

**Multimedia Appendix 1 – Definitions of sepsis, severe sepsis or septic shock [7,15]**

<b>Sepsis</b>	<p>Presence (probable or documented) of infection with systemic manifestation:</p> <p><b>General variables:</b></p> <p>Fever <math>&gt;38.3^{\circ}\text{C}</math>, hypothermia <math>&lt;36^{\circ}\text{C}</math>, heart rate <math>&gt;90 \text{ bpm}</math> or more than two SD above the normal value for age, tachypnea, altered mental status, significant oedema or positive fluid balance <math>&gt;20 \text{ ml/kg}</math> over 24 hours, hyperglycaemia with a plasma glucose <math>&gt;140 \text{ mg/dl}</math> or <math>7.7 \text{ mmol/L}</math> in the absence of diabetes mellitus</p> <p><b>Inflammatory variables:</b></p> <p>Leukocytosis (WBC count <math>&gt;12,000 \mu\text{l}^{-1}</math>), leukopenia (WBC count <math>&lt;4,000 \mu\text{l}^{-1}</math>), normal WBC with greater than 10% immature forms, plasma C-reactive protein more than two SD above the normal value, plasma procalcitonin more than two SD above the normal value</p> <p><b>Hemodynamic variables:</b></p> <p>Arterial hypotension (SBP <math>&lt;90 \text{ mmHg}</math>, mean BP <math>&lt;65 \text{ mmHg}</math>, or reduction in SBP <math>&gt;40 \text{ mmHg}</math> from baseline) persisting for at least 1 hour, despite adequate fluid resuscitation</p> <p><b>Organ dysfunction variables:</b></p> <p>Arterial hypoxemia (<math>\text{PaO}_2/\text{FiO}_2 &lt;300</math>), acute oliguria (urine output <math>&lt;0.5 \text{ ml kg}^{-1}/\text{h}^{-1}</math> for at least 2 h) creatinine increase <math>\geq0.5 \text{ mg dL}^{-1}</math>, coagulation abnormalities (INR <math>&gt;1.5</math> or activated partial thromboplastin time <math>&gt;60 \text{ s}</math>), ileus (absent bowel sounds), thrombocytopenia (platelet count <math>&lt;100,000/\mu\text{L}</math>), hyperbilirubinemia (plasma total bilirubin <math>&gt;4 \text{ mg dL}^{-1}</math> or <math>70 \text{ mmol L}^{-1}</math>)</p> <p><b>Tissue perfusion variables:</b></p> <p>Hyperlactatemia (<math>&gt;3 \text{ mmol/L}^{-1}</math>), decreased capillary refill or mottling</p>
<b>Severe sepsis</b>	<p>Sepsis plus sepsis-induced organ dysfunction or tissue hypoperfusion:</p> <p>Altered mental state</p> <p>Arterial hypoxemia (<math>\text{PaO}_2/\text{FiO}_2 &lt; 300</math>)</p> <p>Acute kidney injury (urine output <math>&lt;0.5 \text{ ml/kg/h}</math> for at least 2h or creatinine increase <math>&gt;0.5 \text{ mg/dL}</math>)</p> <p>Thrombocytopenia (platelet count <math>&lt;100,000/\mu\text{l}</math>)</p> <p>Coagulopathy (INR <math>&gt;1.5</math> or aPTT <math>&gt;60 \text{ s}</math>)</p> <p>Hyperbilirubinemia (total plasma bilirubin <math>&gt;2 \text{ mg/dl}</math>)</p> <p>Hyperlactatemia (<math>&gt;1 \text{ mmol/L}</math>)</p> <p>Sepsis-induced hypotension</p> <p>Decreased capillary refill or mottling</p>
<b>Septic shock</b>	Sepsis-induced hypotension (SBP $<90 \text{ mmHg}$ or MAP $<$

70 mmHg or SBP decrease > 40 mmHg) persisting despite adequate fluid resuscitation

**Abbreviations** C: Celsius; bpm: beats per minute; SD: standard deviation; ml: milliliter; kg: kilogram; mg: milligram; dl: deciliter; mmol: millimol; L: liter; WBC: white blood cell;  $\mu$ l: microliter; SBP: systolic blood pressure; mmHg: millimeter of mercury; MAP: mean arterial pressure; aPTT: activated partial thromboplastin time; SBP: systemic blood pressure; MAP: mean arterial pressure;  $\text{PaO}_2/\text{FiO}_2$ : ratio of arterial oxygen partial pressure to fractional inspired oxygen; INR: international normalized ratio, INR: international normalized ratio.