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Abbreviations

(dZ/dt)$_{\text{max}}$, maximum rate of impedance change

15-HETE, 15-hydroxyeicosa-tetraenoic acid

A-aDO$_2$, arterial-alveolar oxygen difference

ABFi, indexed aortic blood flow

ABSI, abbreviated burn severity index

Acc, intr aortic blood acceleration

ACCP, American College of Chest Physicians

ACE, angiotensin converting enzyme

ACI, acceleration index

ACS, acute coronary syndrome

AECC, American-European Consensus Conference

AED, automatic external defibrillator

AFB, atrial fibrillation

AFT, atrial flutter

ALF, acute liver failure

ALI, acute lung injury

ALS, advanced life support

AM, actual mortality

AM, alveolar macrophages

AMI, acute myocardial infarction

ANH, acute normovolaemic haemodilution

ANP, atrial natriuretic peptide

ANTU, α-naphtylthiourea

AP, action potential

AP, arterial pressure

APC, antigen presenting cells

APRV, airway pressure release ventilation

ARDS, acute respiratory distress syndrome

ARF, acute renal failure

ARF, acute respiratory failure

ASA, American Society of Anaesthesiologists

ATLS, advanced trauma life support™

ATP, adenosine triphosphate

AV, atrioventricular

AVDO$_2$, arteriovenous oxygen difference

AVJR, AV junctional rhythm

AVJT, AV junctional tachycardia

AVS, advanced vital support

BAL, bioartificial liver

BAL, bronchoalveolar lavage

BALF, bronchoalveolar lavage fluid

BB, β-blockers

BIS, bispectral index

BLA, bronchoalveolar lavage

BNP, B natriuretic peptide

BP, blood pressure

BSI, blood system infection

CABG, coronary artery bypass grafting

CAD, coronary artery disease

cAMP, cyclic adenosine monophosphate

CAP, community acquired pneumonia

CBF, central blood flow

CBV, central blood volume

CCM, critical care medicine

CCO, continuous cardiac output

CHD, coronary heart disease

CHF, congestive heart failure

CI, cardiac index

CIM, critical illness myopathy

CIP, critical illness polyneuropathy

CMR, cerebral metabolic rate
CMRO$_2$, cerebral metabolic rate for oxygen
CO, cardiac output
COP, colloid oncotic pressure
COPD, chronic obstructive pulmonary disease
COX-2, cyclooxygenase-2
CPAP, continuous positive airway pressure
CPB, cardiopulmonary bypass
CPC, Chest Pain Centers
cPLA$_2$, cytosolic phospholipase A$_2$
CPP, cerebral perfusion pressure
CPR, cardiopulmonary resuscitation
CRT, cardiac resynchronisation therapy
CS, chondroitin sulphate
CSE, combined spinal epidural
CSF, cerebral spinal fluid
CTD, continuous thermodilution
CTG, cardiograph
CTGF, connective tissue growth factor
CVC, central venous catheter
CVP, central venous pressure
CVVHD, continuous veno-venous haemodialysis
DAD, diffuse alveolar damage
DAP, diastolic arterial pressure
DC, direct current
DCCT, Diabetes Control and Complications Trial
DVR, diastolic volume
DES, desflurane
DIC, disseminated intravascular coagulation
DKA, diabetic ketoacidosis
DNAR, do-not-attempt-resuscitation
DNR, do-not-resuscitate
DTICH, delayed traumatic intracerebral haemorrhage
DVT, deep vein thrombosis
DWI, diffusion-weighted imaging
E, elastance
EAT, ectopic atrial tachycardia
EBM, evidence-based medicine
ECG, electrocardiogram
ECM, extracellular matrix
ED, emergency department
EDHF, endothelium-derived hyperpolarising factor
EDV, end-diastolic volume
EELV, end-expiratory lung volume
EIT, electric impedance tomography
ELAD, extracorporeal liver assist device
EM, expected mortality
EMD, electromechanical dissociation
EMS, emergency medical system
EPEC, Education for Physicians on End-of-life Care
EPO, erythropoietin
ER, emergency room
ESICM, European Society of Intensive Care Medicine
ET, ejection time
EVLW, extravascular lung water
FDA, Food and Drug Administration
FDG, $^{18}$F-fluorodeoxyglucose
FFA, free fatty acids
fMRI, functional magnetic resonance imaging
FRC, functional residual capacity
FT, flow time
GABA, $\gamma$-amino-butyric acid
GAG, glycosaminoglycan
GCS, Glasgow Coma Scale
GFR, glomerular filtration rate
Abbreviations

