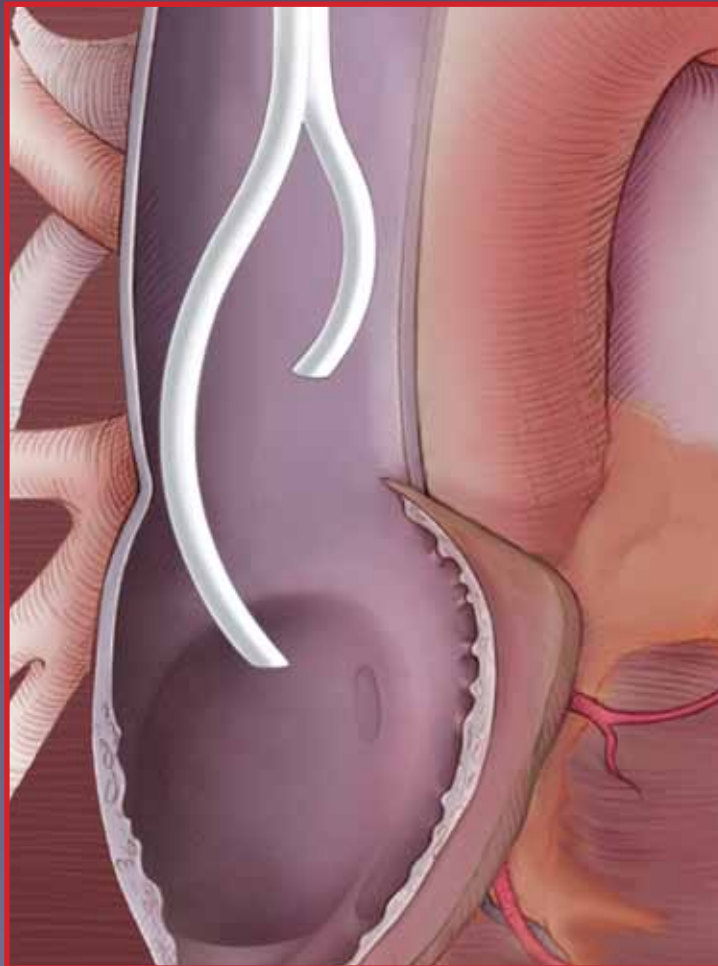


CENTERED ON PERFORMANCE™

reducing catheter failure



CentrosFLO™
Long-Term Hemodialysis Catheter

CentrosFLO™

DESIGNED TO PREVENT FIBRIN SHEATH FORMATION

- Fibrin sheaths are a frequent cause of catheter malfunction.¹
- Fibrin sheathing is associated with vessel wall injury and can occur as the catheter tip impacts the vein wall.^{1, 2}
- Indwelling catheters with fibrin sheaths have shown a predisposition to catheter infection.²
- In a study of removed or exchanged hemodialysis catheters examined with contrast, 76% had fibrin sheaths.³

STUDY RESULTS⁴

A 1998 porcine model study found that vessel injury and fibrin sheath formation can be prevented by a centered [stabilized] catheter tip in the vasculature.

CENTERED CATHETERS were found to be completely free in the vessel with no gross evidence of vessel injury.

NON-CENTERED CATHETERS, control catheter tips were embedded in a lesion and covered with fibrotic tissue.

"Vessel injury, and resulting thrombosis, can be prevented by a catheter modification that stabilizes the tip. Such a catheter may significantly reduce catheter malfunction and morbidity associated with these devices."



The highly innovative CentrosFLO design features preshaped tips which automatically center the catheter in the middle of the vessel.

