

VECMOS ECMO Retrieval Preparation Checklist

General requirements for all patient retrievals

Patient and family preparation

- Explain to the patient (if possible) and patient's family / carer the need for retrieval
- Encourage family / carer to be available to meet the retrieval team on arrival for discussion and consent
- Insert arterial line (preference for right radial)
- Insert central venous line (preference for left internal jugular)
- Insert urine catheter
- All notes photocopied / printed
- All imaging on disk or electronically transferred to receiving site

Equipment

- Small procedure trolley and IV pole available for ECMO console
- Access to two oxygen outlets or two full oxygen bottles available (one for transport ventilator and one for ECMO circuit)

Medications

- Sedation, inotropes, vasopressors and muscle relaxants drawn up to meet [ARV standard infusion concentrations](#). ARV team will provide pumps and compatible syringes
 - Morphine 50mg / 50ml NS
 - Midazolam 50mg / 50ml NS
 - Propofol 200mg x 2 syringes
 - Noradrenaline 3mg / 50ml D5W
 - Adrenaline 3mg / 50ml D5W
 - Muscle relaxants
- Antibiotic dosing up to date (if indicated). Additional antibiotic doses available if required for expected prolonged retrieval

Investigations

- FBE, UEC, LFT
- ABG
- Coagulation screen (INR, APTT, fibrinogen)
- CXR
- CT brain if indicated. All OHCA require a CTB.
- ECG and echocardiography (if available)
- Pregnancy test if appropriate
- Microbiology results

Blood bank

- Valid group and hold
- Packed red blood cells: 2-4 units available
- Fresh frozen plasma, cryoprecipitate, and platelets available if indicated: INR >1.5, fibrinogen < 2.0, platelet count < 80

Additional requirements for patients not already on ECMO support

Patient preparation

- Ensure patient is in single room or large area able to be screened off for cannulation procedure
- Ensure femoral access sites are clean and hair clipped

Personnel required

- Consultant responsible for patient management present
- Two nursing staff available to assist
- Echo technician (or other) able to perform subcostal cardiac imaging

Equipment

- Large procedure trolley available for cannulation
- Resuscitation trolley and airway trolley available
- Ultrasound machine(s) with both cardiac and vascular probes available
- Two sterile ultrasound covers
- 1 litre of 0.9% saline
- 10,000 units of heparin
- Betadine (povidone-iodine 10%) (200mls)
- Local anesthetic (1 or 2% lignocaine)
- Personal protective equipment: surgical gowns x2, masks with face shields x2, sterile surgical gloves, surgical hats