

## Literature review

# Reduction of bacterial burden and pain in chronic wounds using a new polyhexamethylene biguanide antimicrobial foam dressing — clinical trial results

Sibbald RG, Coutts P, Woo KY. *Adv Skin Wound Care*. 2011 Feb;24(2):78-84.

**Summary:** A randomized, controlled, double-blinded study was conducted to compare the efficacy of PHMB-impregnated foam (Kendall™ AMD antimicrobial foam dressing) to a regular foam dressing in reducing superficial bacterial burden and promoting healing in chronic wounds. Outcomes from 40 patients recruited at two sites (one university hospital-based wound clinic and one community-based clinic) were included in the analysis. Though the change in wound surface area was nonsignificant, wounds in the PHMB group demonstrated higher healing rates. Differences in the number of microorganisms detected (5.3% in PHMB group vs. 33% in control group,  $P=0.04$ ) and pain scores before ( $P=0.02$ ) and after ( $P=0.05$ ) dressing changes were significant at four weeks. The authors concluded that PHMB foam dressing successfully reduced chronic wound pain and bacterial burden.

**Clinical outcomes:** AMD significantly reduced



**28%** reduction in organisms\*

**73.7%** reported no pain\*

PHMB foam dressing successfully reduced chronic wound pain and bacterial burden.

For more information about antimicrobial dressings with PHMB, contact your Cardinal Health Canada sales representative, call **1.888.291.5033** or visit **[shop.cardinalhealth.ca](http://shop.cardinalhealth.ca)**

\* Statistically significant.

Reference  
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### About this study



#### Design

Randomized, controlled, double-blinded



#### Intervention

PHMB foam (Kendall™)



#### Study details

- University of Toronto
- Evaluated bacterial colonization
- Evaluated pain



#### Number of participants

**40 patients**  
treated per protocol

**45 patients**  
intended to treat



#### Patient profile

Patients with chronic wounds

- Leg ulcers
- Foot ulcers