

ARTERIAL PRODUCT CATALOG

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Arterial Products Catalog, Venous Products Catalog, Cardiac Products Catalog, Neurovascular Products Catalog, General Surgery Catalog, Oncology Products Catalog.

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## CONSISTENT SOLUTION For PERIPHERAL ARTERIAL DISEASE

Treatment of peripheral artery disease (PAD) and critical extremity ishemia (CLI)

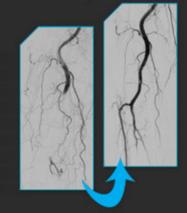
TemREN is used to prepare the lesion area for balloon angioplasty and to relieve heavy plaque burden from atherosclerotic lesions.

TemREN is usually made up of arteries that are difficult to treat with plaque burden by angioplasty and have chronic total occlusions and severe calcification lesions.

TemREN helps to achieve maximal lumen diameter for stent and balloon procedures.

Model Diameter	5 <b>F</b>	6F	7F
Vessel Diameter (mm)	2.0-4.0	3.0-7.0	3.5-7.0
Sheath Compatibility (Fr)	5	6	7
Crossing Profile (mm)	1,8	2.1	2.4
Working Length (cm)	90,135,150	90,135,150	90,110,135,150
Guidewire Compatibility	0,014"	0,014"	0,014"-0,018"
Packing Device	X	X	Х
Catheter Inner Layer	PTFE	PTFE	PTFE
Structure of the Catheter	PE/PEBAX	PE/PEBAX	PE/PEBAX

- ✓ Atraumatic rotational distal tip allows reliable operation
- ✓ Allows movement over 0.014" guidewire
- TemREN transfers torque in the ratio of 1:1 (distal/proximal) by the help of its flexible helical internal structure
- ✓ Internal helix aspirates disintegrated atherosclerotic media by Archimedes Principle



## TemREN ATHERECTOMY



No additional installation equipment required before the process

TREATMENT OF

**ARTERY** 

CRITICAL

**EXTREMITY** 

ISHEMIA (CEI)

AND

PERIPHERAL

DISEASE (PAD)

Rotation speed can be adjusted easily and provide safe space to surgeon

AND

Braided Radiopaque Catheter

CAPTUREAND **CLEAR** 

Sinale Handed Easy procedure Control with Adjustable Rotation Speed

**TAILOR** 

Optional Rotation Direction (R/L)





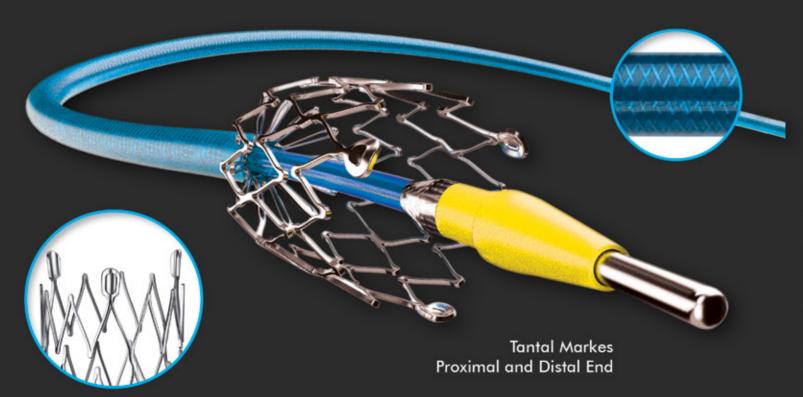


Atlas™ is a peripheral self-expanding stent system consisting of a rapid exchange delivery catheter and a pre-mounted stent made of nitinol.

Atlas™ is intended for use in the treatment of stenotic or occlusive lesions in iliac or femoro-popliteal arteries to establish and maintain patency.

Stent Material	Nitinol alloy
Stent Diameter	5.0 – 8.0 mm
Delivery Catheter Structure	Rapid exchange
Guidewire Compatibility	0.035" (0.89 mm)
Minimum Sheath Size	6 Fr / 2.0 mm
Usable Length of Catheter	80 - 120 cm

## PERIPHERAL SELF-EXPANDABLE



# PRECESION & FLEXIBILITY

They are Applied in the Following Cases:

- Unsatisfactory result of a PTA procedure (residual stenosis).
- Inner vessel membrane delamination.
- Vessel wall elasticity disorders and pressure from the outside.
- Recurrent st

Atlas™ self-expanding peripheral stent system is intended to improve luminal diameter in the treatment of symptamotic de novo or restenotic lesions up to 180 mm in length in the native superficial femoral artery and/or proximal popliteal arteries with reference vessel diameters ranging from 3.5 mm – 7.5 mm

**Atlas™** self-expanding stent is indicated for use in percutaneous intravascular implantation in patients with atherosclerotic, radiation-induced and posttraumatic lesions causing vessel stenosis, of haemodynamic significance and intractable in other forms of treatment.

## **Advantages**

- Made of nitinol laser cutting
- (NiTi) material with higher biocompatibility level and corrosion resistance than medical AISI 316L stainless steel
- ✓ Increased conformability within unique open-cell design technology
- Excellent radial force
- → High flexibility of the Atlas™ stent effects in excellent adaptation
  to vessel curvature
- Special construction of the stent provides a good adhere to the arterial wall
- Radiopaque markers on the stent endings which allow precise implantation
- Special construction of the delivery system make to correction of stent position inside a vessel possible even after the partial stent release.
- ✓ Optimized radial force to reduce thrombosis and neointima hyperplasia
- Increased flexibility in severe bend situations
- ✓ Precise deployment with simplified single-operator system.

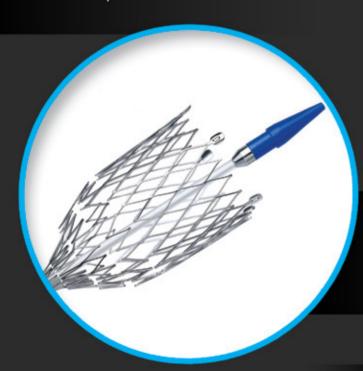
## Stent Size

	20mm	30mm	40mm	60mm	80mm	100mm	120mm	150mm	200mm
5mm	80cm/120cm	X	80cm/120cm	80cm/120cm	80cm/120cm	80cm/120cm	80cm/120cm	80cm/120cm	Х
6mm	80cm/120cm	Х							
7mm	80cm/120cm	Х							
8mm	80cm/120cm	x							
9mm	х	х	80cm/120cm	80cm/120cm	80cm/120cm	80cm/120cm	80cm/120cm	x	x
10mm	X	X	80cm/120cm	80cm/120cm	80cm/120cm	80cm/120cm	80cm/120cm	X	Х



## Self-expandable Aortic Nitinol Stent

Our new an endoluminal stent prosthesis for the aorta is available in a unique range of different stent diameters and lengths that is unrivaled anywhere in the world.