GIC, gastrointestinal complications
GIK, glucose-insulin-potassium
GIT, gastrointestinal tract
GP, general practitioner
HAECs, human aortic endothelial cells
HD, haemodialysis
HDF, haemodiafiltration
HDLs, high-density lipoproteins
HELLP, haemolysis, elevated liver enzymes, low platelet count
HELP, Hospitalized Elderly Longitudinal Project
HES, hydroxyethyl starch
HF, heart failure
HFO, high frequency oscillation
HGF, hepatocyte growth factor
HMCAS, hyperdense middle cerebral artery sign
HNP, human neutrophil peptides
HOC, hypertrophic cardiomyopathy
HR, heart rate
HRP, heart rate period
HS, heparan sulphate
hs-CRP, high-sensitivity C-reactive protein
HSP, heat shock proteins
HSR, heat stress response
HT, highly intensive/complex treatment
HTN, hypertensive
IC, index of contractility
ICAM-1, intracellular adhesion molecule-1
ICD, implanted cardioverter-defibrillators
ICG, indocyanine green
ICH, intracerebral haemorrhage
ICO, intermittent cardiac output
ICP, intracranial pressure
ICU, intensive care unit
IFN, interferon
IFNγ, interferon-γ
IGF, insulin-like growth factor
IGT, impaired glucose tolerance
IHD, ischaemic heart disease
IL, interleukin
IL-1ra, IL-1 receptor antagonist
IL-6, interleukins-6
ILCOR, International Liaison Committee on Resuscitation
iNOS, inducible nitric oxide synthase
IPPS, intermittent positive pressure ventilation
IPS, infection probability score
ISS, interstitial space
ITBV, intrathoracic blood volume
ITP, immune thrombocytopenia
ITP, intrathoracic pressure
IUR, intra-uterine resuscitation
IVS, intravascular space
LAD, left anterior descending coronary artery
LBBB, left bundle branch block
LCX, left circumflex coronary artery
LDH, lactate dehydrogenase
LE, labelled erythrocytes
LIDO-Trial, Levosimendan infusion versus Dobutamine in severe low Output heart failure
LIS, lung injury score
LPS, lipopolysaccharide
LT, less intensive treatment
LTB4, leukotriene B4
LV, left ventricle
LVEDA, left ventricular end diastolic area
LVEDV, left ventricular end diastolic volume
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>LVET</td>
<td>Left ventricular ejection time</td>
</tr>
<tr>
<td>LVOT</td>
<td>Left ventricular outflow tract obstruction</td>
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<tr>
<td>LVSV</td>
<td>Left-ventricular stroke volume</td>
</tr>
<tr>
<td>LVSWI</td>
<td>Left ventricular systolic work index</td>
</tr>
<tr>
<td>MAC</td>
<td>Minimum alveolar concentration</td>
</tr>
<tr>
<td>MAP</td>
<td>Mean arterial pressure</td>
</tr>
<tr>
<td>MAPK</td>
<td>Mitogen-activated protein kinase</td>
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<tr>
<td>MARS</td>
<td>Molecular adsorbent recirculating system</td>
</tr>
<tr>
<td>MBL</td>
<td>Mannose-binding lectin</td>
</tr>
<tr>
<td>MCP</td>
<td>Monocyte chemoattractant protein</td>
</tr>
<tr>
<td>MDP</td>
<td>Maximum diastolic potential</td>
</tr>
<tr>
<td>MEF</td>
<td>Meccano-electric feedback</td>
</tr>
<tr>
<td>MI</td>
<td>Myocardial infarction</td>
</tr>
<tr>
<td>MIBI</td>
<td>Technetium-99m-labelled sestamibi</td>
</tr>
<tr>
<td>MIF</td>
<td>Migration inhibitory factor</td>
