BIOPATCH™ Protective Disk with CHG



BIOPATCH™ Protective Disk with CHG the **#1 selling** CHG dressing in the US market with a **1A CDC recommendation**¹*

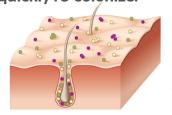
Infection Risk Management



Protect all lines. Protect all lives.™

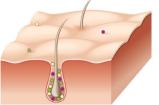
- It is estimated that over 54,000 people get a catheter-related bloodstream infection (CRBSI) every single year in the UK.²
- BIOPATCH™ Protective Disk with CHG is the only dressing that meets all the following criteria: Intended to reduce local infections, catheter related bloodstream infections (CRBSI), and skin colonization of microorganisms commonly related to CRBSI, in patients with central venous or arterial catheters.^{3,4}
- Is constructed from polyurethane foam allowing quick absorption of fluid decreasing the likelihood of skin maceration.^{3,4}
- Is designed to deliver chlorhexidine gluconate a full 360° around the catheter insertion site providing optimized coverage and protection.^{3,4}
- BIOPATCH™ has been shown to reduce catheter-related bloodstream infections (CRBSIs) by up to 60% in central venous and arterial catheters, even when infection rates are low.⁵⁶

Even after treatment with topical antimicrobials, resident bacteria from the patient's own skin quickly re-colonize.⁷



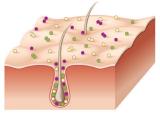
Pre-Prep

Bacteria colonies exist not only on the surface, but below the surface as well, particularly within the hair follicles and sebaceous glands.⁷



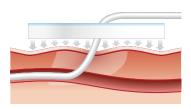
Post-Prep (immediately following antiseptic application)

Prepping the skin reduces colony counts of bacteria from the surface only — it never completely disinfects the skin.⁷



Post-Prep (within 1-2 days following antiseptic application)

Resident bacteria begin to re-colonize the skin surface.⁷



BIOPATCH™ provides 360-degree

antimicrobial protection, continuously' delivering CHG for up to 7 days to maintain skin antisepsis at the catheter insertion site.⁸⁹**

BIOPATCH™ Protective Disk with CHG



PROVEN

BIOPATCH™ Protective Disk with CHG has extensive clinical evidence, including:10

- 1 meta-analysis
- 15 randomized controlled trials (RCTs)
- 6 comparative cohorts
- 19 single-arm case series
- 6 conference proceedings
- 2 case reports



PREFERRED

BIOPATCH™ Protective Disk with CHG has **over 15 years** of clinical use¹¹⁻¹³

BIOPATCH™ is used by **more than**70% of hospitals across the US^{14#}



DESIGNED TO DELIVER

Chlorhexidine gluconate **a full 360° around** the catheter insertion site providing optimized coverage and protection^{3,4}



Removal with BIOPATCH™ is a simple, one-step process - with no saline or alcohol swabs needed¹⁵







BIOPATCH™'s Clinical Data Speaks for Itself

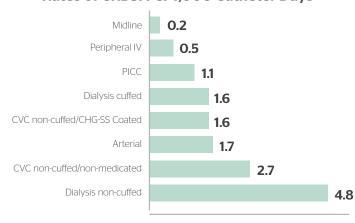
BIOPATCH™ Disk has a cleared indication to reduce the incidence of CRBSIs, local infections and skin colonization in patients with central venous and arterial catheters.¹⁵

BIOPATCH™ Protective Disk with CHG has extensive clinical evidence, including:10

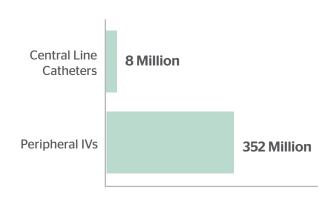
- 1 meta-analysis
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For use with both vascular and nonvascular percutaneous devices

Rates of CRBSI Per 1,000 Catheter Days¹⁶



Catheters Used Annually 201717



Delivering Value Beyond the Product

A suite of complimentary Ethicon Infection Risk Management services designed to help healthcare providers achieve better outcomes, improve patient experiences, and address costs.





Value Proposition: Customizable Economic Model showing resource utilization, Affordable Care Act impact, cost savings and more.



Contracting: Unique contracting options aligned to institutional needs.



Custom Kits: Custom kit assembler and original equipment manufacturer partnerships to maximize protocol compliance and improve efficiencies.



Clinical Team Support: Product education, competency training, and point prevalence surveys provided by a team of registered nurses to address outcomes and improve clinician experience.



Healthcare Regulations & Reimbursement:

Tools and resources to navigate programs and requirements set by the Department of Health and Human Services and identify opportunities to improve performance.



Peripheral IV Tool Kit: Comprehensive references to support the adoption of protecting PIVs, the most frequently performed invasive procedure in hospitals.



Professional Education: Continuing education (CE) programs available to HCPs aiding in the education and understanding of infection risk management solutions. Customized speaker programs and events leveraging Key Opinion Leaders speaking on relevant healthcare related topics.

