



# Intermediate-Term Results of Extracorporeal Membrane Oxygenation

## Support Following Congenital Heart Surgery

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### Background/Hypothesis

There is considerable data regarding in-hospital results of congenital heart surgery patients requiring post-cardiotomy extracorporeal membrane oxygenation (ECMO) support; however there is limited information on mid-term outcomes.

### Materials and Methods

- Single institutional retrospective review
- 25 consecutive post-cardiotomy ECMO patients surviving to hospital discharge
- January 2003 to June 2008

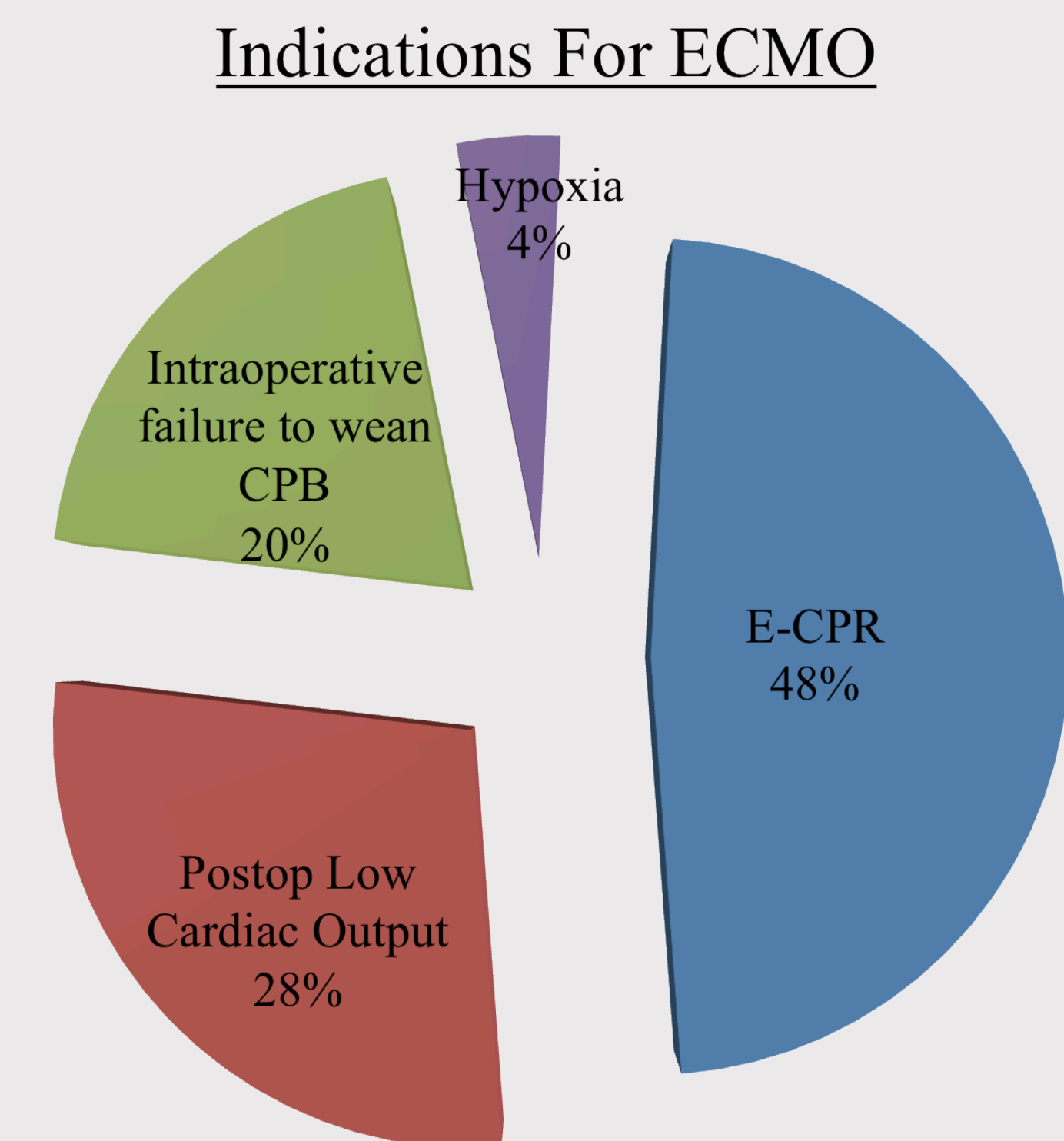
#### Primary endpoint

- Survival at last follow-up

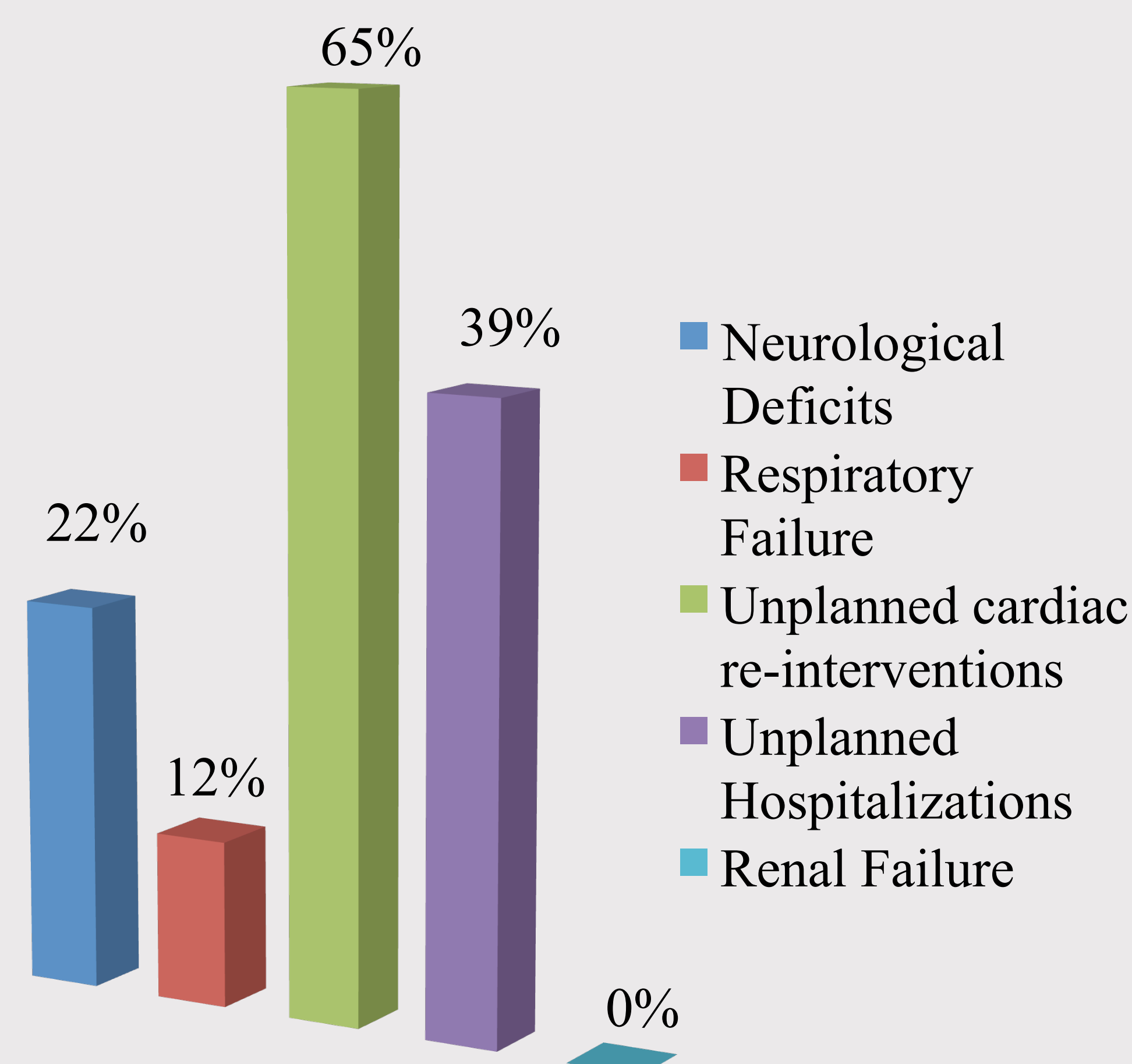
#### Secondary endpoints

- Neurological deficits
- Renal injury
- Respiratory failure
- Unplanned cardiac re-interventions
- Unplanned hospitalizations
- Postoperative medical technology dependence
- Systemic Ventricular Function at follow up

