CARL.

A HEARTBEAT AHEAD

The Next Level of ECPR

Targeted Reperfusion after Sudden Cardiac Arrest

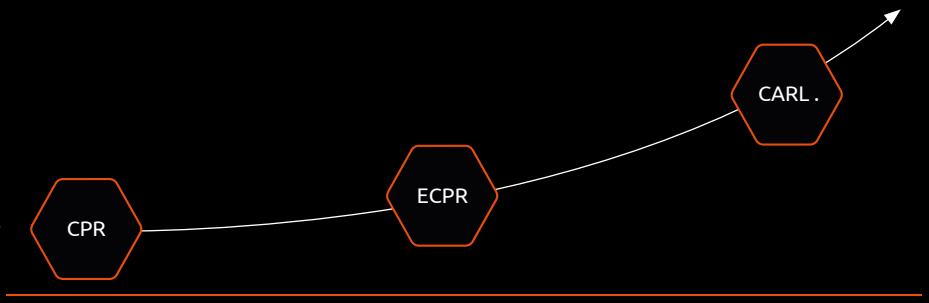


WWW.RESUSCITEC.DE

CARL. Therapy

Controlled Automated Reperfusion & Life Support.

Our vision:
Improving neurological intact survival after sudden cardiac arrest:



Conventional cardiopulmonary resuscitation

Extracorporeal cardiopulmonary resuscitation

CARL. The Next Level of ECPR



High osmolarity
Limiting edema formation

High pulsatile blood flow
Restoring sufficient perfusion

High blood pressure
Improving capillary blood circulation

Controlled oxygenation
Preventing reoxygenation injuries

Integrated blood gas analysis
Early optimization of metabolic pathways

Rapid cooling
Lowering energy consumption

CARL. Technology

Gaining Time Through Precision and Control

CARL. Priming Solution

Fast venting of the CARL RESET and initial optimization of the reperfusate

CARL. RESET

Plug-and-play tubing set
Integrated sensoring

CARL. Controller

Automated dual-pump control

Extensive monitoring

Adjustment of relevant perfusion parameters

CARL. Arterial Pressure Sensor

Fiber-optic catheter for intra-aortic pressure measurement

CARL. Cooler

Achieve Δ 4 °C within a few minutes



CARL. Arterial Blood Gas Cartridge

Enhanced monitoring of arterial parameters

CARL. MOX

Controlled oxygenation and decarboxylation O_2 levels (21% to 100%)

CARL. Cart

Enabling in-hospital transport of all components

CARL. Mobility Concept

Smart transport solutions for air & ground



CARL. Carrier

Lightweight, stable, and adjustable transport solution for air and ground transport, compatible with airline rails





CARL. Bridge

Facilitating pre- and interhospital transport with Stryker stretchers (PowerPro 2, PowerPro XT)

CARL. Training Concept

Enabling Interdisciplinary Emergency Teams

Selected references

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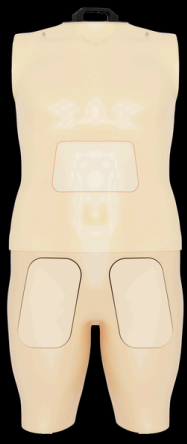
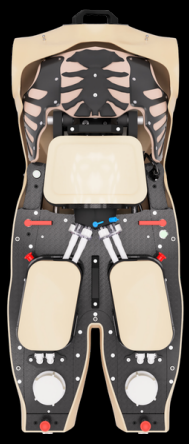
CARL. SAM

ECPR- and cannulation manikin for user training in extracorporeal support systems and resuscitation within multidisciplinary teams





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