

Arrow

ARROWgard Blue PLUS Central Venous Catheter

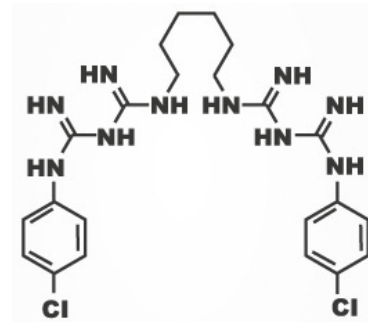
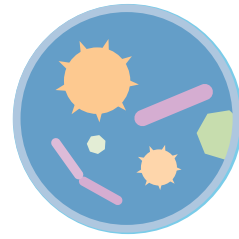
Protection – Both Inside and Outside
from Broad-Spectrum Pathogens

Broad-spectrum Effectiveness

Chlorhexidine, the power behind ARROWg⁺ard Technology, is an effective and widely used biocide.

Chlorhexidine molecule broad spectrum kill

- Biocide effective against gram-positive bacteria, gram-negative bacteria and fungi¹
- Broad-spectrum effectiveness, not class selective like antibiotics²
- Kills 100% of CLABSI-causing organisms within 30 seconds²
- Bactericidal (kills bacteria) and bacteriostatic (inhibits bacterial growth) by disrupting the cell membrane³

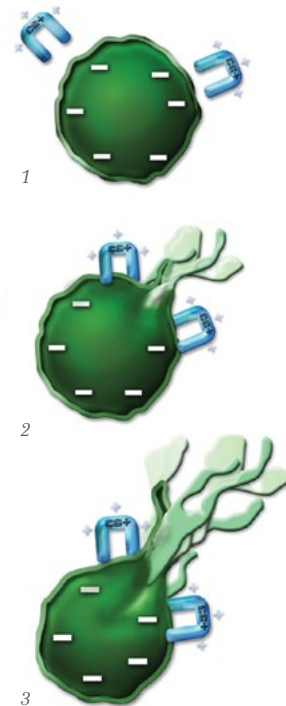


Chlorhexidine Molecule

Chlorhexidine Mechanism of Action

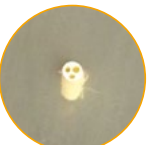
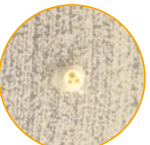
Steps to rupture causing cytoplasm leakage

1. The positively-charged chlorhexidine molecule is attracted to the negatively-charged phospholipids in the cell wall
2. Chlorhexidine binds to the cell wall, causing it to rupture
3. The rupturing of the cell wall causes fluid to leak, leading to lysis and cell death



Full Spectrum Efficacy – Protection You Can See

7-day Incubation

Gram-Positive Bacteria <i>Staphylococcus epidermidis</i>	Gram-Negative Bacteria <i>Pseudomonas aeruginosa</i>	Fungi <i>Candida albicans</i>
 ✓ ARROWgard Blue PLUS Technology	 ✓ ARROWgard Blue PLUS Technology	 ✓ ARROWgard Blue PLUS Technology
 ✗ Control- No Technology	 ✗ Control- No Technology	 ✗ Control- No Technology
 ✓ Spectrum Technology	 ✗ Spectrum Technology	 ✗ Spectrum Technology
 ✗ Vantex Technology	 ✗ Vantex Technology	 ✗ Vantex Technology

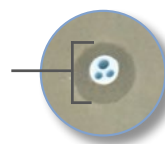
CVC Zone of Inhibition (ZOI) Explanation

* The ZOI is a laboratory test used to demonstrate antimicrobial efficacy in a Petri dish. For this test, antimicrobial catheters are placed into a Petri dish with live pathogens. If the antimicrobial catheter is protective against an organism, a circle or zone will appear where no pathogens grow. If no circle or zone appears, the catheter has no efficacy against that specific organism.

Process for this ZOI Demonstration

1. Pathogens are swabbed (introduced) on a petri dish
2. Antimicrobial catheters are placed on the petri dish
3. Catheters are transferred daily for 7 days on freshly swabbed petri dish
4. Results are analyzed on 7th day

Zone of Inhibition



Data Source: In vitro testing internal testing conducted by Teleflex. Data is available upon request. In vitro results are not necessarily reflective of clinical performance.

* Studies were done using ARROWgard Blue Plus catheters using In-Vitro zone of inhibition test. ARROWgard Blue Plus catheters showed a minimum of a 4 mm zone of inhibition at day seven.

Protection Against the Causes of CLABSI

ORGANISM*	PATHOGEN	% OF ALL CLABSI	PROVEN EFFECTIVE IN VITRO ^{10*}
Gram-positive	CoNS	34.1%	✓
	Enterococcus species	16.0%	✓
	Staphylococcus aureus	9.9%	✓
Gram-negative	Klebsiella species	5.8%	✓
	Enterobacter species	3.9%	✓
	Pseudomonas aeruginosa	3.1%	✓
	Escherichia coli	2.7%	✓
	Acinetobacter baumannii	2.2%	✓
Fungi	Candida species	11.8%	✓
Total		89.5%	

For a complete list of ARROWgard Technology studies, please visit ARROWgard.com.

Arrow CVC with ARROWg⁺ard Technology



Protected by
ARROWg⁺ard Technology

Count on the leading CVC with the protection of blue.

With antimicrobial technology built in and the eluting power of chlorhexidine and silver sulfadiazine to defend against infection, it's clear why more and more vascular professionals rely on Arrow CVCs with ARROWg⁺ard Technology. Add staggered exit ports, a Blue FlexTip Feature and pressure injection and it's easy to see why we're the leading CVC.

Contraindications

The Arrow CVC with ARROWg⁺ard Technology is contraindicated for patients with known hypersensitivity to chlorhexidine, silver sulfadiazine, and/or sulfa drugs.

References

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10. Data on File

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