

# 奇美醫療財團法人柳營奇美醫院

## 113 年 07 月雜誌期刊研討會

講 題：Prevalence and Survival of Prolonged Venovenous Extracorporeal Membrane

Oxygenation for Acute Respiratory Distress Syndrome: An Analysis of the Extracorporeal Life Support Organization Registry

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日 期：113 年 07 月 09 下午 13 時至 14 時（共計一小時）

地 點：本院二樓加護病房討論室

摘 要：

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Abstract

OBJECTIVES:

To examine trends in utilization and outcomes among patients with the acute respiratory distress syndrome (ARDS) requiring prolonged venovenous extracorporeal membrane oxygenation (VV ECMO) support.

DESIGN:

Retrospective observational cohort study.

SETTING:

Adult patients in the Extracorporeal Life Support Organization registry.

PATIENTS:

Thirteen thousand six hundred eighty-one patients that required ECMO for the support of ARDS between January 2012 and December 2022.

INTERVENTIONS:

None.

MEASUREMENTS AND MAIN RESULTS:

Mortality while supported with VV ECMO and survival to hospital discharge based on ECMO duration were examined utilizing multivariable logistic regression. Among the 13,681 patients supported with VV ECMO, 4,040 (29.5%) were supported for greater than or equal to 21 days and 975 (7.1%) for greater than or equal to 50 days. Patients supported with prolonged VV ECMO were less likely to be discharged alive from the hospital compared with those with short duration of support (46.5% vs. 59.7%;  $p < 0.001$ ). However, among patients supported with VV ECMO greater than or equal to 21 days, duration of extracorporeal life support was not significantly associated with mortality (odds ratio [OR], 0.99; 95% CI, 0.98–1.01;  $p = 0.87$  and adjusted OR, 0.99; 95% CI, 0.97–1.02;  $p = 0.48$ ). Even in those supported with VV ECMO for at least 120 days ( $n = 113$ ), 52

(46.0%) of these patients were ultimately discharged alive from the hospital.

#### CONCLUSIONS:

Prolonged VV ECMO support of ARDS has increased and accounts for a substantial portion of cases. Among patients that survive for greater than or equal to 21 days while receiving VV ECMO support, duration is not predictive of survival to hospital discharge and clinical recovery may occur even after very prolonged VV ECMO support.