CATALOGUE 2027

PARAMEDICS

Unbeatable Rapid Haemostatic Dressing
Reengineering Survival, Seconds Matter.

UNBEATABLE
NEVER STOP WINNING



is not China

Stand With Ukraine

BE STRONG AND COURAGEOUS. DO NOT BE AFRAID; DO NOT BE DISCOURAGED FOR THE LORD YOUR GOD WILL BE WITH YOU WHEREVER YOU GO. - NIV JOSHUA 1 : 9

ABOUT US

UNBEATABLE
NEVER STOP WINNING

Unbeatable Rapid Haemostatic Dressing
Reengineering Survival, Seconds Matter.

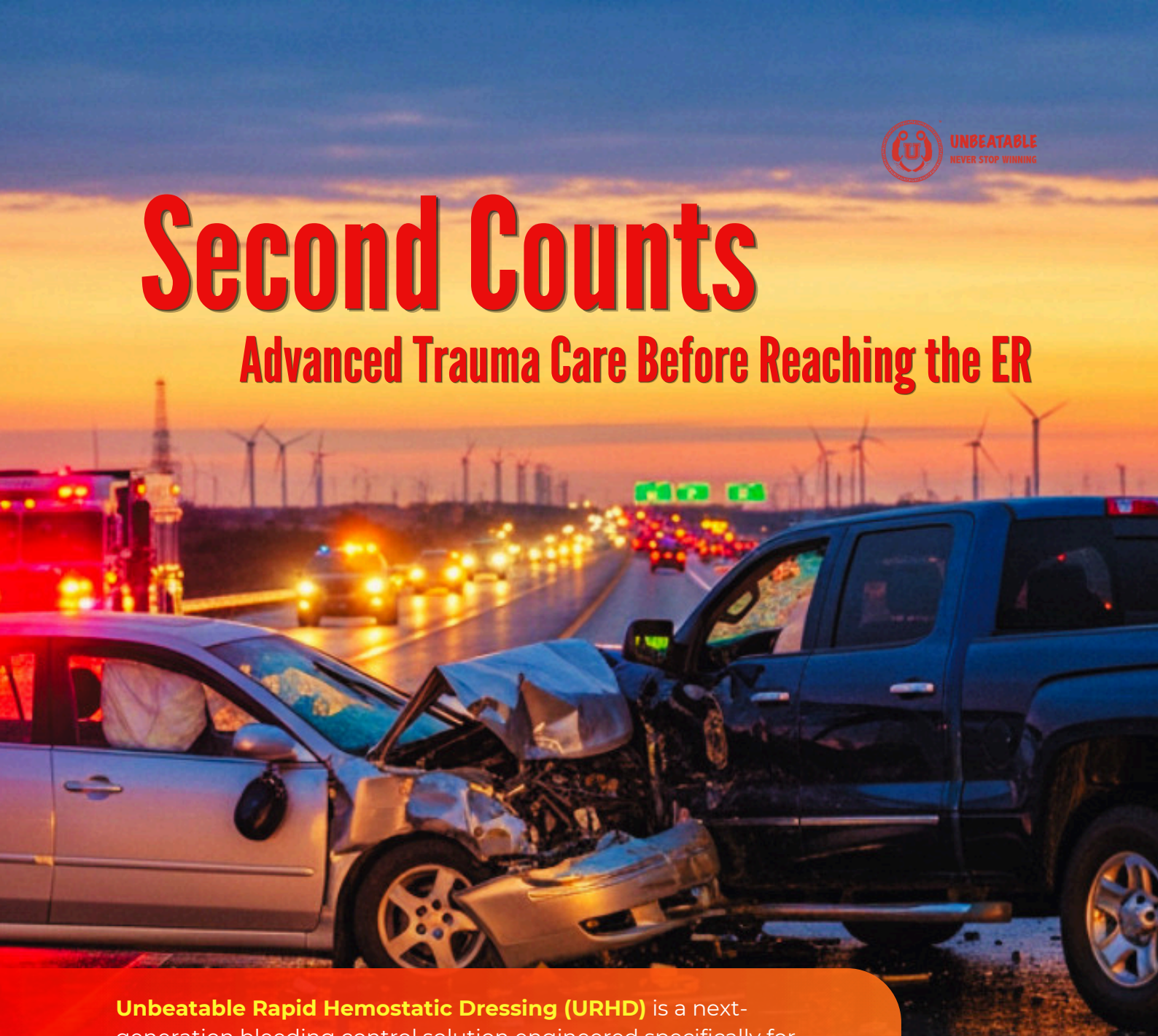
Corporate :	Medge Healthcare Manufacturing Sdn Bhd
Brand :	UNBEATABLE
Founder :	CH LIM
Establishment :	April 2024
Head Office :	Kuala Lumpur, Malaysia
Manufacturing :	Malaysia
Website :	www.medgehealthcare.com

We are not just manufacturing Rapid Haemostatic Dressings; we are re-engineering survival.

