a complete line of vascular access and lead delivery systems
2 | **SafeSheath** Introducers and Sealing Adapters

10 | **SafeSheath CS and LV** Introducers

14 | **Right-sided CS/RV Access** Introducer

16 | **CS Venography** Balloons

18 | **Accessories**

20 | **Transseptal** Access

24 | **Hemostatis and Compression** Management

27 | **Pacemaker** Protection and Comfort
Time-tested design of a tear-away sheath and hemostatic valve with new and improved features to reduce back bleeding and the possibility of air embolism during venous access.

Building on the success of the original, SafeSheath II continues to revolutionize venous access, setting new standards for performance and features, and facilitating better outcomes.

**SafeSheath II** Introduced into the subclavian vein in the standard manner, the hemostatic valve of the SafeSheath II seals the device during lead introduction and positioning. The easy-splitting, ergonomically-shaped break-away hub greatly simplifies sheath removal after lead or catheter placement. Extruded score line construction ensures a clean, even peel every time. A new elastomer snap-locking dilator connector assures firm attachment to the sheath. The three-way stopcock side port provides a convenient means of aspirating and flushing the introducer, as well as for contrast and fluid administration. Finally, the advanced design of the lubricated hemostatic valve enables low insertion and withdrawal forces, delivering greater control during lead manipulation.

**SafeSheath II Long** The 23cm Long provides access beyond the right subclavian-SVC junction, from both the left cephalic and subclavian veins. The extra length helps when upgrading existing systems by the addition of new leads and for atypical venous access sites—axillary or femoral. It also acts as a ‘supporting’ platform for the introduction of defibrillator leads.

Hemostatic Peel-away Introducer System for Vascular Access

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Hub Color</th>
<th>Dilator Length</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS6</td>
<td>6.0 French</td>
<td>Green</td>
<td>13cm</td>
<td>19.5cm</td>
</tr>
<tr>
<td>SS7</td>
<td>7.0 French</td>
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<td>13cm</td>
<td>19.5cm</td>
</tr>
<tr>
<td>SS8</td>
<td>8.0 French</td>
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</tr>
<tr>
<td>SS85</td>
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<td>19.5cm</td>
</tr>
<tr>
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<tr>
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<tr>
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<tr>
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</tr>
<tr>
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<td>19.5cm</td>
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</table>

Guide Wire for standard SafeSheath: 50cm long with O.D. of .038".

**SafeSheath III Long** Tear-away valued hemostatic system w/side port

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
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<td>23cm</td>
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</tr>
</tbody>
</table>

Guide Wire for SafeSheath Long: 60cm long with O.D. of .038".

Features

- Standard 13cm length for access to subclavian vein, and 23cm Long model for access beyond the right subclavian-SVC junction
- Extruded score line peel-away sheath for clean, even peeling during removal
- Longer, smoother sheath tip to dilator transition for ease during insertion
- Lubricated hemostatic valve with low insertion and withdrawal forces yields greater control during lead manipulation and reduces risk of blood loss and air embolism
- Convenient sideport with three-way stopcock for infusion and contrast injection, like the original SafeSheath
- Wide range of French sizes
- French size on handle and indicated by color-coded introducer cap
- Elastomer snap-locking dilator connector like the original SafeSheath with French size embossed on handle
- Ergonomic, easy-splitting break-away hub

Guide Wire for SafeSheath III Long: 30cm long with O.D. of .038".

SafeSheath® II

SafeSheath® II is a registered trademark of Pressure Products Medical Supplies, Inc.

SafeSheath II Introduced into the subclavian vein in the standard manner, the hemostatic valve of the SafeSheath II seals the device during lead introduction and positioning. The easy-splitting, ergonomically-shaped break-away hub greatly simplifies sheath removal after lead or catheter placement. Extruded score line construction ensures a clean, even peel every time. A new elastomer snap-locking dilator connector assures firm attachment to the sheath. The three-way stopcock side port provides a convenient means of aspirating and flushing the introducer, as well as for contrast and fluid administration. Finally, the advanced design of the lubricated hemostatic valve enables low insertion and withdrawal forces, delivering greater control during lead manipulation.

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Hemostatic Peel-away Introducer System for Vascular Access

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<td>13cm</td>
<td>19.5cm</td>
</tr>
</tbody>
</table>

Guide Wire for standard SafeSheath: 50cm long with O.D. of .038".

