



# Reduce the risk

of catheter-related complications



Arrowg+ard®

PROTECTION

## Arrowg+ard® Protected Catheters

As a medical professional, you work with your colleagues every day to keep your patients safe and healthy. **With Arrowg+ard® Protected Catheters, we can be your partner to help you pursue your goal of zero infections.**

**Arrowg+ard® Protection provides:**

- Broad-spectrum protection against bacteria, fungi and yeast<sup>1</sup>
- Chlorhexidine-based antimicrobial technology impregnated into catheter surfaces



**Learn more about:**

[Arrowg+ard Blue Plus® CVC](#)

[Arrowg+ard Blue® Multi-Lumen Access Catheters](#)

[Arrowg+ard Blue® Percutaneous Sheath Introducer](#)

[Arrowg+ard Blue® Acute Hemodialysis Catheters](#)

[Arrowg+ard Blue Advance® PICC](#)

[Arrowg+ard Blue Advance® Midline Catheter](#)

[Arrowg+ard Blue Advance® JACC](#)

[Arrowg+ard Blue Advance® JACC with TightTrack™](#)

[Arrow® Catheter Tip Positioning Systems](#)



# Not all catheters are protected. **Are yours?**

Many healthcare professionals assume the catheters they are using are already protected. After all, all catheters are protected, right? The answer may surprise you.

With Arrowg+ard® Protected Catheters, you can be sure your catheter is protected for the safety of your patients. Look for the blue catheter color and Arrowg+ard® name on the hub.



**Browse** Arrowg+ard® central access products

**Browse** Arrowg+ard® peripheral access products



# Arrowg+ard Blue Plus® Central Venous Catheter (CVC)

## Protection begins within

**Complete coverage** – Features an external surface treatment using antimicrobials chlorhexidine acetate (CHA) and silver sulfadiazine. An internal lumen impregnation combines CHA and a chlorhexidine (CH) base.

**In vitro performance** – Proven effectiveness against common antibiotic-resistant “superbugs.” Arrowg+ard® Protection is supported by 30+ clinical studies.<sup>2</sup>

**Infection reduction capabilities** – Proven to reduce central line associated bloodstream infection (CLABSI) by 67% to 100%.<sup>3, 4, 5, 6</sup>

**Cost reduction potential** – May reduce healthcare systems’ expenses due to the average cost of CLABSI being \$48,108 per incident.<sup>7</sup>

**Reduces broad-spectrum pathogens** – Proven effectiveness in reducing gram-positive and gram-negative bacteria, and fungal organisms.<sup>1</sup>

**Includes the Arrow® Blue FlexTip® Feature** to minimize the risk of vessel trauma.



## Meets guidelines and recommendations:

- ✓ Centers for Disease Control and Prevention (CDC)<sup>8</sup>
- ✓ Society for Healthcare Epidemiology of America (SHEA)<sup>9</sup>
- ✓ Infectious Diseases Society of America (IDSA)<sup>8, 9</sup>
- ✓ Infusion Nurses Society (INS)<sup>10</sup>
- ✓ Occupational Safety and Health Administration (OSHA)<sup>11</sup>

## Learn more about:

[Arrowg+ard Blue Plus® CVCs](#)

[Arrow® ErgoPack® Complete System CVC Insertion Kit](#)

[Arrowg+ard Blue Plus® Clinical Bibliography](#)



**Watch** the Arrowg+ard Blue Plus® Catheter versus Vantex® Catheter Biofilm Formation Video



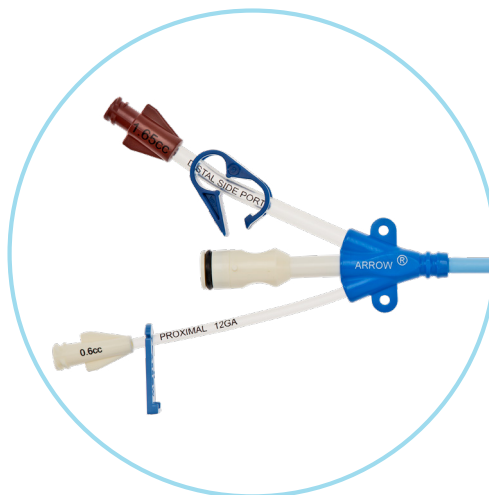
**Watch** the Arrowg+ard® Technology Overview Video

# Arrowg+ard Blue® MAC and PSI

The Arrowg+ard Blue® Multi-Lumen Access Catheter is designed to meet the needs of a variety of patient types – from trauma to cardiac. The catheter combines the access of a sheath introducer with the high-flow lumens of a central line. It also includes companion catheters that add up to three lumens.

