Is Extracorporeal Membrane Oxygenation Associated With Lower Mortality in Refractory Asthma Exacerbations With Respiratory Failure?



STUDY DESIGN

- Retrospective, observational cohort study using the national administrative data set from 2010 to 2020
- Included adult patients treated for acute asthma exacerbation on invasive ventilation admitted to an extracorporeal membrane oxygenation (ECMO)-capable hospital

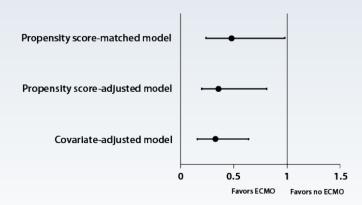
Analyzed Subjects N=13,714 ECMO N=127 Matched Subjects 1:2 N=246 ECMO N=82 No ECMO N=164





RESULTS

ECMO was associated with reduced mortality



However, ECMO was associated with increased hospital costs but not with decreased ICU length of stay or time on invasive ventilation

ECMO was associated with lower mortality and higher hospital costs, suggesting that it may be an important salvage therapy for refractory asthma exacerbations with respiratory failure, but needs further confirmatory clinical trials.