

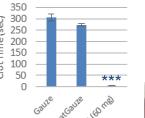
Rapid Active Injury/Distress Enhanced Recovery (RAIDER) Therapy

...wound dressings for immediate hemostasis, and enhanced tissue regeneration

Two distinct types of wound treatments have been developed: one (RAIDER Therapy) for immediate use on the battlefield and in first aid posts to stabilize wounds; the second (RAIDER+ Hydrogel Therapy) for longer term use at higher echelons of care, and to promote increased recruitment of innate stem cells to wound sites.

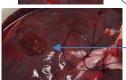
RAIDER Therapy can clot sheep plasma and blood within 3 seconds in vitro, and within 1 minute in artificially-perfused

liver in situ.



Treatment





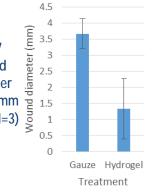
Treatment	Clot time (min:sec)
None	3:00
Combat Gauze (6 pcs)	2:15
RAIDER Therapy (200 mg)	<0:59

RAIDER⁺ Hydrogel Therapy provides physical protection, maintains a moist environment, and helps prevent infection to aid long-term healing. Limited studies in pre-clinical animal experiments have demonstrated the RAIDER+ Hydrogel can accelerate dermal wound healing by over 100%.

Gauze Control Hydrogel Day 0

Day 7

Day 7 Wound Diameter (from 5 mm injury, N=3)



Supporting the Continuum of Care



First Responder

Care









Kandahar Airfield)



Role 4 Definitive Medical/Surgical Rehabilitative Care (i.e., Landstuhl, VA poly-trauma)

Project directly supports specific Continuum of Care Stage



Project does not directly support specific Continuum of Care Stage

Key Features

- RAIDER Therapy
 - ✓ Outperform existing methods used by the military to cause coagulation in vitro and in situ
 - ✓ Can be used in different form. factors (i.e., in packets, on gauze, etc.) to prevent blood loss from various types of wounds
 - ✓ Easy to use.
 - ✓ Made with FDA-approved materials.
 - ✓ Currently being tested in preclinical trials.
- RAIDER+ Hydrogel Therapy
 - ✓ Formulated from a unique combination of FDA-approved materials that are bacteriostatic, fungistatic, biocompatible, biodegradable; stimulate and moderate immune response. stimulate healing, and facilitate cell migration
 - ✓ Can prevent infection and promote healing
 - ✓ Currently being tested in preclinical trials.
 - ✓ Can be used to deliver drug



This project is managed by the Pacific Joint Information Technology Center, which focuses on rapidly researching, testing, and developing warfighter medical solutions and products, through pilots or prototypes in support of the DOD.