The Arrowg+ard Blue® Percutaneous Sheath Introducer is designed to provide optimal access for hemodynamic monitoring. The hemostasis valve also allows easy access for additional devices such as thermodilution catheter or PSI companion catheter, adding up to three lumens.

Both the Arrowg+ard Blue® MAC and PSI are impregnated with antimicrobial protection along the extraluminal surface of the catheter body. This protects against gram-positive and gram-negative bacteria, fungi and yeast.<sup>1</sup> Both catheter types meet the highest level of recommendation by the CDC (Recommendation 1A), INS (Level 1) and SHEA (Level 1).<sup>8, 9, 10, 11</sup>

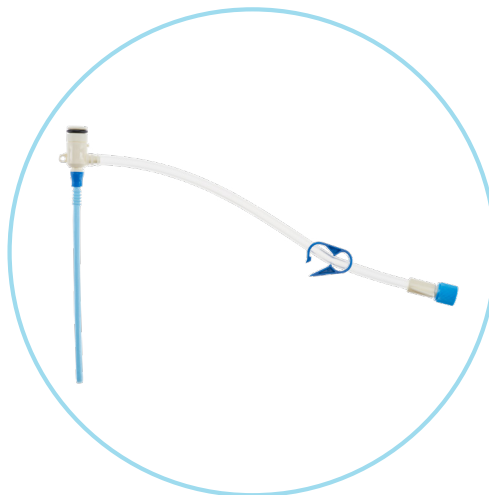


## MAC

Features high flow rates of up to 29 liters per hour under gravity alone.

### Meets a variety of patient types:

- Septic shock
- Trauma
- Cardiac surgery
- Transplant surgery
- High risk for catheter-related bloodstream infections (CRBSI)



## PSI

- Arrow-Flex® Feature on the sheath introducer body is designed to flex without kinking or collapsing
- Allows for consistent monitoring during patient movement or catheter manipulation



**Learn more** about the Arrowg+ard Blue® MAC and PSI



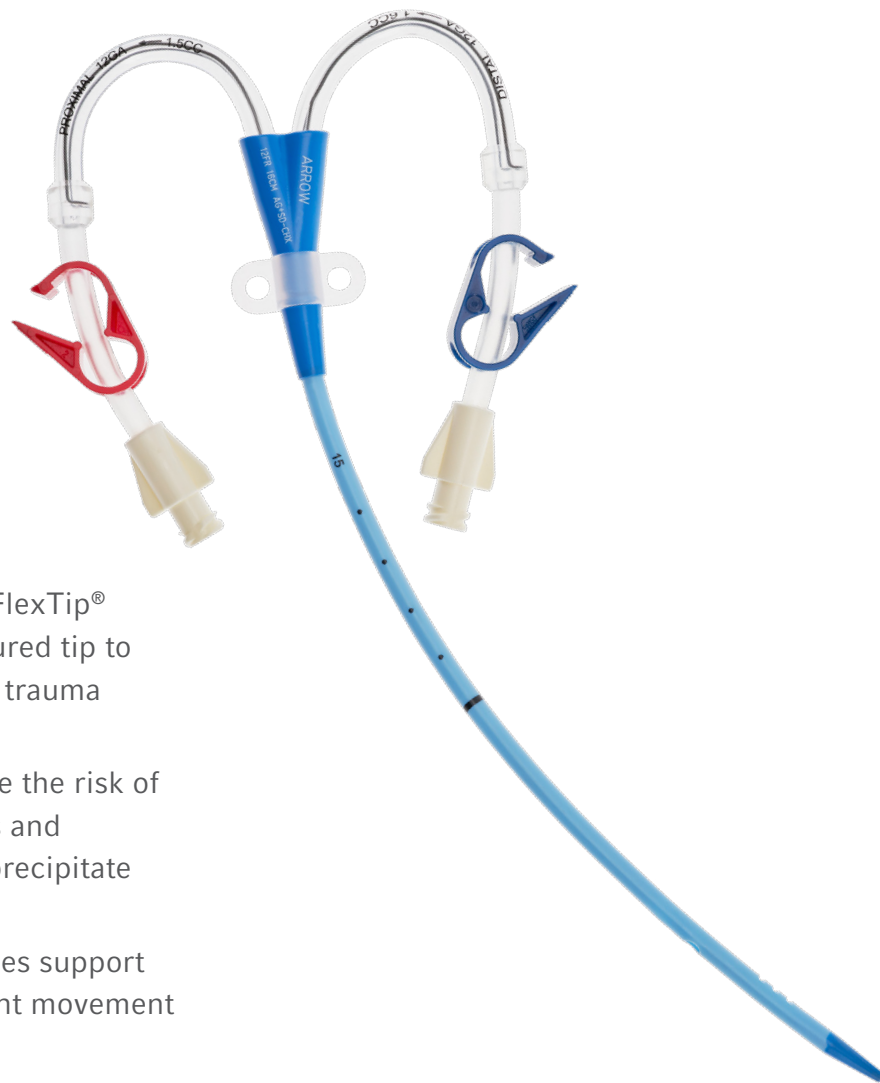
**Watch** the Arrowg+ard® Technology overview video

