

The Multilayered Physiology of Oxygenation During Cardiopulmonary Bypass

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ABBREVIATIONS

Abbreviation	Definition / Meaning
AKI	Acute kidney injury
ATP	Adenosine triphosphate
BSA	Body surface area
CaO ₂	Arterial oxygen content
cfDNA	Cell-free DNA
cf-mtDNA	Cell-free mitochondrial DNA
CPB	Cardiopulmonary bypass
CSA-AKI	Cardiac surgery-associated acute kidney injury
CvO ₂	Venous oxygen content
CVP	Central venous pressure
DAMP	Damage-associated molecular pattern
DO ₂	Oxygen delivery
DO ₂ i	Indexed oxygen delivery
eGC	Endothelial glycocalyx
eNOS	Endothelial nitric oxide synthase
ESL	Endothelial surface layer
ETC	Electron transport chain
GDP	Goal-directed perfusion
Hb	Hemoglobin
Hct	Hematocrit
I/R	Ischemia-reperfusion
L/P	Lactate/pyruvate ratio
MAP	Mean arterial pressure
MFI	Microvascular flow index
mitoPO ₂	Mitochondrial oxygen tension
MMP	Matrix metalloproteinase

Abbreviations

Abbreviation	Definition / Meaning
mPTP	Mitochondrial permeability transition pore
mtDNA	Mitochondrial DNA
NIRS	Near-infrared spectroscopy
NO	Nitric oxide
O ₂ ER	Oxygen extraction ratio
OXPHOS	Oxidative phosphorylation
PaCO ₂	Arterial carbon dioxide partial pressure
PaO ₂	Arterial oxygen partial pressure
PBR	Perfused boundary region
PPV	Proportion of perfused vessels
PVD	Perfused vessel density
ROS	Reactive oxygen species
rSO ₂	Regional tissue oxygen saturation
SaO ₂	Arterial oxygen saturation
SIRS	Systemic inflammatory response syndrome
SvO ₂	Mixed venous oxygen saturation
VCO ₂	Carbon dioxide production
VO ₂	Oxygen consumption
VO ₂ i	Indexed oxygen consumption
ICU	Intensive care unit

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