

The background of the cover is a microscopic view of various bacteria. Some are green and some are orange, appearing as elongated, rod-like structures with textured surfaces. The background has a green-to-orange gradient.

 **QUICK** **GUIDE**

# **SIMPLE BIOFILM MANAGEMENT**

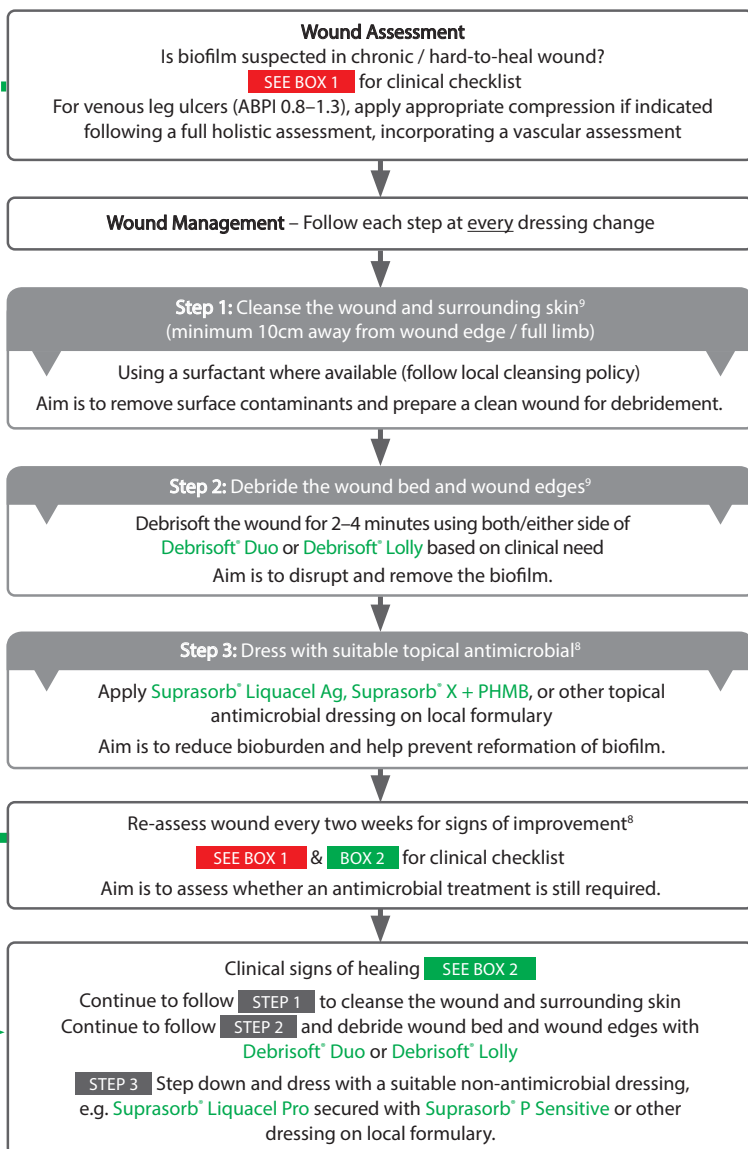
**WOUNDS** | **UK**

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<sup>1</sup>. In 2015, Guest<sup>2</sup> 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 Duo can be used as part of a validated<sup>6</sup> biofilm-based wound management pathway to reduce bioburden and prevent biofilm reformation.

## Biofilm-based wound management

The disruption, removal and prevention of reformation of biofilm = biofilm-based wound care<sup>8</sup>



### Box 1. Suspected biofilm in the chronic wound – are any of the following present?<sup>4,7</sup>

- 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
- Re-forming 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 reoccurring infection
- Slow, or no, response to antimicrobial dressings such as silver, iodine and PHMB
- Positive healing response following implementation of the **Debrisoft® Duo** biofilm-based wound management 2-week pathway

### Box 2. Following the 2-week pathway, reassess the biofilm status in the chronic wound – are any of the following signs of improvement 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

