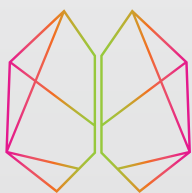




GO DISTAL...
MORE TRACKABILITY
FOR MORE SUPPORT¹



CERENOVUS

PART OF THE **Johnson & Johnson** FAMILY OF COMPANIES

CEREBASE™ DA
guide sheath

ENGINEERED TO SECURE DISTAL ACCESS FOR GEOMETRIC ANCHORING²

8F Short Sheath Compatible

Available in 80, 90, and 95cm lengths

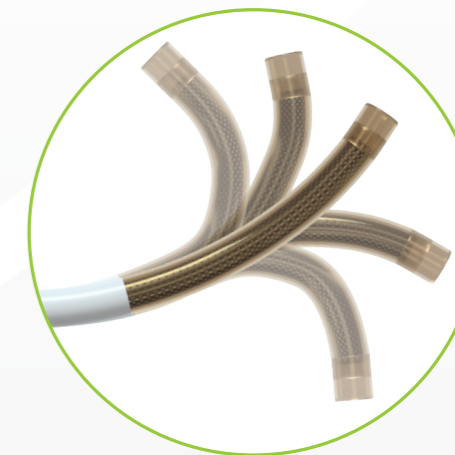
MORE SUPPORT¹

ENGINEERED TO SECURE DISTAL ACCESS FOR GEOMETRIC ANCHORING, RESULTING IN MORE PROCEDURAL SUPPORT².

FEATURES:

- More proximal shaft stiffness designed for arch support³
- More procedural support²

Dexterous (DEX) Tip facilitates tight turns



Large Inner Diameter ID (.090") for more clearance

MORE TRACKABILITY¹

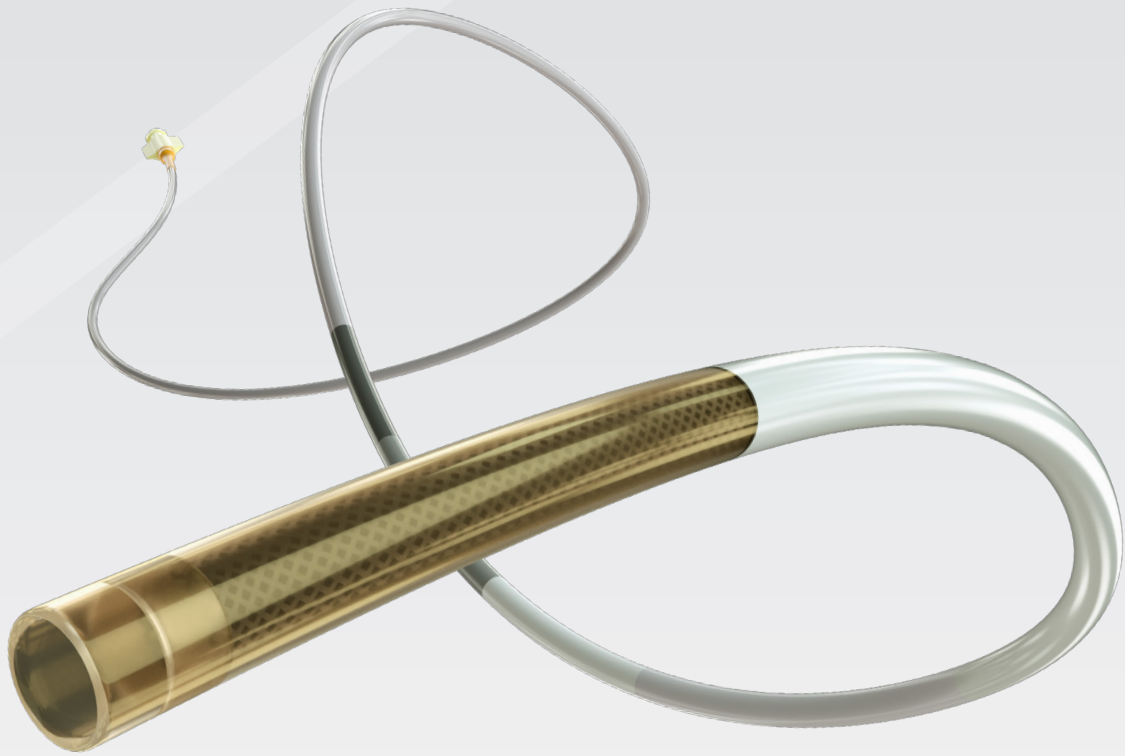
DEX TIP FACILITATES TIGHT TURNS FOR ENHANCED TRACKING THROUGH CHALLENGING ANATOMY

