

DRESSING DISRUPTIONS PUT PATIENTS AT RISK

A large multicenter study confirmed that dressing disruption on vascular catheter insertions can increase infection risk by more than 12-fold.¹ Acquisition of nosocomial catheter-related infections can lead to dire consequences for patients, leading top hospitals to adopt a standardized approach and a “zero tolerance for blood” policy to prevent them.^{2,3}

67% of dressing changes are unplanned¹

THE STATSEAL SOLUTION

When included as part of a CLABSI reduction strategy, prophylactic StatSeal® use on vascular access sites has been shown to reduce infection rates by as much as 92%.⁴ StatSeal products work independently of the clotting cascade to form a rapid, occlusive seal over the site to stop the flow of blood and exudate, while protecting the site from contamination. StatSeal products help standardize, simplify and minimize post procedure care and maintenance of vascular access sites.

Creates an instant seal

- Works with any protein-rich body fluid to prevent oozing and bleeding
- Creates a hostile barrier to microbial penetration over the site⁵

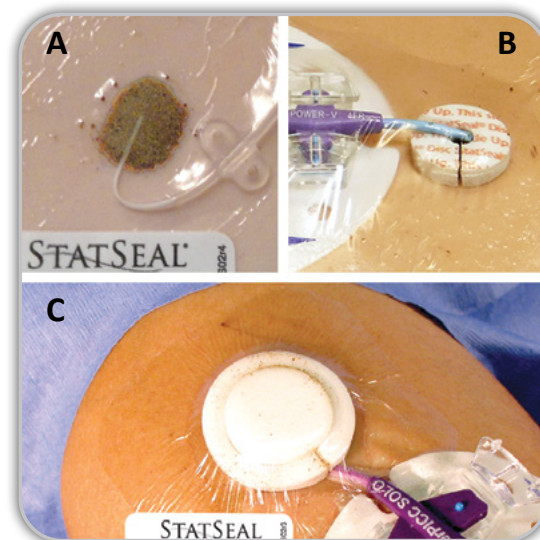
Minimizes dressing disruptions

- Significantly reduces unplanned dressing changes^{4,6}
- Keeps sites dry and intact, until the scheduled dressing change^{4,6,7}

Improves outcomes

- Reduces risk of infection, nursing time, PPE use and material cost^{3,4,6,7}
- Improves delivery of atraumatic care and patient comfort⁶

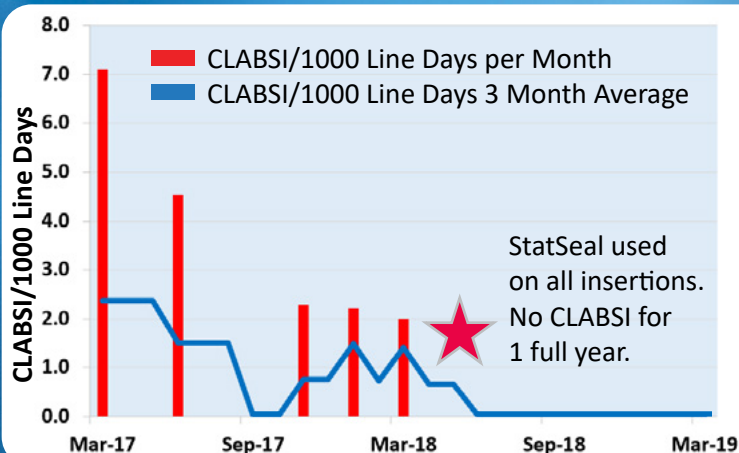
StatSeal topical dressing products are non-systemic, hypoallergenic, have no age contraindications and have passed all FDA-required biocompatibility testing. The products are available in both powder and disc (compressed powder) form, to suit a wide variety of clinical applications.



A: StatSeal Powder B: StatSeal Disc
C: StatSeal Powder in Powder Containment Device

CLABSI REDUCTION

The Oncology ICU at a large IDN hospital identified an issue with unplanned dressing changes, which resulted in increased CLABSI rates. Initially, StatSeal was only used on catheters bleeding at insertion and Biopatch was used for all others; 80% of the Biopatch dressings required unplanned changes whereas **89% of StatSeal dressings remained intact for 7 days**. Practice standards were changed to use StatSeal **prophylactically on all insertions**, and the unit had a **CLABSI-free year** for the first time in its history.⁷



STATSEAL® APPLICATIONS

StatSeal products seal the site while stopping oozing and bleeding from:

- PICC/CVC placement
- Dialysis catheters
- Peripheral arterial catheters
- ECMO cannulas
- Temporary hemodynamic support devices
- Procedures resulting in external bleeding

INFUSION THERAPY STANDARDS OF PRACTICE

Vascular Access Device (VAD) Assessment, Care and Dressing Changes:

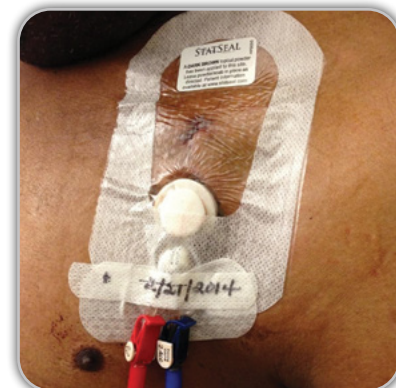
"Consider the use of a hemostatic agent . . . to reduce the need for unplanned dressing changes after peripherally inserted central catheter (PICC) insertion."⁸

HOW DOES STATSEAL WORK?

