

# Clinical Recognition and Management of Biofilm in Non-Healing Wounds

## Biofilm Delays Wound Healing

- It is now recognised that biofilm exists in the majority of non-healing wounds.<sup>1,2</sup>
- There is a growing body of scientific and clinical evidence associating biofilm with delayed wound healing.<sup>3</sup>



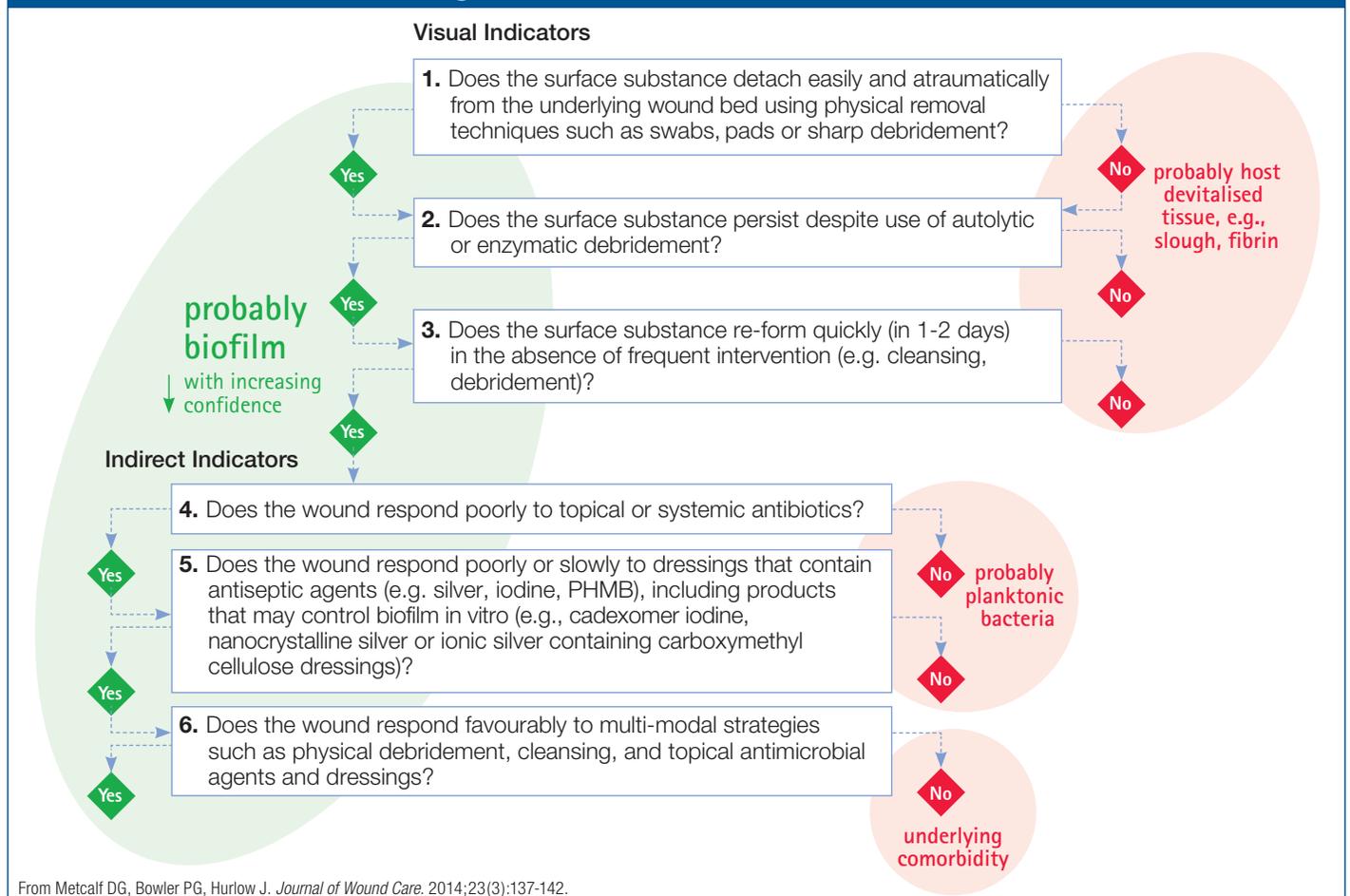
**Suspected biofilm over friable granulation tissue in a leg ulcer.**

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## Identification of Wound Biofilm

- In the absence of a point-of-care test for confirmation of wound biofilm, a clinical algorithm has been proposed to facilitate biofilm identification in chronic wounds.<sup>4</sup>
- This algorithm can help clinicians by aiding recognition of biofilm as part of routine wound assessment and guiding subsequent management choices including dressing selection.

