ACK 1

BioHeal Eutectic Formula: Therapeutic Deep Eutectic Solvents for Antimicrobial Wound Dressing



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SUMMARY

The goal of the project is to develop an antimicrobial and anti-inflammatory dressing for treating infected chronic and complex wounds. To achieve this, the team uses deep eutectic solvents (DES), which are mixtures of two or more components that together have a lower melting point than the individual substances.

Using therapeutic DES that are derived from natural products can offer several advantages over silver dressings, which are the current standard of care. These benefits include lower production costs, reduced toxicity for patients and the environment, and low risk for antimicrobial resistance.

PROJECT GOALS

- Evaluate the efficacy and toxicity of identified DES in human ex vivo wound models.
- Identify the best performing DES and perform the first pre-clinical test in vivo

LONG-TERM GOALS

- Preclinical study and validation
- Develop an efficacious medical product