StatSeal products are comprised of a hydrophilic polymer and potassium ferrate. As a manual pressure adjunct, StatSeal's mechanism of action is two-step and occurs simultaneously to instantly form a low pH seal or physical barrier over the site, letting nothing in or out.

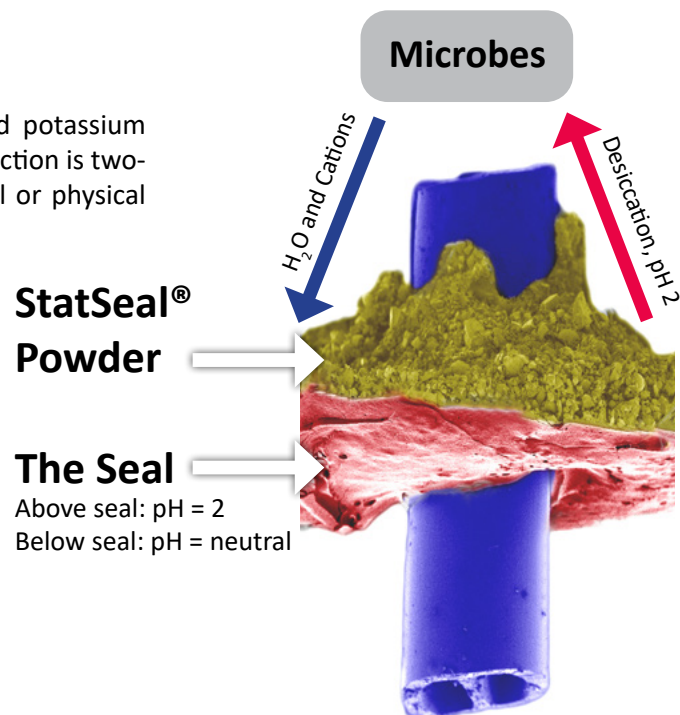
- The hydrophilic polymer rapidly dehydrates the blood and absorbs exudate, stacking up blood solids beneath to form a seal.
- The potassium ferrate agglomerates the blood solids and proteins together, adhering the seal to the wound to stop bleeding and oozing.

Beneath the seal, the pH is neutral and the blood solids and proteins continue to stack naturally. Above the seal, the hydrophilic polymer exchanges protons for cations, resulting in desiccation properties and a pH of ~ 2, which creates a hostile barrier to microbial penetration.^{5,6}



Above: StatSeal Powder minimizes dialysis catheter dressing disruption

Below: Scanning electron microscopy image of StatSeal Powder around a catheter



References: [1] Timsit JF, Bouadma L, Ruckly S, et al. Dressing disruption is a major risk factor for catheter-related infections. Crit Care Med. 2012 Jun;40(6):1707-14. [2] Olachea PM, Palomar M, Álvarez-Lerma F, et al. Morbidity and mortality associated with primary and catheter-related bloodstream infections in critically ill patients. Rev Esp Quimioter. 2013 Mar;26(1):21-9. [3] Olsen M, Morris M. Fresh Eyes Focused on Safety: Nurses Partner with Engineering Students to Eliminate CLABSI in Cardiac Surgery Patients. Lecture presented at AVA Annual Meeting; October 4-7, 2019; Las Vegas, NV. [4] Wilder KA, Wall B, Haggard D, Epperson T. CLABSI Reduction Strategy: A Systematic Central Line Quality Improvement Initiative Integrating Line-Rounding Principles and a Team Approach. Adv Neonatal Care. 2016 Jun;16(3):170-7. [5] Biolife, LLC, 510(k) K080210, Section 18.3. [6] Blough L, Hinson K, Hen J. The science of a seal for PICC line management: bio seal CVC powder. J VAS Access. 2010;15(2):66-73. [7] Ayala, M. PICC Insertion Dressing Protocol for the Hematological Oncology Patient: A Comparison of Biopatch and StatSeal. Poster presented at AVA Annual Meeting; October 4-7, 2019; Las Vegas, NV. [8] Gorski LA, Hadaway L, Hagle M, et al. 2016 Infusion therapy standards of practice. Journal of Infusion Nursing, 39(1 Suppl.), 41:L.

BIOLIFE®

Biolife, LLC, maker of StatSeal® products