This catheter is not intended for any use other than that which is indicated. Do not implant catheter in thrombosed veins or arteries.

The presence of skin related problems around the insertion site (infection, phlebitis, scars, etc.)

The device of related hæmorrhage or sepsis.

History of mastectomy on insertion side.

Previous history of venous/subclavian thrombosis or vascular surgical procedures at insertion site.

Fever of unknown origin.

The patient’s body size is insufficient to accommodate the size of the implanted device.

The patient is known or is suspected to be allergic to materials contained in the device.

Past irradiation of prospective insertion site.

Local tissue factors will prevent proper device stabilization and/or access.

A midline catheter placement is contraindicated for patients requiring any dial of the device.

Solutions with protein concentrations above 5 percent; Solutions with protein concentrations above 10 percent;

Contents sterile and non-pyrogenic in use.

Do not re-stereilize the catheter or accessories by any method.

Re-use may lead to infection or illness in patient.

The manufacturer shall not be liable for any damage caused by reuse or re-sterilization of this catheter or accessories.

Do not use catheter or accessories if any sign of product damage is visible.

Do NOT use high-pressure injectors for contrast medium studies. Excessive pressures may damage catheter.

This is not a right atrium catheter. Avoid positioning the catheter tip in the right atrium. Placement or migration of the catheter tip into the right atrium may cause cardiovascular arrhythmias, myocardial erosion, or cardiac tamponade.

Central venous pressure monitoring should always be used in conjunction with other patient assessment metrics when evaluating cardiac function.

Small syringes will generate excessive pressure and may damage the catheter. The use of 10cc or larger syringes are recommended.

Do not use acrasia instruments near the extension lines or catheter lumen.

Catheter will be damaged if clamps other than what is provided with this kit are used.

Clamping of the tubing repeatedly in the same location will weaken tubing. Avoid clamping near the luer(s) and hub of the catheter.

Examine catheter lumen and extension(s) before and after each infusion for damage.

To prevent accidents, assure the security of all caps and connections prior to and after treatment.

Use only Luer Lock (threaded) Connectors with this catheter.

Repeated over tightening of luer lock connections, syringes, and caps will reduce connector life and could lead to potential connector failure.

Confirm catheter tip position by x-ray prior to use. Monitor tip placement routinely per institutional policy.

INFORMATION:

The basilic, median cubital, or cephalic vein may be catheterized. The basilic vein is the preferred site.

For PICC catheter insertion, advance the guidewire until it reaches the crista terminalis. Once the guidewire is in place, avoid use of the wire or device. The guidewire may break or unravel. If the guidewire becomes damaged, the introducer needle or sheath/dilator and guidewire must be removed together.
15. Attach syringe(s) to extension(s) and open clamp(s). Blood should aspirate easily. If excessive resistance to blood aspiration is experienced, the catheter may need to be repositioned to obtain adequate flow.

16. Once adequate aspiration has been achieved, lumen(s) should be irrigated with saline filled syringe(s). Clamp(s) are recommended.

17. Remove the syringe(s) and close extension clamp(s). Avoid air embolism by keeping catheter tubing clamped at all times when not in use and by aspirating then irrigating the catheter with saline prior to each use. Never flush without connecting tubing connections, purge air from the catheter and all connecting tubing and caps.

18. Confirm and document proper tip placement with fluoroscopy prior to use.

19. For PICC catheter insertion, the distal tip should be positioned at the level of the caudal atrial junction.

20. Record catheter length, catheter lot number, and tip position on patient’s chart.

INFUSION

21. Before infusion begins all connections should be examined carefully.

22. Frequent visual inspection should be conducted to detect leaks to prevent blood loss or air embolism.

23. If a leak is found, the catheter should be clamped immediately and replaced.

CATHETER MAINTENANCE

24. Dressing Changes - A dressing should cover the insertion site at all times. The dressing should be changed at least once per institutional policy. If any time the dressing becomes soiled, wet, or non-occlusive.

25. Remove old dressing and inspect site location. It is recommended for the catheter migration to occur. Peripherally based catheter placement and tip location.

