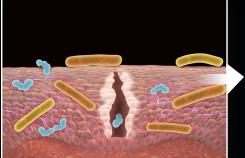
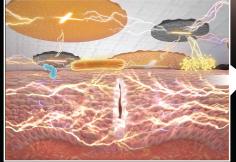
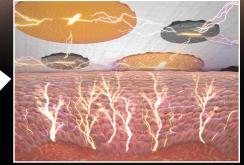


The microcurrent technology of JumpStart dressing can reduce wound infection risk and promote healing<sup>1</sup>







- Polyester substrate with embedded elemental silver and elemental zinc microcell batteries
- Kills and protects against multiple gram-positive and gram-negative bacteria<sup>1-4</sup>
- Applied pre- or postoperatively to help reduce risk of infection<sup>5</sup>
- Water-resistant; up to 7-day wear time
- JumpStart FlexEFit<sup>®</sup> dressing's buildable design covers incisions of any length and angle

#### References

- Banerjee J, Das Ghatak P, Roy S, et al. Silver-zinc redox-coupled electroceutical wound dressing disrupts bacterial biofilm. *PLoS One*. 2015;10(3):e0119531. doi:10.1371/journal. pone.0119531
- Kim H, Makin I, Skiba J. Antibacterial efficacy testing of a bioelectric wound dressing against clinical wound pathogens. *Open Microbiol J.* 2014;8:15-21. doi:10.2174/18742858014080 10015
- Kim H, Izadjoo MJ. Antibiofilm efficacy evaluation of a bioelectric dressing in monoand multi-species biofilms. *J Wound Care*. 2015;24(Suppl 2):S10-S14. doi:10.12968/ jowc.2015.24.Sup2.S10
- Long DR, Bryson-Cahn C, Pergamit R, et al. 2021 Young Investigator Award winner: anatomic gradients in the microbiology of spinal fusion surgical site infection and resistance to surgical antimicrobial prophylaxis. *Spine*. 2021;46(3):143-151. doi:10.1097/ BRS.00000000003603
- Miller BS, Olszewski AM, Bedi A. A microcurrent dressing reduces cutibacterium acnes colonization in patients undergoing shoulder arthroplasty or arthroscopy: a prospective case series. HSS J. 2023;19(1):92-96. doi:10.1177/15563316221100989



Learn more about the science behind JumpStart dressing



**Quick Facts** 



# JumpStart Dressing

Advanced Microcurrent Technology® to Combat Sternal Wound Infections (SWIs)

Wound infection after median sternotomy is one of the most common surgical site infections (SSIs) following cardiac surgery<sup>1</sup> Superficial sternal wound infections (SSWIs) involve only the skin, subcutaneous tissue, and/or deep fascia and have no bony involvement<sup>2</sup>

Deep sternal wound infections (DSWIs) can affect muscle tissue, sternum, substernum, and mediastinum<sup>2</sup>

## 50% of SSIs are preventable<sup>3</sup>

SWIs occur in 0.25%-5% of all cardiac surgery patients with median sternotomies<sup>2,4,5</sup>

.....

## Increased costs of care: \$7981 for SSWI, \$111,175 for DSWI5

Increased readmission rate of ~4.3%<sup>5</sup>

### JumpStart Dressing's Advanced Microcurrent Technology Can Reduce the Risk

- Kills a broad spectrum of bacteria, including multidrugresistant and biofilm-forming bacteria, and the most common pathogens found in DSWIs (staphylococci and gram-negative bacteria)<sup>6-8</sup>
- Embedded microcell batteries generate electricity designed to mimic the skin's natural electric current, which is essential for cell migration and healing<sup>6,7</sup>
- FlexEFit<sup>®</sup> design is buildable to cover incisions of any length and angle
- Can be applied pre- and postoperatively to help reduce risk of infection



#### Reference

L. DynaMed. Sternal Wound Complications. Updated December 29, 2022. Accessed May 8, 2024. www.dynamed.com/condition/sternal-woundcomplications 2. Song Y et al. Review on risk factors, classification, and treatment of sternal wound infection. *J Cardiotomac Surg*, 2023; 18(1):184. doi:10.1186/s13019-023-02229. J. Berrios-Torres 5, Umscheid CA. Bratzler DW, et al. Centers for Disease Control and Prevention guideline for the prevention of surgical site infection, 2017. *J MMA Surg*, 2017;152(8):784-791. doi:10.1001/jjamsaurg.2017.0904.4 Lasses Control and Prevention guideline for the prevention of surgical site infection, 2017. *J MMA Surg*, 2017;152(8):784-791. doi:10.1001/jjamsaurg.2017.0904.4 Lasses Control and Prevention guideline for the D. Gordon S. Prevention and management of sternal wound infections. *J Thorae Cardiovasc Surg*, 2016;152(4):962-972. doi:10.1016/j.jtc.vs.2016.1060 5. Downing M. Modrow M., Thompson-Brazili KA, Ledford JE, Harr CO, Williams JB. Eliminating sternal wound infections: Why very cardiac surgery program needs an I hate infections team. *J TVCY Tech*, 2023;14:19:93-103. doi:10.1016/j.yitc.2023.03.019.6 .Kim H, Park S, Housler G, Marcel V, Coss S, Izadjoo M. An overview of the efficacy of a next generation electroceutical wound care device. *Mil Med*, 2016;18(15 Supp): 184-18-10. doi:10.2705/ MILMED-15-001577. Banerjee J, Das Ghatak P, Roy S, et al. Silver-zinc redox-coupled electroceutical wound areal cardiac surgery: a comparison of three different wound infection types and an analysis of antibiotic resistance. *J Thorae Ds*, 2018;10(1);377-373. doi:10.2703/j.doi:10.271/d.2017.12.109

JumpStart, FlexEFit, V. Dox, V. Dox logo, and Advanced Microcurrent Technology are trademarks of Vomaris Innovations, Inc.

