



# Micro-contouring, bacteria killing\*1,2

Not all silver dressings are created equal.

\*As demonstrated in vitro







## Key challenges

A key challenge in helping fight wound infection is managing the wound bioburden.<sup>2</sup>

Dressing selection can play an important role in helping to fight wound infection by:

- Preventing voids or spaces where fluids and bacteria can collect
- Maximising exposure of the wound bioburden to antimicrobials

## **Overcoming the challenges**

**AQUACEL®** Ag dressing helps manage wound bioburden<sup>2</sup>

## Challenge: Managing the wound bioburden

It is important that antimicrobial dressings achieve maximum exposure to the wound bed.

Achieving maximum contact between the antimicrobial dressing and the wound bed can be achieved by a dressing that decreases the voids and spaces where bacteria can thrive.

#### Solution\*

Because AQUACEL<sup>®</sup> Ag dressing contains Hydrofiber<sup>®</sup> Technology, it gels on contact with exudate and micro-contours to the wound bed.<sup>1</sup>

Micro-contouring minimises voids where bacteria can thrive and allows the ionic silver within the antimicrobial dressing to be in contact with the wound pathogens.<sup>1,4</sup>

\*As demonstrated in vitro

AQUACEL<sup>®</sup> Ag dressing is the only silver dressing with Hydrofiber<sup>®</sup> Technology.<sup>3</sup>

AQUACEL® Ag dressing may help you manage these challenges.



## How it works

AQUACEL® Ag dressing powered by Hydrofiber® Technology micro-contours to a simulated wound bed, helping eliminate voids.<sup>1</sup>



AQUACEL® Ag dressing covered by DuoDERM® Extra Thin dressing, applied to the simulated wound surface



Gelling commences as AQUACEL® Ag dressing absorbs exudate



AQUACEL® Ag dressing forms an intimate contact with the simulated wound surface, limiting spaces where bacteria can thrive



Conformability of ALLEVYN™ Ag Adhesive dressing to an uneven tissue surface

ALLEVYN<sup>™</sup> Ag Adhesive dressing was observed to not conform as well as AQUACEL<sup>®</sup> Ag dressing in an *in vitro* study, and there was evidence of fluid accumulation within the voids between the dressing and the simulated wound surface.<sup>5</sup>



Conformability of Mepilex<sup>™</sup> Ag dressing to an uneven tissue surface

Mepilex<sup>™</sup> Ag dressing was observed to not conform as well as AQUACEL<sup>®</sup> Ag dressing in an *in vitro* study, and there was evidence of fluid accumulation within the voids between the dressing and the simulated wound surface.<sup>5</sup>

## Not all silver dressings are created equal...

In a recent *in vitro* study\* AQUACEL<sup>®</sup> Ag dressing killed more Staphylococcus aureus than ALLEVYN<sup>™</sup> Ag Adhesive and Mepilex<sup>™</sup> Ag dressings, as shown below.

For *S. aureus*, AQUACEL<sup>®</sup> Ag dressing had 0.4% mean bacterial growth beneath the dressing, compared with a 25.7% mean for ALLEVYN<sup>™</sup> Ag Adhesive dressing and a 73.2% mean for Mepilex<sup>™</sup> Ag dressing.<sup>5</sup>

## S. aureus

AQUACEL® Ag dressing covered by Versiva® XC® Adhesive dressing



ALLEVYN<sup>™</sup> Ag Adhesive dressing



Mepilex<sup>™</sup> Ag dressing



Additionally AQUACEL<sup>®</sup> Ag dressing was observed to control the spread of bacteria under the dressing better than ALLEVYN<sup>™</sup> Ag Adhesive dressing and Mepilex<sup>™</sup> Ag dressing. The arrows indicate bacterial growth outside of the inoculated area (indented square).

## AQUACEL® Ag dressing. Micro-contouring, bacteria killing.\*1,2

\* In an in vitro study which simulated a shallow wound model for S. aureus and P. aeruginosa.

The testing of all products was performed three times. The graph percentages represent the mean of these three tests. The photos are representative examples of the results. Dressing Test Ranges:

• AQUACEL® Ag covered by Versiva® XC® Adhesive (S. aureus 0.0% - 1.2%; P. aeruginosa 2.7% - 20.8%)

• Allevyn<sup>™</sup> Ag Adhesive (S. aureus 21.0% – 30.8%; P. aeruginosa all 100%)

• Mepilex<sup>™</sup> Ag (S. aureus 65.9% – 80.6%; P. aeruginosa all 100%)



AQUACEL<sup>®</sup> Ag dressing killed more bacteria than Mepilex<sup>™</sup> Ag dressing in an in vitro study.\*5

60

40

20

Ω

Also, AQUACEL® Ag dressing was observed to control the spread of bacteria under the dressing better than Mepilex<sup>™</sup> Ag dressing.⁵

## S. aureus

AQUACEL® Ag dressing covered by Versiva® XC® Adhesive dressing



% of bacterial growth in the inoculated area (within agar indentation)



Bacterial growth was observed outside of the inoculated area (indented square).

## P. aeruginosa

AQUACEL® Ag dressing covered by Versiva® XC® Adhesive dressing



#### % of bacterial growth in the inoculated area (within agar indentation)



Bacterial growth was observed outside of the inoculated area (indented square).

