P0241
Paper Poster Session
Focus Acinetobacter

Antimicrobial susceptibility profiles for Acinetobacter baumannii from Europe: TEST 2014-2015

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Background: *Acinetobacter baumannii* has been recognized as an important opportunistic pathogen responsible for pneumonia, septicemia, urinary tract infections and meningitis, and is often associated with nosocomial outbreaks. Due to their capacity to acquire and accumulate resistance determinants, clinical isolates of *A. baumannii* are often multi-drug resistant and difficult to eradicate. In this study, data from the Tigecycline European Surveillance Trial (TEST) program were analyzed to evaluate the activity of tigecycline and comparator antibiotics against recent (2014-2015) clinical isolates of *A. baumannii* from Europe.

Material/methods: Between 2014 and 2015, 300 cumulative sites participated in the TEST program in 19 European countries. A total of 1,119 isolates of *A. baumannii* were identified to the species level and MICs determined at each participating laboratory using supplied broth microdilution panels. Organism identification was confirmed using MALDI-TOF mass spectroscopy at a central laboratory (IHMA, Inc., Schaumburg, IL, US). EUCAST breakpoint criteria were applied to define susceptibility and resistance where available (amikacin, levofloxacin, meropenem); CLSI breakpoints were applied for cefepime, ceftazidime, ceftriaxone, minocycline, and piperacillin tazobactam. There are no breakpoint for tigecycline.

Results: Results are shown in the following table (MIC, $MIC_{50/90}$ in mg/L, %S=% susceptible). Minocycline was the only antimicrobial agent tested with a susceptibility rate >50% against *A. baumannii* from Europe. Tigecycline exhibited potent *in vitro* activity, with $MIC_{50/90}$ values of 0.5/2 mg/L.

Antimicrobial	%S	MIC $_{50}$	MIC $_{90}$	Minimum MIC	Maximum MIC
Tigecycline	na	0.5	2	≤ 0.008	8
Amikacin	41.1	64	> 64	≤ 0.5	> 64
Levofloxacin	26.3	8	> 8	≤ 0.008	> 8
Meropenem	32.4	> 16	> 16	≤ 0.06	> 16
Cefepime	29.9	32	> 32	≤ 0.5	> 32
Ceftazidime	30.8	> 16	> 16	≤ 1	> 16
Ceftriaxone	18.8	> 32	> 32	0.12	> 32
Minocycline	67.4	2	16	≤ 0.5	> 16
Piperacillin Tazobactam	28.9	> 128	> 128	≤ 0.06	> 128

na; no breakpoints available

Conclusions: *A. baumannii* present significant treatment challenges due to lack of activity across many drug classes. Continued monitoring for emerging resistance trends is warranted, and continued

search for newer more effective drugs is critical for the future management of patients with infections caused by these organisms.