

# iLA Active in Critical Care

**Aim** To provide guidance on the circuit choice and process for the use of the iLA Active system in the Intensive Care Unit  
**Scope** All adult patients on the Intensive Care Unit who require iLA Active respiratory support.

## Section A: Patient with Respiratory Failure

### Indication

- Severe respiratory failure with high risk of mortality (~50-80%) despite optimal conventional therapy.

### Contraindications

- Patient meets ECMO criteria
- Condition incompatible with life if patient recovers.
- Excessive burden of pre-existing illness (eg CNS disease or malignancy)
- Age and/or size of patient
- HITT or bleeding diathesis

## Select circuit based on treatment goals

\*commonest configurations are shown in bold. \*\*note recirculation is likely above 2 l/min with Novaport Twin.

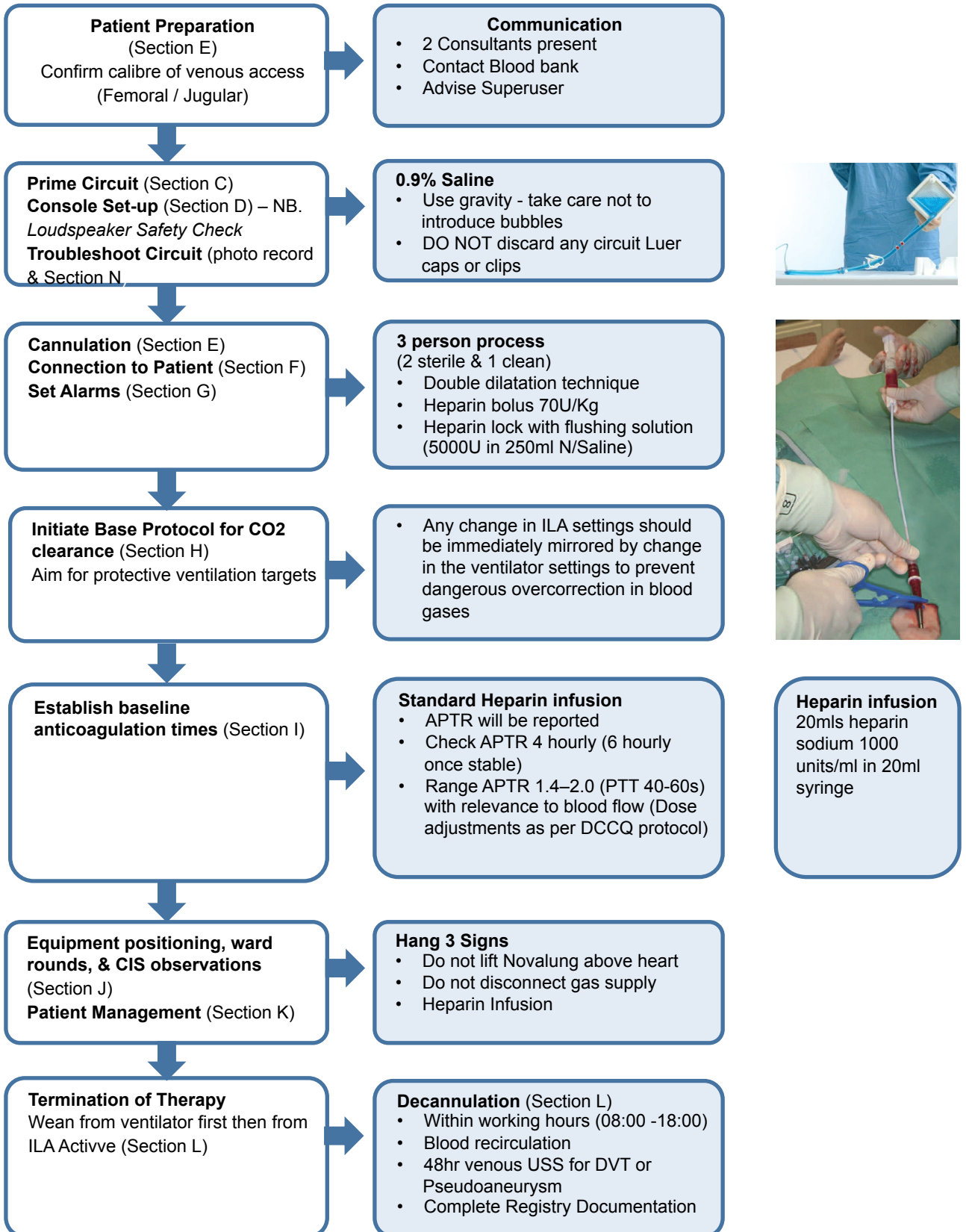
Cannulae Configurations	Sizes (note 4F difference between femoral & jugular lines)	Cannulae combination blood flow tolerability	Choice of membrane ventilator (blood flow tolerability)	Treatment Goals
Novaport Twin**	22F/17cm Jugular	0.8 - 1.3 l/min	ILA (0.5 – 4.5 l/min)	CO2 removal
<b>Novaport Twin**</b>	<b>*24F/27cm Femoral</b>	<b>1.3 – 2.0 l/min</b>	<b>ILA (0.5 – 4.5 l/min)</b>	<b>CO2 removal &amp; Oxygenation</b>
Femoral (Novaport One) to Jugular (Novaport One)	21F/38 or 14cm Femoral 17F/14cm Jugular	Max 3.5 l/min	ILA (0.5 – 4.5 l/min)	CO2 removal & Oxygenation
<b>Femoral (Venous Drainage) to Jugular (Novaport One)</b>	<b>*23F/38cm Femoral 19F/14cm Jugular</b>	<b>Max 4.5 l/min</b>	<b>ILA (0.5 – 4.5 l/min)</b>	<b>CO2 removal &amp; Oxygenation</b>
Femoral (Venous Drainage) to Jugular (Novaport One)	25F/38cm Femoral 21F/14cm Jugular	Max 6.0 l/min	ILA (0.5 – 4.5 l/min) or X-Lung (1-7 l/min)	CO2 removal & Oxygenation or Complete Lung Support
Femoral (Venous Drainage) to Femoral (Venous drainage)	25F/38cm Femoral 20F/55cm Femoral	Max 7.0 l/min	X-Lung (1-7 l/min)	Complete Lung Support

Take iLA Active Baseline ICE profile bloods & inform Haematology that patient starting iLA Active (see section B)

Version: 1.0 | Date: 15 Jul 16 | Revision Due: 15 Jul 19 | Authors: Dr K Adeniji, N Tomlinson, S Andrews

The use of this guideline is subject to professional judgement and accountability. This guideline has been prepared carefully and in good faith for use within the Department of Critical Care at Queen Alexandra Hospital. No liability can be accepted by Portsmouth Hospitals NHS Trust for any errors, costs or losses arising from the use of this guideline or the information contained herein. Portsmouth Hospitals NHS Trust © 2014

## Set-Up Process



## Titration of Ventilator Minute Volume and iLA Gas Flow

