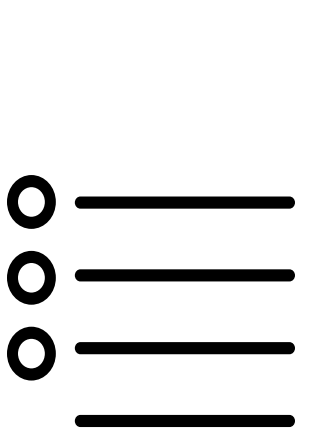


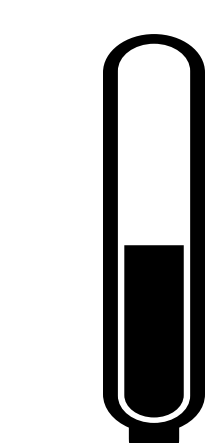
TARGETED TEMPERATURE MANAGEMENT at 33°C vs 36°C AFTER CARDIAC ARREST

Neilson et al.

canadiem MVP INFOGRAPHIC SERIES



Guidelines recommended therapeutic hypothermia post cardiac arrest, but **supporting evidence was limited**



It was **unclear** whether the benefit was **due to** the therapeutic effect of **hypothermia** or **prevention of fever**

OBJECTIVE

To investigate the benefits and harms of targeted temperature of

36°C vs 33°C

post cardiac arrest, both of which were intended to prevent fever

Randomized Control Trial, 2013



Europe

36

TOTAL INTENSIVE CARE UNITS



Australia

Inclusion

- ✓ Cardiac Arrest
- ✓ 20 mins of spontaneous circulation after resuscitation

Exclusion

- ✗ Unwitnessed arrest with asystole as initial rhythm
- ✗ Greater than 240 min interval between return of spontaneous circulation and screening
- ✗ Suspected or known acute intracranial hemorrhage or stroke
- ✗ Body temperature less than 30°C

466

Patients

Sedated and Targeted to 36°C

Gradually Rewarmed

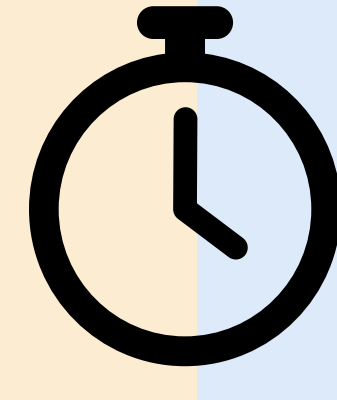
Sedation Discontinued



T= 0 hrs



T= 28 hrs



T= 36 hrs

473

Patients

Sedated and Targeted to 33°C

Gradually Rewarmed

Sedation Discontinued

End of Intervention:

Body Temperature Maintained Below 37.5°C With Fever Control Measures

48%



MORTALITY

50%

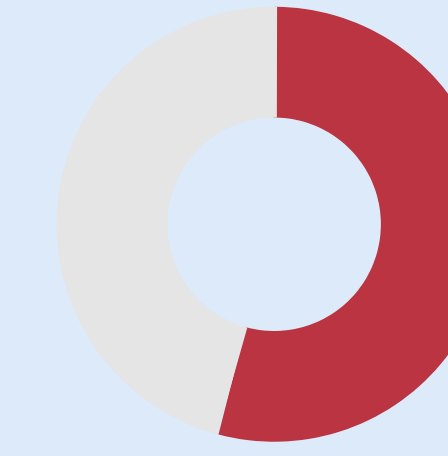


52%



180-DAY MORTALITY OR POOR NEUROLOGICAL OUTCOME

54%



TAKE HOME POINT:

Targeted temperature management to 33 degrees was **not superior** in neurological and mortality outcomes when compared to targeted temperature management to 36 degrees.

REFERENCES:

Targeted Temperature Management at 33°C versus 36°C after Cardiac Arrest, N Engl J Med 2013; 369:2197-2206

This infographic was created by Sparsh Shah and edited by Alvin Chin