FEATURES:

- DEX Tip - short, flexible and soft⁴
- Soft and compliant, rounded distal edges
- Flexibility of the CEREBASE™ DEX Tip is similar to the flexibility of an aspiration catheter
- Smooth transition zones for pushability
- Excellent⁵ kink resistance

CEREBASE™ DA

guide sheath



CEREBASE™ DA Guide Sheath

Product Code	ID	OD (compatible short sheath)	Usable Length
GS9080SD	0.090"	8F	80cm
GS9090SD	0.090"	8F	90cm
GS9095SD	0.090"	8F	95cm

¹ More trackability and more support than NeuronMax™, Infinity™, Shuttle™ and Fubuki™. More support than Ballast™.

² More support than Neuron™ MAX, Infinity™, Shuttle™, Fubuki™ and Ballast™ when placed in a distal cervical position.

³ More shaft stiffness than Neuron™ MAX, Infinity™, Shuttle™, Fubuki™ and Ballast™

⁴ Short flexible and softer than Neuron™ MAX, Infinity™, Shuttle™, Fubuki™ and Ballast™.

⁵ More kink resistance than Neuron™ MAX, Infinity™, Shuttle™, Fubuki™, Ballast™.

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Competitive Test Report #103618595 Rev2, April 2020

Competitive Test Report #10364599 Rev1, April 2020

Competitive Test Report #103628641 October 2019 (Aspiration Catheter)

Türk A, Manzoor MU, Nyberg EM, et al. Initial experience with distal guide catheter placement in the treatment of cerebrovascular disease: clinical safety and efficacy. J Neurointerv Surg. 2013 May;5(3):247-52. doi: 10.1136/neurintsurg-2011-010256. Epub 2012 Mar 13

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EH3 9QP
United Kingdom

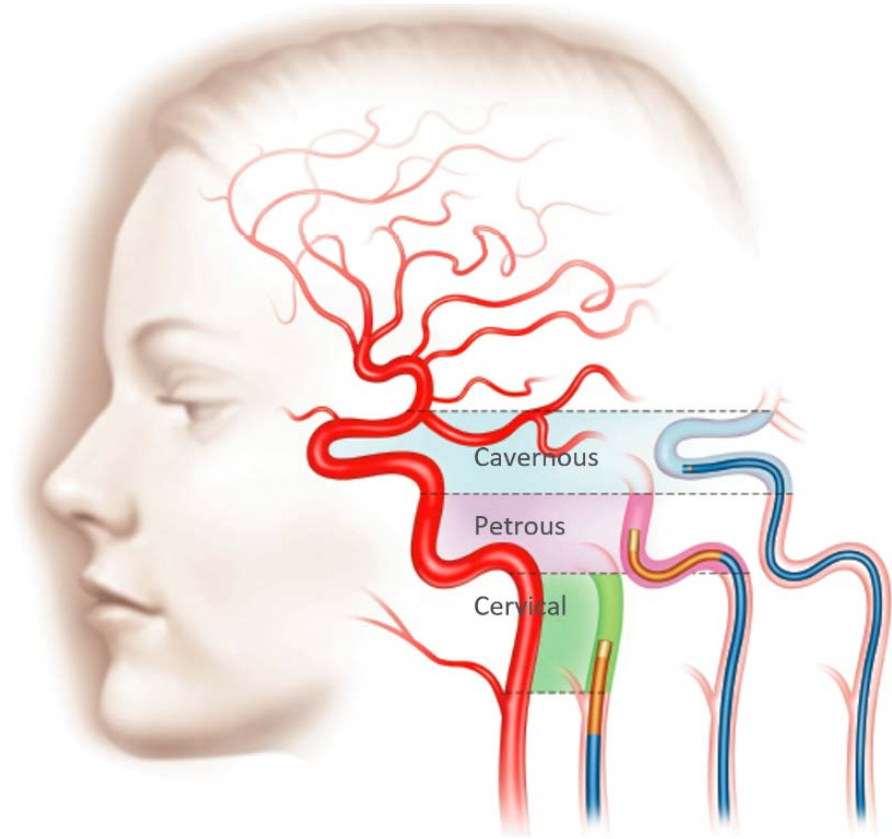
Legal Manufacturer:
Medos International SARL
Chemin-Blanc 38
CH-2400 Le Locle
Switzerland