4. Metcalf DG, Bowler PG, Hurlow J (2014) A clinical algorithm for wound biofilm identification. *J Wound Care* 23(3): 137–42

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6. Morris C, Timmons J, Sykes R (2016) *The management of chronic wound biofilm with a monofilament fibre debridement biofilm pathway: results of an audit*. Poster presented at World Union of Wound Healing Societies (WUWHs), Florence, Italy

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

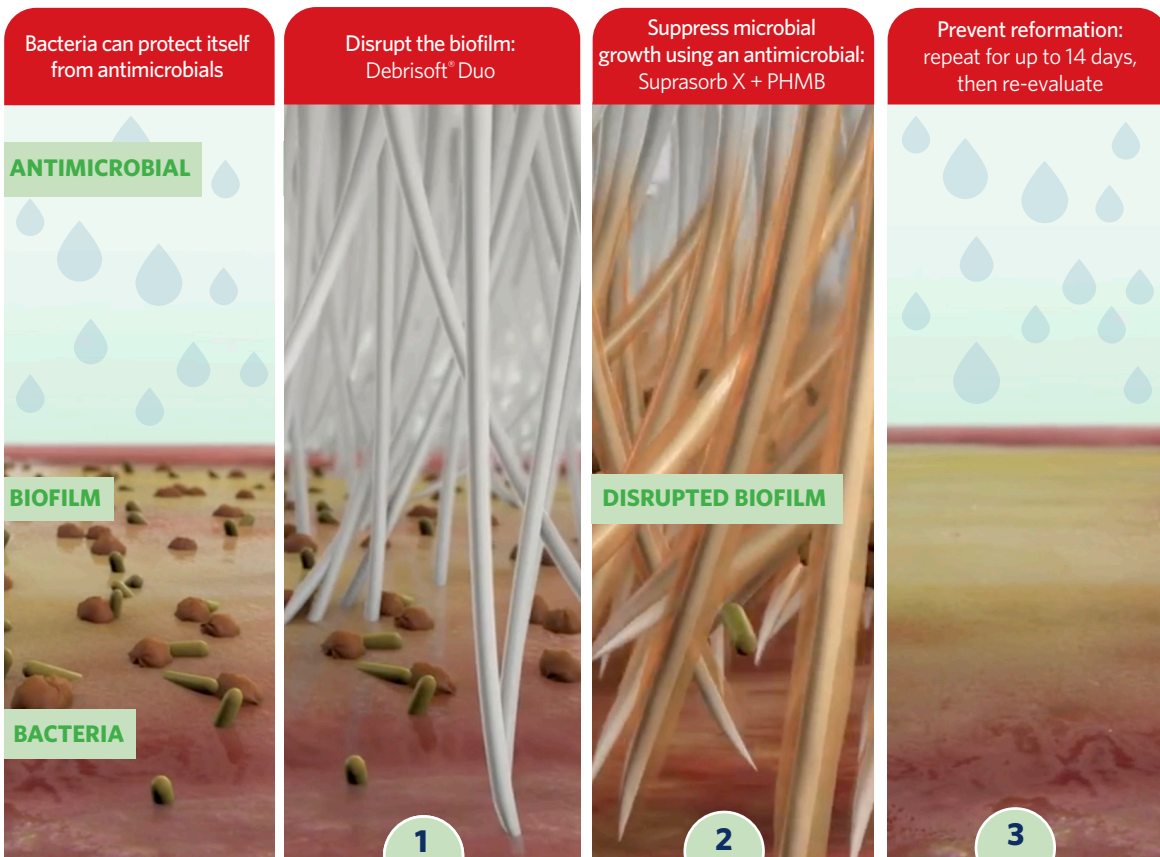
Classic definitions describe biofilm as bacteria attached to a wound surface, encapsulated in a self-produced extracellular matrix.

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>9</sup>.

## Bacteria can protect itself from antimicrobials

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

- 1 Disrupt the biofilm: Debrisoft® Duo
- 2 Suppress microbial growth using an antimicrobial: Suprasorb® Liquacel Ag or PHMB
- 3 Prevent reformation: repeat for up to 14 days, then re-evaluate



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