

Support Catheters

# NAVIGATE COMPLEX PROCEDURES WITH CONFIDENCE



# **PUSHING** BOUNDARIES

Terumo Interventional Systems is **committed to your success** with innovative procedural solutions and ongoing support for your most challenging cases.

We are relentlessly seeking new ways to help you apply effective solutions and achieve **better outcomes for more patients**.



# NAVICROSS<sup>®</sup> Support Catheter Portfolio design and construction delivers:

- Proven best-in-class performance in pushability, wire support and kink resistance<sup>1,a</sup>
- Provides optimal torque control and an ideal crossing profile

<sup>a</sup>When compared to Quick-Cross Support Catheter, CXI Support Catheter, and TrailBlazer Support Catheter during mechanical bench testing



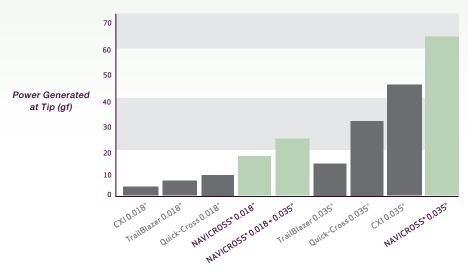




## Unmatched Pushability<sup>1,a</sup>

#### Test Protocol

This test measured the ratio of load that is transmitted to the distal tip when the catheter is pushed from the proximal end.



Tested 0.018" Catheters: NAVICROSS" 0.018": n=10; Tested 0.018" Competitors: n=5 All tested 0.035" Catheters: n=5

## NAVICROSS<sup>®</sup> double-braided stainless steel construction provides an unmatched force transmission ratio.



NAVICROSS® double-braided stainless steel

#### **Clinical Benefit**

Having higher transmission ratio enables:

- Greater transfer of force along the catheter shaft
- Reduced lag time between operator hand and tip movement
- Greater distal tip control

#### NAVICROSS<sup>®</sup> Catheter Construction

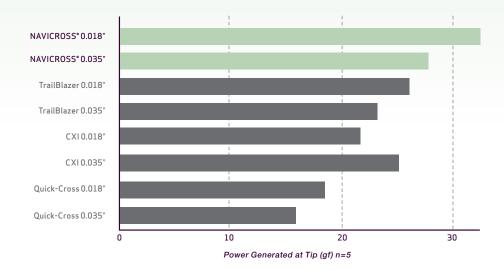
Double-braided stainless steel design runs the length of the device, giving optimal column strength without the disadvantage of distal to proximal tapering.

\*When compared to Quick-Cross Support Catheter, CXI Support Catheter, and TrailBlazer Support Catheter during mechanical bench testing

## Highest Wire Support<sup>1,a</sup>

#### Test Protocol

This test measured how much power the wire generated at the tip when it was pushed 2.5 mm at the proximal end.



#### The NAVICROSS<sup>®</sup> tapered tip provided the highest wire support.



NAVICROSS® double-tapered tip

#### **Clinical Benefit**

Having increased wire support enables:

- Better wire control
- Increased wire pushability across complex lesions
- Decreased wire slop/buckling within the support catheter

#### NAVICROSS<sup>®</sup> Catheter Construction

A near-seamless catheter-to-guidewire transition provides increased wire support, which may increase lesion crossing capability.

<sup>a</sup>When compared to Quick-Cross Support Catheter, CXI Support Catheter, and TrailBlazer Support Catheter during mechanical bench testing

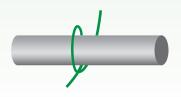


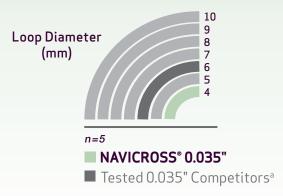


## Highest Kink Resistance<sup>1,a</sup>

#### 0.035" Catheter Test Protocol

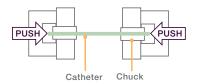
Each 0.035" catheter's kink resistance was established by winding them around pegs of varying sizes, beginning at 10 mm diameters and reducing at 1 mm increments.

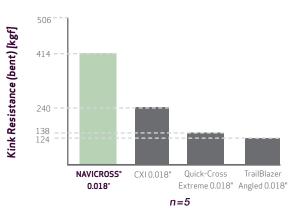




#### 0.018" Catheter Test Protocol

Each 0.018" catheter's kink resistance was established by compressing the proximal end of the catheter against resistance to assess its maximum breaking strength as measured in gram-force (gf).





## The NAVICROSS<sup>®</sup> Support Catheter Portfolio demonstrates the highest kink resistance among tested competitors.



#### **Clinical Benefit**

Having a higher kink resistance enables:

- Better navigation through tortuous anatomy
- Retention of luminal integrity
- Reduced need for replacement devices

#### NAVICROSS<sup>®</sup> Catheter Construction

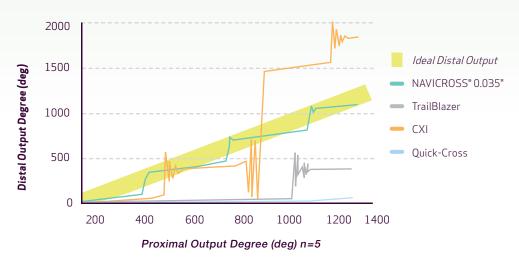
Improved strain relief at the hub and double-braided design give NAVICROSS<sup>®</sup> increased column strength, which may help to prevent catheter kinking and maintain inner lumen integrity.