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Standard Access Placement

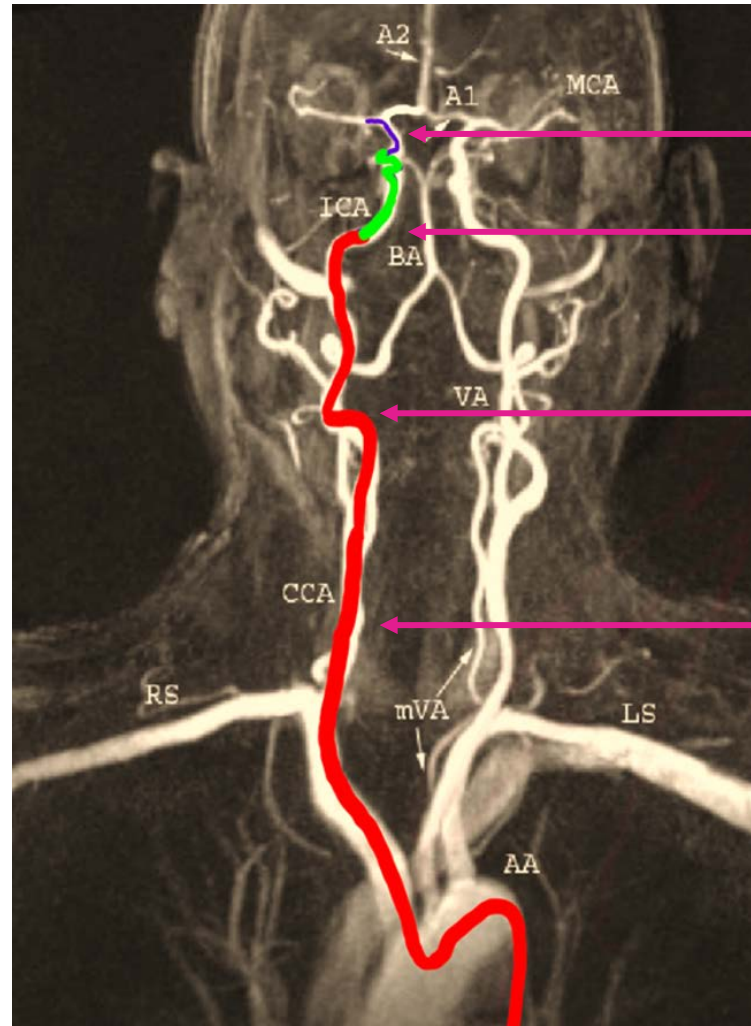


• Long Guide Sheath (CEREBASE)

• Distal Access Guide Catheters

• Intermediate Catheters

• Traditional Guide Catheter (ENVOY)