**SafeSheath III Long** Tear-away valued hemostatic system w/side port

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Hub Color</th>
<th>Dilator Length</th>
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<td>29.5cm</td>
</tr>
</tbody>
</table>

Guide Wire for SafeSheath Long: 60cm long with O.D. of .038".

**SafeSheath II** Introduced into the subclavian vein in the standard manner, the hemostatic valve of the SafeSheath II seals the device during lead introduction and positioning. The easy-splitting, ergonomically-shaped break-away hub greatly simplifies sheath removal after lead or catheter placement. Extruded score line construction ensures a clean, even peel every time. A new elastomer snap-locking dilator connector assures firm attachment to the sheath. The three-way stopcock side port provides a convenient means of aspirating and flushing the introducer, as well as for contrast and fluid administration. Finally, the advanced design of the lubricated hemostatic valve enables low insertion and withdrawal forces, delivering greater control during lead manipulation.

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The convenience of a tear-away introducer combined with a hemostatic valve preventing back bleeding and greatly reducing the possibility of air embolism.

SafeSheath® is the intelligent choice for your vascular access needs.

SafeSheath® is the industry standard—combines an introducer with a hemostatic valve to prevent back-bleeding and air embolization during lead introduction and positioning. Designed primarily for venous access, the 13cm SafeSheath is introduced into the subclavian vein in the standard manner. Its pre-scored sheath ensures a clean, even peel each time, greatly simplifying removal after lead or catheter placement. And the hemostatic valve and snap-fit dilator hub make SafeSheath® the leader when it comes to all your implantation needs.

All SafeSheath® introducer systems combined with a hemostatic valve prevent back bleeding and greatly reduce the possibility of air embolism.

Features

- Wide range of French sizes indicated by color-coded introducer cap
- Side port for “keep open” infusion and contrast injection
- Innovative peel-away sheath with break-away hemostasis valve
- Improved dilator/sheath transition to reduce vein entrance forces
- Hemostatic valve permits exchange of multiple lead insertions without further interventions or “sticks”
- Reduced risk of blood loss and air embolism
- Handles like a standard tear-away introducer
- Standard 13cm length

SafeSheath Tear-away valve hemostatic sheath system w/side port

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Hub Color</th>
<th>Length</th>
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<tr>
<td>HLS-1009</td>
<td>9.0 French</td>
<td>Black</td>
<td>13cm</td>
<td>20cm</td>
</tr>
</tbody>
</table>

Guide Wire for standard SafeSheath® depending upon O.D. of 0.035”.
SafeSheath® Sealing Adapter

The Sealing Adapter provides the convenience of the SafeSheath splittable valved system when using a Medtronic Attain™ or St. Jude Medical CPS® Introducer.

Every SafeSheath Sealing Adapter provides an air- and fluid-tight seal between it and the introducer. Its specially-designed valve allows insertion of single or multiple wires while remaining hemostatic, reducing back bleeding and the possibility of an embolism during lead introduction or exchange.

The convenient sideport allows aspiration and flushing of the introducer, as well as contrast and fluid administration. And after lead or catheter placement, the easy-splitting, break-away hub greatly simplifies device removal.

Each Sealing Adapter for the Medtronic Attain comes with a press-fit connector insuring a secure attachment between adapter and sheath.

The slot-locking mechanism of the Sealing Adapter for St. Jude Medical CPS introducers creates a tight seal with both braided and non-braided models.

### Features
- Unique press-fit connector for Medtronic Attain introducers
- Slot-locking mechanism designed to securely attach to St. Jude Medical CPS introducers.
- Fluid- and air-tight seal between Sealing Adapter and introducer
- Innovative tear-away design with break-away hemostasis valve
- Remains hemostatic when multiple wires are within it, as well as when leads need to be introduced or exchanged
- Reduced risk of blood loss and air embolism
- A side port for “keep open” infusion

<table>
<thead>
<tr>
<th>SafeSheath Sealing Adapter for Medtronic Attain™ Introducers</th>
<th>Model</th>
<th>Size</th>
<th>Hub Color</th>
<th>Description</th>
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<tr>
<td>S-S-A-09-90</td>
<td>9.0</td>
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<td>Standard Wing for Attain Introducers</td>
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<table>
<thead>
<tr>
<th>SafeSheath Sealing Adapter for St. Jude Medical CPS® Introducers</th>
<th>Model</th>
<th>Size</th>
<th>Hub Color</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>410195</td>
<td>9.0</td>
<td>Black</td>
<td>Standard Wing for CPS Introducers with Slot-Locking Mechanism</td>
<td></td>
</tr>
</tbody>
</table>

Splittable-valved, peel-away hemostatic introducer system combined with a high-torque, radiopaque-tipped sheath and braided core for CS access.