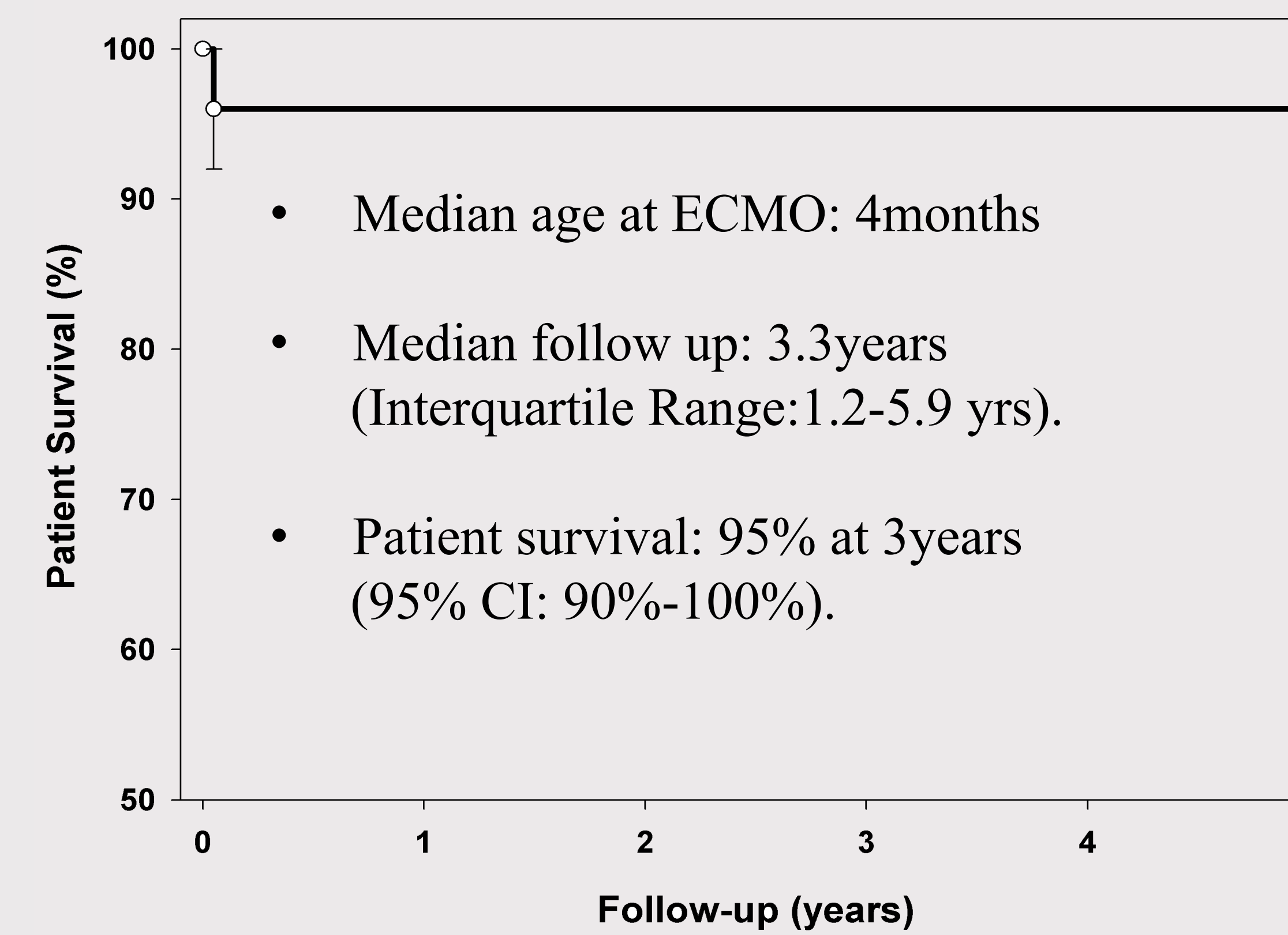
### Results



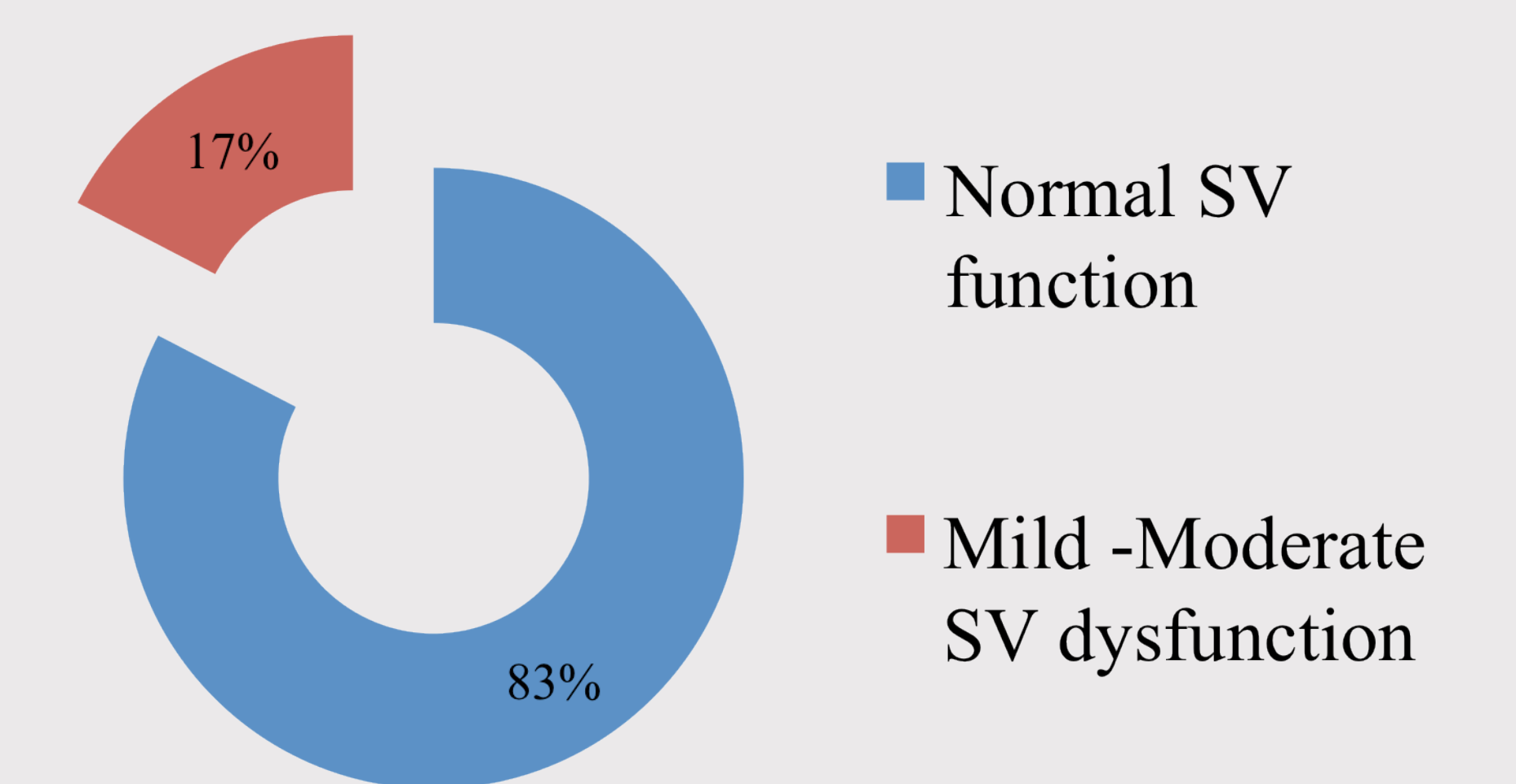