</tr>
<tr>
<td>MIGET</td>
<td>Multiple inert gas elimination technique</td>
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<tr>
<td>MIP-2</td>
<td>Macrophage inflammatory protein-2</td>
</tr>
<tr>
<td>MMP</td>
<td>Matrix metalloproteinases</td>
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<tr>
<td>MODS</td>
<td>Multiple organ dysfunction</td>
</tr>
<tr>
<td>MOF</td>
<td>Multiple organ failure</td>
</tr>
<tr>
<td>mPaw</td>
<td>Mean airway pressure</td>
</tr>
<tr>
<td>MPI</td>
<td>Myocardial perfusion imaging</td>
</tr>
<tr>
<td>MPM</td>
<td>Mortality Prediction Model</td>
</tr>
<tr>
<td>MR</td>
<td>Mitral regurgitation</td>
</tr>
<tr>
<td>MSP</td>
<td>Maximum systolic potential</td>
</tr>
<tr>
<td>MTT</td>
<td>Mean transit time</td>
</tr>
<tr>
<td>NABIS:H</td>
<td>National Acute Brain Injury Study: Hypothermia</td>
</tr>
<tr>
<td>NAD*/NADH</td>
<td>Nicotinamide adenine dinucleotide</td>
</tr>
<tr>
<td>NE</td>
<td>Neutrophil elastase</td>
</tr>
<tr>
<td>NEFA</td>
<td>Nonesterified fatty acid</td>
</tr>
<tr>
<td>NF-κB</td>
<td>Nuclear factor κB</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Service</td>
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<tr>
<td>NIHSS</td>
<td>National Institutes of Health Stroke Scale</td>
</tr>
<tr>
<td>NMDDA</td>
<td>N-methyl-D-aspartate</td>
</tr>
<tr>
<td>NNIS</td>
<td>National Nosocomial Infection Survey</td>
</tr>
<tr>
<td>NO</td>
<td>Nitric oxide</td>
</tr>
<tr>
<td>NPO</td>
<td>Neurogenic pulmonary oedema</td>
</tr>
<tr>
<td>NPPV</td>
<td>Noninvasive positive pressure ventilation</td>
</tr>
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<td>NPV</td>
<td>Negative predictive value</td>
</tr>
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<td>NSCSA</td>
<td>National Sentinel Caesarean Section Audit</td>
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<tr>
<td>NTG</td>
<td>Nitroglycerin</td>
</tr>
<tr>
<td>NYHA</td>
<td>New York Heart Association</td>
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<tr>
<td>OHCA</td>
<td>Out-of-hospital cardiac arrest</td>
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<tr>
<td>OLC</td>
<td>Open lung concept</td>
</tr>
<tr>
<td>OLT</td>
<td>Orthotopic liver transplantation</td>
</tr>
<tr>
<td>OPS</td>
<td>Orthogonal polarisation spectral imaging</td>
</tr>
<tr>
<td>PAB</td>
<td>Premature atrial beat</td>
</tr>
<tr>
<td>PAC</td>
<td>Pulmonary artery catheter</td>
</tr>
<tr>
<td>PAD</td>
<td>Public access defibrillation</td>
</tr>
<tr>
<td>PADSS</td>
<td>Post Anaesthesia Discharge Scoring System</td>
</tr>
<tr>
<td>PAED</td>
<td>Public access emergency defibrillation</td>
</tr>
<tr>
<td>PAF</td>
<td>Platelet activating factor</td>
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<tr>
<td>PAMPS</td>
<td>Pathogen-associated molecular patterns</td>
</tr>
<tr>
<td>PAOP</td>
<td>Pulmonary artery occluded pressure</td>
</tr>
<tr>
<td>PAP</td>
<td>Pulmonary artery pressure</td>
</tr>
<tr>
<td>PAR 1</td>
<td>Protease activated receptor</td>
</tr>
<tr>
<td>PAWP</td>
<td>Pulmonary artery wedge pressure</td>
</tr>
<tr>
<td>PBMC</td>
