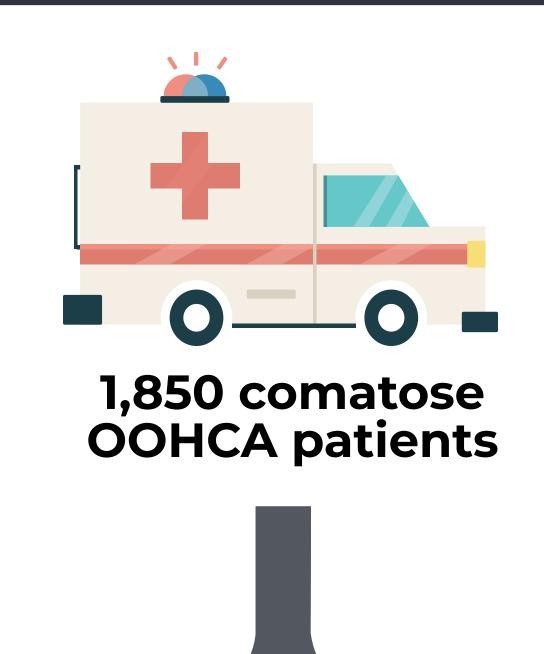
The TTM2 Trial

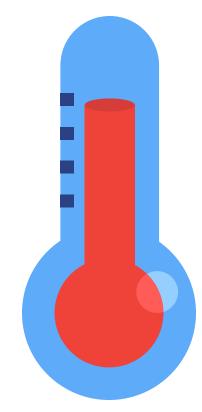
Does targeting hypothermia (33°C) improve the survival of out-of-hospital cardiac arrest (OOHCA) patients over targeting normothermia (<37.5°C)?



Hypothermia: 33°C TTM

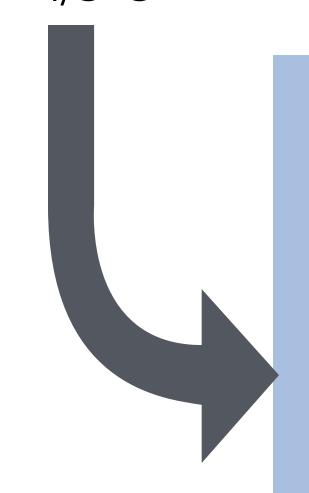
925 patients cooled to 33°C for 28 hours then rewarmed to 37°C over 12 hours in hourly increments of 1/3°C





Normothermia: <37.5°C TTM

925 patients kept ≤37.5°C for 40 hours with surface or intravascular devices used if the temperature reached 37.8°C



Both Groups

Sedation and normothermia were maintained for 40 hours in all patients and until 72 hours in sedated or comatose patients



Protocolized neurologic prognostication was performed after 96 hours

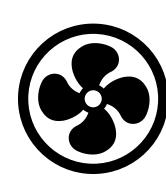
	Hypothermia	Normothermia	
All cause mortality at 6 months	50%	48%	
Surface or intravascular cooling device required	95%	46%	
Poor functional outcome at 6 months	54%	54%	

Hypothermic TTM protocols **do not** have significantly better outcomes than normothermic (≤37.5°C) protocols

Key practice points



The target temperature for TTM following cardiac arrest could be 33°C, 36° C, or $\leq 37.5^{\circ}$ C.



TTM requires close temperature monitoring, pharmacotherapy, and the use of cooling devices.



The protocolization of neuroprognostication decreases the likelihood of premature withdrawal of care.

References:



Dankiewicz J. Hypothermia versus Normothermia after Out-ofhospital Cardiac Arrest. NEJM. 2021;384:2283-2294. doi:10.1056/NEJMoa2100591