AQUACEL<sup>®</sup> Ag dressing killed more bacteria than ALLEVYN<sup>™</sup> Ag Non-Adhesive, ALLEVYN<sup>™</sup> Ag Adhesive, ALLEVYN<sup>™</sup> Ag Gentle Border, and ALLEVYN<sup>™</sup> Ag Gentle dressings in an *in vitro* study.\*<sup>5</sup>

### S. aureus

AQUACEL<sup>®</sup> Ag dressing covered by Versiva<sup>®</sup> XC<sup>®</sup> Adhesive dressing



## % of bacterial growth in the inoculated area (within agar indentation)



#### ALLEVYN<sup>™</sup> Ag dressing range

ALLEVYN<sup>™</sup> Ag Adhesive dressing ALLEVYN<sup>™</sup> Ag Non-Adhesive dressing ALLEVYN<sup>™</sup> Ag Gentle Border dressing





Bacterial growth was observed outside of the inoculated area (indented square).

\*In an in vitro study which simulated a shallow wound model for S. aureus and P. aeruginosa.

The testing of all products was performed three times. The graph percentages represent the mean of these three tests. The photos are representative examples of the results. Dressing Test Ranges:

- AQUACEL® Ag covered by Versiva® XC® Adhesive (S. aureus 0.0% 1.2%; P. aeruginosa 2.7% 20.8%)
- ALLEVYN<sup>™</sup> Ag Adhesive (S. aureus 21.0% 30.8%; P. aeruginosa all 100%)
- ALLEVYN<sup>™</sup> Ag Non-Adhesive (S. aureus 14.6% 18.4%; P. aeruginosa 96.1% 99.4%)
- ALLEVYN™ Ag Gentle Border (S. aureus 31.0% 37.3%; P. aeruginosa 99.4% 100%)
- ALLEVYN<sup>™</sup> Ag Gentle (S. aureus 21.7% 26.3%; P. aeruginosa 95.1% 96.6%)



Also, AQUACEL<sup>®</sup> Ag dressing was observed to control the spread of bacteria under the dressing better than ALLEVYN<sup>™</sup> Ag Adhesive, ALLEVYN<sup>™</sup> Ag Gentle Border, and ALLEVYN<sup>™</sup> Ag Gentle dressings.<sup>5</sup>

## P. aeruginosa

AQUACEL<sup>®</sup> Ag dressing covered by Versiva<sup>®</sup> XC<sup>®</sup> Adhesive dressing





% of bacterial growth in the inoculated area

(within agar indentation)

#### ALLEVYN<sup>™</sup> Ag dressing range

ALLEVYN<sup>™</sup> Ag Adhesive dressing ALLEVYN<sup>™</sup> Ag Non-Adhesive dressing ALLEVYN<sup>™</sup> Ag Gentle Border dressing

ALLEVYN<sup>™</sup> Ag Gentle dressing



Bacterial growth was observed outside of the inoculated area (indented square).

# To find out more about AQUACEL<sup>®</sup> Ag dressing visit **www.convatec.com**

## Choose AQUACEL® Ag dressing to help control wound pathogens.

Description	Pack Size	NHS Code	Product Code
5cm x 5cm	10	ELY109	S7505AG
10cm x 10cm	10	ELY110	S7506AG
15cm x 15cm	5	ELY111	S7507AG
20cm x 30cm	5	ELY112	S7508AG
2cm x 45cm (ribbon)	5	ELY113	S7509AG
4cm x 10cm	10	ELY166	S7513AG
4cm x 20cm	10	ELY167	S7514AG
4cm x 30cm	10	ELY168	S7515AG

AQUACEL® Ag dressing is available in a variety of sizes:

HPRA Wholesalers authorisation No. W00426/00001

Tel: +353 (0) 1 835 2411 Email: sales@medguard.ie

Unit 28B Ashbourne Business Centre, Ashbourne, Co Meath, A84 WA49

## AQUACEL<sup>®</sup> Ag dressing. Micro-contouring, bacteria killing.\*<sup>1,2</sup>

#### \*As demonstrated in vitro

#### References

- 1. Jones S, Bowler PG, Walker M. Antimicrobial activity of silver-containing dressings is influenced by dressing conformability with a wound surface. WOUNDS. 2005;17(9):263-270.
- Jones SA, Bowler PG, Walker M, Parsons D. Controlling wound bioburden with a novel silver-containing Hydrofiber dressing. *Wound Repair Regen*. 2004;12(3):288-294.
  Coutts P, Sibbald RG. The effect of a silver-containing Hydrofiber dressing on superficial wound bed and bacterial balance of chronic wounds. *Int Wound J*. 2005;2(4):348-356.
- Bowler PG, Jones SA, Walker M, Parsons D. Microbicidal properties of a silver-containing Hydrofiber dressing against a variety of burn wound pathogens. J Burn Care Rehabil. 2004;25(2):192-196.
- Dowiel PC, Golies CA, Walker M, Paisons E. Microbiola properties of a silver containing hydrobiol dressing against a valiety of burn would participate of burn would participate. 2007;20(2):104
  Antimicrobial activity of silver-containing wound dressings using a shallow wound microbial model. Scientific Background Report WHR13307 MA143. 2010 Data on File, ConvaTec.

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