<td>Peripheral blood mononuclear cells</td>
</tr>
<tr>
<td>PCA</td>
<td>Patient-controlled analgesia</td>
</tr>
<tr>
<td>PCI</td>
<td>Percutaneous coronary intervention</td>
</tr>
<tr>
<td>PCP</td>
<td>Phencyclidine</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Definition</td>
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<tr>
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<tr>
<td>PCs-WB</td>
<td>platelet concentrates from whole blood</td>
</tr>
<tr>
<td>PCV</td>
<td>pressure-controlled ventilation</td>
</tr>
<tr>
<td>PCWP</td>
<td>pulmonary capillary wedge pressure</td>
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<tr>
<td>PD</td>
<td>physiologic derangement</td>
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<tr>
<td>PDE</td>
<td>phosphodiesterase</td>
</tr>
<tr>
<td>PDGF</td>
<td>platelet-derived growth factor</td>
</tr>
<tr>
<td>PDH</td>
<td>pyruvic dehydrogenesis</td>
</tr>
<tr>
<td>PDPH</td>
<td>post-dural puncture headache</td>
</tr>
<tr>
<td>PDR</td>
<td>plasma disappearance rate</td>
</tr>
<tr>
<td>PE</td>
<td>preeclampsia</td>
</tr>
<tr>
<td>PEA</td>
<td>pulseless electrical activity</td>
</tr>
<tr>
<td>PEEP</td>
<td>positive end-expiratory pressure</td>
</tr>
<tr>
<td>PEG</td>
<td>percutaneous endoscopic gastrostomy</td>
</tr>
<tr>
<td>PEP</td>
<td>pre-ejection period</td>
</tr>
<tr>
<td>PF</td>
<td>peak flow</td>
</tr>
<tr>
<td>PFI</td>
<td>peak flow index</td>
</tr>
<tr>
<td>PG</td>
<td>prosteoglycan</td>
</tr>
<tr>
<td>PGE2</td>
<td>prostaglandin E2</td>
</tr>
<tr>
<td>PGI2</td>
<td>inactivate prostacyclin</td>
</tr>
<tr>
<td>PGN</td>
<td>primary graft non function</td>
</tr>
<tr>
<td>PGs</td>
<td>proteoglycans</td>
</tr>
<tr>
<td>PiP</td>
<td>Pulmonary interstitial pressure</td>
</tr>
<tr>
<td>PIRO</td>
<td>predisposing factors, infection, response, organ dysfunction</td>
</tr>
<tr>
<td>PKC</td>
<td>protein kinase C</td>
</tr>
<tr>
<td>PMN</td>
<td>polymorphonuclear leukocyte</td>
</tr>
<tr>
<td>PONV</td>
<td>postoperative nausea and vomiting</td>
</tr>
<tr>
<td>PPS</td>
<td>prognosis predicting score</td>
</tr>
<tr>
<td>PPV</td>
<td>pulse pressure variation</td>
</tr>
<tr>
<td>Pra</td>
<td>right atrial pressure</td>
</tr>
<tr>
<td>PROWESS</td>
<td>Protein C Worldwide Evaluation of Severe Sepsis</td>
</tr>
<tr>
<td>PSVT</td>
<td>paroxysmal supraventricular tachycardia</td>
</tr>
<tr>
<td>PT</td>
<td>prothrombin time</td>
</tr>
<tr>
<td>PTCA</td>
<td>percutaneous transluminal coronary angioplasty</td>
</tr>
<tr>
<td>PTT</td>
<td>partial thromboplastin time</td>
</tr>
<tr>
<td>PVB</td>
<td>premature ventricular beat</td>
</tr>
<tr>
<td>PVT</td>
<td>polymorphic ventricular tachycardia</td>
</tr>
<tr>
<td>PVx</td>
<td>partial pressure in mixed venous blood</td>
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<tr>
<td>PWI</td>
<td>perfusion-weighted imaging</td>
</tr>
<tr>
<td>R</td>
<td>resistance</td>
</tr>
<tr>
<td>RAAS</td>
<td>renin-angiotensin-aldosterone system</td>
</tr>
<tr>
<td>RANTES</td>
<td>regulated upon activation normal T cell expressed and secreted</td>
</tr>
<tr>
<td>RAP</td>
