

Z-MEDICA®

It's QuikClot® Or It's Not



QuikClot
CONTROL+®

Trauma In-service

Z-Medica®: A Strong Track Record of Success

Z-Medica's mission is to *"Save Lives and Improve Patient Outcome"*

Key Markets

Healthcare



- QuikClot Control+® is in over 60% of Level I & II US Trauma Centers
- QuikClot Control+ gained FDA granted *de novo* clearance in June 2017 indicated for severe bleeding in the internal organ space
- QuikClot® products can be used in several segments in the hospital including Trauma, Cath Lab, IR, EP, Intensive Care, and Emergency Medicine
- Z-Medica has sold over 18 million units of QuikClot products to date



EMS & Law Enforcement



- QuikClot products are used in EMS departments and in Law Enforcement agencies
- These products have been used in many mass casualty events across the world

Military



- The QuikClot products began their use for controlling bleeding in the Military
- In 2008 QuikClot Combat Gauze® was selected by the Department of Defense as the hemostatic dressing of choice for all branches of the military



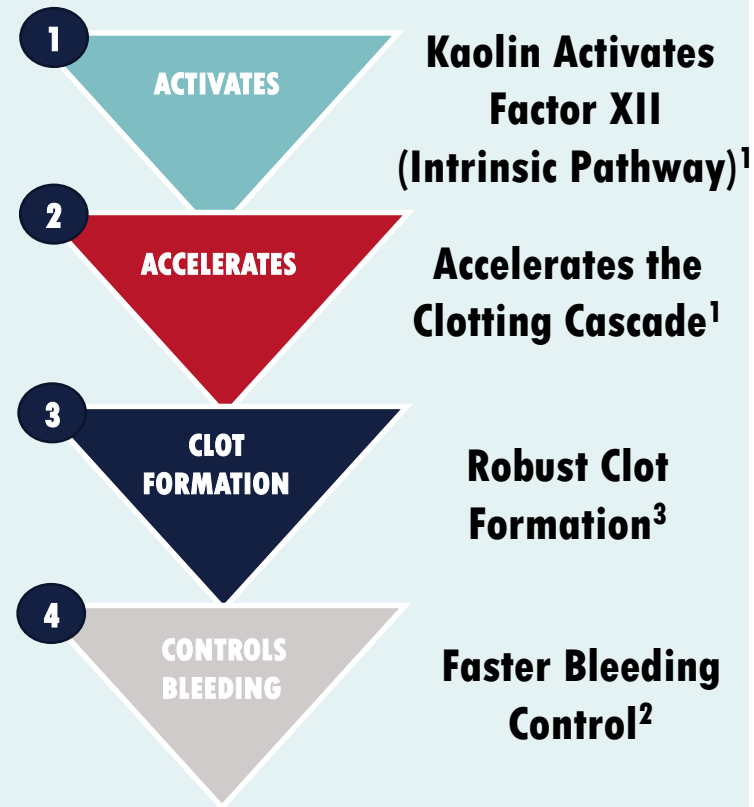
A Non-Woven Material Impregnated With Kaolin



QuikClot® products...

- ✓ Have kaolin which is an inorganic mineral that **Activates The Clotting Cascade**. Standard laparotomy pads do not have hemostatic properties
- ✓ Absorb blood and accelerate the pathway to clot formation¹, leading to **Faster Bleeding Control**²
- ✓ **Significantly Reduces Blood Loss vs. standard lap pads; up to 40% reduction**⁴
- ✓ Faster hemostasis means **Better Visualization**, leading to quicker definitive repair identification
- ✓ Can be left in place for up to **48 Hours** to control bleeding
- ✓ All QuikClot Control+® products are **x-ray detectable**

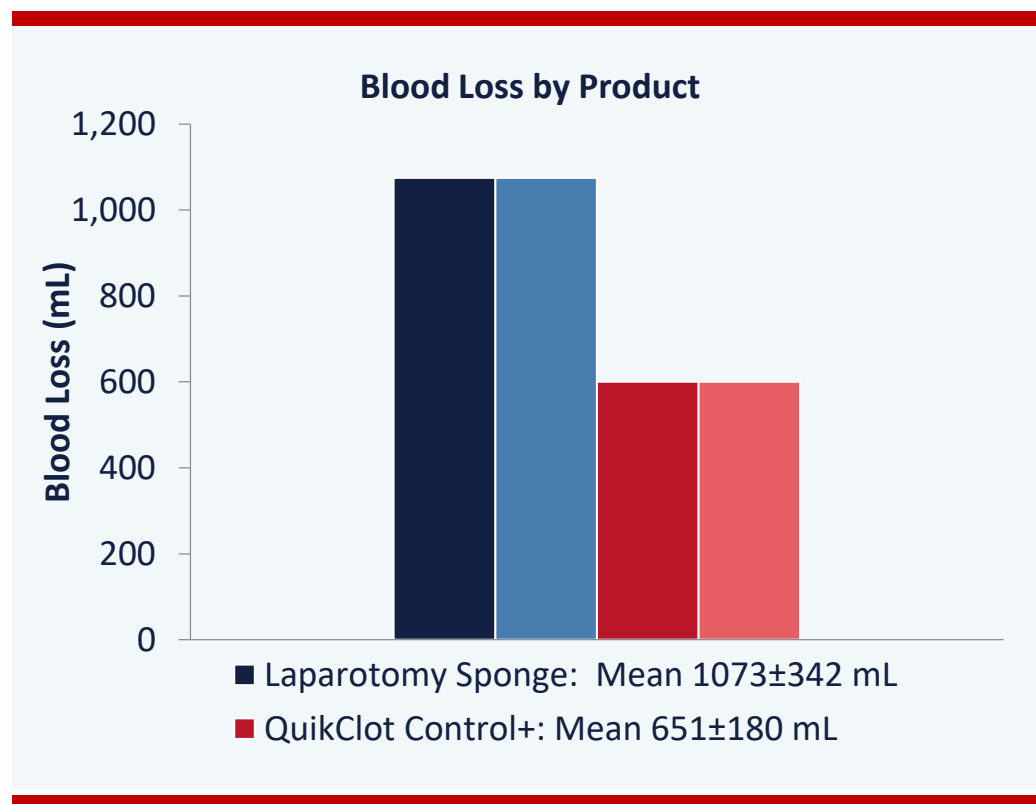
How does kaolin work?



