

Poster abstract submission

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Poster title

ElastiHeal: A Next-Generation Bioactive Skin Contact Layer for Infection Control and Healing in Hard-to-Heal Wounds

Poster abstract

Chronic and hard-to-heal wounds represent a significant and growing healthcare burden, affecting over 2.2 million people in the UK alone and costing the NHS more than £8 billion annually. Infection and delayed healing are major drivers of poor outcomes, frequent dressing changes, and high antimicrobial use, with up to 80% of chronic wounds developing bacterial biofilms that impede healing and increase resistance risk.

ElastiHeal is a next-generation advanced wound care platform designed to address both infection control and tissue repair at the wound interface. The technology comprises a patented, animal-free bioactive contact layer that integrates graphene oxide with novel peptide-based antimicrobial agents, delivering potent activity against clinically relevant pathogens. Applied directly to the wound, ElastiHeal converts standard unmedicated dressings into dual-function antimicrobial and pro-healing systems aims to reduce reliance on conventional antibiotics.

By targeting local bioburden and biofilm-associated infection, ElastiHeal aims to accelerate healing, reduce dressing change frequency, and lower healthcare resource utilisation. This approach aligns strongly with antimicrobial stewardship goals and addresses an unmet need for scalable, non-antibiotic, non-toxic solutions in wound care. The modular platform also supports future expansion through incorporation of additional bioactive molecules, enabling pipeline development across multiple wound indications.

ElastiHeal represents a differentiated, IP-protected wound care technology with clear clinical, economic, and AMR-relevant value, positioned for translation into a high-impact medical device addressing a large and underserved global market.

Research topic

Devices