In Malaysia, Singapore and Philippines, we renamed Unbeatable Rapid Haemostatic Dressing as Unbeatable Gauze with Clot Control.



Global Network | Strategic Trust | Rapid Response | Innovative R&D | Life Savior



Second Counts

Advanced Trauma Care Before Reaching the ER

Unbeatable Rapid Hemostatic Dressing (URHD) is a next-generation bleeding control solution engineered specifically for pre-hospital care, severe motor vehicle accidents, and critical trauma emergencies.

In a chaotic crash scene, every single second dictates a patient's survival. Designed for paramedics and first responders, **URHD stops life-threatening bleeding in as fast as 30 seconds**, drastically minimizing blood loss and securing the wound during bumpy and unpredictable transit to the hospital.

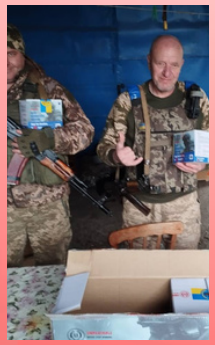
FDA-certified, biocompatible, and optimized for rapid, single-handed application, Unbeatable empowers medical teams to act swiftly, confidently, and effectively under extreme on-scene pressure. **Invented by Malaysians and proudly made in Malaysia, Unbeatable represents local innovation with a global impact-saving lives right at the frontline**.

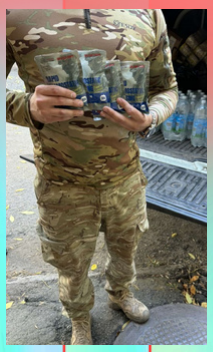
TRUSTED & TESTED

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Trusted Where It Matters Most

In the most demanding environments on earth, Unbeatable Rapid Haemostatic Dressing provides the critical edge needed to save lives. Our products are rigorously tested by frontline personnel and medical professionals who face life-and-death situations every day.











Battle-Tested Excellence

From urban emergency response to the most challenging terrains, our technology is proven to deliver rapid hemorrhage control. We are proud to support those on the frontlines with medical solutions that are not just tested in labs, but proven in action.

UNBEATABLE RAPID HAEMOSTATIC DRESSING

Unbeatable Rapid Haemostatic Dressing (URHD) is engineered to align with TCCC operational requirements for hemorrhage control. The product is:

- **Effective in severe arterial bleeding scenarios**, consistent with TCCC-defined massive hemorrhage conditions
- **Designed to support rapid wound packing and sustained compression**, including use in junctional areas where tourniquets are not applicable
- Suitable for use by **first responders, soldiers, and non-medical personnel** under high-stress, low-visibility environments
- Developed with consideration for **battlefield reliability**, ensuring stable performance across variable and extreme conditions



TCCC COMPLIANCE

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Category	Requirement	Technical Description	Yes?
Hemostatic Performance	Massive hemorrhage control	Ability to rapidly control life-threatening bleeding	Y
	Arterial bleeding effectiveness	Proven effectiveness in arterial hemorrhage	Y
	Clot stability	Maintains stable clot under sustained pressure	Y
	Anti-washout capability	Effective under high-flow bleeding conditions	Y
	Time to hemostasis	Documented time-to-hemostasis data	Y
Wound Applicability	Wound packing capability	Suitable for wound cavity packing	Y
	Deep wound applicability	Effective in irregular/deep wounds	Y
	Junctional hemorrhage	Suitable for groin, axilla, neck injuries	Y
	Non-tourniquet scenarios	Effective where tourniquets cannot be applied	Y
Ease of Use	Non-medical usability	Usable by soldiers or civilians with minimal training	Y
	One-hand operation	Can be opened and applied with one hand	Y
	Low-visibility usability	Usable in dark or high-stress environments	Y
	Simple application	Minimal and intuitive steps	Y
	Rapid packing design	Z-fold or equivalent design for quick application	NA
Safety Profile	No exothermic reaction	Does not generate heat during application	37C
	No tissue damage	Does not cause tissue necrosis	Y
	Debridement compatibility	Easily removable during surgical treatment	Y
	Biocompatibility	Non-toxic, low allergenic risk	Y
Environmental Stability	Temperature resistance	Stable under extreme heat and cold	Y
	Shelf life	Long and validated shelf life	Y
	Protective packaging	Waterproof and contamination-resistant	Y
	Multi-environment suitability	Suitable for desert, jungle, battlefield conditions	Y
Tactical Integration	TCCC compliance	Aligned with Committee on Tactical Combat Casualty Care guidelines	Y*
	MARCH protocol alignment	Supports Massive Hemorrhage priority	Y
	Tourniquet compatibility	Can be used alongside tourniquets	Y
	Pressure dressing compatibility	Works with pressure bandages	Y**
Clinical Validation	Preclinical/clinical data	Supported by animal or clinical studies	Y
	Hemostasis metrics	Quantified performance data	Y
	Efficacy rate	Documented success rate	Y
	Regulatory compliance	FDA, CE, or equivalent approvals	IP***

Tactical Combat Casualty Care (TCCC) establishes that hemorrhage control is the first and most critical priority in prehospital battlefield medicine.

