AMERICAN COLLEGE of CARDIOLOGY®

DanGer Shock

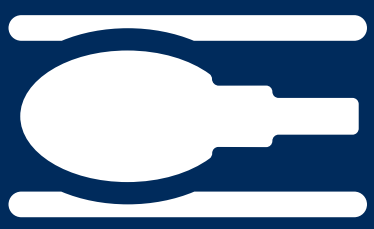
Microaxial Flow Pump or Standard Care in Infarct-Related Cardiogenic Shock

International, Multicenter, Randomized, Open-Label Trial

OBJECTIVE: To assess the efficacy of temporary mechanical support with a microaxial flow pump (Impella CP) in patients with STEMI complicated by cardiogenic shock.

355
PATIENTS

INCLUSION CRITERIA:
Patients with STEMI and cardiogenic shock, defined as hypotension, elevated lactic acid and left ventricular ejection faction <45%.



IMPELLA CP
(N=179)

VS.

STANDARD CARE
(N=176)

PRIMARY ENDPOINT

DEATH FROM ANY CAUSE WAS REDUCED WITH THE IMPELLA CP (45.8%) vs. STANDARD CARE (58.5%)

(HAZARD RATIO, 0.74; 95% CI, 0.55-0.99; P=0.04)

SECONDARY ENDPOINT

COMPOSITE SAFETY ENDPOINT (SEVERE BLEEDING, LIMB ISCHEMIA, HEMOLYSIS, DEVICE FAILURE OR WORSENING AORTIC REGURGITATION)

IMPELLA CP 24% vs. **STANDARD CARE 6.2%**
(RELATIVE RISK, 4.74; 95% CI, 2.36-9.55)

CONCLUSION

The use of the Impella CP microaxial flow pump in patients with STEMI and cardiogenic shock led to lower mortality than standard care at 180 days, but with significantly more serious complications.

Møller J, Engstrøm T, Jensen LO, et al. Microaxial Flow Pump or Standard Care in Infarct-Related Cardiogenic Shock. *NEJM* 2024. Presented at ACC.24.

Developed and reviewed by: Kent Brummel, MD