

What is LINC?

A multicenter, randomized, controlled trial
designed to evaluate the efficacy and safety of:

LUCAS concept for resuscitation of OHCA
including defibrillation during ongoing
compressions

vs.

manual CPR according to 2005 guidelines



Objectives

Primary

- Superiority in 4-hr survival

Secondary

- Survival upto 6 month with good neurological outcome CPC 1-2



Inclusion/Exclusion criteria

Inclusion criteria

- Unexpected adult out-of-hospital cardiac arrest where an attempt of resuscitation is considered appropriate

Exclusion criteria

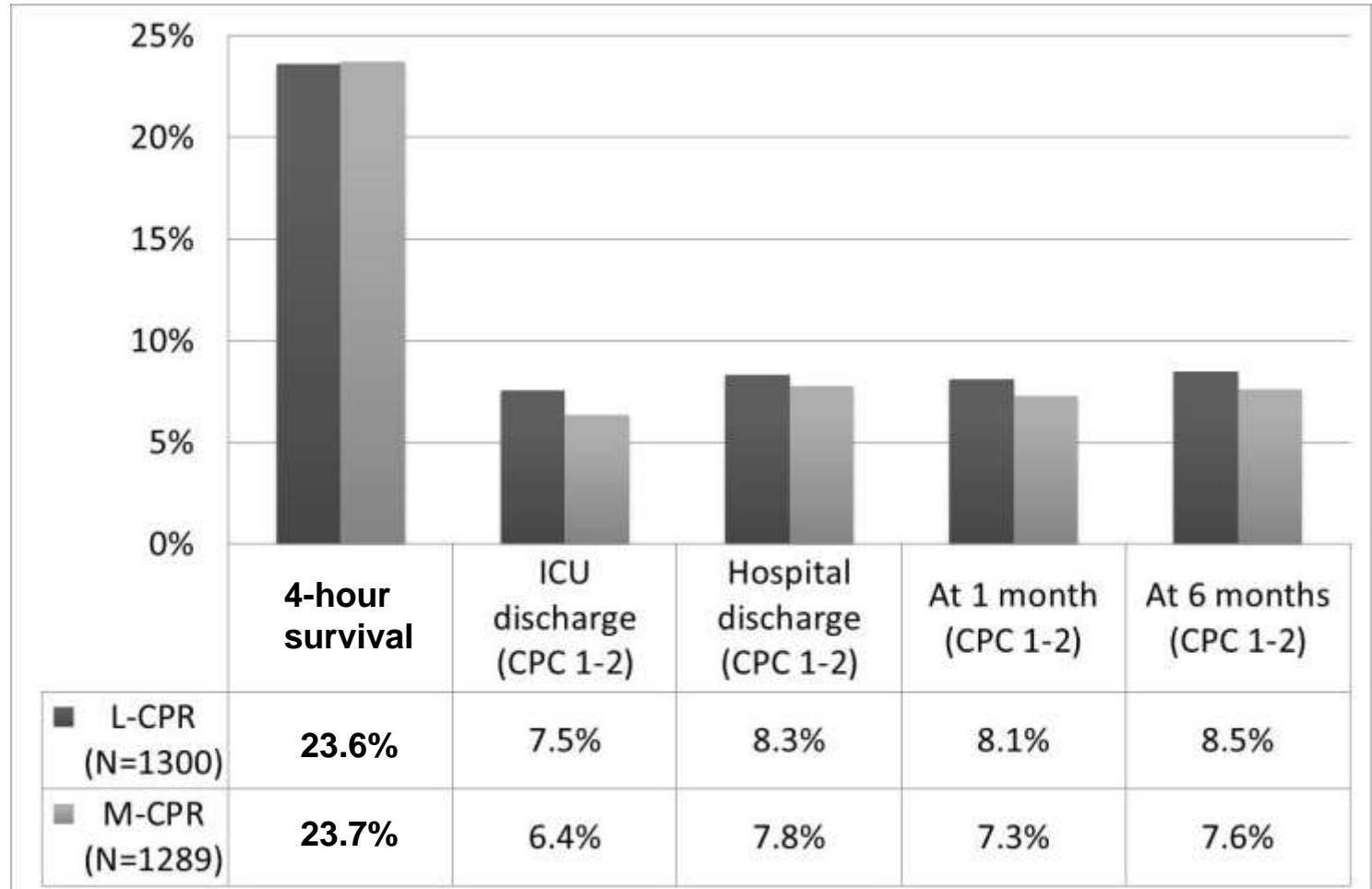
- Traumatic cardiac arrest, including hanging
- Age believed to be < 18 years
- Known pregnancy
- Patients body size not fitting the LUCAS
- Defibrillated
 - before LUCAS arrives at scene
 - crew witnessed VF/VT with ROSC

*some of the most viable patients
have been excluded*



Outcome

4-hour survival:
Risk difference -0.05%
95% C.I. -3.32 – 3.23, p=1.00





Conclusions

- Mechanical chest compressions using the LUCAS device in combination with defibrillation during ongoing compressions provided no improved 4-hour survival compared to conventional manual chest compressions in out-of-hospital CA patients
- There was good neurologic outcome in the vast majority of the survivors in both groups
- Thus, in clinical practise CPR with the LUCAS device and defibrillation during ongoing compressions seems to have similar effectiveness as manual chest compressions