<td>right arterial pressure</td>
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<td>RCA</td>
<td>right coronary artery</td>
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<tr>
<td>rCBF</td>
<td>regional blood flow</td>
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<tr>
<td>rCMRglc</td>
<td>regional cerebral metabolic rates for glucose</td>
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<td>RCOG</td>
<td>Royal College of Obstetrics and Gynaecology</td>
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<tr>
<td>RCT</td>
<td>randomised clinical trial</td>
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<tr>
<td>REM</td>
<td>remifentanil</td>
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<td>ROS</td>
<td>reactive oxygen species</td>
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<tr>
<td>ROC</td>
<td>return of spontaneous circulation</td>
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<tr>
<td>rPAF-AH</td>
<td>recombinant platelet-activating factor acetylhydrolase</td>
</tr>
<tr>
<td>RPP</td>
<td>Reversed Pulsus Paradoxus</td>
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<tr>
<td>RR</td>
<td>recovery room</td>
</tr>
<tr>
<td>RSA</td>
<td>respiratory sinus arrhythmia</td>
</tr>
<tr>
<td>RSI</td>
<td>rapid sequence induction</td>
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<tr>
<td>RVEDP</td>
<td>right ventricular end diastolic pressure</td>
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<tr>
<td>RVEDVI</td>
<td>right ventricular end-diastolic volume index</td>
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<tr>
<td>RVSV</td>
<td>right-ventricular stroke volume</td>
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<tr>
<td>RVSWI</td>
<td>right ventricular stroke work index</td>
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<tr>
<td>SAA3</td>
<td>serum amyloid A3</td>
</tr>
<tr>
<td>SACs</td>
<td>stretch-activated channels</td>
</tr>
<tr>
<td>SAH</td>
<td>subarachnoid haemorrhage</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>SAN</td>
<td>sino-atrial node</td>
</tr>
<tr>
<td>SAP</td>
<td>systolic arterial pressure</td>
</tr>
<tr>
<td>SBP</td>
<td>systolic blood pressure</td>
</tr>
<tr>
<td>SCCM</td>
<td>Society of Critical Care Medicine</td>
</tr>
<tr>
<td>SCI</td>
<td>spinal cord injury</td>
</tr>
<tr>
<td>SERPIN</td>
<td>serine protease inhibitors</td>
</tr>
<tr>
<td>SIAARTI</td>
<td>Società Italiana di Anestesia, Analgesia, Rianimazione e Terapia Intensiva (Italian Society of Anaesthesia, Analgesia, Reanimation and Intensive Care)</td>
</tr>
<tr>
<td>SIRS</td>
<td>systemic inflammatory response syndrome</td>
</tr>
<tr>
<td>SIS</td>
<td>Surgical Infection Societies</td>
</tr>
<tr>
<td>SNP</td>
<td>sodium nitroprusside</td>
</tr>
<tr>
<td>SPECT</td>
<td>single-photon emission computed tomography</td>
</tr>
<tr>
<td>SPV</td>
<td>systolic pressure variation</td>
</tr>
<tr>
<td>SR</td>
<td>sarcoplasmic reticulum</td>
</tr>
<tr>
<td>STI</td>
<td>systolic time intervals</td>
</tr>
<tr>
<td>sTNFII</td>
<td>soluble TNF receptor type II</td>
</tr>
<tr>
<td>SUPPORT</td>