The SafeSheath CSG’s braided core provides improved torque control. Both the introducer and core are radiopaque-tipped for better fluoroscopic visualization. Multiple introducer angles and the advanced core improve ease of CS placement.

The CSG enters the coronary sinus and remains in position during angiography and lead placement, remaining hemostatic during subsequent procedures.

**Worley Curve**
The SafeSheath CSG Worley Braided Core line of introducers incorporate a unique sheath curve. Designed specifically for ventricular resynchronization therapy where the right-sided chamber is significantly dilated, the long gentle throw of the Worley causes its tip to virtually fall into the coronary sinus OS. Various shapes can be created by advancing the braided core into the sheath, better facilitating CS cannulation.

Made from crush-resistant material, the CSG Worley is available in standard, long and jumbo sizes, enabling access to any anatomy. All 9 French CSG sheaths can be used as a coronary sinus access platform for our family of CSG Worley Telescoping LV introducers.

The SafeSheath CSG Worley Braided Core Series provides improved torque control. Both the introducer and core are radiopaque-tipped for better fluoroscopic visualization. Multiple introducer angles and the advanced core improve ease of CS placement.

**Using the Braided Core**
The braided core provides torque control for the outer sheath. By advancing and manipulating the core, a continuum of shapes can be created, aiding in location of the coronary sinus OS.

**Features**
- Braided, soft-tipped core for improved torque control and stability
- Peel-away sheath with break-away hemostasis valve
- Radiopaque tip marker on sheath and core for improved fluoroscopic visualization
- Multiple angles for CS lead placement
- Side port for “keep open” infusion and contrast injection
- Reduces risk of blood loss and air embolism
- Handles like standard peel-away introducer
- May be left in position during placement of other leads
- Permits lead exchange quickly, without further interventions or “sticks”

**Hemostatic Peel-away Introducer System with Braided Core for CS Access**

**Using the Braided Core**
The braided core provides torque control for the outer sheath. By advancing and manipulating the core, a continuum of shapes can be created, aiding in location of the coronary sinus OS.

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The braided core provides torque control for the outer sheath. By advancing and manipulating the core, a continuum of shapes can be created, aiding in location of the coronary sinus OS.
The SafeSheath CSG Worley is a versatile introducer system with a unique design that enables easy access to the coronary sinus. It features a customizable curve that facilitates precise cannulation, and the improved tip transition results in a smoother insertion process. The SafeSheath CSG Worley is also made from crush-resistant material and is available in standard, long, and jumbo sizes.

The SafeSheath CSG Worley System includes:

- P.T.F.E. Guide Wire 45° angle 135cm
- Curved Guiding Dilator 90° angle 63.9cm
- Worley 1 Guiding Dilator 180° angle 44.3cm
- Worley 2 Guiding Dilator 180° angle 53.3cm
- Worley L Guiding Dilator 180° angle 53.3cm
- Straight Vessel Dilator
- Transvalvular Insertion Tool (TVI)
- Needle

These introducers are designed to work seamlessly with the SafeSheath CSG Extruded Core Series, providing a comprehensive solution for coronary sinus access.
SafeSheath® Worley Telescopic LV Introducers

Hemostatic Introducer System for sub-selective access during LV lead placement.

Reduce Implant Times 30-50%
Successful Cardiac resynchronization therapy (CRT) requires accurate delivery of the pacing lead to specific postero-lateral epicardial LV pacing sites via the coronary sinus. Available in four unique curves, the LVI provides sub-selective access to the target vein. When combined with our new Target Vein Selector, better, more reliable access to the chosen vessel is achieved, no matter what the situation.

When deployed through the LVI, the new 5 French O.D. Target Vein Selector is the easiest way to locate and cannulate the target vein, serving as a "rail" for advancing the LVI into the vein. The SafeSheath LVI provides needed support and stability during implant procedures, for delivery of larger, more stable leads.

Contrast injection is easily accomplished with the LVI's convenient sideport, while the radiopaque tip marker enhances fluoroscopic visualization during procedures. The unique, breakaway hub requires no plastic to cut through, reducing the risk of lead dislodgement, while the integrated handle stays firmly attached to the sheath, helping with control and stability during slicing and removal. Finally, the advanced material of the LVI sheath offers uniform resistance during slicing with the user-friendly cutter.