Microcatheter

Intermediate Catheter

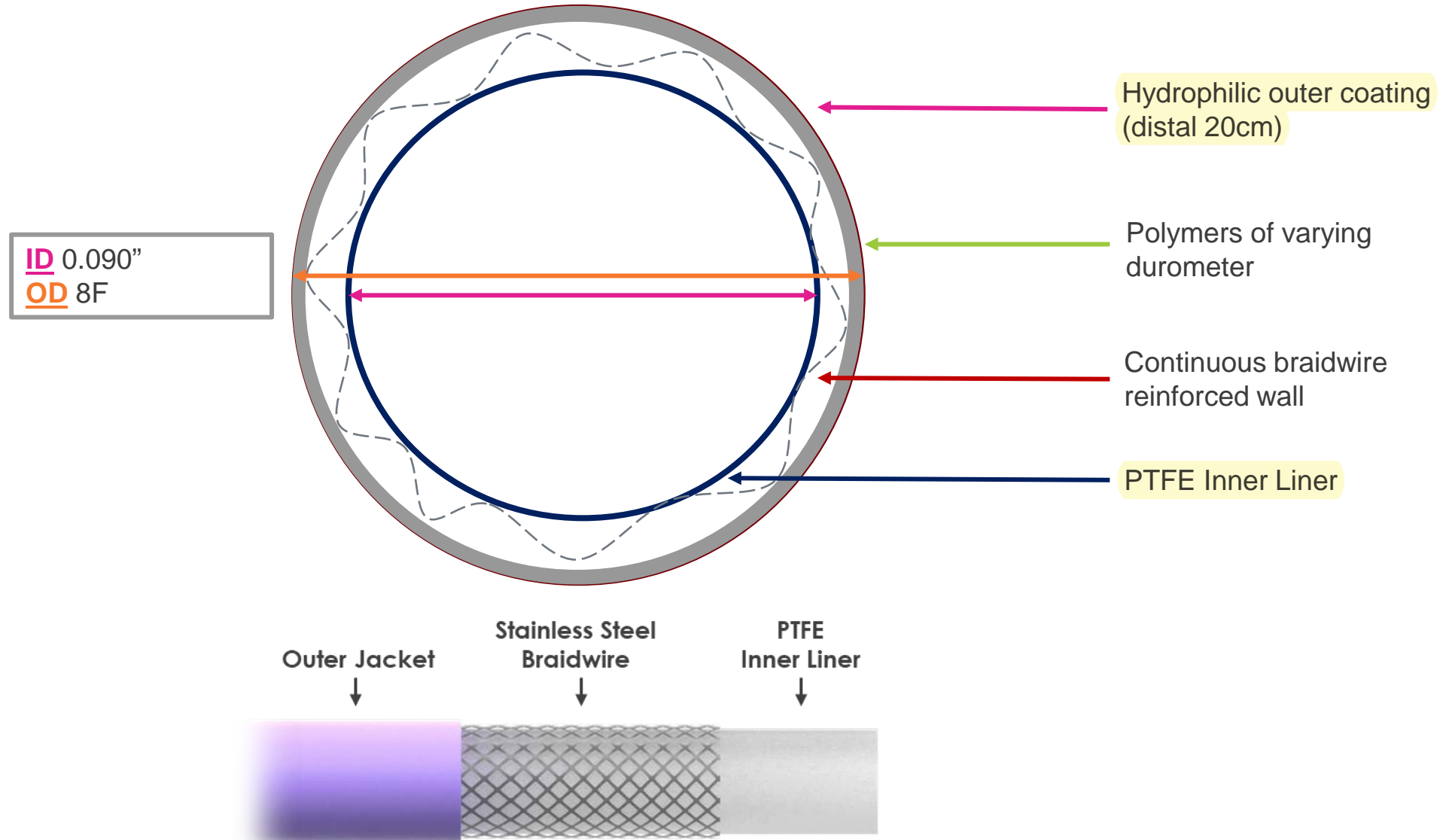
BASE Catheter (DISTAL ACCESS)

- Distal Access Guide Catheter (ENVOY DA)
- **New category! Distal Access Long Guide Sheath CEREBASE DA**