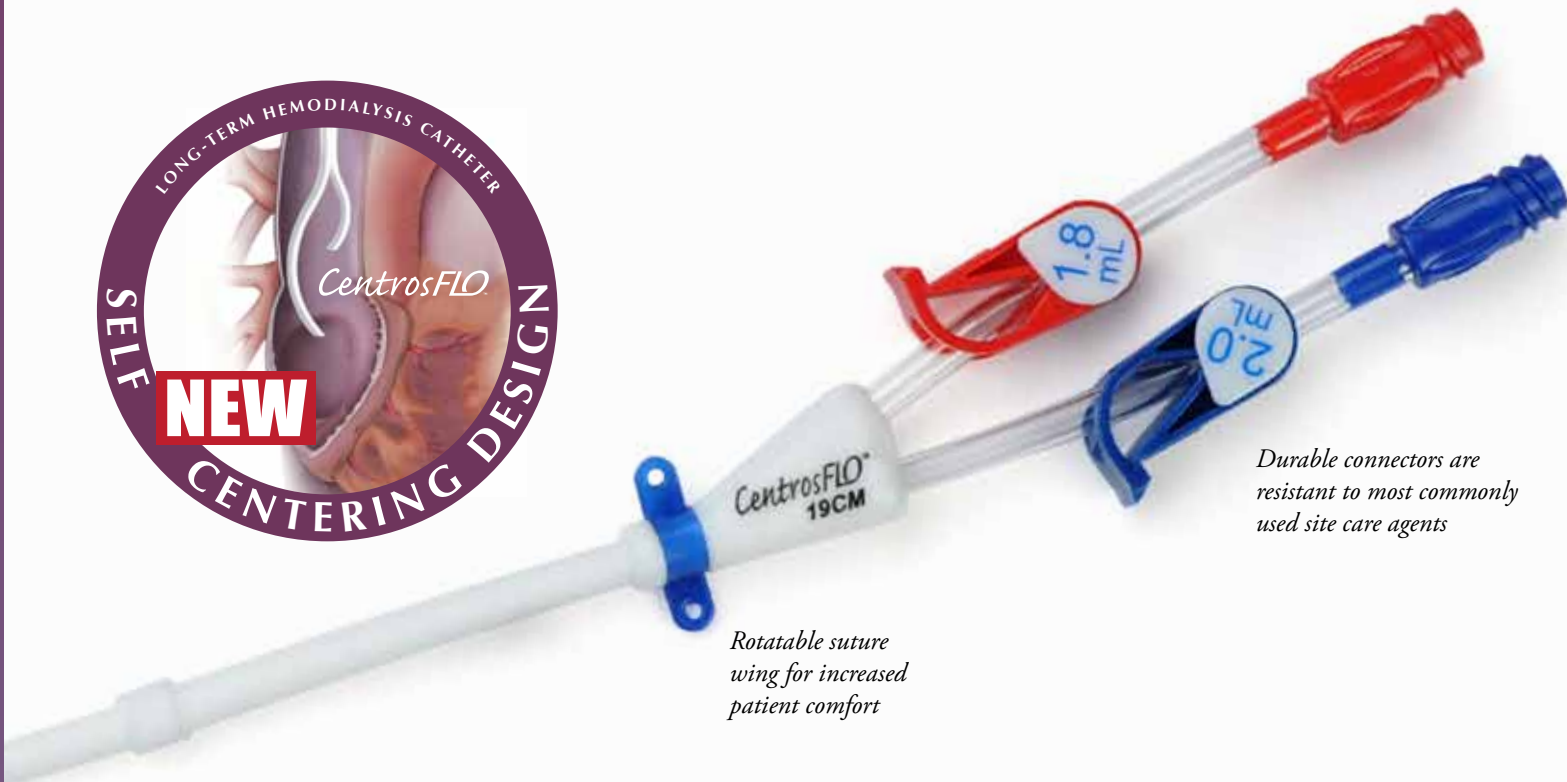
NEW DISTAL
SIDE HOLES

UNIQUE
GUIDE WIRE
SLIT

INNOVATIVE
TIP DESIGN
ENSURES
MINIMAL
RECIRCULATION
RATE OF LESS
THAN 1%*



The CentrosFLO by Dr. Stephen Ash represents a new approach to the design of dialysis catheters. The distal tip of the catheter has a unique curved configuration that keeps the ports of the catheter centered and away from vessel walls.



Durable connectors are resistant to most commonly used site care agents

Rotatable suture wing for increased patient comfort

CentrosFLO Features:

PRESHAPED CURVED TIPS are designed to form a plane that intersects the SVC and keeps the ports in the middle of the vessel.

UNIQUE GUIDE WIRE SLIT facilitates ease of over-the-wire insertion technique.

