

Standard Operating Procedure

ECMO RETRIEVAL PREPARATION CHECKLIST FOR REFERRING HOSPITALS

SETTING	Trust-wide/South West critical care operational delivery network
FOR STAFF	Staff involved in the care of critically ill patients/operating theatre staff
PATIENTS	Severe Respiratory Failure/Critical Care patients

What to expect

Extra-corporeal membrane oxygenation (ECMO) is technology which allows the addition of oxygen and removal of carbon dioxide by a modified heart-lung machine to support failing lungs. The ECMO retrieval team coming to your hospital will consist of an ECMO nurse, perfusionist and at least one ECMO consultant. They will bring all equipment and medicines with them, except controlled drugs which you will need to provide. The retrieval team will draw these up prior to transfer back to Bristol to avoid any syringe driver incompatibility. Putting a patient on ECMO support requires the insertion of two large bore (23-29Fr) intravenous cannulae (usually via both femoral veins) to circulate the blood to the heart-lung machine and back. Cannulation most often takes place in the operating theatre in your hospital under fluoroscopic guidance (image intensifier) and may take up to 2 hours. Once the patient is stabilised they will be transported back to Bristol on ECMO support by ambulance. For any problems or changing patient condition, please phone the ECMO Co-ordinator or the nurse in charge on ICU at UHBW.

Bristol ECMO retrieval team contact details

ECMO Co-ordinator telephone number:	07741123467
Bristol Royal infirmary ICU Nurse in charge:	01173427238

Preparation for ECMO retrieval

Patient preparation	Tick
Family informed and present in hospital for assent process if applicable	
Insert radial arterial line where possible	
Leave CVC in existing position (unless instructed to change position by ECMO team)	
Pregnancy test for all females aged 12-60	
Prepare sufficient IV infusions -for at least 4-6 hours (Sedatives, vasopressors, muscle relaxant etc.)	
Photocopy all notes, charts etc and ensure all relevant imaging transferred electronically to UHBW (Bristol Royal Infirmary site)	
Crossmatch and have available 4 units packed red cells, regardless of Haemoglobin	
Crossmatch and have available platelets, ONLY if platelet count < 100	
Crossmatch and have available Fresh frozen plasma, ONLY if instructed by ECMO retrieval team	
Please complete the ECLS severity form m sent along with this checklist.	

Current Investigations	Tick
Full blood count, C-reactive protein, electrolytes, creatinine, liver function tests	
Clotting studies – APTT, PT, Fibrinogen	
Microbiology results (including recent respiratory viral PCR)	
Chest X-Ray, electrocardiogram, echocardiogram (where available)	

Theatre preparation	Tick
Free theatre available with team (including scrub staff)	
Anaesthetic/ICU support for duration of case	
Radiolucent theatre table	
C-arm with fluoroscopy capability, radiographer and 100ml of IV contrast for injection	
Vascular ultrasound in theatre	
2 Large empty surgical trolleys and 1 small empty surgical trolley with drapes for sterile preparation of equipment	

**** If time critical transfer, please prioritise organising a free theatre and the crossmatch of 4 units of blood****

Thank you,

Bristol ECMO Service Team

Table A

REFERENCES	N/A
RELATED DOCUMENTS AND PAGES	ECLS Severity scoring sheet
AUTHORISING BODY	Clinical Guidelines Group
SAFETY	This SOP and ECLS sheet should be completed prior to retrieval by all referring centres to ensure a seamless handover.
QUERIES AND CONTACT	For any queries, please contact the ECMO Co-ordinator telephone number 07741123467

Document Change Control

Date of Version	Version Number	Lead for Revisions	Type of Revision	Description of Revision
August 2023	1.00	ECMO clinical lead ECMO co-ordinator	Major	Version 1 iteration of document