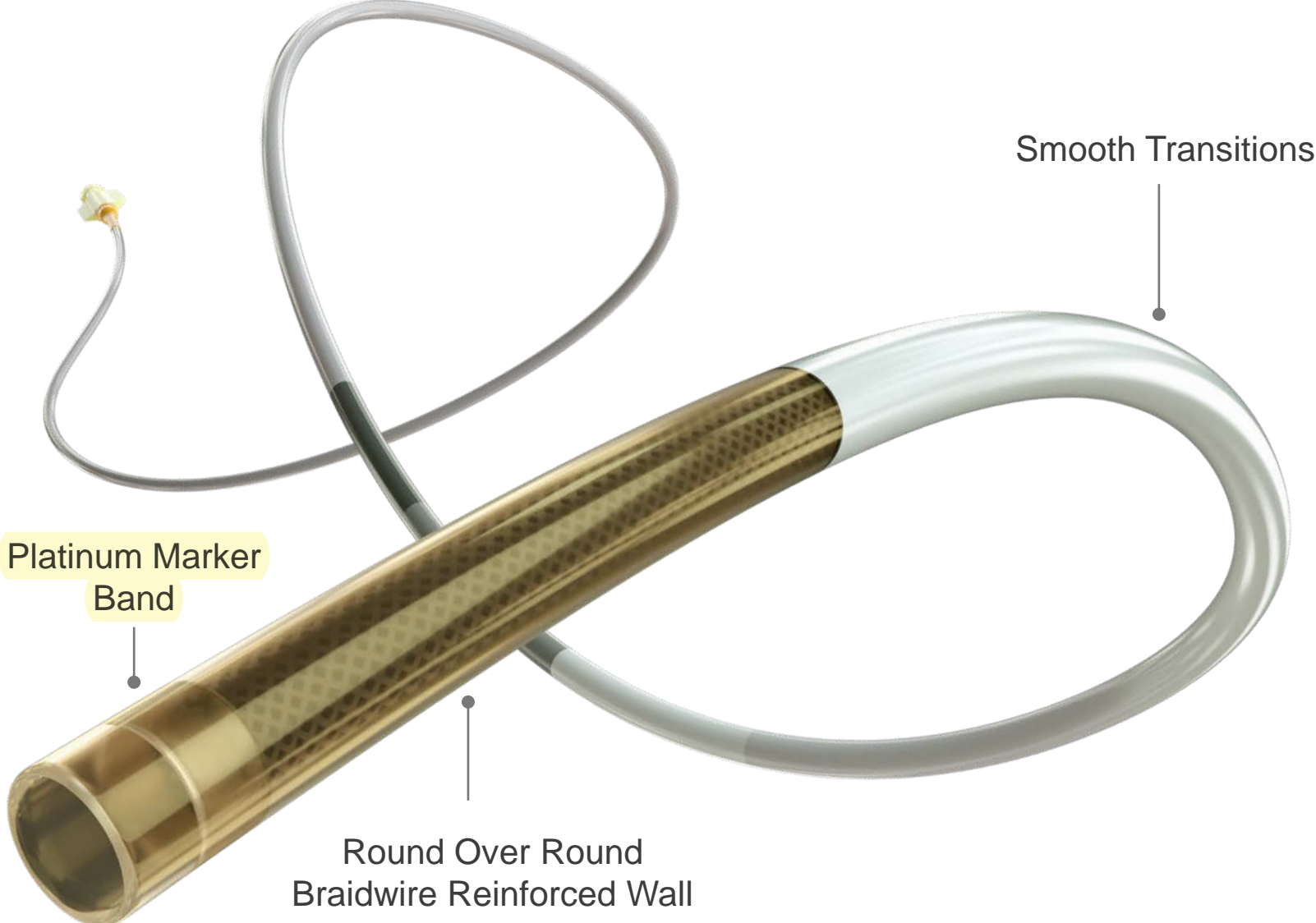
BASE Catheter (Regular & Distal Access)