NEW DISTAL SIDE HOLES reduce potential for arterial insufficiency.

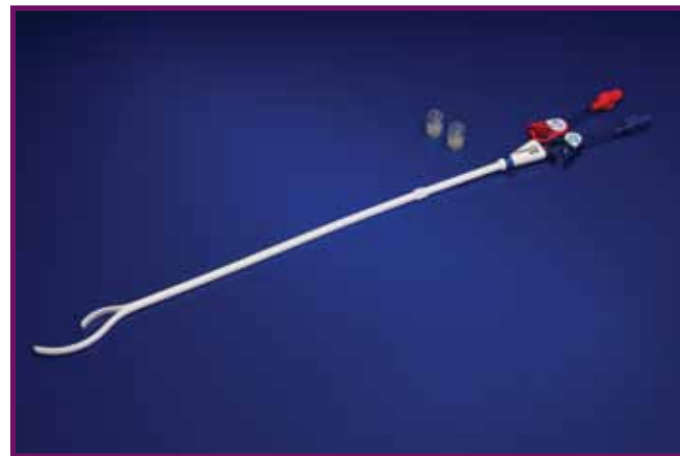
NEW TIP-TO-CUFF MEASUREMENT on bifurcation hub.

NON-TRAUMATIC TUNNELER sleeve and catheter tips form a friction fit inside sleeve, reducing risk.



CentrosFLO Safe, Easy and Effective

ORDERING INFORMATION



COMPLETE KIT:

- 1 15F CentrosFLO Long-Term Hemodialysis Catheter
- 1 16F Valved Peelaway Sheath And Dilator
- 1 18G X 2.75" (7 cm) Introducer Needle
- 1 #11 Safety Scalpel
- 1 0.038" X 80 cm J-Tipped Guide Wire
- 2 Adhesive Dressing
- 2 Injection Caps
- 1 12F Vessel Dilator
- 1 14F Vessel Dilator
- 1 Tunneler With Sleeve

CATHETER ONLY:

- 1 15F CentrosFLO Long-Term Hemodialysis Catheter
- 2 Injection Caps

All Products Packaged 5 Per Box.

Complete Kit Quantity Requested

| product code | tip-to-cuff cm | tip-to-hub cm | |
|----------------|----------------|---------------|----------------------|
| CENF15K | 15 | 20 | <input type="text"/> |
| CENF17K | 17 | 22 | <input type="text"/> |
| CENF19K | 19 | 24 | <input type="text"/> |
| CENF23K | 23 | 28 | <input type="text"/> |
| CENF27K | 27 | 32 | <input type="text"/> |
| CENF31K | 31 | 36 | <input type="text"/> |

Catheter Only Quantity Requested

| product code | tip-to-cuff cm | tip-to-hub cm | |
|----------------|----------------|---------------|----------------------|
| CENF15C | 15 | 20 | <input type="text"/> |
| CENF17C | 17 | 22 | <input type="text"/> |
| CENF19C | 19 | 24 | <input type="text"/> |
| CENF23C | 23 | 28 | <input type="text"/> |
| CENF27C | 27 | 32 | <input type="text"/> |
| CENF31C | 31 | 36 | <input type="text"/> |

Ordering Department _____ Customer Signature _____ Date _____

To find out more about the CentrosFLO, call Customer Service at 1-800-35-MERIT.

¹ Crain, MR, Horton, MG, Mewissen, MV. Fibrin sheaths complicating central venous catheters. *AJR*. 1998 Aug;171:341-346.

² Forauer AR, Theoharis GA, Dasika NL. Jugular vein catheter placement: histologic features and development of catheter-related (fibrin) sheaths in a swine model. *Radiol*. 2006 Aug;240(2):427-434.

³ Alomari, Al, Falk, A. The natural history of tunneled hemodialysis catheters removed or exchanged: a single-institution experience. *JVIR*. 2007;18:227-235.

⁴ Kohler, TR, Kirkman, TR. Central venous catheter failure is induced by injury and can be prevented by stabilizing the catheter tip. *J Vasc Surg*. 1998 Jul;28(1):59-65.

* Tested in forward flow in a simulated anatomical model using fluid viscosity equivalent to blood.



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