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EXPERTS

10

RECOMMENDATIONS

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CONSENSUS

10 global biofilm experts across scientific and clinical discipline have agreed on a series of recommendations designed to add clarity and guidance to core issues in wound biofilm understanding, diagnosis and treatment.

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GLOBAL ADVISORY PANEL



From Left: Prof. David Leaper UK, Prof. Masahiro Tachi Japan, Terry Swanson Australia, Prof. Greg Schultz USA, Dr. Randy Wolcott USA, Dr. Andrew McBain UK, Dr. Garth James USA, Prof. Paul Stoodley UK, Prof. Thomas Bjarnsholt Denmark, Dr. Matthew Malone Australia

Panel

5 scientists, 5 wound care clinicians

Methodology

Modified Delphi Process

Why is a consensus needed?

- Conflicting opinion around biofilm in chronic wounds may lead to inappropriate treatment
- Clarification to separate fact from fiction and increase biofilm understanding
- Scientific understanding of biofilm needs to be combined with clinical reality
- Clear recommendations for the diagnosis and treatment of biofilm in chronic wounds
- Key criteria to determine the most effective anti-biofilm treatments

ONE GOAL

Bridging the gap between scientific understanding and clinical practice addressing core issues in wound biofilm understanding, diagnosis and treatment variables.

Key Consensus Statements¹

What it means for IODOSORB[®]

Understanding the role of biofilm in delayed healing

1. Wounds that contain biofilm may not be identified, resulting in ineffective treatment and delayed healing.
2. Biofilm is present in most chronic wounds, is likely to be located both on the surface and in deeper wound layers and may not be present uniformly across or within the wound.
3. Wound biofilm is difficult to visualize macroscopically and slough, debris, and exudate may be visually mistaken for biofilm by healthcare professionals.
4. Biofilm is recalcitrant to treatment with antibiotics or antiseptics.
5. The most important measure for future diagnostic tests to consider is the indication of where the biofilm is located within the wound.

- Biofilm is present in 78% of chronic wounds,² however it may be underdiagnosed as it may not be uniformly distributed across a wound and also may be found on the wound surface and in deeper tissues.^{3,4} Treatments are often ineffective against biofilm⁵ and clinicians are not able to confirm if biofilm has been removed.¹
- IODOSORB has shown superior efficacy against mature biofilm (*in vitro*)^{5,7-9} and should be the product of choice in non-healing wounds with suspected biofilm. Its unique dual action combines absorption¹⁰ and desloughing with a sustained release of iodine¹¹⁻¹³ to breakdown the biofilm matrix and to expose the bacteria to its antimicrobial action^{14,15} and prepare the wound for healing.

How to treat wound biofilm

6. Debridement is one of the most important treatment strategies against biofilm, but does not remove all biofilm and therefore cannot be used alone – this is one of the critical principles of wound bed preparation (TIME).
7. Biofilm can reform rapidly; repeated debridement alone is unlikely to prevent biofilm re-growth; however, appropriate topical antiseptic application within this time-dependent window can suppress biofilm reformation.

- The disruption and removal of biofilm is key in biofilm treatment, but sharp debridement is not 100% effective¹⁶ or accessible to all healthcare professionals. IODOSORB desloughing properties assist and promote autolytic debridement¹⁶ to address residual biofilm,^{14,15} or when sharp/mechanical debridement is not available.

Evidence based selection of anti-biofilm dressings

8. Topical antiseptics used to treat biofilm should have strong anti-biofilm effects in appropriate *in vitro* test models against mature biofilm.
9. *In vitro* biofilm methods with clinically relevant test conditions are useful to screen treatments for their anti-biofilm efficacy.
10. RCTs and comparative clinical evidence of anti-biofilm treatment should be used to support clinical guidelines, protocols, and treatment choices. In the absence of RCT data, anti-biofilm interventions should be supported by broader wound healing RCT evidence.

- The superior action of IODOSORB against biofilm has been proven across multiple challenging models⁷⁻⁹ (including 3rd party research)^{5,8,9} showing a significant efficacy compared to silver-based antimicrobials.
- IODOSORB has also been shown to reduce biofilm numbers in diabetic foot ulcers in a pilot RCT.¹⁸
- IODOSORB has a very comprehensive evidence package including 21 RCTs and a positive Cochrane review⁹ highlighting “increased rates of healing with cadexomer iodine (IODOSORB) vs. standard care”.

References

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