**TAVI – Scrub Nurse Responsibilities**

**Scrub-Table Set-up**

* TAVI pack
* TAVI tray
* 2 ENT basins *(one for catheters/one for wires)* 3 bags Heparinized-saline for flush
* 3 bowls *(one for waste, 2 for flush)*
* 0-silk cutting x 2
* Pacer cable x 1
* Single art-line set-up from anesthesia cart x 1
* Venous extension tubing x 1
* All required TAVI extras from TAVI pyxis *(use pick list)*

**Scrub Prep**

* Flush all catheters, guide wire and sheaths
* Snap the dilator into the sheath to secure *(ensure stopcocks are OFF/towards patient)*
* Flush the blue end of the swan catheter and check balloon with controlled 3ml syringe
* Place pacer wire cover over tip of wire. Connect the other end to pacer cable (+/-) and check balloon with controlled 3ml syringe
* Label syringes: one 20cc syringe (100 mcg Nitroglycerine + 10ml 0.9% Nacl inj), two 10cc syringes (lidocaine/bupivacaine), one 20cc syringe (Contrast), as well as all Heparinized-saline
* Prepare groin towel and have draping supplies in order and ready
* Move all items needed at the start of the case to the right side of table for easy access
* If keeping the basins on the ring stand cover ring stand with sterile table cover

**Draping**

* Circulating nurse to remove wet groin towel, scrub nurse to replace with sterile groin towel
* Right arm is prepped and held up by circulating nurse
* Angio drape placed with holes on each groin and pulled to cover table
* Sterile towel on arm board under right arm, cover hand with limb bag, then cover entire arm with radial drape *(hole on X)*
* Drape equipment: sonosite cover, C-arm, c-arm screen, med-rad, angio drape and sheild *(6 in total)*
* Drape and drape tape at bottom end of the table prn

**Start of Procedure**

* First hand off medrad lines/controller for the circulating nurse to connect
* Place art-line set up on table
* Place white swan and temporary pacer wires in folded towel on table
* Place ENT basins with wires and catheters on table
* *Right side of back table:*
	+ All sheaths in basin with Heparinized-saline flushed and ready to use
	+ Per-close x 2
	+ Four 20cc syringes ½ full Heparinized-saline
	+ Two 10cc syringes with lidocaine/bupivacaine mixture for puncture sites one with black needle, the other with the orange needle
	+ Seldinger needles
	+ Suture box

**During Procedure: Part 1 (Cannulation)**

* First they will cannulate the radial artery (6fr radial sheath*, +* one opsite*)*
* They will use the mini-stick femorally on the valve side *(for access only),* then the dilator from the 6Fr femoral sheath to dilate for the 2 per-close to be positioned
* The surgeon will cannulate the femoral vein with the 7fr Femoral Sheath&secure with a cutting silk
* Next, the valve sheath the sheath is placed into the femoral artery and secured with a cutting silk
* The Amplatz wire will be inserted into the 7fr sheath, then the Wedge Catheter is inserted over the Amplatz wire the into thefemoral vein to the heart to measure pressures
* The Wedge Catheter is removed & the Temporary Pacer Wire is inserted over the Amplatz wire where it will stay for the entire procedure – used for rapid pacing during balloon expansion and valve deployment

**During Procedure: Part 2 (Access)**

* Pre-load the J-wire through the marker pigtail. This will be inserted into right radial artery
* The marker pigtail sits in the ascending aorta for frequent angiogram to aid in positioning the valve (the Medrad extension tubing is attached here)
* Next pre-load the J-wire into the AL-1 Catheter. It will be inserted into the femoral artery through the large valve sheath
* J-wire is removed and the Straight Wire (blue wire) is fed through
* The AL-1 catheter comes out, & the Regular Pigtail catheter goes into the LV. The straight wire is removed and replaced with the Safari Wire
* Next the valvuloplasty balloon goes in over the Safari Wire the *rapid A pacing as balloon inflates (Circulating Nurse should stand near the defibrillator)*

**During Procedure: Part 3**

* Balloon removed and valve is inserted. They will check the position of the valve with angiogram before deploying the valve
* *Rapid A pacing (Circulating Nurse should stand near the defibrillator) – Valve is deployed*
* Transthoracic-echo (TTE) checks positon and function of the valve
* If satisfactory the marker pigtail is pulled back and the glide wire is used through the radial artery to check for dissection
* The big sheath is pulled back, may need green towel/sponges for bleeding
* Use per-close devices to close the femoral artery puncture

**Post-op TAVI**

* The 7fr Femoral Sheathremains in the patient and is capped and covered with an opsite *(can be done by scrub nurse or fellow)*
* 4x4 sterile gauze and 3-4 opsites for the groin sites and sheath
* If radial access was used then a TR band will be put over the radial artery to apply pressure *(Keep syringe in chart and record amount of air on TAO form – ASK REGULAR OR LARGE)*
* Small count is required for closing