



Acute Care Cover for Severe Injuries

Unmet Need: The increasing prevalence of severe but potentially survivable injuries is an unexpected side effect of the modern body armor worn by warfighters but is also, unfortunately, increasingly seen in civilian populations subjected to sustained conflicts. Current acute medical interventions, whether provided by forward medics or first responders fall short in preserving limb and tissue viability, particularly for instances with extended evacuation time or distant medical facilities. New wound care options are critical to address this growing health issue.

Solution: The US Navy, through the Naval Medical Research Command, has been at the forefront of developing technologies to address severe wound care treatment issues. The present innovation centers around multifunctional bandages that can be used for long term wound care, i.e. care for injuries and wounds when medical treatment is not easily obtainable within 72 hours from treatment. These bandages and dressings include polymer formulations of poly(acrylate) based HIPE gels that demonstrate exceptional physical robustness, hemostatic capabilities and a wide range of drug release kinetics.

Stage of Development: The technology is in the early stages of development.

IP or IP Status: This research has produced a robust set of treatments which are embodied in multiple patents, including US Patent 10,472,450 ([US Patent 10,472,450](#)) and US Patent 11,639,412 ([US Patent 11,639,412](#)).

- **Command:** NMRC
- **Category:** Wound Care
- **License Status:** Available for exclusive or non-exclusive licensing and collaborations
- **Date Published:** September 1, 2024
- **Date Updated:** N/A
- **Invention No.:** 104001US03
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