SafeSheath® Worley Telescopic LV Introducer System

<table>
<thead>
<tr>
<th>Model</th>
<th>Shape/Curve</th>
<th>Length</th>
<th>Size</th>
<th>Max. O.D.</th>
<th>Min. O.D.</th>
<th>Min. Tip I.D.</th>
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<tr>
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<td>7F I.D.</td>
<td>0.120&quot;</td>
<td>0.090&quot;</td>
<td>0.090&quot;</td>
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<tr>
<td>LVI/75-5-62-55-RE</td>
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<td>62cm</td>
<td>5.5F I.D.</td>
<td>0.120&quot;</td>
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<td>0.090&quot;</td>
</tr>
<tr>
<td>LVI/75-5-62-07-HO</td>
<td>Hook / 80°</td>
<td>62cm</td>
<td>7F I.D.</td>
<td>0.120&quot;</td>
<td>0.090&quot;</td>
<td>0.090&quot;</td>
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<td>LVI/75-5-62-55-HO</td>
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<td>0.090&quot;</td>
<td>0.090&quot;</td>
</tr>
<tr>
<td>LVI/75-5-62-07-HS</td>
<td>Hockey Stick / 120°</td>
<td>62cm</td>
<td>7F I.D.</td>
<td>0.120&quot;</td>
<td>0.090&quot;</td>
<td>0.090&quot;</td>
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<tr>
<td>LVI/75-5-62-55-HS</td>
<td>Hockey Stick / 120°</td>
<td>62cm</td>
<td>5.5F I.D.</td>
<td>0.120&quot;</td>
<td>0.090&quot;</td>
<td>0.090&quot;</td>
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<tr>
<td>LVI/75-5-62-MP</td>
<td>Multi-purpose / 75°</td>
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<td>Multi-purpose / 15°</td>
<td>62cm</td>
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<td>0.120&quot;</td>
<td>0.090&quot;</td>
<td>0.090&quot;</td>
</tr>
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Each kit includes:
- Transvalvular Insertion Tool (T.V.I.) 1.75" 7F 0.121" 0.089" — — — — —
- Slicer — — — — — — — — —
- Target Vein Selector 75cm — 5F .041" ± .001" — — — — —


Features
- 7 and 5.5 French O.D. introducers provide support and stability for easier, reliable delivery of larger, more stable leads despite tortuous anatomy.
- 5 French O.D. Target Vein Selector makes target vein identification and guide wire placement a snap, greatly reducing implant times.
- Unique combination of proximal and distal curves for sub-selective access to angulated lateral vein branches.
- Braided sheath construction for better torque control and stability with multidiameter proximal curve for improved tip directivity.
- Break-away hub with integrated handle requires no cutting and provides a secure grip during skiing.
- Radiopaque tip marker on introducer for enhanced fluoroscopic visualization.
- Easy-to-use slicer mates to the SafeSheath hub to create a stable platform for the cutting hand.
- Side port for “keep open” infusion and convenient contrast injection.
- Hemostatic hub reduces the risk of blood loss and asthmatic embolism.

SafeSheath® Worley Telescopic LV Introducer System

Uniquely-shaped, braided, high-torque, 7 and 5.5 French I.D. sliceable hemostatic introducer system with Target Vein Selector for sub-selective access during LV lead placement.
**SafeSheath II Worley Right-sided Access Introducer**

Gains access to the RA, for delivery of catheters into the CS or pacing leads into the right ventricle making right-sided LV or RV access as easy as coming from the left.

The specially designed shape of the 23cm SafeSheath II Worley Right-sided Access Introducer makes right-sided LV or RV access as easy as coming from the left, virtually eliminating the kinking that sometimes occurs when approaching from the right side with a straight introducer. The unique distal curve when positioned in the high RA provides a convenient pivot point for directing CS access catheters to the coronary sinus, such as the SafeSheath Worley Telescopic LV introducer system, creating a stable work platform for better control during lead placement, and reduced risk of lead dislodgement during CS catheter removal. The Right-sided introducer is also perfect for placing leads into the RV and right ventricular outflow tract.

The SafeSheath II Worley Right-sided Access Introducer is a breakthrough technology for left ventricular pacing from the right subclavian and is also an excellent platform for standard RV pacing.