# Arrowg+ard Blue® Acute Hemodialysis Catheters

Arrowg+ard Blue® Acute Hemodialysis Catheters are large central venous catheters that permit access to the central venous system for acute hemodialysis, rapid fluid administration, apheresis and hemofiltration/continuous renal replacement therapy.

## Highlights

- Helps fight infection by inhibiting microorganisms from migrating along the exterior surface of the catheter<sup>1</sup>
- Includes the Arrow® Blue FlexTip® Feature, with a soft, contoured tip to minimize the risk of vessel trauma
- Enables dialysis nurses and clinicians to deliver high flow rates at low venous pressures
- Staggered exit ports reduce the risk of mixing incompatible drugs and solutions that may create precipitate
- Available in multiple French sizes and a variety of lengths
- Rotating suture hub provides support and flexibility during patient movement
- Available in a variety of kits for high-volume infusions
- Color-coded clamps simplify identification of arterial and venous lumens



**Learn more** about Arrowg+ard Blue® Acute Hemodialysis Catheters



**Watch** the Arrowg+ard® Technology overview video



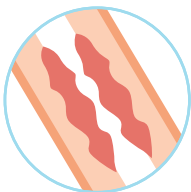
# Arrowg+ard Blue Advance® PICC, Midline and JACC

- **99.99% (4 Log) colonization reduction** in gram-positive, gram-negative bacterial pathogens, as well as fungi and yeast.<sup>12</sup>
- **Meets Infusion Nurses Society (INS)** Standards of Practice for use of an anti-infective device.<sup>10</sup>



### Protects against thrombotic occlusion<sup>13</sup>

Chlorhexidine works continuously to prevent buildup of thrombus, reducing the risk of intraluminal thrombotic occlusion.



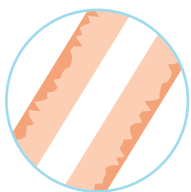
## Antithrombogenic protection<sup>14</sup>

Reduces thrombus accumulation on catheter surfaces.



