Frequently Asked Questions - ELSA

Flowsensors

Q: Must I use Vaseline?

A: *Yes, all Flowsensors are calibrated using Vaseline. We recommend this for highest level or accuracy.*

Q: Why are my Flowsensors not reading identical flows?

A: *Each Flowsensor has its own percentage of accuracy, +/-10%. It is possible that one Flowsensor may be at the higher end of its range, while the other is at the lower range. Additionally, accurate tubing calibration and zeroing of sensors may come into play.*

Q: Must the arterial and venous Flowsensors stay on the arterial and venous limbs?

A: *To measure flow, you can move Flowsensors wherever flow measurement is desired. The specification of venous and arterial are for the ELSA's advanced measurements.*

Q: Do both sensors need to be on the circuit even if I am only measuring one flow?

A: *Yes. The Flowsensors paired design require that both are clamped onto the circuit, whether the user decides to show one or two flows on the ELSA screen.*

Q: Where do I place the Flowsensor for a recirculation measurement?

A: *Recirculation only, Flowsensors are placed close to the patient. We recommend approximately 2-4 inches or 5-10 cm away from the tubing/ cannula connection.*

Q: Where do I place the Flowsensors for an OXBV measurement?

A: *The arterial sensor is placed 2-4 inches or 5-10 cm away from the oxygenator outlet. The venous sensor is placed close to the patient.*

Q: Where do I place the Flowsensors for a REC + OXBV measurement?

A: *The arterial sensor is placed 2-4 inches or 5-10 cm away from the oxygenator outlet. The venous sensor is placed close to the patient.*

* For more information on accurate sensor placement, please reference the ELSA's Quick Reference Guide or Manual.

OXBV

Q: What does OXBV stand for?

A: *Oxygenator Blood Volume*

Q: Explain tubing volume again? How do I measure it?

A: *The ELSA provides an option to add in additional volume that may be present from the tubing length from the injection site to the oxygenator. This is based on the users specific ECMO pump set-up. By using a tape measure, determine how many in/cm of tubing is present and calculate based on tubing size. Round to the nearest whole number to enter into the ELSA. The ELSA will then deduct this amount from the OXBV measurement to accurately reflect the volume of the oxygenator only.*

*Please reference the ELSA Quick Reference Guide or Manual for further instruction

Q: How do I know my oxygenator's priming volume?

A: *All oxygenator manufacturers should provide this information within the product specifications.*

Q: What is initial OXBV?

A: *The initial or baseline OXBV is recommended 4-6 hour after cannulation. This measurement is saved and all OXBV measurements following are compared to the baseline measurement. This provides the OXBV% calculation.*

transonic
THE MEASURE OF BETTER RESULTS.

Frequently Asked Questions - ELSA cont.

Recirculation

Q: How much recirculation is bad or good?

A: *This will be different for every patient depending on size and location of cannulas, ventilation status and overall level of disease process. However, by trending and determining a patient's baseline users can help guide clinical decision making.*

Q: How often should I take measurements with the ELSA?

A: *Recirculation measurements can be taken during cannulation as well as throughout an ECMO run. Once stabilized, measurements are recommended Q12-Q24 hours to determine the patient's baseline and quickly identify any changes.*

Other (Miscellaneous)

Q: How much saline do I inject?

A: *Minimum 5mL – Maximum 30mL*

Neonates 5mL

Pediatric 1ml/kg up to 20kg or 2L/min of flow.

Adult 20mL – 30 mL

Q: Will my patient's maintenance IV fluids effect readings on the ELSA?

A: *No, continuous maintenance fluids will be registered as a part of the baseline. However, any large fluid boluses should not take place during an advanced ELSA measurement.*

Q: I use the Cardiohelp, will the ELSA still measure?

A: *Please refer to the Cardiohelp Technical Note.*

Q: Can I export patient data from the ELSA?

A: *Not at this time.*