the bacteria grown in iron deficit medium. This suggests that
the outer membrane protein also plays an important role in
carbenenem resistance in Acinetobacter spp.

Conclusion: Multiple mechanisms involved for car-
bpenenem resistance in Acinetobacter spp. and therefore,
understanding carbenenem resistance mechanisms might be
crucial for the development of novel therapeutic strategies.
However, it will be an important approach in the near future
if one attempt to develop possible targets of new agents
to control antimicrobial resistance in nosocomial pathogens
such as Acinetobacter spp.

doi:10.1016/j.ijid.2008.05.288

17.023
Antimicrobial Susceptibility and Serotype Distribution of
Nontyphoid Salmonella Clinical Isolates in Seven Asian
Countries, 2003—2005
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Background: Nontyphoid Salmonella infections are ram-
pant in Asia but there has been no large scale collaborative
study to evaluate the serotype distribution and antimicrobial
susceptibility in this region.

Methods: Clinical isolates of nontyphoid Salmonella were
collected from clinical specimens from 11 medical centers
in 7 Asian countries from 2003 to 2005. Broth microdi-
lution method was performed to determine the minimum
inhibitory concentrations of 6 antimicrobial agents.

Results: A total of 400 clinical isolates were col-
lected from Hong Kong, Korea, Philippines, Singapore, Sri
Lanka, Taiwan, and Thailand. The overall susceptibility
was higher to ceftriaxone (97%) and ciprofloxacin (95.5%)
than to traditional antibiotics (chloramphenicol, 72.3%;
trimethoprim/sulphamethoxazole, 71%; ampicillin, 65.5%;
and tetracycline, 54.3%). Among these countries, isolates
from Taiwan and Thailand showed higher resistance to each
of the 4 traditional antibiotics (all \(p<0.001\)), and those
from Korea showed higher resistance to ciprofloxacin (13.5% vs
3.2%; \(p=0.004\)). The multidrug-resistant rate (MDR) was
significantly higher in isolates belonging to serogroups B
(49.6%) and C1 (46.9%) than other serogroups (all \(p<0.004\)).
MDR was common in S. Heidelberg (100%), S. Panama
(87.5%), S. Virchow (87.5%), S. Choleraesuis (85.7%), and
S. Typhimurium (54.4%). High rates of reduced suscepti-
bility to ciprofloxacin (MIC=0.125—1 mg/L) were found in
isolates from Taiwan (48.2%), Thailand (46.2%) and Korea
(36.5%), especially in S. Choleraesuis (68.8%) and S. Vir-
chow (75%). Overall decreased susceptibility to ceftriaxone
(MIC>2 mg/L) remained low except isolates from Taiwan
(40.7%) or isolates of S. Typhimurium (28.6%) and S. Panama
(25%).

Conclusion: Ceftriaxone appears to be drug of choice
in the treatment of invasive nontyphoid Salmonella infec-
tions. High rate of reduced susceptibility to ciprofloxacin
in some Asian countries as well as in some Salmonella
serotypes is a concern. Prudent use of antibiotics in both
humans and food animals should never be overempha-
sized.

doi:10.1016/j.ijid.2008.05.289

17.024
Nationwide Surveillance of in vitro Activities of Tigecy-
cline against Clinical Isolates of Acinetobacter baumannii
in Taiwan
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Background: The Tigecycline In-Vitro Surveillance in Tai-
wan (TIST), initiated in 2006, is a nationwide surveillance
program designed to monitor longitudinally the in vitro
activities of tigecycline against commonly encountered
resistant bacteria in Taiwan. This study aims to determine
the in vitro activities of tigecycline against clinical isolates
of Acinetobacter baumannii in Taiwan.

Methods: A total of 393 isolates of A. baumannii
were collected from various sources of patients treated
at 20 teaching hospitals. Minimum inhibitory concentra-
tions (MICs) for tigecycline were determined by the broth
microdilution methods according the guidelines described
by Clinical and Laboratory Standards Institute (CLSI).
The results were interpreted by the MIC criteria provided by U.S.
FDA tigecycline susceptibility breakpoints listed for Enter-
obacteriaceae (S, \(\leq 2\mu g/mL\); I, 4 \(\mu g/mL\); R, \(\geq 8\mu g/mL\)). All
isolates were also examined for susceptibility to other 11
antimicrobial agents using the disk diffusion method and the
results were interpreted by the CLSI criteria.

Results: Of these A. baumannii isolates, 81.7% were
susceptible to tigecycline by the broth dilution method.
Susceptibility rates of tigecycline to several resistant phe-
notypes determined by the disk diffusion method are shown
below.

Conclusion: Tigecycline exhibited good in vitro activities
(>70%) against Taiwanese A. baumannii isolates, including
various resistant phenotypes.

doi:10.1016/j.ijid.2008.05.290