## Antimicrobial protection<sup>15</sup>

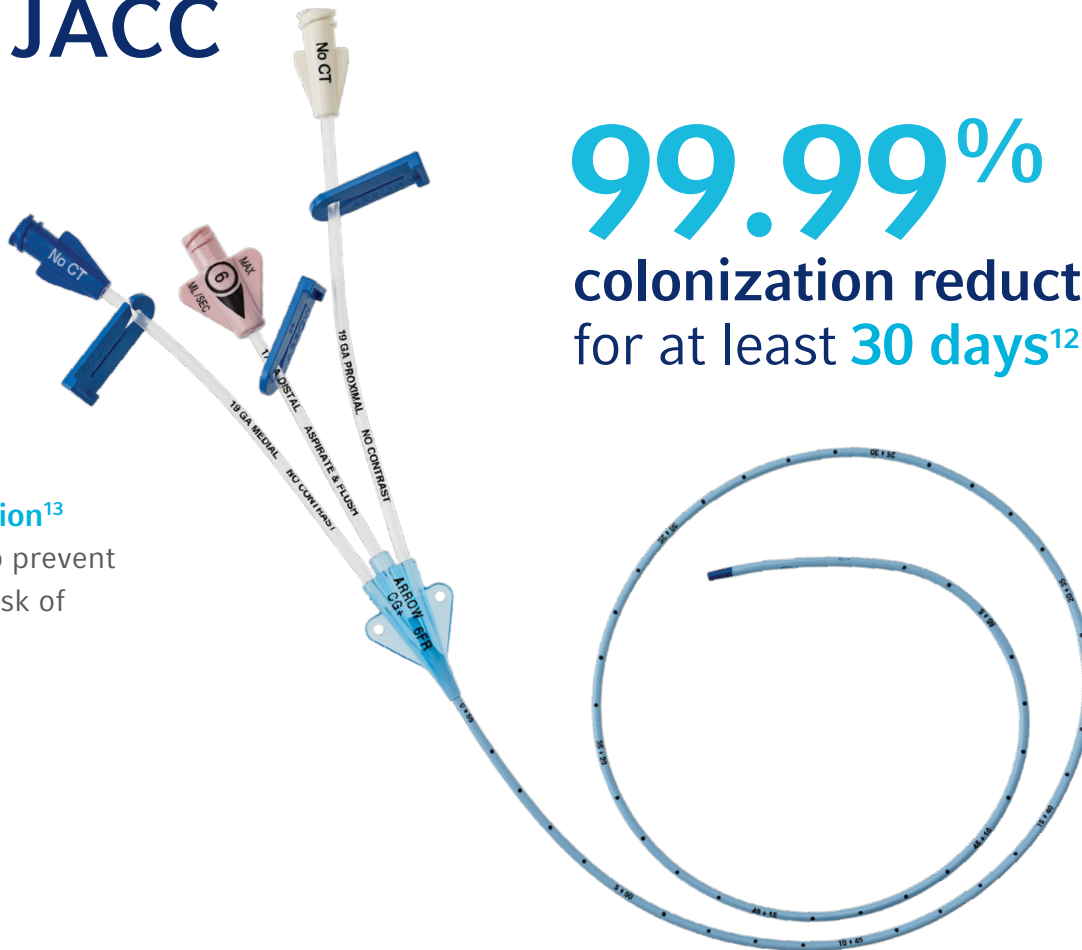
Extra- and intraluminal protection helps reduce the colonization from pathogens responsible for most healthcare-associated infections.



## Intimal hyperplasia protection<sup>16</sup>

In vivo intravascular studies have shown an average of 72% less intimal hyperplasia after 29 days and reduction in phlebitis.

99.99%  
colonization reduction  
for at least 30 days<sup>12</sup>



**Learn more about:**

## Arrowgard Blue Advance® PICC

## Arrowgard Blue Advance® Midline

## Arrowgard Blue Advance® JACC

# Your teammate during procedures + workflow

We are your valued teammate beyond the procedure. Our innovative products and methods of delivery, including our **Arrow® VPS Rhythm® Device** and our **Arrow® ErgoPack® Complete System kits**, help improve your workflow and give you confidence in every procedure. Teleflex Academy provides access to continuing education and training designed to help you and your team improve your skills and continually enhance your practice.



ErgoPack®  
Complete System



VPS Rhythm®  
Device



# Arrow® VPS Rhythm® Device

We go beyond just catheters to help you have efficient and safe insertion procedures.