Stent Material	Nitinol alloy
Stent Diameter	14 mm – 40 mm
Stent Lenght	70 mm – 100 mm – 130 mm
Delivery Catheter Structure	Over The Wire System
Guidewire Compatibility	0.035" (0.89 mm)
Delivery System	12 Fr , 14Fr , 16 Fr
Usable Length of Catheter	100 cm



### Stent Size

	20mm	30mm	40mm	60mm	80mm	100mm	120mm	150mm	200mm
20mm	<b>*</b>	<b>★</b>	<b>★</b>	<b>*</b>	<b>*</b>	<b>★</b>	<b>★</b>	<b>★</b>	<b>*</b>
100mm	<b>★</b>	<b>→</b>	<b>*</b>	<b>*</b>	<b>★</b>	</th <th><b>★</b></th> <th><b>★</b></th> <th><b>*</b></th>	<b>★</b>	<b>★</b>	<b>*</b>
130mm				<b>*</b>	<b>*</b>	<b>✓</b>	<b>★</b>	<b>★</b>	<b>*</b>

## Advantages

- Made of nitinol laser cutting
- (NiTi) material with higher biocompatibility level and corrosion resistance than medical AISI 316L stainless steel
- ✓ Increased conformability within unique open-cell design technology
- Excellent radial force
- ✓ High flexibility of the Atlas™ Aortic stent effects in excellent adaptation to vessel curvature
- Special construction of the stent provides a good adhere to the vessel wall.
- Radiopaque markers on the stent endings which allow precise implantation
- Special construction of the delivery system make to correction of stent position inside a vessel possible even after the partial stent release.
- Precise deployment with simplified single-operator system.
- Coaxial pull back system for safety and easy use
- Delivery system for smooth gliding characteristics
- Radioopaque markers on the inner catheter
- For exact stent placement
- 100 cm working length
- ✓ OTW design with 0,035" guidewire
- Self-expanding nitinal stent
- Flexible stent design
- Closed-cell structure for optimal stent fixation
- Open-cell structure for high flexibility
- 5 intergrades laser-welded tantalum markers at proximal and distal end

# PRECESION & FLEXIBILITY

### Atlas™ Aortic is indicated for:

- Vena cava syndrome
- Obstructions of the vena cava
- Stenoses and dissections of the aorta
- Endoleak type 1a and 1b



Latest generation paclitaxel-eluting balloon catheter for peripheral interventions

Compatible for both below and above the knee applications due to variable balloon size options.

OUTSTANDING
CLINICAL
PERFORMANCE
and EXCELLENT
LONG-TERM
PATIENT RESULTS.

### Indicated for:

- De-novo lesions
- Restenosis after realisation of balloon and /or stent PTA
- Pre-and post-dilatation in case of peripheral stent implantation

## **Mode of Action**

With balloon dilatation, the injuries to the arterial wall initiate an inflammatory reaction with an excretion of growth factors which trigger the onset of cell division and smooth muscle cell migration.

## Advantages

- Excellent pushability
- ✓ Targeted drug delivery into the vascular wall
- Single shot, short-term Paclitaxel delivery for long-term vessel patency
- ✓ Homogeneous and complete polymer-free drug release
- Low profile tip and balloon design for reduced friction and advanced crossing performance
- Homogeneous drug delivery
- Effectively inhibiting proliferation



G ELUTING BALLOON

# CONSISTENT THREATMENTOF PERIPHERAL ARTERIAL VENOUS DISASES

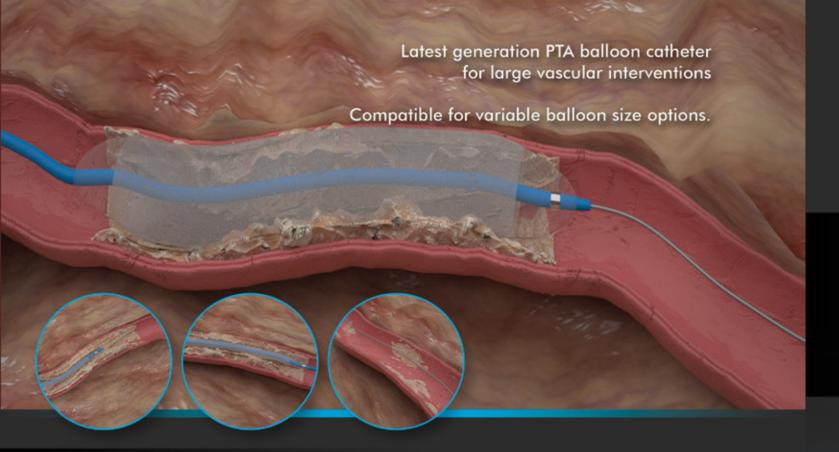
<2µm particles</p>
Contrast Medis as a drug carrier
Minimum drug loose during delivery
<90% drug transfer to the target lession</p>

Paclitaxel Drug Dose	3.0-3.5 μg/mm2
Excipient	lopromid
Balloon Diameter	2.0 mm to 10 mm
Guiding Catheter Profile	5F, 6F, 7F
Balloon Lenght	15, 20, 40, 60, 80, 100, 120, 150, 220 mm
Balloon Fold Configuration	2.0 to 4.0 mm: 3 folds; 4.0 to 10 mm: 6 fol
Radiopacity	Pt-Ir Ring marker
Guidewire Compatible	0,014", 0,018", 0,025"
Catheter Design	Over the wire (OTW)
Catheter Lenght	80cm, 90cm, 120cm, 135 cm, 150 cm
Structure of the Catheter	PA/PEBAX

🌙 3μg / mm² drug dosage

Paclitaxel prevents restenosis by stabilizing microtubal formation and thus prevents the cells going through the phases of replication, resulting in the inhibition of cell division.





# OUTSTANDING CLINICAL PERFORMANCE and EXCELLENT LONG-TERM PATIENT RESULTS.

## **Advantages**

- Excellent pushability
- Single shot for long-term vessel patency
- Low profile tip and balloon design for reduced friction and advanced crossing performance
- Increased tip visibility leading to more accurate positioning.

Extender<sup>XL</sup> Ultra High Pressure dilatation catheter is a Coaxial design catheter with a balloon mounted on its distal tip. The catheter utilizes a higher pressure balloon to facilitate dilatation. High pressure PTA catheter is based on a over the wire coaxial shaft and is 100cm in total length. The high puncture resistant non compliant balloon material is mounted on the distal end of the shaft and is designed to reopen strong calcifications in peripheral vessels.

