



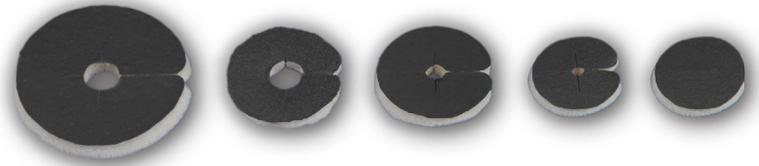
Emphasis on the prevention of catheter related infections has generated increasing clinical interest in using topical antimicrobial dressings as an adjunctive treatment to reduce the risks of bacteremia. Many questions exist on the differences of available topical antimicrobial dressings such as BioPatch® and Algidex Ag® I.V. Patch, and how these dressings fit within the Centers for Disease Control evidence based recommendations for preventing catheterrelated infections.*

** The CDC guidelines were updated and published in 2003, before supportive data on the chlorhexadine patch was completed and years before the introduction of the ionic silver antimicrobial patch.*

DIFFERENCES IN BIOPATCH v. ALGIDEX AG I.V. PATCH

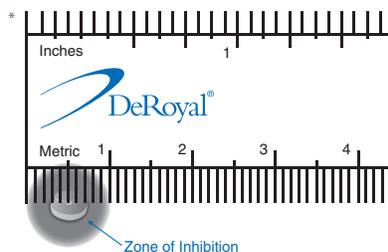
Both patches have indications for use on vascular access sites and have similar attributes in shape and antimicrobial effectiveness. The primary difference is the agent that kills pathogens, creating an effective zone of inhibition to prevent bacteria from entering the catheter site. BioPatch is a circular sponge soaked with a widely utilized antiseptic, chlorhexadine. In contrast, the Algidex Ag I.V. Patch is a circular foam device coated with an active ionic silver matrix.

Over the past decade, topical ionic silver dressings have been tested in the laboratory and clinical setting to prove its broad antimicrobial effects. In early 2005, the unique ionic silver technology of Algidex Ag was released with approved indications for vascular access sites. This technology uses ingredients that are **not absorbed** into the patient's body, thus reducing risks of systemic effects, skin irritation and life threatening allergic



reactions that have been reported with the use of topical antiseptics such as betadine and chlorhexadine.

As comparative laboratory studies are completed on BioPatch versus Algidex Ag I.V. Patch, we are gaining valuable knowledge on the antimicrobial performance of these products. Recent zone of inhibition testing on the products confirmed the statistical equivalence of Algidex Ag I.V. Patch to BioPatch in its ability to effectively kill Staphylococcus aureus and Methylicillin resistant Staphylococcus aureus. However, the zone of inhibition results on Pseudomonas revealed a significant difference between BioPatch and Algidex Ag I.V. Patch. At the 24, 48, and 96 hour readings, BioPatch showed a clearing of Pseudomonas aeruginosa directly underneath the sample but **did not** exhibit a zone of inhibition outside the dressing.



* Ruler enlarged for viewing purposes only, not to scale. Algidex Ag I.V. Patch is to scale.

Algidex Ag I.V. Patch Results:
Pseudomonas aeruginosa (96 hour interval)
Diameter = 10mm vs. no zone with BioPatch

ZONE OF INHIBITION TESTING

on Algidex Ag® I.V. Patch compared to BioPatch®

study objective

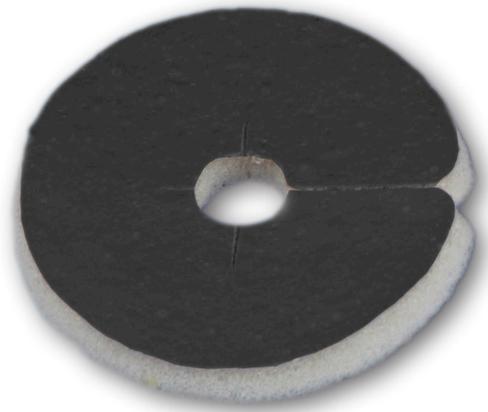
Comparison of the antimicrobial effectiveness of Algidex Ag® I.V. Patch compared to BioPatch product against three common bacteria associated with Catheter Related Blood Stream Infections.

methods

An in-vitro laboratory study using the Kirby-Bauer Susceptibility Test to determine antimicrobial properties by measuring the zone of inhibition.

test products

- Johnson & Johnson, BioPatch, #3150
- DeRoyal, Algidex Ag I.V. Patch, #46-IV22



BioPatch Results:

	Staphylococcus aureus ATCC #6538	Staphylococcus aureus (MRSA) ATCC #33591	Pseudomonas aeruginosa ATCC #9027
Time Interval			
24 hours	5 mm	6 mm	NZ/C*
48 hours	6 mm	6 mm	NZ/C*
72 hours	8 mm	7 mm	1 mm
96 hours	6 mm	5 mm	NZ/C*

Algidex Ag I.V. Patch Results:

	Staphylococcus aureus ATCC #6538	Staphylococcus aureus (MRSA) ATCC #33591	Pseudomonas aeruginosa ATCC #9027
Time Interval			
24 hours	6 mm	6 mm	5 mm
48 hours	5 mm	5 mm	7 mm
72 hours	6 mm	5 mm	12 mm
96 hours	5 mm	5 mm	10 mm

*NZ/C = No zone was seen; however, there was a clearing of growth directly underneath the sample

ORDERING INFORMATION

Product #	Pad	Qty/Bx	Qty/Cs
46-IV20	¾" disc w/2 mm opening	5	50
46-IV22	1" disc w/4 mm opening	5	50
46-IV25	1" disc w/7 mm opening	5	50
46-IV32	1" disc w/4 mm opening (with insert)	5	50
46-IV34	¾" disc w/o opening	5	50
46-IV375	1½" disc w/7 mm opening	5	50

SUMMARY

In-vitro tests show that DeRoyal's Algidex Ag I.V. Patch performs statistically equivalent to BioPatch to create an effective and sustained zone of inhibition against common bacteria, Staphylococcus aureus and Methicillin Resistant Staphylococcus aureus. Superior performance of Algidex Ag I.V. Patch over BioPatch was shown when tested on Pseudomonas aeruginosa. As with all new technologies, continued research will be conducted to further demonstrate the clinical effectiveness of Algidex Ag I.V. Patch against competitor antimicrobial dressings in all patient populations.

For more information, please call:

800.DEROYAL or 865.938.7828
or visit www.deroyal.com

* Data on file.

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BioPatch® is a registered trademark of Johnson & Johnson Corporation.

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