Our VPS Rhythm® Device uses familiar intra-cavity ECG technology to allow clinicians to accurately place PICC or CVC catheters, eliminating the need for a confirmatory chest X-ray. The VPS Rhythm® Device can also be used in various clinical settings, including the ICU, OR, or bedside.\*

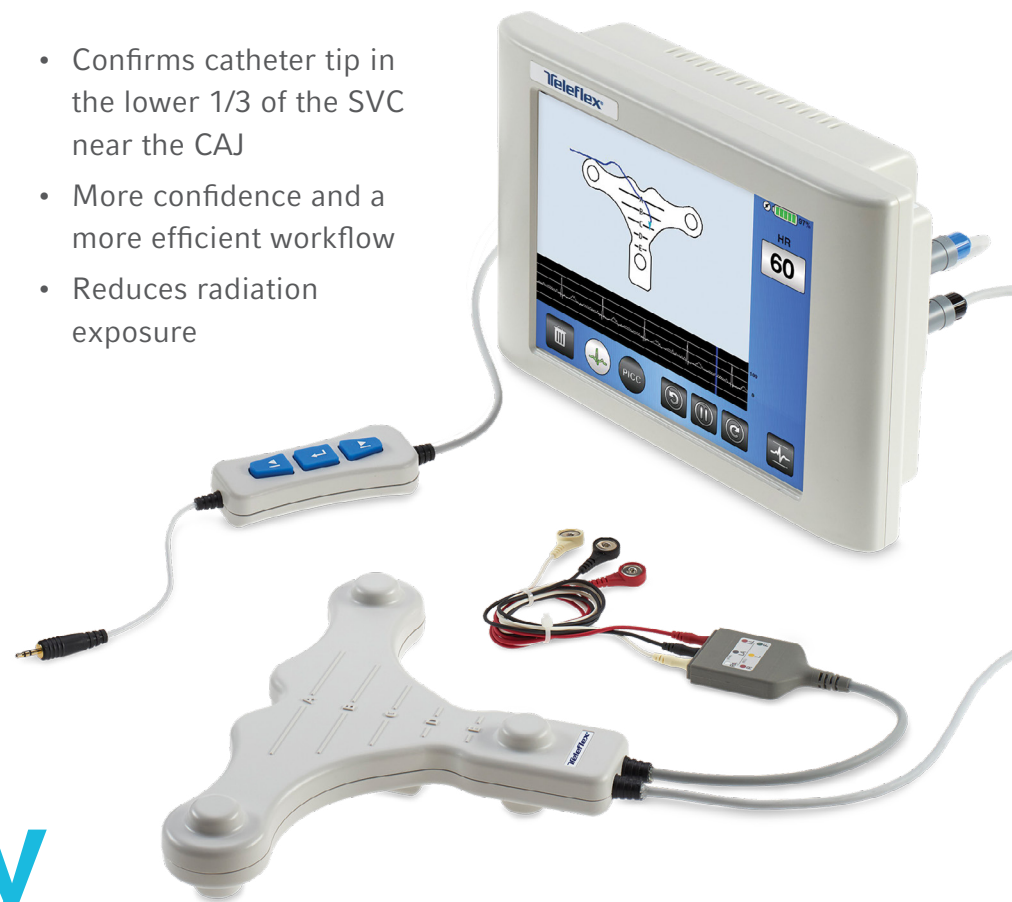
**Optional TipTracker™ Technology for PICCs provides real-time visual navigation as the catheter is inserted.** With the largest visual range, you can easily watch the blue line as it traces the catheter pathway, helping you avoid the frustration of PICC tip malpositions.

A teammate that brings value – get more benefits with Teleflex with appropriate hospital policies and procedures in place.

## Uses ECG technology

to help accurately insert PICCs or CVCs without a confirmatory X-ray.

- Confirms catheter tip in the lower 1/3 of the SVC near the CAJ
- More confidence and a more efficient workflow
- Reduces radiation exposure



[Learn more](#) about Arrow® Catheter tip positioning systems

# Supporting your workflow

Our innovation does not stop with our protected catheters or the Arrow® VPS Rhythm® Device. We have the accessories you need to help your teams produce a seamless experience throughout the procedure.

## The Arrow® ErgoPack® Complete System

A kit designed to be ergonomic and all-inclusive, helping you and your team save time and have a safer and more confident insertion.