**Features**

- Curved shape designed for making right-sided access during BiV LV procedures as easy as approaching from left side
- Enables access to the RA, for delivery of catheters into the CS or pacing leads into the right ventricle
- Virtually no chance of kinking during right-sided access introduction
- Uniquely shaped distal curve acts as a pivot point for CS access catheter, for stability and control during lead placement and removal
- Ergonomic, easy-splitting break-away hub and extruded score line peel-away sheath for clean, even peeling during removal
- Hemostatic valve with low insertion and withdrawal forces permits multiple lead insertions without further interventions
- Convenient sideport with three-way stopcock for infusion and contrast injection
- Elastomer snap-locking dilator connector with French size embossed on handle

**SafeSheath II Worley Right-sided Access Introducer**

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Hub Color</th>
<th>Length</th>
<th>Dilator Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSR9</td>
<td>9.0 French</td>
<td>Black</td>
<td>23cm</td>
<td>28cm</td>
</tr>
</tbody>
</table>

*Guide wire for SafeSheath II Worley Right-sided Access Introducer is 50cm long with O.D. of .038".*

SafeSheath is a registered trademark of Pressure Products Medical Supplies, Inc.
The SafeVue™ Balloon Venography Catheter enables temporary vascular occlusion or balloon catheter flotation. With a 1.75cm maximum inflation diameter, the SafeVue’s balloon is 75% larger than that of a standard balloon catheter, providing optimum CS occlusion and venography visualization.

SafeVue’s low profile design allows advancement of the device through any CS access sheath, 6.5 French or larger, including the SafeSheath CSG family of introducers. It features a port for distal contrast injection or guidewire placement, a pressure relief valve for regulating balloon pressure and reducing the potential for vessel trauma or dissection, and a radiopaque marker band at tip.

Features
- Large 1.75cm balloon diameter with high diameter-to-length aspect ratio for optimal coronary sinus occlusion and venography visualization
- Rotationally wrapped balloon with “floating” coaxial catheter design enables the balloon to fit through a 6.5F introducer
- Pressure relief valve in fluid communication with the inflation lumen regulates the balloon pressure, minimizing the potential for vessel trauma or dissection
- Radiopaque marker band at tip
- Compatible with the SafeSheath CSG family of introducers
- Inner lumen accepts a 0.025” diameter guidewire
- Markers every 10cm from proximal tip
- Latex- and PVC-free design

Pending 510(k), not approved for sale in the United States

The Coronary Sinus Balloon Venography Catheter* is designed for placement in the proximal coronary sinus via SafeSheath® CSG® introducer. When inflated, the coronary sinus is occluded and venography easily accomplished.

The Coronary Sinus Balloon Venography Catheter features a 1cm diameter balloon and a port for distal contrast injection or guidewire placement.

Features
- 1cm diameter Balloon
- Useful for occlusion of the CS
- Aids visualization of the coronary sinus venous system
- Inner lumen for contrast injection or guidewire placement
- Markers every 10cm from proximal tip
- Designed to work with the SafeSheath CSG and Worley line of LV introducers, as well as SafeSheath Sealing Adapters

*Manufactured by B. Braun Medical Inc., Bethlehem, PA 18018-3524 USA

CS Balloon Venography Catheter CS Venous System Visualization Aid

SafeVue Balloon Catheter System

SafeVue Balloon Catheter system is specially designed with the largest diameter balloon available for optimal coronary sinus occlusion and venography.
The Transvalvular Insertion Tool (TVI) is designed to open the valve for lead placement via the SafeSheath® and SafeSheath® CSG® family of introducers and Sealing Adapters. When inserted into the valve housing of the introducer, the 7 French TVI aids insertion and advancement of a pacemaker lead through the sheath. The TVI may then either be withdrawn and peeled away or left resting on the shaft of the pacemaker lead.

### Features

- Opens the valve of a SafeSheath introducer or Sealing Adapter for placement of a lead or catheter
- Can be used with leads up to 9 French
- Easily peeled away after lead placement

<table>
<thead>
<tr>
<th>Transvalvular Insertion Tool (TVI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>TVI-07</td>
</tr>
</tbody>
</table>

An aid for opening a SafeSheath® hemostatic valve during the introduction of various types of pacing or defibrillator leads and catheters.
**SafeSept® Transseptal Guidewire**

Specially designed to improve safety and lessen penetration forces when crossing the interatrial septum at the fossa ovalis while supported by a transseptal introducer.

The SafeSept® Transseptal Guidewire is the first significant advance in left atrial access since the Brockenbrough needle. The SafeSept is a 135 cm long, 0.014 inch diameter nitinol guidewire specifically designed for transseptal puncture. After the transseptal dilator has “tennis” the fossa ovalis, effortless advancement of the SafeSept tip perforates the membranous fossa, requiring 77% less force* than a standard transseptal needle. Unsupported by the needle and dilator, the tip of the wire assumes a “J” shape, rendering it incapable of further tissue penetration.