- Long Guide Sheath
- Guide Catheter
- Balloon Guide Catheter

Large Bore Catheter Cross Section



CEREBASE Design Overview



Platinum Marker Band

Round Over Round Braidwire Reinforced Wall

Smooth Transitions

Inner Liner – PTFE

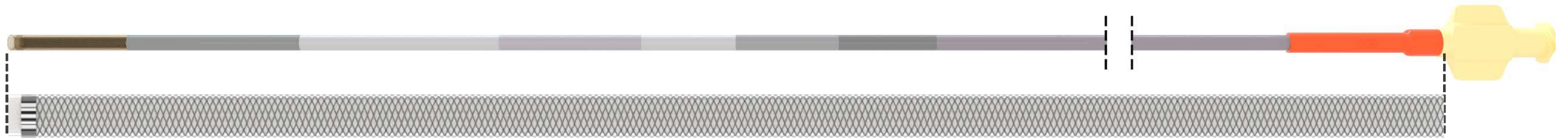
Continuous PTFE liner from proximal end to distal tip

- PTFE balance of lubricity and durability for device exchange



Reinforced Walls – Continuous Braidwire

- Continuous Stainless Steel Braidwire Reinforcement
 - Braidwire from proximal end to distal tip
 - Single material, stainless steel, so no transitions to different reinforcement material
 - Round over round braid
- Continuous Braid Density
 - Density directly related to Picks Per Inch (PPI) – recall PPI is a count of the number of times a braid is crossed per inch
 - Higher PPI = more braid crosses = higher density
 - Lower PPI = less braid crosses = lower density
 - Continuous density means the PPI remains constant the entire length of the catheter
 - Adds to the stability of the braid



Multiple Segments – 12 Segments with Smooth Transitions

12 Segments relates to the polymer jackets on outside of the catheter

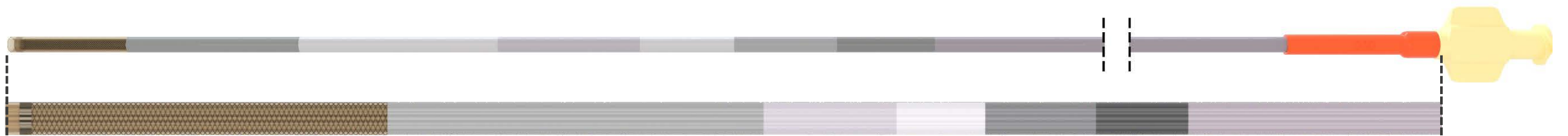
Note: color change on catheter does not correlate directly to segment

Profile depends on two characteristics:

- Durometer: Hardness of the polymer used; main determinant of the stiffness / flexibility of the segment
- Extrusion Process:
 - Different sections are extruded to be thinner closer to the distal tip, reducing the polymer thickness
 - Leads to a thinner material, reducing wall thickness – ID remains the same, reduces OD of catheter

So what really affects the stiffness / flexibility profile of the catheter? In order of importance:

- Mostly the polymer jacket (durometer and extrusion process)
- Braid density also plays a role to some degree
- Inner liner durometer and thickness (slight impact)



CEREBASE DA Messaging

Go DISTAL...

More Trackability*

Design Feature	Clinical Benefit
• DEX tip (short, flexible and soft)	• Facilitates tight turns for trackability
• Smooth Transition Zones	• Pushability and control
• Soft, Compliant and Rounded Tip	• Atraumatic vessel wall interaction
• Excellent Kink Resistance	• Maintains catheter lumen

More Support*

Design Feature	Clinical Benefit
• Distal tracking	• Geometric anchoring in various bends for more support
• Proximal shaft stiffness	• Arch support

*More trackability and more support than NeuronMax™, Infinity™, Shuttle™, Fubuki™, Ballast™

Sources:
1. Competitive Test Report 103618595, April 2020
2. Competitive Test Report 10364599, April 2020