26. Flushing and Locking - Flush and lock catheter according to your institutional policy.

27. The catheter should be flushed with normal saline prior to drug administration to remove locking solution.

28. After drug administration each lumen should be flushed again with normal saline and then locked to maintain patency.

29. Injection Caps - Injection caps or needless access port(s) should be changed per the institutional policy (if specified). If no needless access port(s), do not exceed 100 actuations.

30. Catheter PERFORMANCE

• Occluded/Partially Occluded Catheter: Resistance is encountered to aspirating or flushing, the lumens may be partially or completely occluded.

• Warning: Do not flush against resistance.

• If the lumen will neither aspirate nor flush, and it has been determined that the catheter is occluded with blood, follow institutional declotting procedure.

31. Catheter Infection

• Due to risk of exposure to HIV or other blood borne pathogens, healthcare professionals should always use Universal Blood and Body Fluid Precautions in the care of all patients.

• Sterile technique should always be strictly adhered to.

• Clinically recognized infection should be treated promptly per institutional policy.

32. CATHETER REMOVAL

• Warning: Only a clinician familiar with the appropriate techniques should attempt the following procedures.

• Always review facility protocol, potential complications and their treatment, warnings, and precautions prior to catheter removal.

1. Wash hands, gather equipment.

2. Remove old dressing and inspect insertion site for redness, tenderness, and drainage.

3. Grasp catheter near insertion site and using a slow steady motion, remove catheter from vein.

4. If resistance is felt - STOP. Retape the catheter and apply a warm compress and proceed normally for 20-30 minutes.

5. Resume removal procedure. If catheter remains “stuck” follow institutional policy for further intervention.

6. Apply pressure, if necessary, until bleeding stops and dress site following institutional policy.

• Note: Inspect catheter and measure length. It must be equal to baseline measurement taken when the catheter was inserted.

ALTERNATE INSERTION TECHNIQUE USING DIFFERING RIGID AND SIDEPORT ADAPTER

PREPARE CATHETER

33. Preflush catheter, sideport adapter, and needless access ports.

34. Attach saline filled syringe to luer adapter and flush catheter. Clamp sideport extension and remove syringe. If using multiple lumen catheter, attach needless access port to remaining extension. Attach saline filled syringe to the needless access port completely flush catheter lumen. Remove syringe from needless access port prior to clamping extension. Flush remaining needless access port and set aside.

35. Never clamp close on catheter stylet; stylet and catheter damage may result.

• Caution: The needless access port should not be used with needles, blunt cannula, or other non-cutting connectors, or luer connectors with visible defects. If needle access is attempted, the needless access port must be replaced immediately. Do not exceed 100 actuations.

INSERTION

36. Insert the introducer needle with attached syringe into the target vein. Aspire to insure proper placement.

37. Insert needle, leaving guidewire in the target vein. Advance guidewire with forward motion into and past the needle hub into the target vein.

38. The length of the wire inserted is determined by the size of the patient for anticoagulation therapy.

39. Caution: The guidewire should be held securely during this procedure.

40. Remove needle, leaving guidewire in the target vein. Thread stylet over the proximal end of the guidewire into the target vein.

41. For PICC catheter insertion, advance the guidewire until it reaches the caudal atrial junction. Once the guidewire is in place, notify the radiologist by marking the wire on the wire. Remove the guidewire leaving the sheath and dilator in the vein.

42. Do NOT bend the sheath/dilator during insertion as bending will cause the sheath/dilator to seal and may prevent advancement.

43. Do NOT flush against resistance.

44. Do not reposition sheath until guidewire is fully inserted.

45. Never leave sheaths in place as an introducer catheter. Damage to the vein will occur.

46. Remove dilator from sheath.

47. Insert distal tip of catheter into and through the sheath until catheter tip is correctly positioned in the target vein.

48. Remove the tear-away sheath by slowly pulling it out of the venous wall. Simultaneously split the sheath by grasping the tabs and pulling them apart (slight twisting motion may be helpful).