

## Appendix 1

### Study eligibility criteria

Criterion	Definition
Adult	Age of $\geq 18$ years
Systemic Inflammatory Response Syndrome	<ul style="list-style-type: none"> <li>(i) core temperature of <math>&gt;38^{\circ}\text{C}</math> or <math>&lt;36^{\circ}\text{C}</math></li> <li>(ii) heart rate <math>&gt;90</math> beats/min</li> <li>(iii) respiratory rate <math>&gt;20</math> breaths/min or arterial <math>\text{CO}_2</math> tension <math>&lt;30\text{mmHg}</math> or need for mechanical ventilation,</li> <li>(iv) white blood cell count <math>&gt;12,000/\text{mm}^3</math> or <math>&lt;4000/\text{mm}^3</math> or immature forms <math>&gt;10\%</math></li> </ul>
Acute organ dysfunction	<ul style="list-style-type: none"> <li>(i) Areas of mottled skin</li> <li>(ii) Urinary output <math>&lt;0.5</math> mL/kg for at least 1 h or renal replacement therapy</li> <li>(iii) Lactates <math>&gt;2</math> mmol/L</li> <li>(iv) Abrupt change in mental status</li> <li>(v) Platelet counts <math>&lt;100,000/\text{mL}</math> or disseminated intravascular coagulation</li> <li>(vi) Acute respiratory distress syndrome</li> <li>(vii) Fluid-refractory hypotension or cardiac dysfunction (on echocardiography)</li> </ul>

Absence of indisputable clinical infection	<p>Absence of</p> <ul style="list-style-type: none"> <li>(i) purpura fulminans</li> <li>(ii) cellulitis</li> <li>(iii) toxic shock syndrome</li> <li>(iv) community-acquired pneumonia in previously healthy subjects</li> <li>(v) purulence from wounds or a normally sterile cavity</li> </ul>
Negative microbial cultures	<p>Culture- and Gram-stain negative for all following</p> <ul style="list-style-type: none"> <li>(i) blood</li> <li>(ii) urine</li> <li>(iii) bronchoalveolar lavage</li> <li>(iv) venous and arterial catheters</li> <li>(v) any other fluid from a normally sterile cavity</li> <li>(vi) any surgical wound</li> <li>(vii) cerebro-spinal fluid in case of altered mental status</li> <li>(viii) any other site sampled as clinically indicated</li> </ul>

Criteria adapted from reference 1 (Annane et al, Lancet 2005)

Appendix 2. Procalcitonin-based algorithm