The proximal end hosts the hub for inflation and deflation of the distal balloon and the guide wire lumen is 0.035". The balloon is diameter specific and varies in length from 2cm, 3cm, 4 cm, and 6cm with diameters starting from 14mm and incrementally moving in 2mm up to 30mm in diameter.

Extender<sup>XL</sup> is especially designed for double dilatation in large vessels. It provides extra safety during the procedure. The high-pressure performance combined with low profile makes the Extender<sup>XL</sup> PTA Balloon an excellent choice to treat difficult large vessels and non-vascular lesions.



### Radiopaque Marker

Platinum marker bands facilitate reliable positioning of the balloon.

# THREATMENT OF LARGE VASCULAR LESSIONS

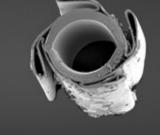
#### Indicated for:

 Percutaneous Transluminal Angioplasty (PTA) of the femoral, iliac and renal arteries

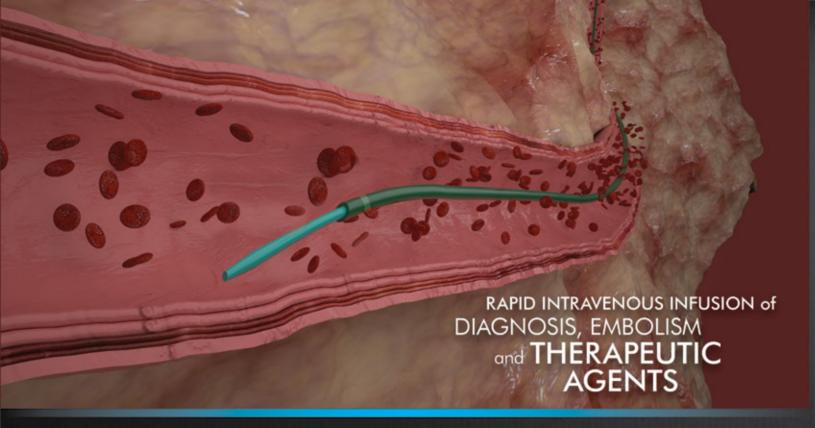
Balloon Diameter	12.0 mm to 30 mm
Balloon Lenght	20- 60 mm
NP / RBP	4 / 6 / 8 atm 9- 14 at
Balloon Fold Configuration	Refolding Technology 6 folds
Radiopacity	Pt-Ir Ring marker
Recommended Sheath Compatibility	9F- 16F
Guidewire Compatible	0,035"
Catheter Design	Over the wire (OTW)
Catheter Lenght	100cm
Structure of the Catheter	PA/PEBAX

#### Maximum Trackability

The distal shaft through the balloon is highly flexible for exceptional maneuverability. This, combined with the pushability of the coaxial shaft, provides outstanding tracking performance.



		BALLOON DIAMETERS								NP	
		12mm	14mm	16mm	18mm	20mm	22mm	24mm	26mm	28mm	30mm
	3atm	11.84	13.09	15.41	17.88	19.78	21.59	23.84	25.74	27.83	29.79
П	4atm	12.00	14.00	16.00	18.00	20.00	22.00	24.00	26.00	28.00	30.00
I	5atm	12.28	14.25	16.58	18.30	20.20	22.11	24.12	26.14	28.24	30.22
rkessuke	6atm	12.41	14.50	16.71	18.50	20.41	22.26	24.29			
2											RBP
2	5atm	12.28	14.25	16.58	18.30	20.20	22.11	24.12	26.14	28.24	30.22
	6atm	12.41	14.50	16.71	18.50	20.41	22.26	24.29			
	7atm	12.46	14.62	16.83	18.71	20.48	22.58	24.60			
	8atm	12.52	14.80	16.89							
	10atm	12.70									



# DESIGNED to WORK WITH TemREN and Extender

The exact proper of the dilator in the sheath allows for simultaneous motion of both dilator and sheath. The shape of the dilator compliments the shape of the sheath. The radiopacity of the dilator has been greatly enhanced to increase the visibility. The diatal segment of the dilator has been minimized to extend approximately 2 cm beyond the tip of the sheath.

Japuar Catheter is designed to perform as a guiding catheter and an introducer sheath.

Japuar Catheter is designed to be used for the introduction of interventional and diagnostic devices into the human vasculature, including but not limited to the lower extremities, renal arteries, and carotid arteries.

- · Highly flexible
- Kink Resistance
- It incorporates a radiopaque marker located approximately 5mm proximal to the tip.
- Atraumatic tip
- Hydrophilically coated.



- Maintains shape and positioning: Outstanding durability, even in the longest procedures
- · Resists kinking: Stainless steel coil for consistent reliability
- Allows easy penetration and smooth transition.
- · Atraumatic tip: Minimizes potential for vessel damage
- · Smooth transitions: Guidewire-to-dilator-to sheath
- Provides lesion access: Exceptional trackability, even in the most challenging anatomy

ALLOWS for SIMULTANEOUS MOTION of BOTH DILATOR and SHEATH

The radiopacity of the dilator has been greatly enhanced to increase the visibility.

- Enhances visualization for precise positioning: Triple radiopacity (sheath, dilator and coil marker)
- Provides smooth movement:
  Coil reinforced tubing and
  PTFE inner layer that minimizes
  friction
- Shapes and sizes to meet your peripheral challenges

Design SS Spiral Coil Design

Catheter Lenght 45 cm, 65 cm, 90 cm, 110 cm

Catheter Profile 4F-5F-6F-7F-8F-9F-10F

Radiopaque Markers PT-IR

Hydrophilic Polymer Jacket

Coating Hydrophilic

Tip Crossing Profile Angled, Straight

Radiopaque Coil Desian



# Dolphin<sup>XC</sup> CROSS OVER SUPPORT CATHETER

**Dolphin**<sup>xc</sup> Crossing Catheter is used with steerable guidewires to access veins and arteries not in the chest or abdomen. It may be used to assist with the placement and exchange of guidewires and other interventional devices and administer drugs or fluids into blood vessels.

- Polymer Jacket
- · Polymeric Liner
- Marker
- Tip Tube Micro-coil

#### **EXCEPTIONAL PUSHABILITY**

- Stainless steel design provides additional strength for exceptional pushabiliy
- Spiral micro-coil design with smooth flexible transition allows for optimal force transfer and trackability
- Proprietary hydrophilic coating on distal 40 cm allows for smooth tracking through challenging vasculature.

