**Online Table 1: Diagnostic performance of multiplex-PCR assays for the detection of carbapenemases in *Enterobacteriaceae*, *Pseudomonas* spp. and *Acinetobacter* spp. (EPA) compared to culture method used as standard (n=415) a, b, c**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| M-PCR | Sensitivity  (%, 95% CI) | Specificity  (%, 95% CI) | PPV  (%, 95% CI) | NPV  (%, 95% CI) | LR+  (95% CI) | LR-  (95% CI) | Accuracy  (%, 95% CI) | Kappa  (95% CI) |
| CARBA | 138/144, 95.8  (91.2-98.5) | 260/271, 95.9  (92.9-98.0) | 138/149, 92.6  (87.5-95.7) | 260/266, 97.7  (95.2-99.0) | 95.8/4.1, 23.4  (13.2-42.2) | 4.2/95.9, 0.04  (0.02-0.1) | 398/415, 95.9  (93.5-97.6) | 0.91 |
| CARBA+OXA | 142/144, 98.6  (95.1-99.8) | 260/271, 95.9  (92.9-98.0) | 142/153, 92.8  (87.6-95.8) | 260/262, 99.2  (97.0-99.8) | 98.6/4.1, 24.0  (13.6-43.4) | 1.4/95.9, 0.01  (0.0-0.06) | 402/415, 96.9  (94.7-98.3) | 0.93 |

Note. CI, confidence interval; PPV, positive predictive value; NPV, negative predictive value; LR+, positive likelihood ratio; LR-, negative likelihood ratio; M-PCR, multiplex-PCR

a Of 415 blood culture positive samples, 144 and 271 samples were true positive (carbapenem resistant organism) and true negative (carbapenem susceptible organism) by culture method.

b Details of EPA blood isolates (carbapenem non-susceptible/total no. of isolates, %) based on blood culture: *K. pneumoniae* (80/139, 57.6); *K. oxytoca* (1/2, 50); *E. coli* (31/143, 21.7); *Enterobacter cloaecae* (2/16, 12.5); *Salmonella* spp. (0/9, 0); *Citrobacter freundii* (1/1, 100); *Serratia marcescens* (0/5, 0); *Pseudomonas aeruginosa* (16/51, 31.4); *Pseudomonas* spp. (1/3, 60); *Acinetobacter baumannii* (11/21, 52.4); *Acinetobacter* spp. (2/9, 22.2).

c Other isolates (n): *Aeromonas* spp. (4); *Arthrobacter* spp. (1); *Burkholderia cepacia* (6), *Capnocytophaga* spp. (1), *Chryseobacterium* spp. (3), *Elizabethkingia* spp. (2), *Ochrobactrum* spp. (1), *Ralstonia* spp. (1), *Roseomonas* spp. (1), *Sphingomonas* spp. (2), *Stenotrophomonas* spp. (4), uncultivable bacteria (4)