**Instructions for Blood Transfer and Collection into an ASPIRATING SYRINGE using the Hummi Closed Needleless Micro-Draw Blood Transfer Device on** Umbilical Arterial Catheters **and** Umbilical Venous Catheters **with Micro T Split-Septum T-Connector Attached.**

**Procedure:**

1. Assemble the needed components. Hummi Closed Needleless Micro-Draw Blood Transfer Device, desired collection device (aspirating syringes), site prep materials, labels, gloves etc.
2. Don Gloves. Prep the T-connector septum according to institutional policy and procedure.
3. Open the Hummi Needleless Closed Micro-Draw Blood Transfer Device and inspect for damage, etc. Make sure the vent plug is in place on the extension with **Blue** clamp. Make sure the white vent cap is in place on the extension with the **Red** clamp. The protective cover should be on the Hummi blunt metal tube.
4. Clamp both extension tubing clamps on the Hummi (**Red** and **Blue**) to the closed position, clamping the lines.
5. Remove the white vented plug from the extension tube with **Blue** clamp. Pre-Attach an aspirating syringe (luer lock or luer slip) of desired size to the female luer for collection of holding / clearance blood.
6. Remove the white vented plug from the extension tube with **Red** clamp. Pre-Attach an aspirating syringe (luer lock or luer slip) of desired size to the female luer for collection of blood sample for testing.
7. Using the T-Connector slide clamp, Clamp the T-connector tubing closed.
8. Remove the protective cover on the Hummi blunt tube, hold the T-connector hub securely and slowly insert the blunt metal tube into the T-connector septum at a 90 degree angle to the septum. (Keep straight on insertion)
9. Fully insert the Hummi blunt tube until it is entirely inserted through the septum and rests with its tip inside the catheter hub. Stop inserting once resistance is felt. **CAUTION: Do not force blunt tube if resistance is met on initial insertion. Probe septum until opening is found. Stop insertion after blunt tube is fully seated inside the catheter hub.**
10. Unclamp the **Blue** clamp on the extension tube and holding the syringe in an upright position, aspirate the desired volume of clearance blood into the syringe. Immediately close the **Blue** clamp**.** Note: 0.5mL to 1.0 mL will be sufficient for most UAC umbilical catheters.
11. Re-clamp the **Blue** clamp and leave this syringe in place with the holding/clearance blood.
12. Holding the Hummi in a upright position unclamp the **Red** clamp blood sampling extension tubing and holding the Aspirating Sample Syringe, slowly aspirate the desired blood sample volume into the syringe. Re-clamp / Close the **Red** clamp on the extension tubing.
13. Unclamp the **Blue** clamp on the Waste/Holding extension tubing with syringe attached. Slowly, holding the syringe in an upright position, return the clearance blood to the patient at a rate of 1.0 mL over a 30 second period. Leave clearance syringe attached. Close **Blue** clamp**.**
14. Holding the T-connector hub securely, slowly remove the Hummi Micro-Draw device with both the waste and blood sample syringe attached, in a straight and smooth withdrawal motion.
15. Remove the sample syringe from the female luer, cap and set aside for testing.
16. Unclamp the T-connector to resume normal UAC arterial pressure monitoring / UVC venous line flow.

Flush the UAC / UVC catheter with 0.3mL to 0.5mL of flush administered through a stopcock attached to the T-connector or at some access point in the line.

1. Clean the T-connector split-septum with appropriate anti-microbial.
2. Dispose the Hummi-Micro Draw device in an appropriate sharps container.