Dolphin<sup>XC</sup> is intended for use in small vessel or superselective anatomy for diagnostic and interventional procedures, including peripheral use.

**Dolphin**<sup>xc</sup> with hydrophilic coating is a braided, kink-resistant catheter designed to facilitate wire guide exchange, infusion, and wire guide support.

Design	SS Spiral Micro-Coil Design
Guidewire Compatibility	0,014"
Catheter Lenght	65 cm, 90 cm, 135 cm, 150 cm
Catheter Profile	2F, 3F, 4F, 5F, 6F
Radiopaque Markers	PT-IR
Coating Zone	40 cm
Crossing Profile	0,66mm 2F

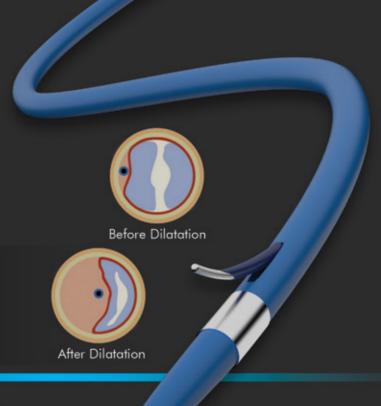
# Dolphin<sup>XR</sup>

PASSAGE IN

NON-PERMEABLE

VESSEL SEGMENTS

**Pivot** Re-entry Catheter System, designed for intuitive true lumen re-entry from subintimal space of the artery, is the best graceful dual-component solution for challenging lesions that creating a path for the Micro-Catheter to re-enter the vessel with precision and ease.



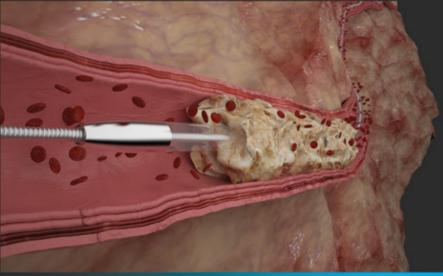
from the distal tip of the sheath)

**Dolphin** Re-entry Catheter enter true lumen from subintimal space when combined with a guidewire in chronic total occlusions. The integrated re-entry system can be used to access and bypass lesions above or below the knee.

Re-entry Catheter System provides an operating channel for angioplasty and stent placement within the sub intimal space of the vessel wall

Radiopaque Marker	Radiopaque marker (at 5 mm
Catheter Inner Layer	PTFE polytetrafluoroethylen
Structure of the Catheter	PE/PEBAX
Catheter Diameter	3F, 4F, 5F, 6F
Lenght	90 cm, 150 cm
Sheath Compatibility	5F, 6F
Guidewire	<0,018"
Average Usage Time (min)	8
Average Total Fluoroscopy Time (min)	17
Device Technical Success Defined as Placement of a Guidewire in the True Lumen Distal to a CTO as Confirmed by the Angiography Core Lab	Technical success: 95%

- True Precision
- True Control
- True Lumen
- Braided catheter shaft provides effective torque control it provides easy and quick positioning to the target re-entry area.
- OTW 0.014 "and 0.018" guide wire compatibility Minimizes guide wire exchange with flexibility structure
- Ergonomic construction for perfect control
- Fluoroscopy adjustment of traditional guidewire techniques helps reduce the time of adjustment



- ✓ High bending resistance with excellent torque control
- ✓ Optimum push through from proximal shaft to distal end
- Small Pass Profile and Tapered Tip
- Provides continuous guide wire-catheter passage for high support and successful lesion passage.
- Powerful next-generation distal tip for superior thrust, with an ultra-low lesion entry profile,
- Three radiopaque markers, it is designed for perfect crossover, giving you every advantage in combating challenging lesions.



**Dolphin**<sup>xs</sup> Support Catheter is used to switch from Occlusion to true lumen. It is dedicated to reaching and overcoming complex lesions of the difficult anatomy during femoro-popliteal and below-knee interventions.

- Ultra low 0.018 "lesion entry profile
- Increases lesion access and entry
- Delivered and replaced with 0.014 "guide wires
- Hydrophilic M Coat™ 40 cm Distally
- Ensures best-in-class trackability in challenging anatomy and provides best-in-class traceability and excellent crossability of complex lesions in challenging anatomy.
- Provides improved delivery and access to distal lesions and complex and small vessels.

PASSAGE IN
NON-PERMEABLE
VESSEL SEGMENTS

<b>Guidewire Compability</b>	0.014", 0.018", 0.035"
Radiopaque Marker	Silver special tip design and 2 Radiopaque marker at 40 mm from the distal tip of the sheath
Catheter Inner Layer	PTFE polytetrafluoroethylene
Catheter Lenght	90-135cm
Structure of the Catheter	PE/PEBAX
Catheter Diameter	4F, 5F, 6F, 7F, 8F, 9F



**GuideH** Catheter is intended to be used in conjunction with guide catheters to access discrete regions of the coronary and/or peripheral vasculature, and to facilitate placement of interventional devices.

TO ACCESS

DISCRETE REGIONS

OF THE CORONARY AND/OR

PERIPHERAL VASCULATURE



Increases trackability through totous anatomy

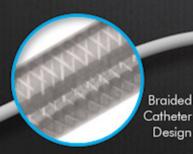
#### **FLEXIBLE DISTAL REGION**

Design for atraumatic vessel entry

#### **BRAIDING TIP**

Braiding distal tip provides excellent pushability, trackability and kink recovery when crossing small tortous vessels.

**Guide** H Guide Extension Catheter creates a smooth pathway for balloon and/or stent delivery by providing greater flexibility and a smooth surface. This is important with complex lesions, calcium, tortuous vessels, and distal lesions.



Sizes 6F, 7F, 8F

Guide Segment 25 cm on 6F, 7F, 8F

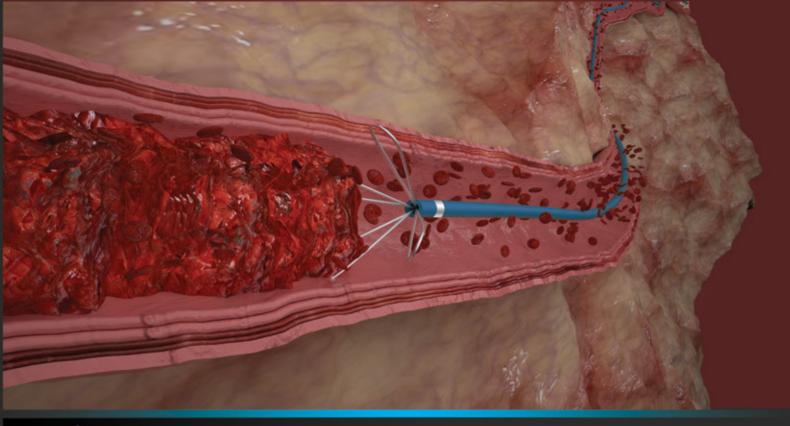
Working Length 150 cm

Collar Stainless Steel

Coating Hydrophilic

Radiopaque Distal Marker Band Radiopaque Collar

By supporting the delivery of the interventional devices that are necessary to complete the procedure, **GuideH** Extension Catheter can benefit the patient and hospital by turning an unsuccessful PCI into a successful PCI.