Within the **TCCC MARCH** algorithm, **Massive Hemorrhage (M)** is addressed before airway, respiration, circulation, and hypothermia management, underscoring the decisive impact of rapid bleeding control on survivability.

TCCC-compliant hemostatic solutions are therefore required to meet three core operational principles:

1. **Battlefield usability** under austere and high-threat conditions
2. **Reliability in extreme environments** (temperature, humidity, contamination)
3. **Rapid and effective control of life-threatening hemorrhage**, including arterial bleeding

In alignment with TCCC and CoTCCC guidelines, a compliant hemostatic dressing must enable immediate intervention by ***non-medical personnel, support wound packing for deep or junctional injuries, and maintain hemostatic efficacy under sustained direct pressure in high-flow bleeding scenarios***.

THE BRUTAL REALITY OF PRE-HOSPITAL HEMORRHAGE CONTROL

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1 Non-Compressible Torso Hemorrhage (NCTH)

The most difficult obstacle is anatomy. Traditional bleeding control relies on compression - pressing a blood vessel against a bone to stop the flow. While tourniquets work beautifully on arms and legs, they are useless for internal bleeding inside the chest, abdomen, or pelvis.

- **The Dilemma**: If a patient has a deep stab wound to the torso, a ruptured spleen from a car crash, or a fractured pelvis, paramedics cannot apply direct pressure to the source.
- **The Operational Reality**: Paramedics have very few tools to treat internal bleeding in the field. They are forced to rely on pelvic binders to structurally minimize bleeding, administer medications like Tranexamic Acid (TXA) to help the body maintain its own clots, and rush the patient to a trauma surgeon. It becomes a race against the clock.

2 Severe Patient Coagulopathy (The Trauma Triad of Death) & Physiological Collapse

When a patient loses a massive amount of blood, their body's internal chemistry aggressively breaks down. Paramedics frequently fight against the patient's own failing physiology, widely known in emergency medicine as the **Trauma Triad of Death (Hypothermia, Acidosis, and Coagulopathy)**.

The Reality of Patient Collapse: When paramedics arrive at the scene, they often find that the patient is not just bleeding heavily; *they are frequently unconscious, hemodynamically unstable (unstable heart rate and crashing blood pressure), or in full traumatic cardiac arrest.* Paramedics are often forced into a brutal triage situation where they must stop catastrophic bleeding in seconds because they immediately need to transition to performing CPR or managing a failing airway.

Because the body is in profound shock, the blood loses its ability to clot entirely, making standard bleeding control even less effective.

3 Hostile, Chaos-Driven Environments (The Multi-Tasking Paradox)

Unlike a pristine hospital operating room, paramedics must manage bleeding in chaotic environments where they are forced to treat multiple life-threatening injuries - or multiple casualties - simultaneously.

- **The Unrealistic Nature of Standard Protocols**: Standard training manuals often teach paramedics to use combat gauze, pack the wound for 90 seconds, and then maintain continuous manual compression for a full 3 minutes. *In a real-world multi-trauma scene, holding down a single wound for 3 to 5 minutes is a luxury paramedics simply do not have.*
- **The Chaos of Compounding Injuries**: When a single paramedic has to manage an unconscious patient who requires immediate airway intervention, chest decompressions (CPR), and has multiple bleeding wounds, spending minutes immobilized just to compress one injury is completely unrealistic. They must rapidly balance stopping the bleed with keeping the patient's heart beating.
- **The "Scoop and Run" Paradox**: High-pressure bleeding control requires steady, uninterrupted force. Trying to maintain aggressive wound packing or precise direct pressure while bumping down a road at 60 mph in the back of an ambulance while simultaneously managing other critical vitals is an extraordinary operational challenge.

SIMULTANEOUS CARE UNDER TIME CRUNCH

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WHY URHD IS VITAL FOR ADVANCED PARAMEDICINE?

