

Supplementary Appendix

Figure 1: Targeted temperature management protocol provided to each center

→ Targeted hypothermia (34-35°C) by internal cooling or warming device

The use of an intravenous bolus of cold (4°C) isotonic saline is not recommended.

→ Targeted hypothermia (34-35°C) by external cooling or warming with no specific device

- According to the local protocol or as an example:
 - Cooling can be obtained using one or more of the following methods:
 - Place 2 cold wet sheets (4°C) on the patient. Take care to keep the sheets wet to optimize cooling by convection.
 - Place ice packs wrapped in a towel on the following sites:
 - 1 on each side of the neck
 - 1 below each armpit
 - 2 on the abdomen
 - 1 on each groin
 - Place a fan with blades at the end of the bed directed towards the patient.

→ Targeted hypothermia (34-35°C) by internal or external cooling or warming with a specific device

- According to the local protocol or as an example:
 - Place the device on the patient and set the target temperature at 33°C.

Figure 2: Hypothermic machine perfusion settings

Two different machines are used in France for organ transportation: the ORS (Organ Recovery Systems) LifePort® 2nd generation and the Waters Waves® machine. Both machines are used for perfusion, delivering a pulsatile flow of preservation solution at 4°C, with no changes in perfusion settings throughout the preservation period. The systolic perfusion pressure is initially set at 30 mmHg, and can be temporarily increased to 35mmHg to open the kidney. Thereafter, the perfusion pressure is set to target an intrarenal resistive index between 0.3 and 0.5 and a flow between 80 and 100ml/min. Pressure, flow, resistance and temperature are recorded by both machines during the transport period.

Table 1: ICU management of deceased organ-donors*

Donor Management Goals	Parameters
General management	
Heart rate (bpm)	60-120
Mean arterial pressure (mmHg)	65-70
Hemoglobin (g/dL)	7-10
SpO ₂ (%)	≥95
PaO ₂ (mmHg)	>80
Urinary output (mL·kg ⁻¹ ·h ⁻¹)	0.5-3
Lactate (mmol/L)	<2
Metabolic disorders	
Serum sodium (mmol/L)	130-150
Serum glucose (mmol/L)	4-8
pH	7.35-7.45
Serum potassium, calcium, phosphate, magnesium	Maintain within normal range
Hemodynamic parameters**	
ScVO ₂ (%)	≥70
Cardiac index (L·min ⁻¹ ·m ²)	2.5-3
Central venous pressure (mmHg)	8-10
Pulmonary artery wedge pressure (mmHg)	6-10
Systemic vascular resistance (dynes·seconds·cm ⁻⁵)	800-1200

* From the following reference: Boulard G Ann Fr Anesth Reanim. 2005 Jul;24(7):836-43. doi: 10.1016/j.annfar.2005.05.020.

** If invasive monitoring is implemented (not mandatory)