

ULTIMATE Domain



Protocol Summary, dated: 13Jun2023

<https://practicalplatform.org/domains/ultimate>

Primary Objective	To determine the feasibility of recruiting 72 patients over 1 year of active enrolment, as well as assess the rate of participant recruitment and understand the barriers to enrolment.
Design	An interventional, open-label, randomized, multi-site feasibility study.
Eligible Patient States	Intubated patients with $\text{PaO}_2/\text{FiO}_2 < 200$, not on ECLS, with high normalized respiratory system elastance ($\geq 2.5 \text{ cm H}_2\text{O}/(\text{mL}/\text{kg predicted body weight})$)
Interventions	Participants will be randomized to receive either the experimental intervention: ultra-protective ventilation facilitated by an ECMO device or the control group: usual care, standard lung protective ventilation
Outcome	<ul style="list-style-type: none">• Primary outcome is feasibility<ul style="list-style-type: none">○ Recruitment rate○ Protocol Adherence<ul style="list-style-type: none">▪ $\Delta P_{L\text{-dyn}} \leq 20 \text{ cm H}_2\text{O}$ and $V_T < 8 \text{ ml}/\text{kg}$○ Crossovers• Secondary outcomes<ul style="list-style-type: none">○ Complications○ Clinical outcomes
Duration	The duration of this study will include an estimated 1 year of recruitment to reach target sample size, and 6 months of follow up.
Sample Size	Approximately 72 evaluable patients will be randomized in this domain protocol.