

Susceptibility among pathogens isolated from complicated skin and soft tissue infections in Europe; TEST program 2004-2011

D. Biedenbach*, D. Hoban, M. Hackel, R. Badal, S. Bouchillon, J. Johnson, H. Leister-Tebbe (Schaumburg, Collegeville, US)

Objectives: Complicated skin and soft tissue infections (cSSTI) include diabetic foot which are difficult to manage therapeutically. Active antimicrobial agents are required to treat these infections which may be polymicrobial in some cases. Tigecycline (TIG) and other broad spectrum agents are useful in cSSTI and it is important to monitor susceptibility rates. The TEST program has provided surveillance on cSSTI over the last eight years in European (EU) hospitals. **Methods:** The TEST program 2004-2011 tested 16,160 isolates of gram-positive (GP) and -negative (GN) isolates from species listed in the table. These were collected from hospitalized patients with cSSTI in EU hospitals. Isolates were susceptibility (S) tested against TIG and comparators locally using broth microdilution by CLSI methods and CLSI/FDA/EUCAST breakpoint criteria were applied. Phenotypic confirmation testing according to CLSI was performed to confirm ESBL-producing isolates. **Results:** In this collection, the MRSA rate was 25.4%, the VRE rate was 4.3% and ESBL rates were 15.3 and 16.0% for *E. coli* and *K. pneumoniae*, respectively. aAK=amikacin, AMP=ampicillin, CFT=ceftriaxone, LEVO=levofloxacin, MERO=meropenem, PT=pip/tazo, VAN=vancomycin. bCLSI/EUCAST breakpoint (BP) criteria. FDA/EUCAST criteria for TIG; na =no breakpoints. **Conclusions:** Among this large collection of EU SSSI isolates, *S. aureus* was the most common GP species and *Enterobacter* spp. were the most common GN pathogens. S to TIG among all of the isolates in this study ranged from 75.7-100% using EUCAST BP and 93.8-100% using FDA BP criteria. Considering that cSSTI is a very common cause of morbidity, diligent efforts are needed to monitor antimicrobial agents used in the treatment of these infections.

Antimicrobial^a: % Susceptible^b

Organism (n)	AK	AMP	CFT	LEVO	MERO	PT	TIG	VAN
<i>S. aureus</i> , MSSA (3509)	na/na	22.3/na	98.9/na	93.3/93.3	99.8/na	>99.9/na	100.0/100.0	100.0/100.0
<i>S. aureus</i> , MRSA (1192)	na/na	na/na	na/na	14.6/14.6	na/na	na/na	100.0/100.0	100.0/100.0
<i>Enterococcus</i> spp.(1719)	na/na	78.1/77.7	na/na	54.0/na	na/na	na/na	99.8/99.8	95.7/95.7
<i>S. agalactiae</i> (1049)	na/na	100.0/na	100.0/na	98.9/96.4	99.9/na	na/na	100.0/100.0	100.0/100.0
<i>E. coli</i> (2162)	98.8/95.4	34.6/34.6	78.5/78.5	67.7/66.8	99.7/99.9	89.4/85.4	100.0/99.2	na/na
ESBL+ (346)	95.7/84.1	0.6/0.6	0.9/0.9	23.7/22.5	98.7/99.4	70.8/58.7	100.0/98.3	na/na
<i>K. pneumoniae</i> (1267)	95.7/91.6	2.8/2.8	67.2/67.2	72.8/69.8	94.2/95.2	74.7/69.2	96.5/86.6	na/na
ESBL+ (292)	88.0/77.7	0.0/0.0	0.3/0.3	30.0/26.0	89.0/91.6	38.0/27.1	93.8/81.5	na/na
<i>Enterobacter</i> spp (2633)	98.3/96.7	2.9/2.9	64.0/64.0	88.2/86.1	98.3/99.0	76.6/71.4	96.1/89.0	na/na
<i>Serratia</i> spp. (1010)	98.3/96.3	5.0/5.0	83.3/83.3	93.6/88.6	98.4/98.9	93.5/90.5	96.5/75.7	na/na
<i>Acinetobacter</i> spp (1619)	69.2/65.2	na/na	34.0/na	57.4/53.5	70.1/66.3	54.4/na	na/na	na/na