# CNS Complications in Adult Patients Treated With Extracorporeal Membrane Oxygenation (ECMO)

## DESIGN
- RETROSPECTIVE
- SINGLE-CENTER
- COHORT STUDY

## PATIENTS
- 412 CONSECUTIVE ADULT PATIENTS SUPPORTED WITH ECMO FROM 2009 TO 2017

### Overall CNS Complication
13.3%

### CNS Complications by ECMO Type
- VA ECMO 18.0%
- VPa ECMO 13.6%
- VV ECMO 4.6%

### CNS Complications Associated with
- VA ECMO \( p = 0.002 \)
- RRT \( p = 0.04 \)

### Hospital Mortality
- ECMO + CNS Complication 65%
- ECMO - CNS Complication 32%
\( p < 0.001 \)

### Hospital Mortality Associated with
- VA ECMO \( p = 0.01 \)
- RRT \( p < 0.001 \)
- Days on ECMO \( p = 0.002 \)

## Conclusion
CNS complications appear to occur more frequently inpatients requiring circulatory as opposed to respiratory support on extracorporeal membrane oxygenation, and are independently associated with mortality.