## **Advantages**

- For the removal of fresh, soft emboli and thrombus from vessels in the coronary and peripheral vasculature.
- ✓ AnpioHAND is a fully-integrated system designed specifically for mechanical thrombectomy by aspiration.
- Includes special four loop handles design catch system for thrombus with aspiration catheter and delivers high vacuum with Invamed Aspiration Pump.
- AnoioHAND System is engineered to maximise aspiration power for clot removal.

# DESIGNED AND PROVEN TO RESOLVE SMALL, FLESH THROMBUS IN ARTERIAL AND PERIPHERAL VEINS

Catheter diameter	3F, 4F, 5F, 6F, 7F, 8F, 9F, 10F
Catheter Lenght	90 cm, 120 cm, 150 cm
Useable Introducer Sheath	3F, 4F, 5F, 6F, 7F, 8F, 9F, 10F
Diameter of effect area:	3mm- 30 mm
Side Port	Infusion/Aspiration

AnoioHAND System is a Mechanical Thrombectomy catheter that is intended for use with our Continuous Aspiration Machine. The AnoioHAND System is indicated to aid in the removal of clot from the body.

**AnoioHAND** System is indicated for use in the revascularization of patients with pulmonary embolism and deep vein thrombosis.

# AnoioHAND THROMBUS REMOVAL SYSTEM

The catheter is designed for and proven to resolve small, fresh thrombus in arterial and peripheral veins.

Thanks to nitinol's special material properties, the flexible handles loop re-assumes its original shape after exiting the catheter. The AnpioHAND has a different diameter with a variable snare cross section dependent on its position when it is pushed out of the introducer.

## Advantages

- Optimized tip design
- ✓ Powerful aspiration and superior king resistance.
- ✓ Large extraction lumen yielding better aspiration
- ✓ Over the guidewire system avoiding vessel wall damage
- Side aspiration window provides efficient aspiration of wall adherent thrombus

Designed to remove thrombus from the vasculature using special design handles tip and continuous aspiration.

It targets aspiration from the pump directly to the thrombus. The handles could be used to clear the lumen of the vessel should it become blocked with thrombus.

Infusion & Aspiration Ports

Easy to Use Single Handed Operation Control



# PROTECTION SYSTEM DEVELOPED FOR TEMPORARY PERCUTANEOUS TRANSLUMINAL FILTRATION SYSTEM



The System Consists

of the Following Components

carotid artery and during stent implementation in carotid arteries.

Over the wire distal protection system is

performance of angioplasty procedure on

used to seize embolic material during



## **EXCELLENT**PUSHABILITY

EmboQUARD device is used to capture and remove debris that becomes dislodged during an interventional procedure.

The EmboQUARD Embolic Protection System is a temporary percutaneous transluminal filtration system designed to be used as a guide wire and to capture embolic material released during an angioplasty and stent procedure within a saphenous vein bypass graft or a carotid artery.

## Advantages

- 100% Retrievable
- Self Centering
- ✓ Innovative Design
- No securement Hooks
- Minimized risk of fracture
- ✓ No risk Migration
- Maintains shape and positioning: Outstanding durability, even in the longest procedures
- Allows easy penetration and smooth transition.
- Provides lesion access: Exceptional trackability, even in the most challenging anatomy
- ✓ Enhances visualization for precise positioning
- Provides smooth movement: Coil reinforced tubing and PTFE inner layer that minimizes friction

# EMBOLIC PROTECTION SYSTEM

EmboQUARD device is the only embolic protection device that can be delivered through any 0.035" catheter.

Nitinol Innovative Design
150, 180cm
4, 5, 6, 7, 8mm
3-8mm
0.014", 0.018"

NITINOL SHAPE-MEMORY
VISIBLE UNDER
X-RAY RADIATION.

## ESPECIALLY DESIGNED TO MEET THE HIGH REQUIREMENTS DURING EXTRACTION

Keeper Retrieval Technology is your first choice safety device when it comes to successful retrieval.

## **Advantages**

✓ Heep	er is c	real e	mergency	tool f	for e	very In	terventino
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Atraumatic Nitinol loop

✓ Ultimately save valuable time

Avoid unnecessary X-Ray exposure

Avoid major open surgery procedures

Open loop nitinol wire

Design with extra high pulling forces

1:1 torque capabilities

Small size introducer sheath 4F & 5F,

High visibility

Excellent kink-resistant

Over-the-wire 0,018", 0,035"

Enhancing stability and trackability

Real 3-dimensional retrieval

Radiopaque platinum inner Marker Ring ensures near

## for Large Vessels

Diameter	5, 10, 15, 20, 25, 30, 35
Vessels	3-5 mm, 6-10mm, 11-15mm, 16-20mm,
	21-25mm, 26-30mm, 31-35mm
Lenght	120
Introducer Sheath	4F, 5F
Catheter	110 cm
Guidewire Compatibility	0.035"

## for Small Vessels

Diameter	2, 4, 7, 20, 25, 30, 35
/essels	1-2 mm, 3-4mm, 5-7mm
enght	175
ntroducer Sheath	2.3F, 3F
Catheter	150 cm
Guidewire Compatibility	0.018"



Hgh degree of vessel coverage within a wide range of vessel sizes 5mm to 35mm, and is available in lengths of 65, 125, and 150 cm. With extra high pulling forces of up to 5.5kg.

Have been especially designed to meet the high requirements during extraction.

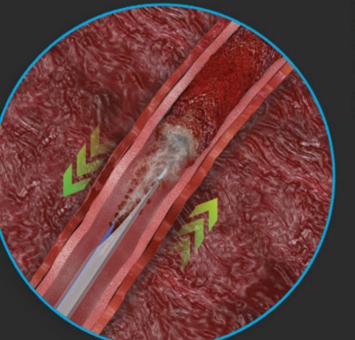
**Heeper** Retrieval Technology is your first choice safety device when it comes to successful retrieval.

**Heeper** retrieval device allows simplified retrieval of foreign bodies like lost catheters, guidewires, stents, as well as coil manipulation Vena Cava Filter retrieval in small to extra large vessels.