Hear from the Experts

Organization	Statement
The Joint Commission	NPSG.07.04.01 Use proven guidelines to prevent infection of the blood from central lines ¹⁸
Infusion Nurses Society	Use chlorhexidine-impregnated dressings over CVADs to reduce infection risk when the extraluminal route is the primary source of infection. ¹⁹
American Association of Critical-Care Nurses	Apply chlorhexidine-impregnated sponge dressing to site. Decreases the risk of bacterial growth at the insertion site. ²⁰
Oncology Nursing Society	Use a CHG-impregnated sponge dressing for all (CVC) catheters, including specialty catheters in patients older than 2 months of age. Emerging data suggests that the rate of catheter-related bloodstream infections from peripheral catheters may be higher than once thought ²¹
Association for Professionals in Infection Control and Epidemiology (APIC)	The risk for infection is present during the entire dwell time of the catheter The use of a post-insertion care bundle was associated with a significant reduction ²²

For use with both vascular and nonvascular percutaneous devices





















Central Venous

Dialysis Catheters

Arterial Catheters

PICC Lines

Peripheral IVs

Midline

Epidural Catheters

Implanted **Venous Ports**

External **Fixator Pins**

Drains

BIOPATCH™ Protective Disk with CHG













ORDER CODE	44150	44151	44152
Size	1" disc (2.5cm) w/4.0mm center hole	3/4" disc (1.9cm) w/1.5mm center hole	1" disc (2.5cm) w/7.0mm center hole
FRENCH SIZE RANGE	6-12Fr	<6Fr	13-20Fr
Common Uses	Central Lines PICC	Peripheral IVs Huber Needles (ports) Arterial Lines Extended Dwell PIVs Midlines PICCs Pins	Dialysis Catheters Drains Sheaths Cordis Catheters VAD drive lines
QUANTITY PER CASE	10/box 4 boxes/case, 40	10/box 4 boxes/case, 40	10/box 4 boxes/case, 40
Average CHG per disk	92 mg	53 mg	86.8 mg

Please refer always to the Instructions for Use / Package Insert that come with the device for the most current and complete instructions.

- * Based on 2017 US market share data CDC US Centers For Disease Control and Prevention.
- ** BIOPATCH™ dressing changes should occur at least every 7 days. Dressing changes will be needed more frequently with highly exuding wounds per hospital policy.

Based on US 2018 market share data.

References: 1. Ethicon, 01092017, U.S. Market & Share Insights Report, Sept. 2017, Data on File. (115059-190524) 2. NHS Commissioning Board, Catalogue of Potential Innovations. Available at http://www.trustech.org.uk/ wp-content/uploads/2014/04/Catalogue-of-Potential-Innovations, pdf. Accessed April 17 2019. (112150-190417) 3. Gonzalez S. Differences In Absorption Between BIOPATCH™ And Tegaderm CHG Part II: Rate of absorption of different fluids. 2010;3-6. (106844-190204) 4. As per Instructions for Use. (106844-190204, 106843-190204) 5. Timsit JF et al. Chlorhexidine-impregnated sponges and less frequent dressing changes for prevention of catheter-related infections in critically ill adults: a randomised controlled trial. JAMA 2009; 301 (12): p1231-1241. (112239-190418) 6. Timsit J. et al. Randomized Controlled Trial of Chlorhexidine Dressing and Highly Adhesive Dressings for Preventing Catheter- Related Infections in critically ill adults. AJRCC. 2012; Published Oct 4th:1-41. (112239-190418) 7. Hendley, Effect of topical antimicrobial treatment on aerobic bacteria in the stratum corneum of human skin, Antimicrob Agents Chemother;1991;35627 **8.** Westergom C. Ex Vivo Comparative Analysis of Chlorhexidine Gluconate (CHG) Coverage on Porcine Skin. Ethicon, Inc., Somerville, NJ, 2008. 20080000; BP-066;DOF_Info. (112118-190417) **9.** Shapiro JM, Bond EL, Garman JK. Use of a chlorhexidine dressing to reduce microbial colonization of epidural catheters. Anesthesiology. 1990 Oct;73(4):625-31. (112118-190417) 10. Ethicon, 18092019, Memorandum Biopatch Level of Evidence, Sept 2019, Data on File (115058-190524) 11. Ethicon, Biopatch of File (115049-190524) 12. Ethicon, Biopatch of File (115049-190524) 13. Ethicon, Biopatch of File (115049-190524) 13. Ethicon, Biopatch of File (115049-190524) 14. Ethicon, Global Business Insights Market Share Report, June 2018, Data on File (115051-190524) 15. Biopatch IFU Rev3 16. Maki DG, Kluger DM, Crnich CJ. The risk of bloodstream infection in adults with different intravascular devices: a systematic review of 200 published prospective studies. Mayo Clin Proc 2006; 8:1159-1171. 17. Procedure Volumes, SmartTrak avialble at https://appsmarttrak.com/markets/qs/6580 [Accessed 25 Sept, 2019] 18. 2018 Hospital National Patient Safety Goals, Available from https://www.jointcommission.org/assets/1/6/2018_HAP_NPSG_goals_final.pdf [Accessed 11 Oct 2019] 19. 2016 Infusion Nursing Standards of Practice, The Art and Science of Infusion Nursing:2016;39;15;582 20. Norwood, MA 19. Procedure Manual for High Acuity, Progressive, and Critical Care. 7th Ed. AACN 2017. 21. Dawn Camp-Sorrell, Access Device Standards of Practice for Oncology Nursing, ONS,2017;12 22. Guide to Preventing Central Line Associated Bloodstream Infections. APIC;2015;1-72