#### Secondary End Points



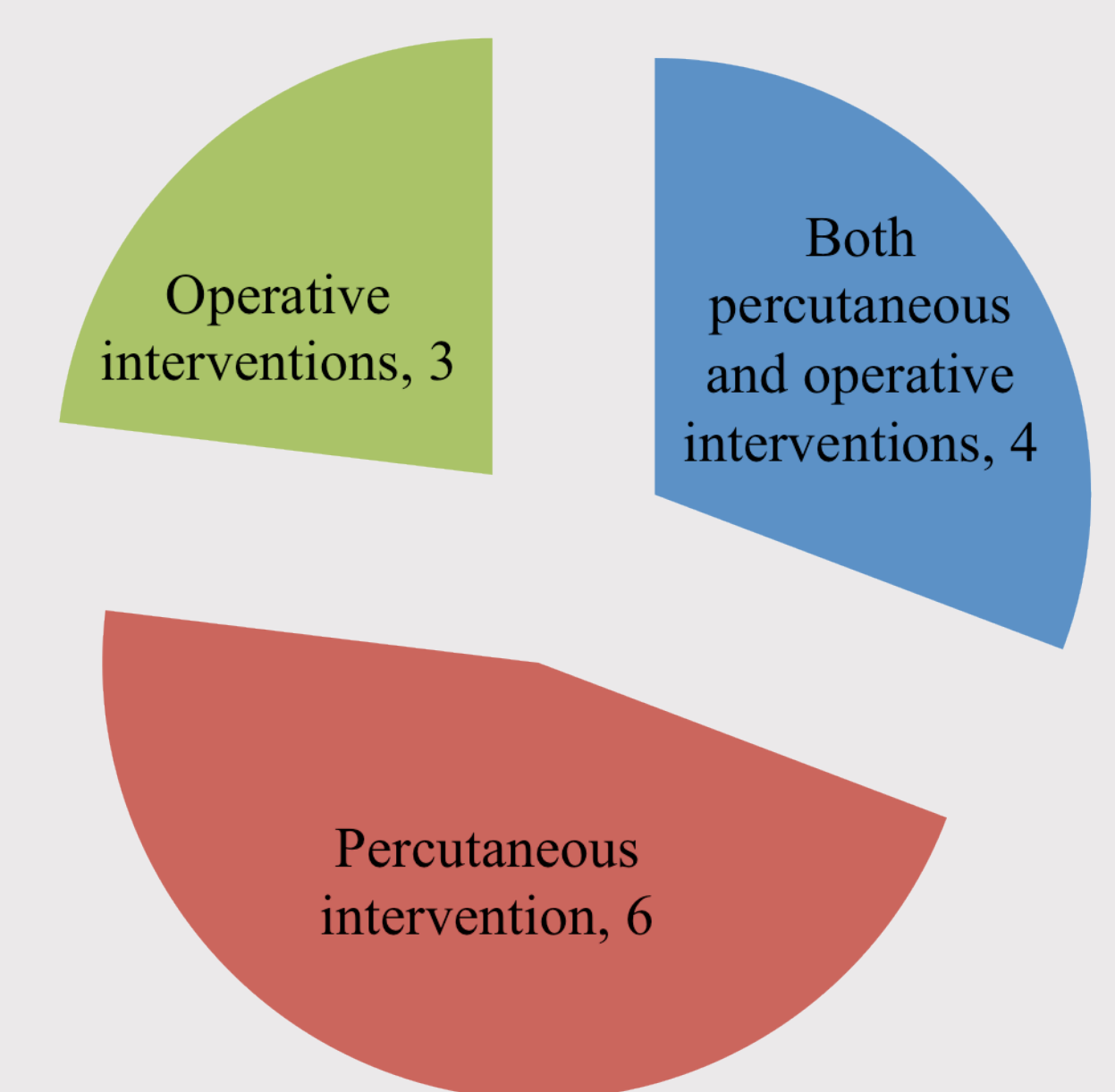
**Kaplan-Meier Survival Curve Based on 25 Patients (1 death at 6 months post surgery)**