The high upstanding force plus a 1:1 torque and loop diameters ranging from 5 to 35 mm together with a pre-shaped and shapeable delivery sheath catheter of 4 and 5F makes it the emergency device of choice.

## 4-9F WIDE ASPIRATION LUMEN





## Move Beyond

## Standart Thrombus Management Treatments

**WaterJET** Thrombectomy System is designed for fragmentation and removal of thrombus from peripheral blood vessels.

It includes a high-pressure jet of sterile saline solution directed in front of a powerful aspiration.

## Dominate Thrombus Management



- Allows easy penetration and smooth transition.
- Provides lesion access: Exceptional trackability, even in the most challenging anatomy
- Shapes and sizes to meet your peripheral challenges

WaterJET can move towards to thrombus with precise jet directed to the front of the aspiration lumen. Continious aspiration retrieves fractured lessions into a collection bag. Precise Jet effects hard lesions while preserving soft vessel tissue

## OTW 0.014" RAPID EXCHANGE LUMEN

## Advantages

- ✓ Vessels < 1.8 mm in diameter as for ELT6FGC,</p>
- √ < 2.05 mm in diameter as for ELT7FGC, and</p>
- √ < 2.2 mm in diameter as for ELT8FGC.
  </p>
- 🗸 Innovative Design
- ✓ No securement Hooks
- Minimized risk of fracture
- ✓ No risk Migration

# ADJUSTABLE ASPIRATION SPEED

Design	RX Design
iheath Lenght	135 cm, 150 cm
Catheter Profile	5F- 6F -7F
dydrophilic Aspiration Part	5 cm
Radiopacity	Ring marker from distal tip to 3mm
Guidewire Compatible	0,014"
Catheter İnner Layer	PTFE
Structure of the Catheter	PE/PEBAX

# Viper SONIC INFUSION THERAPY

**Viper** Thrombolysis Catheter is designed for controlled ultrasonic infusion therapy of tPA along with mechanical US vibrations.

It increases the effects of tPA by thinning the fibrin and increasing porosity.

tPA can be pushed deeper inside the thrombus, increasing the drugs effectivity.

Over the guide wire system and 90, 135, 150 and 200 cm catheter lenght.

Allows safe acces to the clotted target vessel including pulmonary artery in PE cases.





## ALLOWS SAFE ACCESS

- The lumen is used to facilitate passage of a guide wire which is allow 0,035" (0,36 mm) in diameter.
- Viper Ultrasonic Infusion Therapy, also can be use Vein / Pulmonary Artery.
- During the application of tPa, pharmacomechanical thrombolytic therapy is performed with the help of these micropores in the contents of the catheters.
- Totally includes 30 micropores (10 micron) both side at the distal tip of 20 cm.

4F-10F 90-150cm

Model Diameter	5F	6F	7F
Vessel Diameter (mm)	2.0-4.0	3.0-7.0	3.5-7.0
Pores (Pcs)	20, 30, 40	20, 30, 40	20, 30, 40
Sheath Compatibility (Fr)	5	6	7
Crossing Profile (mm)	90,135,150	90,135,	150 90,110,135,150
<b>Guidewire Compatibility</b>	0,014"	0,014"	0,014"-0,018"
Catheter Inner Layer	PTFE	PTFE	PTFE
Structure of the Catheter	PE/PEBAX	PE/PEBAX	PE/PEBAX

# Viper INFUSION THERAPY

**Viper** Thrombolysis Catheter is designed for controlled infusion therapy of tPA along with mechanical vibrations.

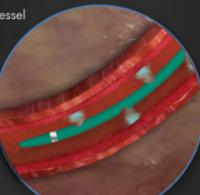
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Pores (Pcs)	20, 30, 40	20, 30, 40	20, 30, 40	
Sheath Compatibility (Fr)	5	6	7	
Crossing Profile (mm)	90,135,150	90,135,	150 90,110,135,150	
Guidewire Compatibility	0,014"	0,014"	0,014"-0,018"	
Catheter Inner Layer	PTFE	PTFE	PTFE	
Structure of the Catheter	PE/PEBAX	PE/PEBAX	PE/PEBAX	



**filler** is non-adhesive liquid embolic agent comprised of n butyl polymer dissolved in DMSO.

Embolization of lesions in the peripheral and neurovasculature, including arteriovenous malformations and hypervascular tumors.

**Filler** is non-adhesive, the micro catheter can be left in place while slow, controlled injections are performed. Post embolization angiography can be conducted with the delivery micro catheter in place, enabling the physician to make additional injections through the same micro catheter, if necesary.

Filler is delivered through a micro catheter into the AVM under fluoroscopic control. The DMSO solvent dissipates into the blood and interstitial fluids.

- Neuro Aneurysms and AVM's
- · Abdominal Aneurysms, Endoleaks
- Neurovascular & Peripheral Aneurysms and AVM's
- Short prosedure time.
- · Mix with lipiodol (1:1) for radiopacity



## Emboguard Balloon

### Advantages

- Utilizes highly compliant
- Provides excellent trackability
- ✓ Support and stability for ease of lesion crossing.

## WORKING CHANNEL EXIT PORT DISTAL TO CCA BALLOON

 Provides lesion access and effective, efficient aspiration of debris.

#### RADIOPAQUE MARKERS

 Markers are centrally located in each balloon for precise positioning and orientation.

#### OPTIMAL DEVICE SELECTION

 Device allows for selection of preferred wires, stents and balloons during intervention.

### **HIGH-CAPTURE EFFICIENCY**

 Device facilitates the removal of all sizes of debris through aspiration.†



# DEVELOPED FOR EMBOLIC PROTECTION SYSTEM

Balloon material Compliant elastomeric rubber

Balloon marker distance 6 cm

Recommended guidewire 0.035" (0.89 mm)

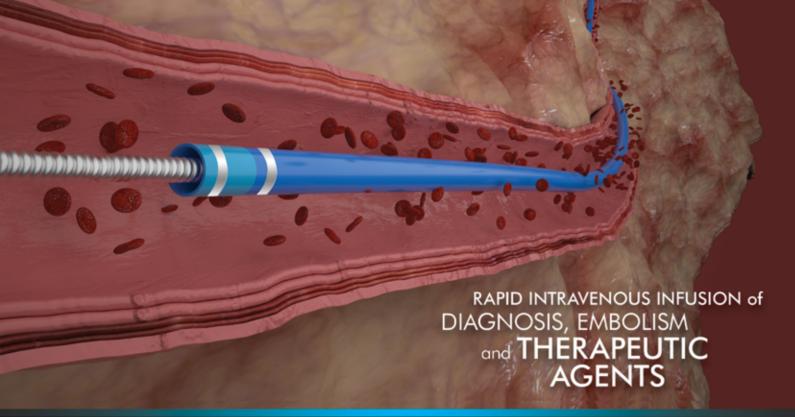
Balloon occlusion range 5-13 mm diameter (CCA prox. balloon)

3-6 mm diameter (ECA dist. balloon)

**EmboGUARD** embolic protection device to contain and remove all sizes of thrombus performing angioplasty and stenting procedures involving lesions of the internal artery and ven bifurcation.