A radiopaque coil along the shaft allows for fluoroscopic visualization of the wire within the left atrium while proximal marker bands help determine the approximate location of the SafeSept tip in relation to the tip of the needle. The transseptal needle, dilator and sheath are then advanced “over the wire” into the left atrium with virtually no possibility of aortic or pericardial perforation.

**SafeSept® NF Needle Free Transseptal Guidewire**

Specially designed to replace a transseptal needle while crossing the interatrial septum with improved safety and less force when supported by a transseptal introducer.

The SafeSept® NF Needle Free Transseptal Guidewire, when used in conjunction with a transseptal dilator and introducer, creates the primary puncture in the interatrial septum, without the need for a transseptal needle, providing access through the septum from the right side of the heart to the left side.

SafeSept NF is a 180 cm long, 0.0315 inch diameter nitinol guidewire specifically designed for safer and easier transseptal puncture, requiring less force to perforate and cross the fossa. Unsupported by the dilator and sheath, the tip of the guidewire assumes a “J” shape, rendering it incapable of further tissue penetration.

A radiopaque coil allows for fluoroscopic visualization of the wire within the left atrium while proximal marker bands help determine proper guidewire location relative to the dilator tip. Once proper guidewire location is confirmed, advancement of the transseptal dilator and sheath “over the wire” into the left atrium is accomplished with virtually no possibility of aortic or pericardial perforation.

### SafeSept Transseptal Guidewire

<table>
<thead>
<tr>
<th>Model</th>
<th>Length</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS-135</td>
<td>135 cm</td>
<td>0.014&quot;</td>
</tr>
</tbody>
</table>

### SafeSept NF Needle Free Transseptal Guidewire

<table>
<thead>
<tr>
<th>Model</th>
<th>Length</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS-150</td>
<td>180 cm</td>
<td>0.0315&quot;</td>
</tr>
</tbody>
</table>

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*Calculated from average transseptal needle and transseptal guidewire puncture forces during in vitro design qualification testing.

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Features

- Radiopaque coil makes the 0.014 inch diameter wire easily visible fluoroscopically
- Specially designed tip configuration requires 77% less force* than a standard transseptal needle, enabling effortless penetration of the fossa
- “J” shape allows safe advancement to assure proper wire location within left atrium
- Transseptal needle and dilator are rendered atraumatic when tracking over the SafeSept
- Proximal marker bands help determine SafeSept tip location relative to transseptal needle tip during the procedure
- 135 cm length for compatibility with all currently available adult transseptal introducer systems

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Features

- 180 cm length is works with all commercially available adult transseptal introducer systems without the need for a transseptal needle
- Distal radiopaque coil allows fluoroscopic visualization
- Specially designed tip configuration enables effortless penetration of the fossa, requiring less force than a standard transseptal needle
- “J” shape allows safe advancement to assure proper wire location within left atrium
- Transseptal introducer and dilator are rendered atraumatic when tracking over the SafeSept NF
- Proximal marker bands help determine transseptal guidewire tip location relative to transseptal dilator tip during the procedure
Specially designed to provide support when using a SafeSept® Needle Free Transseptal Guidewire to cross the interatrial septum.

The Needle Free® Transseptal Cannula replaces a transseptal needle when using the SafeSept® Needle Free Transseptal Guidewire for creating the primary puncture in the interatrial septum, providing access from the right side of the heart to the left side.

The Needle Free® Transseptal Cannula offers equivalent lengths of 71 cm, 89 cm, and 98 cm, and is available in Curve 0 and Curve 1 shapes. Turn the stress that accompanies every transseptal stick into a routine, “no hassles” procedure.

### Needle Free® Transseptal Cannula

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Size</th>
<th>Length</th>
<th>Curve</th>
<th>Curve Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSC071</td>
<td>71cm Transseptal Cannula</td>
<td>18G</td>
<td>67.7cm</td>
<td>0</td>
<td>38°</td>
</tr>
<tr>
<td>TSC089</td>
<td>89cm Transseptal Cannula</td>
<td>18G</td>
<td>87.7cm</td>
<td>0</td>
<td>38°</td>
</tr>
<tr>
<td>TSC098</td>
<td>98cm Transseptal Cannula</td>
<td>18G</td>
<td>96.7cm</td>
<td>0</td>
<td>38°</td>
</tr>
<tr>
<td>TSC171</td>
<td>71cm Transseptal Cannula</td>
<td>18G</td>
<td>67.7cm</td>
<td>1</td>
<td>72°</td>
</tr>
<tr>
<td>TSC189</td>
<td>89cm Transseptal Cannula</td>
<td>18G</td>
<td>87.7cm</td>
<td>1</td>
<td>72°</td>
</tr>
<tr>
<td>TSC198</td>
<td>98cm Transseptal Cannula</td>
<td>18G</td>
<td>96.7cm</td>
<td>1</td>
<td>72°</td>
</tr>
</tbody>
</table>

