

# BVS® 5000/AB5000™ Systems Cannulation Guide

## 1. Select Cannulation Locations

Most common locations are listed below

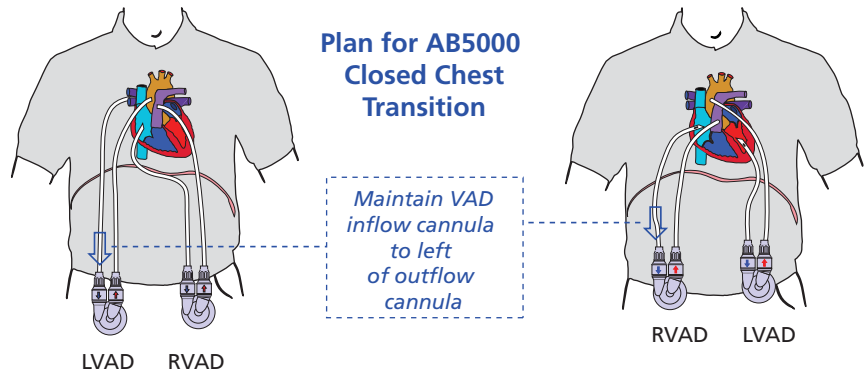
Support Side	Location	Advantage	Cannula Size
Left-Inflow	Left Atrium - Interatrial Groove	Most common for left atrial placement	42F - 32F
Left-Inflow	Right Superior Pulmonary Vein	Ease of insertion and removal	32F
Left-Inflow	Left Ventricular Apex	Maintains blood flow across prosthetic valves Off-loads left ventricle and LV Chamber	42F - 32F
Left-Outflow	Anterolateral aspect of the Ascending Aorta	N/A	10mm
Right-Inflow	Right Atrium Mid Free Wall	Most common for right-side support	42F - 32F
Right-Outflow	Pulmonary Artery	N/A	10mm

### Cannulation Tips:

- Inflow refers to blood from the patient into the VAD
- Outflow refers to blood from the VAD back to the patient
- Place pledgeted double purse string sutures around the desired cannulation site
- Pericardial patches or large Teflon® pledgets and 2-0 or 3-0 polypropylene sutures are recommended
- Bevel Hemashield® outflow graft at 30 degrees; 3-0 or 4-0 polypropylene sutures are recommended
- Consider the use of surgical glue at arterial site to reduce bleeding
- Externalize cannula before cannula implantation (see graphic in Step 2 for exit sites)

## 2. Select Cannula Exit Location

Plan cannula exit sites during BVS Blood Pump implant to facilitate transition to AB5000™ Ventricle

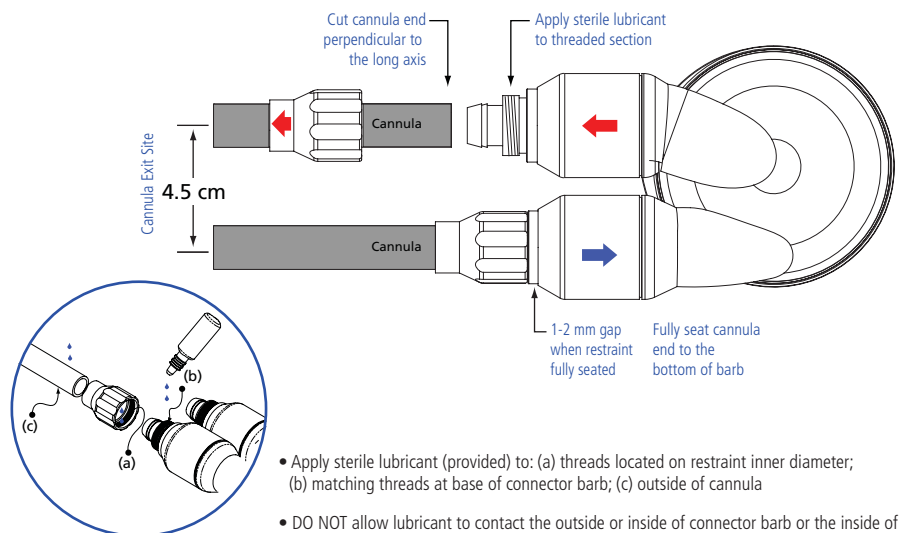


## 3. Cannulation Consideration

### Assess cannula placement

- Before closing the chest, record hemodynamics and VAD operating parameters
- Approximate chest, and note any changes in hemodynamics and VAD operating parameters
- If hemodynamics or VAD operating parameters change, assess cannula positioning
- TEE should be used to evaluate cannula inflow with a target velocity of < 400cm/sec.
- Cannula should exit patient parallel to each other and spaced ~ 4.5 cm apart to match AB5000 Ventricle
- If needed, use supplied tubing extensions
- Ensure restraints are properly secured
- Use the white threaded cannula restraint marked with a red arrow with the Hemashield® outflow cannula; use white cannula restraint without red arrow for inflow cannula

### AB5000 Connection Guidelines



- Apply sterile lubricant (provided) to: (a) threads located on restraint inner diameter; (b) matching threads at base of connector barb; (c) outside of cannula
- DO NOT allow lubricant to contact the outside or inside of connector barb or the inside of cannula

**ABIOMED 24-HOUR SUPPORT 800-422-8666**

For more information on the BVS® 5000 / AB5000™ Systems see: [http://www.abiomed.com/clinical\\_information/ifus\\_manuals.cfm](http://www.abiomed.com/clinical_information/ifus_manuals.cfm)