrobials for empirical treatment of complicated skin and skin-structure infections. *Int J Antimicrob Agents* 30: 514-520.
- 5. Stein GE, Craig WA (2006). Tigecycline: a critical analysis. *Clin Infect Dis* 43: 518-524.
- Tygacil Package Insert (2009). available at <u>www.wyeth.com</u>. Accessed August 2009.

ACKNOWLEDGEMENT

This study was supported by a grant from Wyeth Pharmaceuticals.

- a. Criteria as published by the CLSI [2009].
- b. Criteria as published by USA-FDA [Tygacil Package Insert, 2009].
- c. Includes: Enterococcus avium (9 strains), E. casseliflavus (2 strains), E. durans (1 strain), E. faecalis (221 strains), E. faecium (27 strains), E. gallinarum (2 strains), and E. hirae (1 strain).
- d. Includes: Enterococcus faecalis (6 strains), E. faecium (21 strains), and E. gallinarum (2 strains).
- e. Criteria as published by CLSI [2009] for parenteral penicillin (non-meningitis).
- f. Criteria as published by CLSI [2009] for oral penicillin V.
- g. Includes: Streptococcus dysgalactiae (4 strains), Group A Streptococcus (32 strains), Group B Streptococcus (34 strains), Group C Streptococcus (13 strains), and Group G Streptococcus (8 strains).
- h. Includes: Streptococcus anginosus (2 strains), S. milleri (1 strain), S. mitis (11 strains), S. porcinus (1 strain), S. salivarius (4 strains), and unspeciated viridians group streptococci (2 strains).

c. CLSI [2009] breakpoints for *P. aeruginosa* were applied for comparison purposes.

d. Includes: *Klebsiella oxytoca* (14 strains), *K. ozaenae* (1 strain), *K. pneumoniae* (186 strains) and unspeciated *Klebsiella* (1 strain).

- e. Includes: Enterobacter aerogenes (10 strains), E. asburiae (1 strain), E. cloacae (85 strains), E. gergoviae (2 strains) and unspeciated Enterobacter (9 strains).
- f. USA-FDA breakpoints for Enterobacteraiceae were applied for comparison purposes.

CONCLUSIONS

- Tigecycline showed sustained activity and spectrum against Grampositive and -negative bacteria, including MDR strains, causing infection in patients hospitalized in selected Latin American medical centers.
- The results of the present study (2009) indicate that tigecycline may have an important role in the treatment of both hospital- and community-acquired infections in the Latin American region.