Features:
- Clear hub to visualize devices and fluids
- Light ergonomic hub with arrow indicator for curve detection
- Integrated stopcock with arrow indicator on handle
- Cannula provides column strength to any adult transseptal introducer system
- Smooth bevel on inside of cannula to facilitate passage of SafeSept Needle Free Transseptal Guidewire
- Non skiving design
- Mimics shape of standard transseptal needles curves
- Available in Curve 0 and Curve 1 shapes

### TSN Transseptal Needle

Specially designed to cross the interatrial septum at the fossa ovalis when used with a Transseptal Introducer.

The TSN Transseptal Needle is used to create the primary puncture in the interatrial septum during a transseptal procedure to gain access to the left side of the heart.

The Transseptal Needle consists of a stainless steel cannula with a proximal plastic handle and hub, and a distal needle bevel designed to puncture the interatrial septum during a transseptal procedure. The proximal end of the Transseptal Needle has a pointer hub to indicate the distal curve direction, and a 2-way stopcock handle and luer lock connection for flushing or aspiration.

The distal end of the needle is curved to facilitate positioning within the heart. A stylet inserted within the transseptal needle is designed to guide the needle when advancing through the dilator and comes in equivalent lengths of 71 cm, 89 cm, and 98 cm, and is available in Curve 0 and Curve 1 shapes.

### TSN Transseptal Needle

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Size</th>
<th>Length</th>
<th>Curve</th>
<th>Curve Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSN071</td>
<td>71cm Transseptal Needle</td>
<td>18G</td>
<td>67.7cm</td>
<td>0</td>
<td>38°</td>
</tr>
<tr>
<td>TSN089</td>
<td>89cm Transseptal Needle</td>
<td>18G</td>
<td>87.7cm</td>
<td>0</td>
<td>38°</td>
</tr>
<tr>
<td>TSN098</td>
<td>98cm Transseptal Needle</td>
<td>18G</td>
<td>96.7cm</td>
<td>0</td>
<td>38°</td>
</tr>
<tr>
<td>TSN171</td>
<td>71cm Transseptal Needle</td>
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<td>67.7cm</td>
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<td>18G</td>
<td>96.7cm</td>
<td>1</td>
<td>72°</td>
</tr>
</tbody>
</table>

Features:
- Smooth bevel on inside of needle to facilitate passage of transseptal guidewires
- Light ergonomic hub with arrow indicator for curve detection
- Clear hub to visualize devices and fluids
- Integrated stopcock with arrow indicator on handle
- Bevel on needle tip designed to minimize skiving
- Stylet wire with locking hub
- Available in Curve 0 and Curve 1 shapes
- Available in 71cm, 89cm, and 98cm lengths

SafeSept is a registered trademark of Pressure Products Medical Supplies, Inc.
Hemobilizer® Immobilization of the Groin and Femoral Arterial Puncture Site

For immobilization of the groin and femoral arterial puncture site during prolonged procedures or when arterial sheaths are left indwelling.

The Hemobilizer® device is designed to immobilize the groin and femoral area following femoral arterial puncture or when femoral arterial sheaths are to be left in place for extended periods of time.

The device principle is simple. By immobilizing the knee and precluding both flexion (by means of the Hemobilizer® stay) as well as medial and lateral motion (by means of the straps), significant motion at the catheterization site is eliminated.

Hemobilizer® is ideal in the setting of:

- Cardiac catheterization
- Intra-aortic balloon pump procedures
- Coronary arteriography/angiography
- Coronary angioplasty
- Cerebral renal/peripheral arteriography
- Valve implantation procedures

Hemobilizer® is particularly well suited for situations where prolonged bleeding times and/or procedures are expected.

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>fits most adults</td>
</tr>
</tbody>
</table>

Hemobilizer® is a registered trademark of Pressure Products Medical Supplies, Inc.