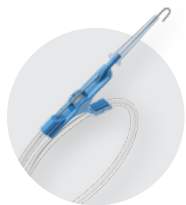
The ErgoPack® Complete System is available in CVC, MAC, and PSI max barrier kits.



## The Arrow® ErgoPack® Complete System comes with:



**Nitinol wire**  
Kink-resistant compared to stainless steel



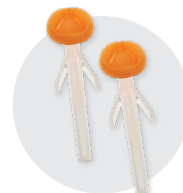
**Arrow® GlideWheel™ Advancer**  
Provides tactile feedback and finer control



**Transducer cover**  
Supports guidelines for ultrasound insertion



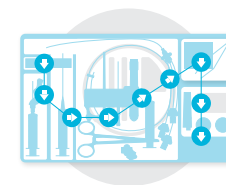
**Pre-filled sterile saline syringe**  
One per lumen now included in kit



**Extra ChloraPrep® Skin Prep**  
Extra applicator in each kit



**Kits available with BioPatch® Protective Disk or Tegaderm® CHG Dressing**



**Efficient tray design**  
The top-to-bottom, left-to-right layout reduces missteps and increases efficiency



**Learn more** about the  
ErgoPack® Complete System

# Receive Continuing Education

## Teleflex Academy

### Your one-stop education center.

We are here to be a teammate beyond the sale of our catheters and products. **Through Teleflex Academy, you will have access to e-learning modules, hands-on training, and webinars.** Receive valuable Continuing Education for healthcare providers, or simply gain a better understanding of how to efficiently use your Arrow® Catheters and other products. Our resources are at your fingertips to help you and your teammates do your job more effectively.



Hands-On  
Training



E-learning  
Courses



Webinars



Resource  
Library



Video  
Library



**Learn more** about  
Teleflex Academy



### Our courses are approved and regulated by:

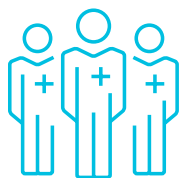
- The California Board of Registered Nursing, provider number 12422
- The Continuing Respiratory Care Education (CRCE) system of the American Association for Respiratory Care (AARC)



Do you have a need for an  
**in-person process evaluation  
and risk assessment** related  
to the use of **Arrow® Products?**

### Arrow® OPERA Program

- On-site assessment
- Interviews (1–2 clinicians per unit)
- Summary meeting
- Follow-up as needed



To learn more, [click here](#)  
to connect with the Teleflex  
Clinical and Medical Affairs team.





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12. *In vitro* data on file 2010: AVER-004371 and AVER-004483. No correlation between *in vitro/in vivo* testing methods and clinical outcomes has currently been ascertained.
13. As compared to uncoated PICCs, *in vitro* model measuring flush pressure post exposure to bovine blood: AVER-006376. No correlation between *in vitro/in vivo* testing methods and clinical outcomes has currently been ascertained.
14. As compared to uncoated PICCs, intravascular ovine model inoculated with *Staph aureus*: AVAR-000427. No correlation between *in vitro/in vivo* testing methods and clinical outcomes has currently been ascertained.
15. *In vitro* data on file 2010: AVER-004371, AVER-004483 and AVAR-000427. No correlation between *in vitro/in vivo* testing methods and clinical outcomes has currently been ascertained.
16. As compared to uncoated PICCs, intravascular ovine model: VAR-000427. No correlation between *in vitro/in vivo* testing methods and clinical outcomes has currently been ascertained.

## Rx only.

Contraindications: The Arrowg+ard Blue® and Arrowg+ard Blue Plus® Catheters are contraindicated for patients with known hypersensitivity to chlorhexidine and silver sulfadiazine and/or sulfa drugs. Clinical data have not been collected that demonstrate the use of the Arrowg+ard Blue® antimicrobial surface in decreasing catheter-related infections in hemodialysis patients.

Clinical assessment of the patient must be completed to ensure no contraindications exist. The Arrowg+ard Blue Advance® Catheters are contraindicated in the following areas:

- Patients with known hypersensitivity to chlorhexidine
- In presence of device-related infections
- In presence of previous or current thrombosis in the intended vessel or along the catheterized vessel pathway

No correlation between *in vitro/in vivo* testing methods and clinical outcomes has currently been ascertained.

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