**Systemic Ventricular (SV) function at follow up n=23**

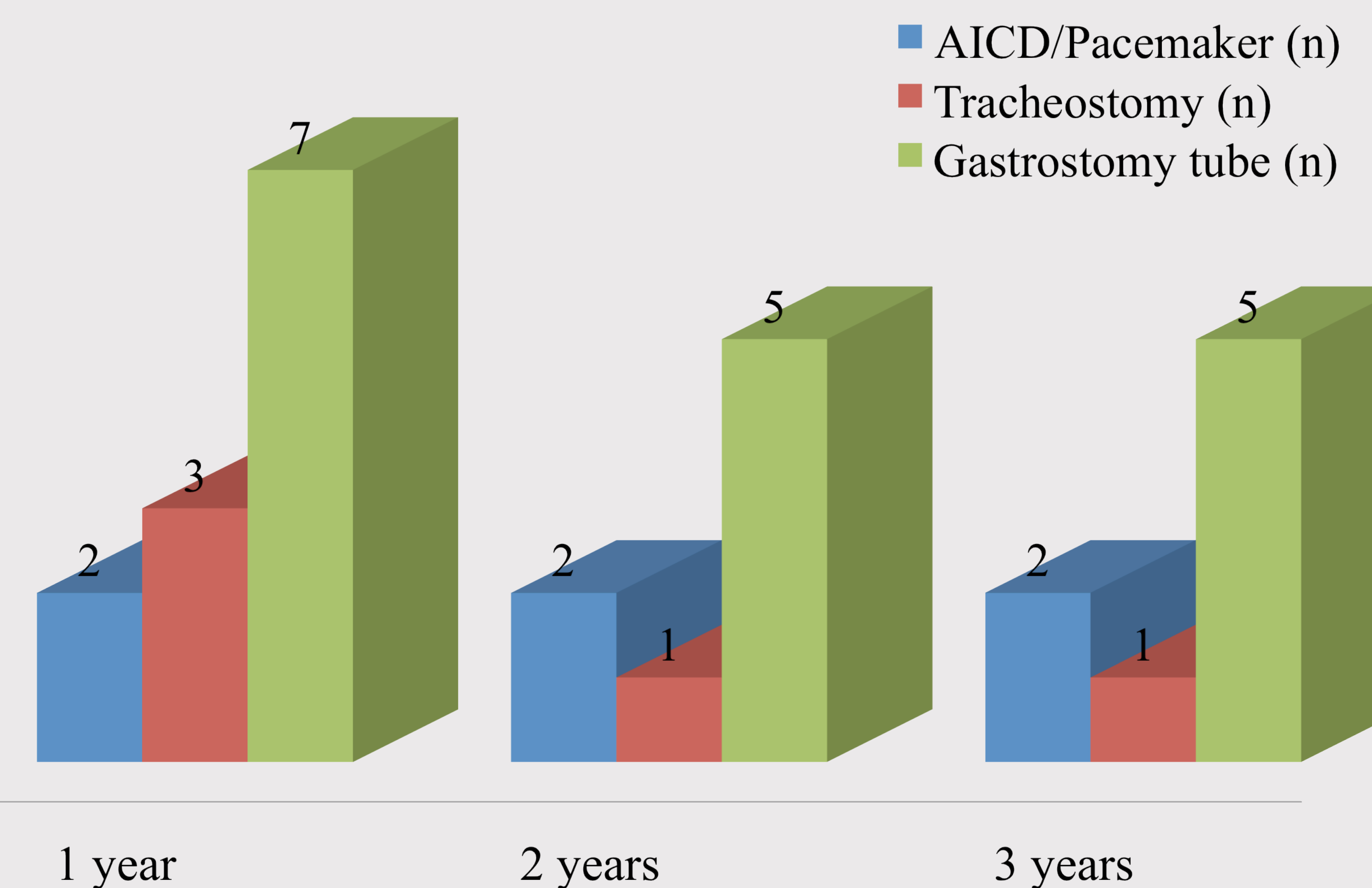


**Unplanned Cardiac Reinterventions 68% (n=13/19)**



**Unplanned Hospitalizations: 47% (n=9/23)**

#### Postoperative Medical Technology Dependence



### Conclusion

Intermediate-term post-cardiotomy ECMO patient survival encouraging  
Neurological impairment and unplanned cardiac re-interventions remain significant concerns