Data – J. Trauma Acute Care Surg. 2017

Significantly Less Blood Loss⁴

- ✓ When treating inferior vena cava injuries in a swine model, there was **significantly less blood loss after packing with QuikClot Control+[®]** ($651 \pm 180\text{mL}$) compared to packing with laparotomy sponges ($1073 \pm 342\text{mL}$) ($p \leq 0.05$)⁴
- ✓ The authors noted these results demonstrate that the use of the new hemostatic kaolin-based dressing, **QuikClot Control+, improved haemorrhage control and significantly decreased blood loss in this penetrating RIVC model⁴**



Where To Use QuikClot Control+® Products:

Size: 12x12 and 8x8
Intra-abdominal packing <ul style="list-style-type: none"> • Liver • Spleen • Damage Control
Intra-thoracic packing <ul style="list-style-type: none"> • Chest • Around lung
Pelvic packing <ul style="list-style-type: none"> • Iliac
Retro-peritoneal packing <ul style="list-style-type: none"> • Inferior vena cava • Kidney • Descending aorta
Large soft tissue wounds <ul style="list-style-type: none"> • Large laceration • Amputation • Machinery-related wounds
Burn debridement
Soft tissue flaps
Narrow Pelvis & Smaller Spaces (8x8)

Size: Z-Fold
Penetrating Wounds <ul style="list-style-type: none"> • Gunshots wounds • Stabbings
Lacerations <ul style="list-style-type: none"> • Head, neck, scalp, & face
Amputation
Size: 5x5
Small soft tissue wounds
Lacerations <ul style="list-style-type: none"> • Head, neck, scalp, & face
Soft tissue flaps



Note: Usage is not limited to this list, refer to the QuikClot product instructions for use (IFU)

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Application of QuikClot Control+® Products

Indication

QuikClot Control+ is indicated for temporary control of internal organ space bleeding for patients displaying class III or class IV bleeding. It may also be used for control of severely bleeding wounds such as surgical wounds and traumatic injuries.

Directions For Use



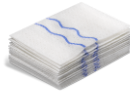

- 1. Verify the expiration date on the package labels prior to using the product. Open package and remove QuikClot Control+ dressing.**
- 2. Apply QuikClot Control+ dressing to the wound and apply pressure until bleeding is controlled. More than one dressing may be required.**
NOTE: If needed, additional gauze or a pressure dressing may be applied to maintain pressure. The time for formation of a stable clot may vary depending on several patient factors.
- 3. Remove the dressing and repair the wound, if necessary. If the dressing is adhered to the wound, hydrate with sterile saline to aid in removal.**
- 4. Copiously irrigate the QuikClot Control+ dressing application sites and completely suction irrigation fluid prior to wound closure.**



QuikClot Control+®

Product Ordering Information



Product	Product Order Number	Product Description	Units Per Box
QuikClot Control+ 5x5	4000 	5 in. x 5 in., in 4-ply	10/Box
QuikClot Control+ 8x8	4010 	8 in. x 8 in., in 2-ply	10/Box
QuikClot Control+ Z-Fold	4020 	3 in. x 2 yds., in 1 ply	10/Box
QuikClot Control+ 12x12	4030 	12 in. x 12 in., in 3-ply	10/Box

References

1. Lamb KM, Pitcher HT, Cavarocchi NC, Hirose H. Vascular Site Hemostasis in Percutaneous Extracorporeal Membrane Oxygenation Therapy. *Open Cardiovasc Thorac Surg J.* 2012;5:8-10
2. Trabattoni D, Montorsi P, Fabbionchi F, Lualdi A, Gatto P, Bartorelli AL. A new kaolin-based haemostatic bandage compared with manual compression for bleeding control after percutaneous coronary procedures. *Eur Radiol.* 2011;21:1687-1691
3. Garcia-Blanco J, Gegel B, Burgert J, Johnson S, Johnson D. The Effects of Movement on Hemorrhage When QuikClot® Combat Gauze™ Is Used in a Hypothermic Hemodiluted Porcine Model. *J Spec Oper Med.* 2015 Spring;15(1):57-60
4. Koko KR, McCauley BM, Gaughan JP, Nolan RS, Fromer MW, Hagaman ALR, et al. Kaolin-based hemostatic dressing improves hemorrhage control from a penetrating inferior vena cava injury in a coagulopathy swine. *J Trauma Acute Care Surg.* 2017;83(1):71-76