



# ClearGuard™ HD

## Antimicrobial Barrier Caps for Haemodialysis Catheters

Clinically proven to reduce the rate of bloodstream infections in haemodialysis catheters and recommended in the UK's National Institute for Health and Care Excellence (NICE) Medical Technologies Guidance [MTG62]

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# Reduce haemodialysis catheter infections with clinically proven technology<sup>1,2</sup>

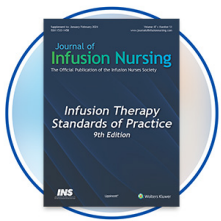


## Catheter infections are frequent, costly, and deadly

- › Increased infection rates are associated with use of invasive devices, in particular, central lines, urinary catheters, and ventilators<sup>3</sup>
- › 15-38% of patients receive haemodialysis using a central venous catheter (CVC) in European countries<sup>4</sup>
- › CLABSIs are very expensive with an estimated additional length of stay of 4-14 days and additional costs per episode of €4,200-13,030 in European countries<sup>3</sup>

## Reduce haemodialysis catheter infections by up to 63%<sup>1</sup>

Multiple large, prospective, cluster-randomized multicentre open-label trials demonstrated a significant reduction in the rate of positive blood cultures (PBCs) and CLABSIs using ClearGuard HD caps vs. control groups.



### Recommended in Infusion Therapy Standards of Practice 9th edition: 2024

INS SOP, 27. Vascular Access and Hemodialysis, Section C3  
INS SOP, 47. Vascular Access Device-Related Infection, Section J



### Recommended in the UK's NICE National Guidance for haemodialysis catheter-related bloodstream infections: 2021\*\*

<https://www.nice.org.uk/guidance/mtg62/>

ClearGuard HD antimicrobial barrier caps recommended by NICE for preventing catheter-related bloodstream infections in people with central venous catheters having haemodialysis.



### Special Report published by Global Business Media exclusively features ClearGuard HD

Titled: *Reducing Catheter Related Bloodstream Infections in Hemodialysis Patients*



### Recommended in NKF's KDOQI Clinical Practice Guideline for Vascular Access: 2019<sup>5</sup>

21.3 KDOQI considers it reasonable to use an antimicrobial barrier cap to help reduce CRBSI in high-risk patients or facilities; the choice of connector should be based on clinician's discretion and best clinical judgment. (Expert Opinion)

## A simple, intuitive design

The ClearGuard HD antimicrobial barrier cap is the first and only device for sale designed to kill infection-causing bacteria inside a haemodialysis catheter hub.\* ClearGuard HD features a rod that extends into the haemodialysis catheter hub. The rod and cap threads are coated with chlorhexidine, a well-known broad-spectrum antimicrobial agent.

\*Designed to kill microorganisms, not intended to be used for treatment of existing infections.



Contact us today to find out how ClearGuard HD can play a large role in your infection control practices. Visit [www.icumed.com](http://www.icumed.com) or call +44 (0)203 357 9400

1. Brunelli, SM et al. Cluster-randomized trial of devices to prevent catheter-related bloodstream infection. J Am Soc Nephrol. 2018 Apr;29(4):1336-1343.  
2. Hymes, JL et al. Dialysis catheter-related bloodstream infections: a cluster-randomized trial of the ClearGuard HD antimicrobial barrier cap. Am J Kidney Dis. 2017 Feb;69(2):220-227.  
3. Report on the Burden of Endemic Health Care-Associated Infection Worldwide, World Health Organization, 2011.  
4. Pisani, RL et al. Trends in US Vascular Access Use, Patient Preferences, and Related Practices: An Update From the US DOPPS Practice Monitor With International Comparisons. Am J Kidney Dis. 2015 Jun;65(6):905-15.  
5. Lok CE, Huber TS, Lee T, et al; KDOQI Vascular Access Guideline Work Group. KDOQI clinical practice guideline for vascular access: 2019 update. Am J Kidney Dis. 2020;75(4)(suppl 2):S1-S164.

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