

SIGNIFICANCE STATEMENT

Catheter-related bloodstream infections are a common complication related to hemodialysis central venous catheter (CVC) use and they contribute to increased infection-related hospitalization, mortality, and health care costs. Devices are currently available that are designed to reduce these infections, but published comparative effectiveness data are needed to allow evidence-based patient care decisions. This manuscript describes a large, multicenter, randomized clinical study in a real-world setting. The results show that use of ClearGuard HD Antimicrobial Barrier Caps, when compared with Tego connectors plus Curoc caps, results in a significantly lower rate of catheter-related BSIs in patients undergoing hemodialysis using CVCs. This represents an important advancement in hemodialysis patient care for patients dialyzing with CVCs.