In Vitro Activity of Colistin, Fosfomycin, and Piperacillin/tazobactam Against *Acinetobacter baumannii* and *Pseudomonas aeruginosa* in Songklanagarind Hospital, Thailand

Thanaporn Hortiwakul, M.Sc.*
Pantip Chayakul, M.D.*
Natnicha Ingviya , B.Sc.**
Vee Chayakul, M.D.***

ABSTRACT

A total of 118 isolates of Gram-negative, non-fermentative bacilli including *Pseudomonas aeruginosa* (60 isolates) and *Acinetobacter baumanni* (58 isolates) were tested for susceptibility to colistin, fosfomycin, and piperacillin/tazobactam. The minimal inhibitory concentration (MIC) of fosfomycin and piperacillin/tazobactam was determined using the Epsilon (E)-test method. The susceptibility of colistin was determined by both disc diffusion and E-test methods. *A. baumannii*, and *P. aeruginosa* were 61.7 percent and 50 percent susceptible to fosfomycin, respectively; and 65 percent and 100 percent susceptible to piperacillin/tazobactam. The inhibition zone of colistin against all isolates was 11-14 mm with 100 percent susceptibility within the MIC range of 0.19-2 mg/L. In conclusion, *A. baumannii*, and *P. aeruginosa* showed little resistance to colistin, and piperacillin/tazobactam was very active against *P. aeruginosa*. The MIC data did not support stand-alone usage of fosfomycin. (*J Infect Dis Antimicrob Agents 2009;26:91-6.*)