Stage	Description	Physical Exploration	Laboratory	Hemodinamyc parameters
(A) At risk	No CS, but at risk (e.g. large anterior STEMI with important LV dysfunction).	Dry and warm. No congestion signs.	Normal lactate. Normal kidney function (or not worsening from basal function in CKD).	SBP≥100mmHg or ≈ to baseline. If PAC: • CI >2.5 l/min/m2 • CVP<10mmHg • PCWP<15mmHG • SVO2≥65%
(B) Beginning	Hemodinamic deterioration without hypoperfusion signs.	Dry/slightly wet and warm. Congestion signs (jugular ingurgitation, rales in lung fields)	Normal lactate. Minimal acute kidney function deterioration. ↑NT-proBNP.	SBP≤90mmHg or MAP≤60mmHg or >30mmHg drop respect to baseline. HR ≥ 100bpm.
(C) Classic	Hypoperfusion signs. Vasoactive drugs and/or MCS are required.	Wet and cold. Increased congestion signs. Impaired mental status. Oliguria.	Lactate ≥ 2mmol/l. Acute renal function impairment (stage I AKIN classification). Liver function impairment ↑NT-proBNP.	PAC (strongly recommended): • CI<2.2L/min/m2 • PCWP>15mmHg
(D) Deteriorating	Worsening from previous status. No response to inital therapies.	Worsening from previous status. No response to inital therapies.	Rising and persistently increased lactate. Deteriorating kidney and liver function. ↑↑NT-proBNP.	An increase in dosage or numbers of vasoactive drugs or addition of MCS are required to keep perfusion.
(E) Extremis	Actual or incipient circulatory collapse.	Unconscious. Pulseless (or near) Cardiac arrest. Multiple desfibrilations.	Lactate≥ 8mmol/l. Severe Acidosis • pH<7.2 • Base deficit>10meq/L.	Deep hypotension despite máximum hemodynamic support. Vasoactive drugs administered in bolus.

Supplementary Figure 1. Cardiogenic shock severity stages according to updated SCAI classification from Naidu et al. [7]. CS: cardiogenic shock; STEMI: ST-elevation myocardial infarction; LV: left ventricle; CKD: chronic kidney disease; SBP: systolic blood pressure; PAC: pulmonary artery catheter; CI: cardiac index; CVP: central venous pressure; PCWP: pulmonary capillary wedge pressure; SVO_2: mixed venous oxygen saturation; MAP: mean arterial pressure; HR: heart rate; MCS: mechanical circulatory support; AKIN: Acute Kidney Injury Network NT-proBNP: N-terminal pro-brain natriuretic peptide.