Bactisure™
Wound Lavage

Advancing Biofilm Removal
Bactisure Wound Lavage is used to remove debris, including microorganisms, from wounds using pulsed (jet) lavage. The clear, colorless, low-odor solution is a FDA 510(K) cleared device. Active ingredients include ethanol (solvent), acetic acid (pH modifier), sodium acetate (buffer), benzalkonium chloride (surfactant), and water. Product is available in sterile 1000 mL polypropylene plastic bags with an integrated single spike port.

A New Approach to Biofilm Removal

Bacteria can produce Extracellular Polymeric Substance (EPS) to shield themselves from both mechanical and chemical attack. Bactisure Wound Lavage was specifically designed to remove these structurally resistant forms of bacteria. Our solution physically deconstructs the protective EPS matrix, making bacteria more susceptible to traditional antibiotics and the body’s normal defense mechanisms.

Indicated for Use on All Wound Types

- Apply just prior to wound closure using Zimmer Biomet Pulsavac® Plus or similar pulsed lavage system.
- Immediately rinse with an equal amount of normal saline using pulsed lavage.
- Not intended for repeated use.
- Not indicated for use during dressing changes or for use by soaking the product into dressings.
- Do not use if there is a history of allergy to any of the ingredients.

Does Not Harm Human Tissue*

- Safe for use – NAMSA Toxicology Report¹
- Non-irritant – ISO Intramuscular Implantation Test with Histopathology²
- Normal wound healing – Porcine Dermal Testing³

* When used as labeled.
Deconstructs and Removes

Deconstructs
Bactisure Wound Lavage breaks up crosslinks within biofilm EPS.

Removes
With EPS crosslinks removed, Bactisure Wound Lavage solubilizes biofilms for easy removal via pulsed lavage. Exposed bacteria are subject to lavage removal or inactivation via traditional antibiotics and the body’s normal defense mechanisms.

Biofilm’s Role in Chronic Wound Infections

- Over 90% of all bacteria exist in biofilms.4
- Biofilms are formed in the body when bacteria coalesce on surface structures and produce an Extracellular Polymeric Substance (EPS).4
- The EPS then shields bacteria from both mechanical and chemical attack.4
- EPS shielded bacteria in a biofilm can be 1000x more resistant to antibiotics than planktonic (free-floating) bacteria.4
- The periodic release of planktonic bacteria from biofilms have been linked to chronic relapsing infections.5
Focused on Patient Outcomes

Enhancing Wound Care

Irrigation and debridement are considered essential components of wound management and infection control. Bactisure Wound Lavage can enhance these standard wound care practices when used as an adjunct to normal saline wound lavage (See Figure 1). Moreover, independent laboratory testing suggests that Bactisure Wound Lavage can effectively remove common wound pathogens including the bacteria found in biofilms (See Figures 2 and 3). Bactisure Wound Lavage also conforms to USP <51> requirements for rapid in-solution inactivation of common pathogens.

Figure 1 – Mature Biofilm/EPS Removal: Static vs. Pulsed Lavage Performance
2-Min. Static and 30-Sec. Pulsed Lavage, Tivanium Substrate

Figure 2 – In Vitro Removal of Contaminants
30 Second Suspension Time

Figure 3 – Mature Biofilm/EPS Removal
2-Min. Static - Stainless Steel Substrate
Ordering Information

Bactisure Product
Bactisure Wound Lavage – 1L Bag, 6/BX

Bactisure Pulsavac Plus Kits*
Bactisure Component Kit with Dual Spike Y-Connector
Bactisure Fan Spray Kit with Dual Spike Y-Connector
Bactisure Hip Kit with Dual Spike Y-Connector
Bactisure Shower Spray Kit with Dual Spike Y-Connector

Bactisure Pulsavac Plus A/C Kits*
Bactisure A/C Component Kit with Dual Spike Y-Connector
Bactisure A/C Fan Spray Kit with Dual Spike Y-Connector
Bactisure A/C Hip Kit with Dual Spike Y-Connector
Bactisure A/C Shower Spray Kit with Dual Spike Y-Connector

*Each kit includes 6 1L bags of Bactisure Wound Lavage and 6 Pulsavac handpieces with Dual Spike Y-Connectors

From diagnosis to treatment, Zimmer Biomet provides the most comprehensive portfolio for the continuum of care.

Therapy
Once infection has been diagnosed, defeating the organism is vital. In conjunction with systemic antimicrobial antibiotic therapy (standard treatment approach to an infection), Zimmer Biomet’s modular and monoblock spacer molds and lavage systems are designed to help meet these needs.

Re-Implantation
After the infection has been diagnosed and treated, Zimmer Biomet’s specialized antibiotic loaded cements and your choice of implant to provide symptom relief and restore joint function. Zimmer Biomet offers a wide range of proven revision implant systems for re-implantation.

Diagnostics
Synovasure® Alpha Defensin is a unique, reliable and reproducible test designed and validated to aid in the diagnosis of Periprosthetic Joint Infection (PJI). It identifies elevated levels of Alpha Defensin, a critical protein in the innate immune response to infection.
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