

Supplement 3. Thirty-five septic episodes with potential time-saving effect of PCR vs. MC technique in identification of pathogen microorganisms

Focus of infection	Initial anti-infective (AI) therapy	New AI therapy after MC diagnostics	Causative pathogen (CP)	Date & time of PCR result	Date & time of MC result	Time-saving effect (h)
Lung	Meropenem	Ciprofloxacin/ Ceftazidime	<i>P. aeruginosa</i>	2. Nov. 20:30	4. Nov. 8:00	35.5
Lung	Ceftriaxone	Meropenem/ Ciprofloxacin	<i>S. aureus, Enterococi</i>	16. Nov. 22:30	19. Nov. 8:00	17.5
Abscess	Imipenem/ Ampicillin/ Fluconazole	Meropenem/ Ciprofloxacin/ Fluconazole	<i>P. aeruginosa, E. cloacae, K. pneumoniae</i>	26. Nov. 19:00	27. Nov. 18:00	23
Abdomen	Piperacillin/ Tazobactam	Imipenem/ Ciprofloxacin	<i>Enterococi</i>	11. Jan. 11:30	14. Jan. 8:00	34.5
Lung	Ceftriaxone	Fluconazole	<i>C. albicans</i>	16. Jan. 16:00	18. Jan. 8:00	40
Lung	Ceftriaxone	Ciprofloxacin/ Meropenem/ Fluconazole	<i>E. cloacae, C. albicans</i>	14. Feb. 12:30	16. Feb. 14:00	49.5
Wound	Imipenem	Imipenem/ Vancomycin	<i>E. faecium, CoNS</i>	16. Oct. 18:30	17. Oct. 12:00	17.5
Abdomen	Vancomycin	Vancomycin/ Ciprofloxacin	<i>E. cloacae</i>	24. Oct. 20:30	26. Oct. 16:00	43.5
Abdomen	Imipenem	Imipenem/ Fluconazole	<i>C. albicans</i>	29. Nov. 19:30	30. Nov. 14:00	18.5
Kidney	Cefotiam	AI therapy ceased	<i>No CP identified</i>	14. Oct. 17:00	18. Oct. 8:00	31
Lung	Clindamycin/ Cefotiam	Meropenem/ Ciprofloxacin	<i>P. aeruginosa, E. coli, K. pneumoniae</i>	21. Jan. 16:00	22. Jan. 17:00	25
Abdomen	Piperacillin/ Tazobactam	Piperacillin/ Tazobactam/ Vancomycin	<i>E. faecium</i>	22. Sep. 20:00	24. Sep. 11:00	39
Abscess	Meropenem	Meropenem/ Cefepime	<i>P. aeruginosa</i>	05. Oct. 24:00	11. Oct. 12:00	24
Abscess	Piperacillin/ Tazobactam	Piperacillin/ Tazobactam/ Fluconazole	<i>C. albicans</i>	21. Nov. 5:30	23. Nov. 10:00	52.5
CSF	Ampicillin/ Sulbactam	Ampicillin/ Sulbactam/ Vancomycin	<i>S. epidermidis in CSF</i>	13. Feb. 14:30	15. Feb. 17:00	50.5
Lung	Piperacillin/ Tazobactam/ Ciprofloxacin/ Fluconazole	AI therapy ceased (symptoms due to lung fibrosis and heart insufficiency)	<i>No CP identified</i>	3. Nov. 18:30	6. Nov. 13:00	66.5
Lung	Ciprofloxacin/ Ceftazidim/ Fluconazole	Imipenem/ Fluconazole	<i>E. cloacae</i>	4. Dec. 24:00	6. Dec. 15:00	39

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CVK	Meropenem/ Ciprofloxacin	Ampicillin/ Ciprofloxacin	<i>E. faecalis</i>	21.Nov. 2:30	23. Nov. 16:00	61.5
Lung	Imipenem/ Vancomycin/ Voriconazol	Imipenem (<i>3 MC tests did not yield CP</i>)*	<i>No CP identified</i>	15. Dec. 24:00	20. Dec. 20:00	116
Wound	Piperacillin/ Tazobactam	AI therapy ceased (<i>2 MC tests did not yield CP</i>)	<i>No CP identified</i>	22. Dec. 18:30	27. Dec. 8:00	109.5
Abscess	Cefotiam/ Clindamycin/ Vancomycin	Cefotiam/ Clindamycin	<i>S. aureus</i>	25. Dec. 14:00	27. Dec. 8:00	42
Lung	Fluconazole	AI therapy ceased	<i>No CP identified</i>	09. Mar. 12:00	11. Mar. 8:00	44
Lung	Meropenem/ Ciprofloxacin	Cefotiam (<i>first 3 MC tests did not yield CP</i>)	<i>E. coli</i>	18. Mar. 11:30	24. Mar. 9:00	141.5
Abscess	Piperacillin/ Tazobactam/ Clindamycin	Continued (<i>first 2 MC tests did not yield CP</i>)	<i>S. aureus</i>	23. Sep. 13:30	27. Sep. 12:00	94.5
Lung	Meropenem/ Ciprofloxacin	continued	<i>P. aeruginosa</i>	15. Oct. 12:00	18. Oct. 8:00	68
Abdomen	Imipenem	continued	<i>E. coli, Enterococci</i>	25. Oct. 21:30	28. Oct. 14:00	64.5
Abdomen	Imipenem/ Vancomycin	continued	<i>Resistant Enterococci</i>	11. Nov. 21:00	18. Nov. 12:00	159
Kidney	Piperacillin/ Tazobactam	continued	<i>E. coli, E. faecalis in urine</i>	20. Nov. 3:30	22. Nov. 9:00	53.5
Wound	Meropenem/Ampicillin	continued (<i>first MC test did not yield CP</i>)	<i>E. cloacae</i>	25. Nov. 22:00	01. Dec. 8:00	130
Abdomen	Imipenem	continued as prophylaxis of necrotizing pancreatitis	<i>No CP identified</i>	21.11., 24:00	24.11., 9:00	57
Lung	Meropenem/ Ciprofloxacin/ Linezolid	continued	<i>E. coli, K. pneumoniae</i>	20. Dec. 10:30	22. Dec. 8:00	45.5
CVC	No AI therapy	No AI therapy, clinical situation improved after CVC withdrawal	<i>P. aeruginosa, E. faecium</i>	17. Jan. 20:00	19. Jan. 8:00	36
CVC	Imipenem/ Ceftriaxone	continued (<i>first 3 MC tests did not yield CP</i>)	<i>K. pneumoniae</i>	9. Dec. 12:30	13. Dec. 9:00	92.5
Abdomen	Imipenem/ Ciprofloxacin	continued (<i>first 3 MC tests did not yield CP</i>)	<i>Enterococci</i>	13. Jan. 8:30	17. Jan. 8:00	95.5
Lung	Meropenem/ Ciprofloxacin	continued	<i>E. cloacae</i>	17. Mar. 17:00	21. Mar. 8:00	87

MC: microbiological culture; AI: anti-infective; CP: causal pathogen; CVC: central venous catheter; CoNS: *coagulase-negative staphylococci*; CSF – cerebrospinal fluid.

*The explanations for outlier values of potential time-sparing effect are given in bold italics