<td>Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment</td>
</tr>
<tr>
<td>SV</td>
<td>stroke volume</td>
</tr>
<tr>
<td>SvO₂</td>
<td>mixed venous oxygen saturation</td>
</tr>
<tr>
<td>SVT</td>
<td>supraventricular tachycardia</td>
</tr>
<tr>
<td>SVV</td>
<td>stroke volume variation</td>
</tr>
<tr>
<td>TBARS</td>
<td>thiobarbituric acid reactant substances</td>
</tr>
<tr>
<td>TBI</td>
<td>traumatic brain injuries</td>
</tr>
<tr>
<td>TBSA</td>
<td>total body surface area</td>
</tr>
<tr>
<td>TBW</td>
<td>total body water</td>
</tr>
<tr>
<td>TCDB</td>
<td>Traumatic Coma Data Bank</td>
</tr>
<tr>
<td>TD</td>
<td>thermodilution</td>
</tr>
<tr>
<td>TDP</td>
<td>Torsades de pointes</td>
</tr>
<tr>
<td>TEA</td>
<td>thromboendoarterectomy</td>
</tr>
<tr>
<td>TEB</td>
<td>thoracic electrical bioimpedance</td>
</tr>
<tr>
<td>TEE</td>
<td>transesophageal echocardiography</td>
</tr>
<tr>
<td>TETRO</td>
<td>technetium 99m tetrofosmin</td>
</tr>
<tr>
<td>TF</td>
<td>tissue factor</td>
</tr>
<tr>
<td>TFC</td>
<td>total fluid conductivity</td>
</tr>
<tr>
<td>TGF-β</td>
<td>transforming growth factor-β</td>
</tr>
<tr>
<td>TIBC</td>
<td>total iron binding capacity</td>
</tr>
<tr>
<td>TIMP</td>
<td>tissue inhibitors of metalloproteinases</td>
</tr>
<tr>
<td>TISS</td>
<td>trauma index severity score</td>
</tr>
<tr>
<td>TIVA</td>
<td>total intravenous anaesthesia</td>
</tr>
<tr>
<td>TNF</td>
<td>tumour necrosis factor</td>
</tr>
<tr>
<td>TNFR1</td>
<td>tumour necrosis factor receptor 1</td>
</tr>
<tr>
<td>TNF-α</td>
<td>tumour necrosis factor-α</td>
</tr>
<tr>
<td>TNM</td>
<td>tumour, node, metastases</td>
</tr>
<tr>
<td>TOF</td>
<td>train-of-four</td>
</tr>
<tr>
<td>TPA</td>
<td>tissue plasminogen activator</td>
</tr>
<tr>
<td>TPID</td>
<td>transpulmonary indicator dilution</td>
</tr>
<tr>
<td>TRALI</td>
<td>transfusion associated lung injury</td>
</tr>
<tr>
<td>TSVRi</td>
<td>indexed total systemic vascular resistances</td>
</tr>
<tr>
<td>TTP</td>
<td>thrombocytopenic purpura</td>
</tr>
<tr>
<td>TXA₂</td>
<td>thromboxane A₂</td>
</tr>
<tr>
<td>UBS</td>
<td>unit of burned skin</td>
</tr>
<tr>
<td>UKPDS</td>
<td>UK Prospective Diabetes Study</td>
</tr>
<tr>
<td>UTI</td>
<td>urinary tract infection</td>
</tr>
<tr>
<td>V/Q</td>
<td>ventilation/perfusion ratio</td>
</tr>
<tr>
<td>VACs</td>
<td>volume-activated channels</td>
</tr>
<tr>
<td>VAP</td>
<td>ventilator associated pneumonia</td>
</tr>
<tr>
<td>Vₐ</td>
<td>alveolar dead space</td>
</tr>
<tr>
<td>Vₐanat</td>
<td>anatomical dead space</td>
</tr>
<tr>
<td>Vₐphys</td>
<td>physiological dead space</td>
</tr>
<tr>
<td>VET</td>
<td>ventricular ejection time</td>
</tr>
<tr>
<td>VF</td>
<td>ventricular fibrillation</td>
</tr>
<tr>
<td>VILI</td>
<td>ventilation-induced lung injury</td>
</tr>
<tr>
<td>VLC</td>
<td>videolaparoscopic cholecystectomy</td>
</tr>
</tbody>
</table>
Abbreviations

VLDL, very low-density lipoprotein
VLS, volume loading step
VR, vascular resistance
VS, vital support
VT, tidal volume

VT, ventricular tachycardia
WHO, World Health Organization
WP, wedge pressure
ΔZ, change in impedance
η, hysteresivity