## CHRONIC WOUND BIOFILM IS A COMMON PROBLEM REQUIRING AN EFFECTIVE SOLUTION

Classic definitions describe biofilm as bacteria attached to a wound surface, encapsulated in a selfproduced extracellular matrix.

Bacteria in biofilm are often metabolically dormant, which can lead to tolerance to antimicrobials and antibiotics, since these only work with metabolically active bacteria. Disruption of the biofilm is important to increase the bacteria's metabolic rate<sup>8</sup>.

## Bacteria can protect itself from antimicrobials

Therefore, it is important to implement an effective biofilm-based management program:

Disrupt the biofilm:

Suppress microbial growth using an antimicrobial:
Suprasorb+PHMB\*

Prevent reformation: repeat for up to 14 days, then re-evaluate







Suppress microbial



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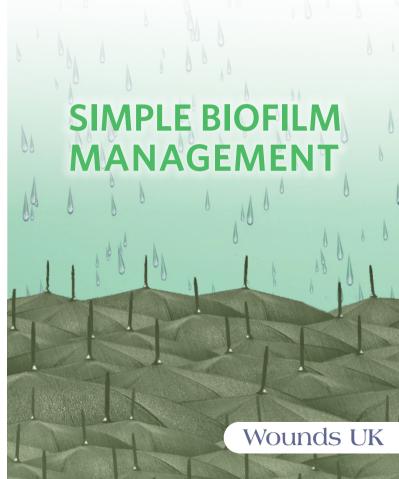




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## SIMPLE DAY-TO-DAY BIOFILM MANAGEMENT WITH DEBRISOFT

Wound microbiota has always been recognised as important, but recent developments have shown that microorganisms are often a primary cause of the chronic wound itself. In 2015, Guest' reported the existence of 1.3m chronic wounds and, at a recent wound care conference, 71% of a symposium audience believed that 60%–100% of chronic wounds contain a biofilm<sup>3</sup>. Moreover, evidence strongly supports the notion that wound biofilm delays healing<sup>4-5</sup>

All nurses who manage chronic wounds need the appropriate tools and knowledge to address the issue of biofilm. Debrisoft can be used as part of a validated biofilm-based wound management pathway to reduce bioburden and prevent biofilm reformation.

#### BOX 1\*: SUSPECTED BIOFILM IN A CHRONIC WOUND - ARE ANY OF THE FOLLOWING PRESENT?

- Absence of healing progression, even though all obvious comorbidities and wound management issues have been addressed
- Visible slimy, gel-like and shiny material on the surface of the wound bed, which detaches easily and atraumatically from the wound bed
- Reforming of slough quickly, despite debridement
- An increase in the production of exudate
- Poor quality granulation tissue — possibly fragile and/or hypergranulation
- Signs of local infection (as biofilm is a precursor to infection), e.g. heat, redness, swelling, pain, odour
- Persistent or recurring infection
- Slow, or no, response to antiseptic dressings such as silver, iodine or PHMB
- Positive healing response following implementation of the Debrisoft biofilm-based wound management 2-week pathway.

# **Debrisoft®**

## Biofilm-based wound management pathway

Reduce the biofilm burden + Prevent reconstitution of the biofilm = Biofilm-based woundcare

	• See Box 1
	s (ABPI 0.8–1.3) – Apply appropriate compression if stic assessment, incorporating a vascular assessment
	Week 1
Dressing change 1	Debrisoft® the wound (This will reduce the biofilm burden) and     Apply a suitable topical antimicrobial* (e.g. Suprasorb® X+PHMB) (This will help prevent reconstitution of the biofilm)
Dressing change 2	Debrisoft® the wound and     Apply a suitable topical antimicrobial* (e.g. Suprasorb® X+PHMB)
Dressing change 3	Debrisoft® the wound and     Apply a suitable topical antimicrobial* (e.g. Suprasorb® X+PHMB)
Please repeat	if more dressing changes are required
	Week 2
Dressing change 1	Debrisoft® the wound and     Apply a suitable topical antimicrobial* (e.g. Suprasorb® X+PHMB)
Dressing change 2	Debrisoft® the wound and     Apply a suitable topical antimicrobial* (e.g. Suprasorb® X+PHMB)
Please repeat	if more dressing changes are required
Wound re-assessment	Re-assess the biofilm status in the chronic wound     See Boxes 1 & 2 and consider the following:
Healing progression? NO	Consider repeating with another topical antimicrobial* (e.g. Suprasorb® A+Ag) Consider repeating with a 3rd topical antimicrobial* If no progression after 3rd antimicrobial – consider specialist referral
Healing progression? YES	Consider reducing the use of Debrisoft® and     Consider stopping the topical antimicrobial

\*Box 1 and Box 2 have been developed using the following references: Metcalf et al. 2014<sup>4</sup> and Phillips et al. 2010<sup>7</sup>

### BOX 2\*: FOLLOWING THE 2-WEEK PATHWAY, REASSESS THE BIOFILM STATUS IN THE CHRONIC WOUND - ARE ANY OF THE FOLLOWING PRESENT?

- Healing progression
- Reduction in the production of exudate and slough
- Improved quality of granulation tissue
- No signs of local infection (heat, redness, swelling, pain, odour).
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- 3. Fletcher J, Stephen-Haynes J, Fumarola S (2016) Wound management: improving what we can see and addressing what we cannot see. Wounds UK 12(1): 66-9

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  5. Schultz (2015) Debridement Whose problem is it? Solutions for patients, purchasers and providers. Poster presented at European Wound Management Association (EWMA), London, UK 6. Morris C. Timmons J. Sykes R (2016) The management of chronic wound bigfilm with a monofilament fibre debridement bigfilm pathway: results of an audit. Poster presented at World Union
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