STUDY FINDS VOMARIS BIOELECTRIC TECHNOLOGY SIGNIFICANTLY DECREASED BIOFILM IN BURN PATIENTS

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Vomaris Innovations, Inc. announced today the publication of results confirming that the company's bioelectric V.Dox™ Technology was effective in preventing and reducing biofilm infection in burn wounds. The manuscript, "*A Prospective, Randomized, Controlled Study to Evaluate the Effectiveness of a Fabric-based Wireless Electroceutical Dressing Compared to Standard of Care Treatment against Acute Trauma and Burn Wound Biofilm Infection,*" was published in *Advances in Wound Care.* The collaborative research was led by Rodney Chan, M.D. Plastic and Reconstructive Surgeon at the Brooke Army Medical Center (BAMC) and the U.S. Army Institute of Surgical Research (USAISR) Burn Center, and Indiana University. Blinded analysis of samples collected from enrolled study patients was conducted at Indiana University under the guidance of Dr. Sashwati Roy, PhD.

Fig. 1: Fabric-based Wireless Electroceutical Dressing (Procellera™ Antimicrobial Wound Dressing powered by V.Dox Technology)

Results from the study (www.Vomaris.com) demonstrated that early treatment with Vomaris's wireless electroceutical dressing (Fig. 1) significantly decreased biofilm presence and severity in all burn wound patients (Fig. 2) as compared to the standard of care (SoC), which included silver-based therapies. In addition, the Vomaris dressing significantly decreased the incidence of specific opportunistic bacterial pathogen strains in burn patients (Fig. 3).

Fig. 2:

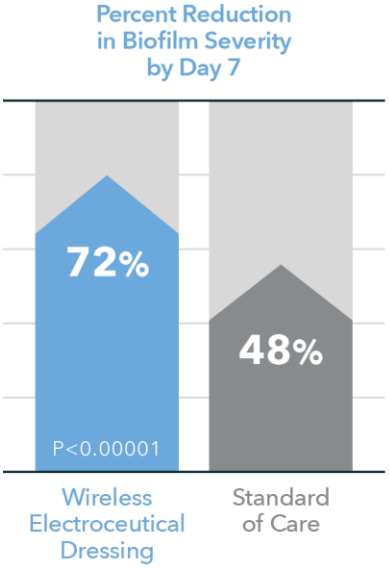
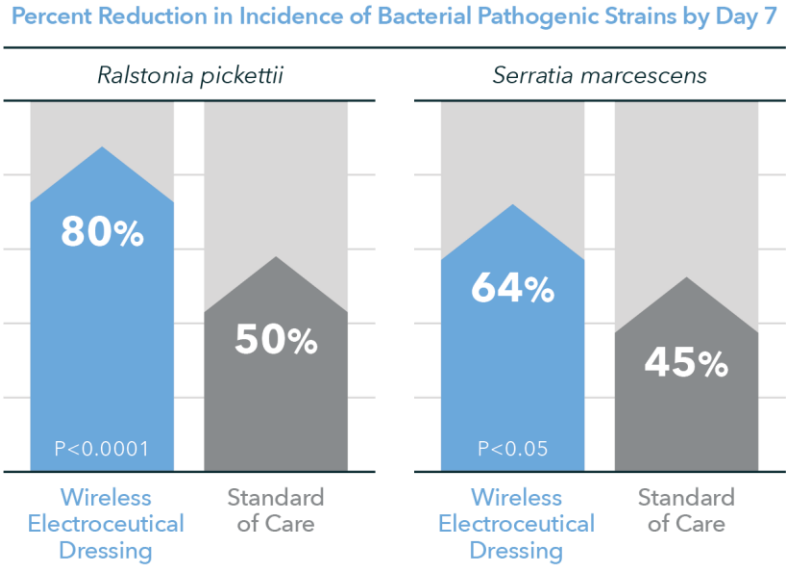


Fig. 3:



Sixty percent of the most common complications after burn injury are caused by infection, and 42-65 percent of deaths following thermal injuries are directly linked to infections. Bacteria in

biofilm form is often implicated in these infections, and it remains a major problem in the management of burns because of its resistance to antibiotics and immune system attack. Vomaris's V.Dox Technology employs embedded microcell batteries that wirelessly generate microcurrents designed to mimic the skin's electrical energy, enabling its dressing to be robustly antimicrobial without the use of high-volume silver ion release or antibiotics. To date, more than one million wounds have been treated with this technology.

"We believe this is the first randomized *clinical* study of any wound care technology to show reduction in biofilm severity and overall infection in burn wounds. The bioelectric dressing technology is an important new tool for addressing the significant challenge of biofilm infection," commented Dr. Chan.

The authors previously published a *preclinical* study in the *Annals of Surgery,* which demonstrated that the Vomaris dressing was able to both prevent and disrupt active biofilm infection better than the control group. The study also demonstrated superior restoration of skin barrier function as measured by transepidermal water loss (TEWL)[1] when used in biofilm-infected burn wounds.

"We were proud to work with the U.S. Military on this very important study; the findings demonstrate in a real-world *clinical* environment the anti-biofilm impact of our bioelectric technology. V.Dox Technology offers clinicians and patients an easy-to-use, economical, one-of-a-kind solution to help combat the threat of biofilm infection," said Vomaris President and CEO Michael Nagel.

About Vomaris

Vomaris Innovations, Inc. (www.vomaris.com) is a privately held medical device company specializing in bioelectric technology that is redefining infection control and wound healing. Vomaris's patented V.Dox Technology powers antimicrobial products for the wound and incisional care markets and has been validated in 27 peer-reviewed publications to-date. It is FDA cleared and commercially available for both prescription and over-the-counter use under the brand names Procellera™ and JumpStart® Antimicrobial Wound Dressings, powered by V.Dox® Technology.

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[1] Barki KG, Das A, Dixith S, Ghatak PD, Mathew-Steiner S, Schwab E, Khanna S, Wozniak DJ, Roy S, Sen CK. Electric Field Based Dressing Disrupts Mixed-Species Bacterial Biofilm Infection and Restores Functional Wound Healing. Ann Surg. 2019 Apr;269(4):756-766.