Hemostatic Occlusive Leverage Device (HOLD)

The Hemostatic Occlusive Leverage Device (HOLD) was designed to apply direct pressure over the puncture site following cardiac catheterization via the femoral artery or vein without the discomfort associated with the application and removal of an adhesive dressing or the difficulty with maintaining sandbags in a stable position.

Pressure is maintained over the area of femoral puncture for as long as is clinically desired. No extensive skin preparation is required, and no adhesive is applied to the patient. HOLD applies constant pressure using the force applied via an elasticized groin strap, and maintained in position by a pelvic apron. The device is easily applied and removed without any patient discomfort.

Maintains pressure over femoral arterial or venous puncture site after cardiac catheterization, coronary arteriography or renal/peripheral arteriography

- Avoids risk of skin abrasion and tape allergies
- No need for skin preparation or shaving
- Obviates need for heavy sandbags or adhesives
- Results in prolonged application of greater direct pressure to either femoral artery or vein

<table>
<thead>
<tr>
<th>HOLD (Hemostatic Occlusive Leverage Device) Model</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-100S</td>
<td>Standard</td>
</tr>
<tr>
<td>H-150L</td>
<td>Large</td>
</tr>
<tr>
<td>H-200XL</td>
<td>Extra large</td>
</tr>
</tbody>
</table>

HOLD is a trademark of Pressure Products Medical Supplies, Inc.
Pocket Pal II™ Device Pocket Compression Harness with Cooling Gel Pack

Pocket Pal II was designed to provide moderate direct pocket compression and a means for cooling of the operative site in the immediate post-surgical period. Clinical experience has shown that moderate compression of the pacemaker pocket may result in a decreased incidence of post-operative hematoma formation. Additionally, considerable literature demonstrates that cooling of an operative incision reduces capillary blood flow, thereby decreasing both incisional pain and swelling.

Pocket Pal II conveniently combines these two principles in a single, unique device. An elastic and velcro harness provides moderate, direct incisional compression while decreasing patient upper extremity motion. The compression apron houses a pouch designed to position a cooling gel pack directly over the fresh device pocket.

SoftTouch™ Seat Belt Pad

Provides comfort and protection to those with pacemakers, defibrillators, chemotherapy ports, or other medical conditions while wearing a seat belt.

The patented SoftTouch seat belt pad is designed to provide comfort and a level of protection to your patients with implanted devices or other medical conditions while wearing a seat belt. SoftTouch provides support and comfort during everyday travel for patients with:

- Pacemakers
- Defibrillators
- Mastectomies
- Chemotherapy ports
- Other medical conditions
- When seat belt irritation is a problem

Made with polyurethane and silicone gel, the unique design and construction of the SoftTouch pad enables the medical device to sit in a free air space, reducing the forces over the region where the device is positioned, better protecting the driver in the event of an automobile accident. SoftTouch lifts the shoulder belt like a bridge over the pacemaker implant area, eliminating direct contact between the medical device and the belt while at the same time lessening the discomfort from vibration transmission.

Features

- Eliminates seat belt irritation
- Reduces compressive force over implant site
- Polyurethane and silicone-gel construction
- Lessens transmission of vibration

Pocket Pal II

- Model: PP-101
- Size: Fits most adults

Protected by U.S. Patent No. 6,557,895. Pocket Pal is a trademark of Pressure Products Medical Supplies, Inc.

SoftTouch

- Model: ST-1
- Size: Fits most adults

U.S.A. Patent 6,557,895. SoftTouch is a trademark of Pressure Products Medical Supplies, Inc.
Following implantation of a pacemaker, defibrillator, chemotherapy port, or other medical procedure, your patient’s bra strap can irritate the surgical site. The fully adjustable comfortHer cushion provides post-operative comfort to the affected area when wearing a bra.

Made of a silky-soft, washable tricot nylon fabric with triple-padding and unique internal stiffeners, the comfortHer pad gently protects the post-surgical area from the constant rubbing of the bra strap during everyday activities.

Easily adjusted to fit any bra, the comfortHer pad’s low profile enables it to be worn under most any clothing without being seen.

Provides post-operative comfort from bra strap irritation of the surgical site following implantation of a pacemaker or other medical device or procedure.

Adjustable Velcro® strips allow comfortHer to be used with almost any bra strap.

**Features**

- Fits on any bra strap
- Silky-feel tricot nylon fabric
- Triple-padded for total comfort
- Low profile
- Washable

**comfortHer™ Post Surgery Bra Strap Pad**

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH-1</td>
<td>fits most adults</td>
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</tbody>
</table>

comfortHer is a trademark of Pressure Products Medical Supplies, Inc.