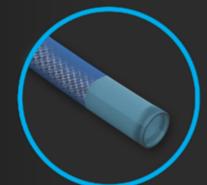
Device include with double-occlusion balloon system allows for embolic protection to be established prior to crossing a carotid lesion.

Double occlusion elastomeric balloons that provide atraumatic flow suspension and stability.



## **Advantages**

- Excellent kink resistance and Proximal pushability with Stainless steel coil design shaft
- Dedicated tip design with radiopaque marker
- Excellent crossability
- Ensures reliable fluoroscopic visibility
- Optimized tip design
- High compressive strength
- ✓ Low profile
- ✓ DMSO compatibility
- Embolizing agent compliance
- ✓ Over the guidewire (0.014") system avoiding vessel w.



Pars offers the user the lowest available tip profile while providing unmatched burst and tensile strength, making it the ideal catheter for the treatment of AVMs.

Pars Embolization Catheter is the peripheral intervention that use for the controlled selective infusion of physician-specified therapeutic agents such as embolization materials and of diagnostic materials such as contrast media to treat vascular diseases of the brain.

Pars Embolisation Catheter is a single-lumen, endhole catheter designed for the subselective infusion of physician-specified therapeutic agents such as embolization materials and diagnostic materials such as contrast media in tortuous, distal vessels.



## PERIPHERAL INTERVENTION AT USE FOR THE CONTROLLED

THAT USE FOR THE CONTROLLED SELECTIVE INFUSION

The catheter has a semi-rigid proximal shaft and a highly flexible distal shaft to facilitate the advancement of the catheter in the anatomy.

The proximal end of the catheter incorporates a standard luer adapterwhich is compatible with DMSO to facilitate the attachment of accessories.

The catheter has a radiopaque marker at the distal end to facilitate fluoroscopic visualization.

The outer surfaces of the catheter are coated to increase lubricity.

## Compatible Embolizing Agents

- NBCA
- Ethanol
- Lipiodol
- Microspheres
- PVA Particles
- Chemoembolization Agents
- Contrast media

## PERIPHERAL EMBOLIZATION

Usable length	90 cm, 150 cm
Tip Shape	Straight tip
Catheter Profile Proximal	2.5F, 2.7F, 3.0F
Catheter Profile Distal	1.3F, 1.5F, 1.8F
Radiopaque Marker	1 mm located at 2 mm from the tip
<b>Guidewire Compatibility</b>	Maximum diameter 0.014"
Coating	Hydrophilic
Structure of the Catheter	PE/PEBAX

The catheter is used to increase the rigidity of the distal section during introduction into the guiding catheter.

Pars is the micro catheter with a strong resistance to pressure and total DMSO compatibility.

The catheters are the only real flow dependant catheters, meaning that their progression through the system is facilitated by the blood flow. This characteristic is achieved thanks to an extreme suppleness of the tubes which allows a fast and non traumatic progression of the catheter inside the blood vessels.

Steer CATH CORONARY & PERIPHERAL

180 170

Accurately Mentor Your Next Treatment

Quickly Access Indicated Anatomy with the Steerable Catheter SteerCATH improves
access to
hard-to-reach sites
with wide variety of
applications within the
human vasculature,
from the periphery to
the intracardiac

Use with aortic and peripheral interventional devices

- Eliminates need to change directive to reach desired position
- Conformability
- · Curve retention
- Radiopaque tip
- · Hydrophobic coated
- · Up to 180 degree Control
- Precise deflection using the self-locking rotating knob allows you to maintain control of the full procedure
- · Adjustable Tip Deflection
- · Make certain kink resistance
- · Torque control

 Inner Diameter
 6.5F / 7F / 8.5F

 Usable Lenght
 45, 55, 90cm

 Deflection Lenght
 9, 17, 22mm

Anoio CATHETER

## **Advantages**

- ✓ Workhorse construction suitable for various anatomies
- Flexible distal segment enables you to engage for backup support
- Supportive secondary curve for backup support and curve retention
- √ Thinner walls without compromising support
- Larger lumens to maximize contrast flow for enhanced visualization
- Radiopaque marker and PTFE-nylon shaft

AnoioCATH is intended for use for intravascular introduction of interventional/diagnostic devices into the coronary or peripheral vascular systems

High flexibility, support and visualization, the capability you need to respond to your challenging cases.

Catheter Material

Catheter Outer Diameter

Catheter Inner Diameter

Catheter Lenght

Tip Sytle Coating PEBAX/PA

4F, 5F, 6F, 7F, 8F, 9F,10F

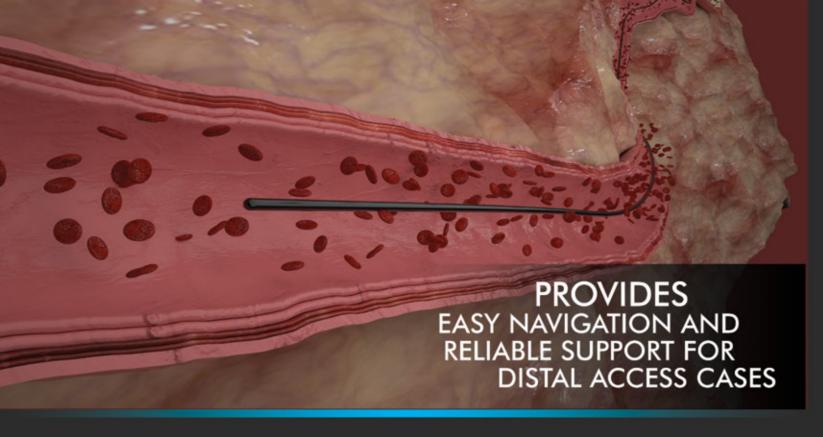
0,043", 0,058", 0,071", 0,081", 0,090", 0,108", 0,117"

90 cm

Straight, Left, Right

PTFE

THINNER WALLS
without
COMPROMISING
SUPPORT





Guidewire Material	Nitinol
Guidewire Diameter	0.018", 0.032", 0.035", 0.038"
Guidewire Lenght	150 cm, 180 cm, 260cm, 290 cm
Core Material	Super Elastic Nitinol Core
Covers	Polymer Cover
Coating	Full Hydrophilic
Tip Style	Straight, Angled, Long Taper
Shaft	Standart, Stiff

Designed to cirect a catheter to the desired anatomical location during diagnostic or interventional procedures.

