

ECMO entails the oxygenation of blood by an artificial lung aided by a modified heart-lung machine. The surgical procedure takes about 20 to 60 minutes and is carried out on the ward. The patient's bed should be in a private room if possible. After allowing one to three hours for stabilization the patient is transported to Stockholm.

We would appreciate it if the following preparations were made before our arrival (please check):

Order blood; should be available on the ward **✓ here**
All age groups (neo to adults) 6 adult size of red blood cell concentrates, 2 adult size units fresh (frozen) plasma O

Investigations to be made:

Echocardiogram O
Chest x-ray O
Cranial ultrasound (Neo) O
CT of cranium and thorax if possible O

Recent lab tests (fill in data on separate sheet below):

Hgb, WBC, Platelets, CRP, PCT, Alb, ionized Ca, Cr, Urea, Bilirubin, O
APTT, prothrombin complex, Fibrinogen, D-dimer, Antithrombin O
Arterial blood gas incl lactate O
Cardiac enzymes O
HIV and Hepatitis serology O

Note last GCS-score before sedation/intubation O
Note body temperature, actual blood pressures and heart frequency O

Blood typing and basic antibody screening in the mother where neonatal patients are involved O
Newborn bloodspot screening incl PKU sample taken before ECMO. O
(A new sample should be drawn one week after completed ECMO treatment)

Patient preparation:

Surgical table or adjustable height outpatient incubator without water mattress O
No pumps or similar apparatus on the patient's right-side O
Indwelling catheter O
CVC, preferably on patient's left side, if possible O
A-line, preferably on patient's right side, if possible O
Securely fixed endotracheal tube O

Misc:

Surgical personnel (in the case that ECMO can't bring their own scrub nurse), anesthesiologist O
Diathermia, instrument table, accessory table, suction, illumination, ultrasound O
Sodium chloride for infusion, chlorhexidine for sterile preparation, sterile infusion set O
Space to set up the ECMO system with access to air, oxygen, and electricity. O
Two empty tables or trolleys O

CXR immediately after procedure O
Copies of chart notes and x-rays O
Relatives should be available to receive information from ECMO doctor O

When ECMO retrieval involves air transport we need a big enough transport vehicle that can take four people and 250 kg of equipment. Going back to the airport we need a big enough ambulance that can take us and the patient. It is important that you can load both the pump and the patient together through the same door in the ambulance.

Note

A complete application form to Treatment Abroad Scheme needs to be submitted by the parents of patient or patient with their referring Irish consultant.

Name: _____ Birth date: _____

Fill in these data, please

Height: _____ cm Weight: _____ kg
Latest GCS before sedation/intubation: _____ Body temp: _____
Time of intubation, date: _____, time: _____

Samples/data taken 30-60 minutes BEFORE our planned arrival

Date: _____ Time of blood sample: _____

Hgb: _____ WBC: _____ Platelets: _____ CRP: _____ PCT: _____
Creatinine: _____ BUN/Urea: _____ Albumin: _____ Bilirubin: _____ Lactate: _____
PK /INR: _____ aPTT: _____ Fibrinogen: _____ Antithrombin: _____
D-dimer: _____ Troponin; TnT: _____, Tnl: _____

Regarding neonatal patients

Date of birth: _____, time: _____

GA: _____

Birth weight: _____ g Height: _____ cm

APGAR, 1min: _____, 5 min: _____, 10 min: _____

Age of mother: _____

Newborn bloodspot screening before ECMO (please circle): No Yes Time: _____

Has Vitamin-K (fytomenadion) been given (please circle): No Yes Time: _____

This form should be submitted the ECMO transport team.

Thanks for your cooperation!