

Supplement 2. Clinical details of 27 septic episodes, where MC technique failed and PCR identified pathogen microorganisms\*.

Focus of infection	Severity of sepsis	PCT ng/ml	Calculated anti-infective therapy	Sample	PCR result	Clinical decision on further therapy
FUO	SSS	0.1	Piperacillin/Tazobactam, Fluconazole	Blood	<i>S. aureus</i> (++)**	Meropenem/Ciprofloxacin because of persistent fever
Abdomen	SSS	38.6	Piperacillin/Tazobactam	Ascites	<i>E. coli</i> (+)	Piperacillin/Tazobactam continued
FUO	SS	0.1	none	Blood	<i>S. epidermidis</i> (++++)	Piperacillin/Tazobactam after abdominal hematoma excision
Wound	SS	0.3	Cefuroxim	Blood	<i>S. aureus</i> (+++), <i>S. epidermidis</i> (++)	Meropenem/Ciprofloxacin because of suspected pneumonia
CVC	SSS	0.41	Meropenem, Vancomycin Fluconazole	Blood	<i>S. aureus</i> (+++)	Ampicillin/Sulbactam because of suspected CVC infection
Lung	SS	0.1	Gentamicin, Ceftriaxon	BS	<i>S. aureus</i> (++)	Meropenem/Ciprofloxacin because of suspected pneumonia
FUO	SS	1.8	Cefuroxim	Blood	<i>S. epidermidis</i> (++) , <i>E. faecium</i> (++)	Meropenem/Ciprofloxacin
FUO	SS	0.14	Ceftriaxon	Blood	<i>S. epidermidis</i> (+++)	Death at ICU
FUO	SS	0.1	Clindamycin, Cefotiam	Blood	<i>S. epidermidis</i> (+++)	New CVC because of suspected CVC infection
FUO	SSS	1.8	Piperacillin/Tazobactam	Blood	<i>S. aureus</i> (+)	New CVC because of suspected CVC infection
FUO	SSS	2.86	Gentamicin/Ceftriaxon	Blood	<i>S. epidermidis</i> (+++), <i>E. faecium</i> (++)	Meropenem/Ciprofloxacin, no sepsis focus found
FUO	SSS	2.8	Meropenem/Ciprofloxacin	Blood	<i>E. faecium</i> (+)	Meropenem/Ciprofloxacin and Vancomycin
FUO	SS	0.1	Cefuroxim	Blood	<i>S. epidermidis</i> (+++)	Imipenem and new CVC
Abdomen	SSS	0.36	none	Blood	<i>S. aureus</i> (++++)	Piperacillin/Tazobactam after colon resection
FUO	SS	16.5	Imipenem	Blood	<i>S. epidermidis</i> (+++)	New CVC because of suspected CVC infection

FUO	SSS	0.59	none	Blood	<i>S. epidermidis</i> (++)	Ampicillin/Sulbactam because of suspected CVK infection
FUO	SS	0.11	none	Blood	<i>C. albicans</i> (+++), <i>S. epidermidis</i> (++)	Meropenem/Ciprofloxacin
FUO	SSS	0.15	none	Blood	<i>S. epidermidis</i> (+), <i>C. albicans</i> (+)	None
FUO	SS	0.11	Ciprofloxacin	Blood	<i>P aeruginosa</i> (+++), <i>S. epidermidis</i> (+)	Ciprofloxacin because of suspected urinary tract infection
FUO	SSS	0.1	Imipenem, Ciprofloxacin, Fluconazole	Blood	<i>S. epidermidis</i> (+)	CVC removal
Lung	SS	0.14	Tobramycin, Ceftazidin, Linezolid	BS	<i>E. faecium</i> (+++), <i>C. albicans</i> (+)	De-escalation to Linezolid due to clinical symptoms
FUO	SSS	0.12	none	Blood	<i>S. epidermidis</i> (++)	Portcath removal
FUO	SSS	0.15	Piperacillin/Tazobactam	Blood	<i>S. epidermidis</i> (++) , <i>S. aureus</i> (++++)	CVC removal
FUO	SS	0.28	Piperacillin/Tazobactam, Fluconazole	Blood	<i>S. epidermidis</i> (+), <i>K. pneumoniae</i> (+)	Piperacillin/Tazobactam
FUO	SS	0.12	Meropenem, Ciprofloxacin	Blood	<i>K. pneumoniae</i> (+)	Piperacillin/Tazobactam
Abdomen	SSS	2.23	Piperacillin/Tazobactam Fluconazole	Blood	<i>P. aeruginosa</i> (+++), <i>E. cloacae</i> (++)	Meropenem, Ciprofloxacin, Fluconazole
Abdomen	SSS	0.43	none	Blood	<i>S. aureus</i> (++++), <i>S. epidermidis</i> (++) , <i>E. faecium</i> (+)	Ciprofloxacin, Piperacillin/Tazobactam, Fluconazole

FUO: fever of unknown origin; S: sepsis; SS: severe sepsis; SSS: septic shock; CVC: central venous catheter.

\*PCR results were not taken into account to improve the anti-infective therapy of sepsis. Anti-infective therapy was changed only according to clinical course of the disease.

\*\* (+) represents the score for DNA concentration according to conversion chart 1, Supplement 1.