<sup>a</sup>When compared to Quick-Cross Support Catheter, CXI Support Catheter, and TrailBlazer Support Catheter during mechanical bench testing

## Optimal Torque Control<sup>1,b</sup>

#### Test Protocol

Using 0.035" catheters, this test model mimicked moderate tortuosity and acute takeoffs typically found in iliac bifurcations. 0.035" catheters were rotated at the proximal end, and distal tip response measurements were recorded.



<sup>b</sup> As demonstrated by mechanical bench testing performed on 0.035" catheter platforms.

NAVICROSS<sup>®</sup> 0.035" double-braided stainless steel construction provides optimal torque control, avoiding overshooting and minimizing delayed tip response.



NAVICROSS® angled tapered tip

#### NAVICROSS<sup>®</sup> Catheter Construction

Double-braided stainless steel design runs the length of the device, resulting in near 1:1 torque. Combined with the 30° angled version, it provides the operator with an ideal solution for above-the-knee (ATK) and below-the-knee (BTK) lesion crossing.

#### **Clinical Benefit**

Having optimal torque control enables:

- Greater hub-to-tip response
- Increased catheter and wire control
- Aid to the operator in vessel and microchannel selection, as well as wire advancement

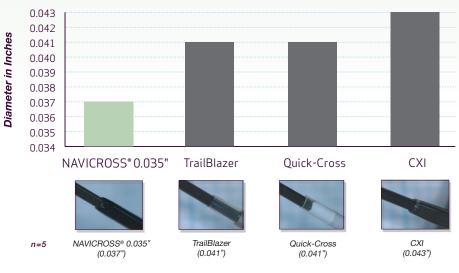




## Smallest Crossing Profile<sup>1,a</sup>

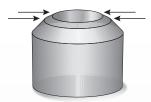
#### Test Protocol

Tested 0.035" catheter outer diameters were measured to determine the smallest crossing profile. Images were also taken to show catheter-to-guidewire transitions.



<sup>a</sup> As demonstrated by testing performed on 0.035" catheter platforms.

#### NAVICROSS<sup>®</sup> 0.035" has the smallest crossing profile with an 0.037" OD. It also has a double-tapered tip, which aids in a seamless transition from catheter to guidewire.



NAVICROSS® double-tapered tip

#### **Clinical Benefit**

Having a low crossing profile enables:

- Improved wire support
- Smoother catheter tracking through complex lesions and tortuous anatomy

#### NAVICROSS<sup>®</sup> Catheter Construction

Double-tapered tip provides the smallest crossing profile, giving a near-seamless catheter-to-guidewire transition to aid in crossing simple or complex lesions.

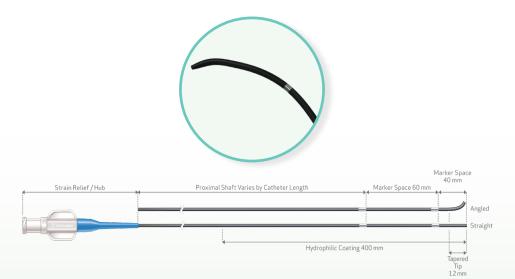
### NAVICROSS® Catheters

Navicross° 0.018" Support Catheters









TERUMO INTERVENTIONAL SYSTEMS



## NAVICROSS® 0.018" Catheter

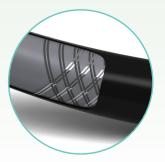
Minimum Sheath Compatibility: 2.6 Fr

#### Three Radiopaque Markers<sup>1</sup>

- Markers facilitate accurate assessment of position
- Unique spacing provides easy measurement of common stent and balloon sizes
- Initial marker is 1 mm from distal tip; 40 mm and 60 mm spacing

## NAVICROSS® 0.035" Catheter

Minimum Sheath Compatibility: 4 Fr







# Double-braided stainless steel<sup>1</sup>

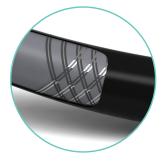
Engineered for optimal pushability and torque control for lesion crossing

#### Telescoping Capability<sup>1</sup>

NAVICROSS® 0.018" is designed to telescope through NAVICROSS® 0.035"

#### Straight and Angled Tips<sup>1</sup>

Tips allow access to vascular branches, including BTK collaterals



# Double-braided stainless steel<sup>1</sup>

Affords best-in-class pushability and torque control for lesion crossing



12 mm Tapered Tip<sup>1</sup>

Provides seamless guidewire-to-catheter transition, facilitating lesion access and crossing



Straight and 30° Angled Tips<sup>1</sup>

Tips allow access to vascular branches, including BTK collaterals





#### NAVICROSS® 0.018" Support Catheter

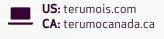
PRODUCT CODE	WIRE COMPATIBILITY	CATHETER LENGTH	TIP SHAPE
NC18650	0.018"	65 cm	Straight
NC18651	0.018"	65 cm	Angle
NC18900	0.018"	90 cm	Straight
NC18901	0.018"	90 cm	Angle
NC18130	0.018"	135 cm	Straight
NC18131	0.018"	135 cm	Angle
NC18150	0.018"	150 cm	Straight
NC18151	0.018"	150 cm	Angle

#### NAVICROSS® 0.035" Support Catheter

PRODUCT CODE	WIRE COMPATIBILITY	CATHETER LENGTH	TIP SHAPE
NC35650	0.035"	65 cm	Straight
NC35651	0.035"	65 cm	30° Angle
NC35900	0.035"	90 cm	Straight
NC35901	0.035"	90 cm	30° Angle
NC35130	0.035"	135 cm	Straight
NC35131	0.035"	135 cm	30° Angle
NC35150	0.035"	150 cm	Straight
NC35151	0.035"	150 cm	30° Angle

### FIND OUT MORE





Reference: 1. Data on file.

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