

Institutional Resources and Capacity – Partner Institution

Shebin Elkom Teaching Hospital is a tertiary-level teaching hospital providing advanced critical care services. The hospital includes a large, well-established Intensive Care Unit (ICU) with a high clinical turnover of critically ill patients, including those requiring invasive mechanical ventilation. This environment offers a robust and appropriate setting for clinical research in critical care medicine.

Clinical and Technical Facilities

The Intensive Care Unit consists of 72 ICU beds. The ICU is equipped with mechanical ventilators for invasive and non-invasive ventilation, bedside ultrasound machines enabling lung ultrasound, basic cardiac ultrasound, and diaphragmatic ultrasound, as well as standard invasive and non-invasive hemodynamic monitoring systems.

Human Resources and Clinical Expertise

The ICU team is composed of board-certified critical care consultants and registrars with continuous bedside responsibilities. The team has hands-on experience in mechanical ventilation management, weaning assessment, and routine application of lung, cardiac, and diaphragmatic ultrasound in critically ill patients.

Research Capacity

The institution has the capacity to prospectively enroll mechanically ventilated patients, perform standardized ultrasound assessments, collect clinical and ventilatory data, and ensure compliance with ethical and institutional research regulations.

Role within the Consortium

As a partner, Shebin Elkom Teaching Hospital will contribute to patient recruitment, execution of integrated ultrasound assessments during weaning, clinical data collection, and validation of predictors of weaning failure from mechanical ventilation.

Key Personnel

A designated Clinical Investigator from the ICU team will oversee on-site study implementation and coordinate with the project coordinator.

Commitment

The institution commits to providing the necessary clinical infrastructure, personnel time, and institutional support required for successful project execution in compliance with Horizon Europe requirements.