### Clinical Algorithm for Wound Biofilm Identification.



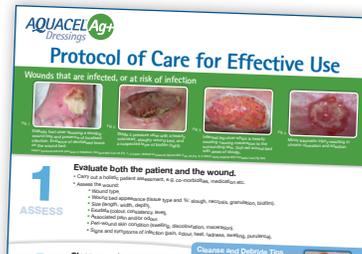


# Biofilm Control as part of a Protocol of Care

- Biofilm can be controlled by cleansing, debridement and application of an appropriate antimicrobial dressing.<sup>5</sup>
- Such a protocol of care can help minimise the opportunity for biofilm to delay healing and promote infection.<sup>5</sup>
- AQUACEL™ Ag+ dressing has been proven to disrupt, kill, and prevent reformation of biofilm.<sup>\*6-8</sup>

## AQUACEL™ Ag+ Dressings *No dressing does more.<sup>†</sup>*

Add **AQUACEL™ Ag+ Dressings** to your protocol of care for chronic and acute wounds that are **infected** or **at risk for infection**.



## Perfect partners: **AQUACEL™ Ag+ Dressings** and **AQUACEL™ Foam**

Dressing Size	Dressings per box	Product Code	Dressing Size	Dressings per box	Product Code
<b>AQUACEL™ Ag+ Extra™</b>			<b>AQUACEL™ Foam Adhesive</b>		
5 cm x 5 cm (2 in x 2 in)	10	413566	8 cm x 8 cm (3.2 in x 3.2 in)	10	420804
10 cm x 10 cm (4 in x 4 in)	10	413567	10 cm x 10 cm (4 in x 4 in)	10	420680
15 cm x 15 cm (6 in x 6 in)	5	413568	12.5 cm x 12.5 cm (5 in x 5 in)	10	420619
20 cm x 30 cm (8 in x 12 in)	5	413569	17.5 cm x 17.5 cm (7 in x 7 in)	10	420621
4 cm x 10 cm (1.5 in x 4 in)	10	413581	21 cm x 21 cm (8.2 in x 8.2 in)	5	420623
4 cm x 20 cm (1.5 in x 8 in)	10	413598	25 cm x 30 cm (10 in x 12 in)	5	420624
4 cm x 30 cm (1.5 in x 12 in)	10	413599	19.8 cm x 14 cm Heel (8 in x 5.5 in)	5	420625
<b>AQUACEL™ Ag+ Ribbon Dressing</b>			20 cm x 16.9 cm Sacral (8 in x 7 in)		
2 cm x 45 cm (.75 in x 18 in)	5	413571	24 cm x 21.5 cm Sacral (9.4 in x 8.4 in)		
1 cm x 45 cm (.39 in x 18 in)	5	413570	<b>AQUACEL™ Foam Non-Adhesive</b>		
			5 cm x 5 cm (2 in x 2 in)	10	420631
			10 cm x 10 cm (4 in x 4 in)	10	420633
			15 cm x 15 cm (6 in x 6 in)	10	420635
			20 cm x 20 cm (8 in x 8 in)	10	420636
			20 cm x 40 cm (8 in x 16 in)	5	420637

Wound healing  
has always had villains.  
Now it has a hero.



\* As demonstrated in vitro

† Demonstrated ability to manage excess exudate, infection and biofilm.

**References:** 1. James GA, Swogger E, Wolcott R, et al. Biofilms in chronic wounds. *Wound Repair Regen* 2008; 16: 37-44. 2. Kirketerp-Møller K, Jensen PO, Fazli M, et al. Distribution, organization, and ecology of bacteria in chronic wounds. *J Clin Microbiol* 2008; 46: 2712-22. 3. Metcalf DG, Bowler PG. Biofilm delays wound healing: a review of the evidence. *Burns Trauma* 2013; 1: 5-12. 4. Metcalf DG, Bowler PG, Hurlow J. Clinical Algorithm for Wound Biofilm Identification. *Journal of Wound Care*. 2014;23(3):137-142. 5. Wolcott RD, Rhoads DD. A study of biofilm-based wound management in subjects with critical limb ischaemia. *J Wound Care*. 2008;17(4):145-155. 6. Antimicrobial activity and prevention of biofilm reformation by AQUACEL® Ag+ EXTRA dressing. Scientific background report WHRI3857 MA236. 2013. Data on file, ConvaTec Inc. 7. Antimicrobial activity against CA-MRSA and prevention of biofilm reformation by AQUACEL® Ag+ EXTRA dressing. Scientific background report WHRI3875 MA239. 2013. Data on file, ConvaTec Inc. 8. Physical Disruption of Biofilm by AQUACEL® Ag+ Wound Dressing. Scientific Background report WHRI3850 MA232. 2013. Data on file, ConvaTec Inc.