1. Clinical Realities in Paramedicine: The Critical Polytrauma Challenge

Paramedics routinely confront high-impact mechanisms - such as severe motor vehicle collisions (MVCs), pedestrian-struck incidents, and heavy industrial crushing - where patients present with multiple concurrent, catastrophic exsanguinating wounds (e.g., severe open fractures accompanied by deep junctional arterial tears). Unlike single focal injuries, these polytrauma patients frequently present in a comatose state with profoundly compromised vital signs; as their cardiac rhythm deteriorates rapidly due to severe blood loss, they face an acute risk of imminent traumatic cardiac arrest that demands immediate, simultaneous life-support interventions.

2. The Urgent Need for Zero-Pressure Maintenance (Pack-and-Forget)

Traditional hemorrhage control requiring 3-to-5 minutes of continuous manual pressure represents a fatal operational bottleneck for a small EMS crew, as they cannot dedicate their hands to holding pressure on multiple wounds simultaneously. Paramedics require an immediate "pack-and-forget" capability, which is why the Unbeatable Rapid Haemostatic Dressing (URHD) is critical; it is engineered to chemically initiate robust clotting upon contact, instantly freeing the paramedic's hands to focus on high-priority, life-saving measures such as continuous Cardiopulmonary Resuscitation (CPR), endotracheal intubation for advanced airway management, and establishing intravenous/intraosseous lines for volume resuscitation.

3. Overcoming Physiological Collapse & Coagulopathy

Severe, rapid exsanguination quickly plunges the trauma patient into the "Lethal Triad" (Hypothermia, Acidosis, and Coagulopathy), a state where the body's intrinsic clotting cascade becomes severely impaired or completely non-functional. URHD addresses this physiological collapse by providing an active, independent clotting matrix that bypasses the compromised systemic cascade, forcing localized hemostasis even in hemodiluted, hypothermic patients, or those on prescribed long-term anti-coagulant medications (blood thinners) where traditional gauze would inevitably fail.

4. Resisting Mechanical Disruption During CPR and High-Speed Transport

The aggressive mechanical forces and chest wall recoils of manual or automated CPR compressions create massive systemic pressure fluctuations that easily dislodge weak, standard blood clots, triggering secondary catastrophic bleeding. URHD forms an exceptionally resilient, highly adherent matrix within the wound cavity that maintains total clot integrity against both the internal physical stress of continuous chest compressions and the external turbulence, rapid shifting, and vibrations inherent to patient extrication and high-speed ambulance transit to the trauma center.



UNBEATABLE BLEEDING CONTROL KIT

Why Every Ambulance Needs the Unbeatable Bleeding Control Kit?

In emergency medical services, seconds dictate the line between life and death. When responding to violent encounters, mass casualty incidents, or severe industrial and traffic accidents, the greatest threat to a patient's survival is catastrophic, uncontrolled blood loss.

Even on an ambulance, where advanced medical gear is standard, having an immediate, highly accessible, and specialized hemorrhage control solution is paramount. Every ambulance must be equipped with the Unbeatable Bleeding Control Kit. Here is why this kit is an absolute necessity for modern emergency medical services:

1. 30-Second Hemostasis: The Ultimate Lifeline
The kit features the Unbeatable Rapid Hemostatic Dressing, capable of stopping arterial or severe bleeding in just 30 seconds.

- **Instant Stabilization & Crew Safety**: It clots severe arterial or junctional bleeding almost instantly - allowing paramedics to rapidly stabilize patients (or perform self-rescue if injured in hostile scenes) before managing other life-threatening priorities.

2. Defeating the "Golden Hour" Transport Delays
While an ambulance provides a mobile ER, the true challenge lies in the transit time to a Trauma Center or managing overwhelming scenes.

- **En-Route Security & MCI Management**: It secures definitive bleeding control before and during gridlock transit, while providing a rapid, stackable triage solution to save multiple heavily bleeding victims during mass casualty incidents (MCI).

3. Built for the Demanding Realities of EMS Operations
The Unbeatable Bleeding Control Kit is housed in an ultra-rugged, heavy-duty hard case engineered specifically for the chaotic environment of emergency response.

- **Rugged, High-Visibility Deployment**: The heavy-duty, climate-resistant case protects sterile supplies from EMS rig chaos and ensures critical gear is organized for instant, intuitive deployment under high stress.



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WHY PARTNER WITH US?

Global Vision & Brand Influence
We deliver premium, internationally competitive products designed to accelerate your market recognition and elevate your brand presence.

Profitable Growth & Market Protection
With a robust pricing architecture and strict regional market protection policies, we guarantee secure and maximized returns on your investment.

Comprehensive Technical & Marketing Support
We empower your business with expert product training, professional marketing assets, and a fully supportive after-sales service system.

Flexible & Innovative Partnership Models
Whether through distribution, agency, or project-based collaboration, we tailor the perfect business model to fit your unique goals.



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Manufacturer

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