

## SUPPLEMENT S1

### *INCLUSION CRITERIA*

1. Patient showed signs of systemic infection (meeting at least two criteria; one in each section):

- Temperature  $\geq 38^{\circ}\text{C}$

and

- Heart Rate  $> 90/\text{min}$
- Systolic Blood Pressure  $< 100\text{mmHg}$
- Respiratory Rate  $\geq 22/\text{min}$
- GCS $<15$

AND

2. Patients showed bacteria specific clinical signs/symptoms of infection with an ESKAPE pathogen (at least one criterion):

- positive urine test strip (Leukocyturia)
- acute bacterial skin and skin structure infections (ABSSSI)
- signs of abscesses in imaging procedure
- acute backpain without trauma and clinical suspected spondylodiscitis
- recent intravenous drug abuse
- endocarditis
- presence of intravascular devices
- presence of peritoneal dialysis
- previous evidence of colonization with ESKAPE organisms
- intraabdominal infection

### *EXCLUSION CRITERIA*

- younger than 18 years
- presence of pneumonia (including clinical suspicion of pneumonia)
- presence of meningitis (including clinical suspicion of meningitis)
- presence ears, nose and throat (ENT) infection (including clinical suspicion of ENT infection)
- presence of or suspicion of colitis
- presence of Influenza or other viral disease explaining the symptoms
- persons who are incapable of giving consent

## SUPPLEMENT S2

*Defined targeted therapy depending on the found pathogen.*

Pathogen	Targeted therapy	Targeted therapy if penicillin allergy exists
Enterococcus faecium	Linezolid, Vancomycin, Daptomycin	
Staphylococcus aureus	Isoxazolympenicillin, Cephalosporine 1 <sup>st</sup> Generation	
Klebsiella pneumoniae	Cephalosporine 3 <sup>rd</sup> Generation,	Ciprofloxacin/Levofloxacin
Acinetobacter baumannii	Meropenem	-
Pseudomonas aeruginosa	Piperacillin/Tazobactam, Ceftazidim, Cefepime	Aztreonam
Escherichia coli	Cephalosporine 2 <sup>nd</sup> or 3 <sup>rd</sup> Generation	-