## **Excellent Torque Control**

Nitinol wire and elastic hydrophilic polimer coating, integrated design allowa 1:1 torque response to deliver the guidewire into the target vessel quickly.

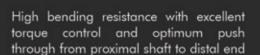
## **Durable and Lubricant Performance**

Hydrophilic coating offers a durable and smooth approach in tortous vessels.

Extra visualization

## Small Pass Profile and Tapered Tip

Provides continuous guide wire-catheter passage for high support and successful lesion passage.

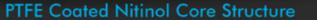


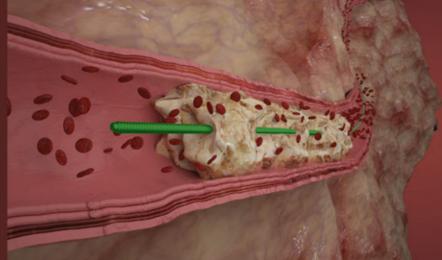
## STEERING AND TRACKING

- · Good flexibility
- Excellent steering and tracking
- Easy steerability
- · Straight, configurable tip structure
- · Hydrophilic polymer coating provide lubricity
- Radio-opaque tip
- Torque capability
- Straight angled and tapered tip

Elastic Radioopaque Tip

Hydrophilic Coating

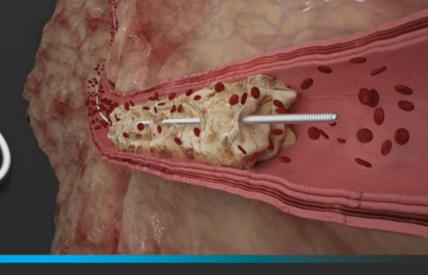




# PROVIDES EASY NAVIGATION AND RELIABLE SUPPORT FOR DISTAL ACCESS CASES



- Tip radiopacity
- Polymer jacket length



# NE COATED

Provides extra strength and stability during catheter placement and exchange during contralateral access and in carotid procedures.

Facilitates catheter placement and exchange during diagnostic or interventional procedures.

Tip Design: flat wire construction with spring coil

Benefits: Soft, atraumatic tip, multiple tip style options.

Guidewire Material	Stainless Steel
Guidewire Diameter	0.032", 0.035", 0.038"
Guidewire Lenght	150 cm, 180 cm, 260cm, 290 cm
Core Material	Stainless Steel
Covers	PTFE Coated
Tip Style	Straight, Angled
Shaft	Standart, Stiff

Guidewire is intended to facilitate the placement and exchange of interventional devices during diagnostic or therapeutic interventional procedures. Provides enhanced torqueability and lubricity, alllowing interventionalists to approach challenging cases with confidence.

PROVIDES EXTRA STRENGTH AND STABILITY



- More durable than regular stainless steel
- Retains shape
- Good flexibility
- · Excellent steering and tracking
- Easy steerability
- Straight, configurable tip structure
- Hydrophilic polymer coating provide lubricity
- Radio-opaque tip
- Torque capability
- Recanalization

HIGH TENSILE STRENGTH
STAINLESS STEEL
CORE MATERIAL

InWire is use for PTCA and PTA and consists of an elastic stainless steel core wire. InWire platinum / iridium alloy coil provides radiopacity under high-resolution fluoroscopy at the distal end. The distal surface has a hydrophilic polymer coating that forms a high lubricity.

It has a non-damaging flexble tip and slippery body structure. The distal tip is radiopaque.

Fine control over challenging tortuous vessels and highly stenosed lesions. Polymer jacket provides advanced slip performance with superior torque and support.

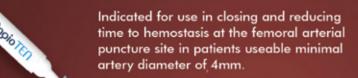
Can be used to enter and insert a diagnostic or interference device in the coronary vessels and is used to access and pass the lesion in a target lesion.

3cm Radioopaque Tip

Stainless Steel Core

### Super Elastic Platinium/Iridium Coil Structure

Guidewire Material	Stainless Steel
Guidewire Diameter	0,010", 0,012", 0,014", 0,018"
Guidewire Lenght	150 cm, 180 cm, 260cm, 300 cm
Core Material	Stainless Steel
Core Taper	Longer
Tip Sytle	Stiff / Intermediate / Floppy
Tip Lenght	1.5 cm- 10 cm
Spring Coils	Pt-Ir Coil Shape
Covers	Polymer Cover
Coating	Hydrophilic
Tip Load (g)	1-2, 3-6



# EASY PROCEDURE CONTROL

## AnoioTEN VASCULAR CLOSURE

AngioTEN, Vascular Closure Device

procedures

developed for achieving rapid, reliable and safe homeostasis after diagnostic angiography procedures or interventional Special designed delivery sheath allows system to detect artery easily and deliver polymer compound over adventitia of the artey safety.

- Insertion Sheath
- Arteriotomy Locator
- 5F (2.0 mm) 0.035 in. (0.89 mm) Guidewire with J-Straightener, 6F (2.0 mm) 0.035 in. (0.89 mm) Guidewire with J-Straightener, 7F (2.0 mm) 0.035 in. (0.89 mm) Guidewire with J-Straightener, 8F (2.7 mm) 0.038 in. (0.96 mm) Guidewire with J-Straightener, 9F (2.7 mm) 0.038 in. (0.96 mm) Guidewire with J-Straightener, 10F (3.3 mm) 0.038 in. (0.96 mm) Guidewire with J-Straightener
- 🖊 Single use, one year shelf life after sterilization
- ✓ Sterilized by Eto. Do not re-sterilize

## INTRADUCER SET





0.035" KIT 0.035" J-tip guidewire The **Invaducer** is intended to be inserted percutaneously into a vessel to facilitate the insertion of angiographic, electrode, balloon, or similar catheters.

## Designed for Easy Insertion and for Patient Comfort

A percutaneous introducer is used to facilitate placing a catheter through the skin into a vein or artery. Percutaneous introducers are recommended for initial percutaneous introduction or the exchange of intravascular devices.

Diameter (F=French)	Excluded Lengths (cm)
4	11, 16
5	11, 16
6	11, 16
7	11, 16, 45, 64
8	11, 16, 45, 64
9	11, 16, 45, 64
10	11, 16, 45
11	11, 16, 45



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