

**eTable 1. Definitions of candidate prognostic factors**

<b>Prognostic factor</b>	<b>Definition</b>
Age	The age of the patient in whole years at admission to critical care.
Sex	The genotypical sex of the patient.
Ethnicity	The ethnicity of the patient based on self-report, as recorded in the medical records or as seen. Recorded according to NHS ethnic category codes and grouped as white, Asian, black or mixed/other.
Quintile of deprivation	Population level quintiles within country based on small area multiple deprivation measures combining indicators of income, employment, education, health, crime, barriers to housing and services, and living environment. The latest published version of the measure for each country was used – the English Index of Multiple Deprivation 2019 for postcodes in England, the Welsh Index of Multiple Deprivation 2019 for postcodes in Wales or the Northern Ireland Multiple Deprivation Measure 2017 for postcodes in Northern Ireland.
Body mass index	Calculated from the weight (either measured or estimated) and height (either measured or estimated) of the patient as weight in kilograms divided by height in metres squared.
Any dependency prior to hospital admission	Dependency prior to admission to acute hospital, assessed as the best description for the dependency of the patient in the two weeks prior to admission to acute hospital and prior to the onset of the acute illness based on the level of assistance required with daily activities. Daily activities include bathing, dressing, going to the toilet, moving in/out of bed/chair, continence and eating.]
Immunocompromise	Immunocompromise due to illness or treatment during the six months prior to admission to critical care, defined by one or more of: <ul style="list-style-type: none"> <li>• AIDS (HIV positive and AIDS-defining illness)</li> <li>• Congenital immunohumoral or cellular immune deficiency state</li> <li>• Metastatic disease (distant metastases)</li> <li>• Chronic myelogenous or lymphocytic leukaemia</li> <li>• Acute myelogenous or lymphocytic leukaemia or multiple myeloma</li> <li>• Lymphoma</li> <li>• Chemotherapy</li> <li>• Radiotherapy</li> <li>• Daily high dose steroid treatment (<math>\geq 0.3</math> mg/kg prednisolone or equivalent)</li> </ul>
Sedated for entire of first 24h	The patient was, in clinical opinion, never free from the effects of sedative agents at any time during the first 24 hours following admission to critical care. Sedation is defined as receiving continuous or intermittent doses of agents to produce and maintain a continuous decreased level of consciousness.
Highest temperature	Highest central temperature during the first 24 hours following admission to critical care. If no central temperatures recorded, highest non-central temperature $+0.5^{\circ}\text{C}$ is substituted.
Lowest systolic blood pressure	Lowest systolic blood pressure during the first 24 hours following admission to critical care.
Highest heart rate	Highest heart rate during the first 24 hours following admission to critical care.
Highest respiratory rate	Highest respiratory rate (either ventilated or non-ventilated) during the first 24 hours following admission to critical care.
PaO <sub>2</sub> /FiO <sub>2</sub>	Ratio of PaO <sub>2</sub> to FiO <sub>2</sub> from the arterial blood gas with the lowest PaO <sub>2</sub> from blood sampled during the first 24 hours following admission to critical care.

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Mechanical ventilation	Mechanical ventilation received at any time during the first 24 hours following admission to critical care. Mechanical defined as where some or all of the breaths, or a portion of the breaths, are delivered by a mechanical device. Indicated by the recording of a ventilated respiratory rate.
Highest blood lactate concentration	Highest blood lactate concentration during the first 24 hours following admission to critical care.
Highest serum creatinine	Highest serum creatinine during the first 24 hours following admission to critical care.
Highest serum urea	Highest serum urea during the first 24 hours following admission to critical care.
Lowest hemoglobin concentration	Lowest hemoglobin concentration during the first 24 hours following admission to critical care.
Lowest platelet count	Lowest platelet count during the first 24 hours following admission to critical care.