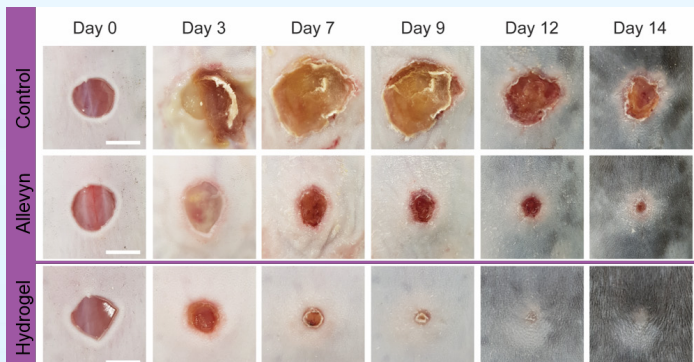


Tools, Therapies and Devices



Antibacterial and Bio-functional Wound Dressing

Led by Professor Mary Chan of Nanyang Technological University, Singapore, novel cationic hydrogels that are highly efficient at killing bacteria and removing biofilm were developed.



The cationic hydrogels are formulated via crosslinking of various polymers. Its porous structure traps bacteria and cationic polymer kills them by lysing cell membranes. The hydrogels are available as stable non-leaching gels and leaching gels that release active components in response to bacterial enzymes.

Advantages

- Antimicrobial, biocompatible and improves wound healing
- Can be easily incorporated into dressings
- Effective against multidrug-resistant bacteria that are hard to kill via conventional antibiotics
- Polymer properties can be customized by using different monomers

