

PICU ECLS GOALS AND PARAMETERS DEFAULT QUICK REFERENCE

ECLS Flow
 VA – Neonate 120-150 ml/kg/min
 VA – Pediatric 80ml/kg/min
 VV – 80-100ml/kg/min

ACT 180-220 seconds

HCT ≤ 30

Platelets $\leq 50,000 \text{ mm}^3$

Lactate ≥ 2 or increasing

SvO2 $\leq 75\%$

Fibrinogen $\leq 1.5 \text{ g/L}$

Anti-thrombin $\leq 0.5 \text{ unit}$

Plasma free Hb $\geq 0.5 \text{ g/L}$

Urine $\leq 1 \text{ cc/kg/hr}$

Bleeding if $\geq 5 \text{ cc/kg/hr}$

Unfractionated Heparin 0.3 to 0.7 $\mu\text{g/ml}$

Antithrombin (AT) dosing when a patient is on ECLS:

- a. Dose calculation - Aim to correct to 120%:
 Administered dose (units) = $(120 - \text{actual level as a percentage}) * \text{weight (kg)} / 1.4$
 Sample for a measured level of 0.4 in a 4 kg baby:

$$\text{Prescribed dose} = (120 - 40) * 4 / 1.4 = 230 \text{ units}$$

- b. Give over 3 hours
- c. Heparin infusion decreased by 25% at initiation of AT infusion - minimum heparin infusion rate of 10u/kg/hr.
- d. Monitor ACT's every 30 minutes until back within ordered range.