Improving Care Through INNOVATION
As a global medical products company, HemCon Medical Technologies, Inc. exists to significantly advance the standard of care in the civilian and Armed Forces medical markets. Through a broad spectrum of platform technologies, HemCon offers solutions to improve patient care and drive emergency and acute care advancements forward.

HemCon was built on a simple premise – to save lives. The company’s original product, HemCon® Bandages, were developed to address severe arterial bleeding, the leading cause of battlefield mortality. They remain a top choice hemostat of military forces worldwide. Built on a life-saving chitosan platform, HemCon now offers a variety of hemostatic solutions providing a continuum of care across medical specialties on a global scale.

**Saving Lives and Improving Care Through Creative Solutions**

As a world leader in advanced chitosan research and development and a specialist in lyophilization (freeze-drying), HemCon has continued to expand its capabilities and markets through both acquisitions and investments in innovation. With the acquisition of HemCon Medical Technologies Europe Ltd. (formerly Alltracel Pharmaceuticals plc.) comes a valuable professional team which offers deep experience in the development and manufacturing of unique products and breakthrough innovations including Nanospider™ technology.

The HemCon Medical Technologies family also includes a wholly-owned subsidiary, Synpart Ltd., with manufacturing facilities in China and India. Synpart’s expertise includes the design, manufacturing and distribution of private label and branded oral care products, as well as orthopedic neoprene bandages.

**Strengthening Military Forces Through Innovation**

Just as HemCon changed the way medical professionals think of hemostatic solutions with their revolutionary HemCon Bandages—used on the battlefield since 2003 in Operation Iraqi Freedom and Operation Enduring Freedom—HemCon will once again innovate to save lives. Selected as a research and development partner by the U.S. Army, HemCon will be involved with a multi-year lyophilized human plasma project to offer much needed resuscitation fluid systems on the battlefield that will eventually translate into improved care for civilian patients on a global scale.

As the needs of the medical world grow, HemCon will advance to meet these challenges to serve the needs of military and civilian medical professionals—on the battlefield, as well as acute and home settings.

“They (HemCon Bandages) have resulted in a survival rate that’s better than anybody has ever achieved. Mortality rate has been reduced from 24% to 13%.”

-Lieutenant General Louis Lillywhite, Surgeon General, UK Military
CONTINUUM OF CARE

From innovative thinking and breakthrough technologies, advanced hemostatic products are born. HemCon dressings can be used across a wide range of applications to control bleeding, even the most severe, arterial hemorrhaging. Born on the battlefield and now serving hospitals across the world, HemCon has a spectrum of hemostatic solutions that offer a new standard of care for bleeding control and wound management.

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<td>• Acute arterial and venous bleeding wounds&lt;br&gt;• Interventional radiology&lt;br&gt;• Puncture wounds&lt;br&gt;• Open fractures&lt;br&gt;• Deep penetrating wounds&lt;br&gt;• Epistaxis&lt;br&gt;• Maxillofacial trauma&lt;br&gt;• Tactical battlefield care</td>
<td>• Sealing central lines&lt;br&gt;• Central/arterial line removal&lt;br&gt;• Sealing access port rebleeds&lt;br&gt;• Oozing suture lines</td>
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From the hospital to your first aid kit, HemCon offers KytoStat™, an over-the-counter version of their powerful prescription level hemostatic dressings.

FIRST AID

• Minor cuts and lacerations<br>• Effective for anticoagulated patient<br>• Sport’s injuries<br>• Home use<br>• Travel<br>• Wilderness medicine

Dental professionals can also benefit from the HemCon technology through a full line of oral wound care products.

PROFESSIONAL ORAL CARE

• Wound sealing following extractions<br>• Biopsies<br>• Implants<br>• Free gingival graft donor sites

Through strategic partnerships, HemCon can offer private label and branded oral care and orthopedic bandages in the retail world.

RETAIL

• Toothbrushes<br>• Dental floss<br>• Dental accessories<br>• Orthopedic neoprene bandages

Nanospider™ technology is a unique nanofiber process that offers multi-layered technology for manufacturing solutions for a wide range of medical products.

NANOSPIDER™ TECHNOLOGY

• Surgical hemostasis<br>• Chronic wound care<br>• Burn care
Used successfully in battle, the HemCon product line is continuously credited with saving lives. Through lessons learned from users on the battlefield, the HemCon product line has expanded to include a wide range of hemorrhage control dressings that now provide civilian medical professionals a set of innovative tools that help improve patient care. The entire hemostatic HemCon line provides quick-acting, natural, localized and effective control for bleeding.

**THE HEMOSTATIC HemCon Product Line**

HemCon® Bandages were originally developed for use on the battlefield to address severely bleeding injuries.

“I used the HemCon Bandage extensively in Iraq and it helped save countless lives; it was especially effective with amputations and penetrating wounds. Wounds in the emergency room are different than those on the battlefield, but the bandage functions the same way. It stops bleeding and saves lives. There are times when I would not have been able to stop the bleeding without it. This allows me to spend the vital time performing other measures to stabilize the patient.”

—Dr. Sudip Bose, Attending Emergency Physician, Advocate Christ Medical Center, IL and OIF/OEF Veteran

**HemCon products offer improved patient care and infection control. Key features include:**

- Strong hemostatic capabilities
- Antibacterial barrier against a wide range of gram positive and gram negative organisms, including antibiotic resistant *Staphylococcus aureus* (MRSA), *Enterococcus faecalis* (VRE) and *Acinetobacter baumannii*
- Reduced need for costly transfusions
- Offer critical time to administer care and control bleeding quickly
- No additional tissue damage
- Easily administered with current protocol of dressing and direct pressure
- Flexibility at the point of care
- Simple removal keeps clot intact
- Decreased clean up and biohazard exposure
- Maximized effectiveness for a limited staff to provide more effective care

*Only single strains of most species mentioned have been studied.*
HemCon offers a specific bandage that provides a non-invasive solution to help patients reach hemostasis safely and effectively following a vascular access procedure, such as a catheterization, diagnostic or interventional radiology, and electrophysiology lab procedures. The use of the HemCon Bandage is an enhancement to any hospital’s direct pressure protocol and helps control cost to improve care.

“I like to use HemCon Bandages because they are well priced and effective compared to other patches. My patients are also well satisfied. Since the bleeding is stopped faster, patients experience less down time and are able to get out of bed sooner than with other blood control products. Telling a patient he needs to remain on his back for four hours instead of six is better.”

–Dr. Ziyad Hijazi, Congenital/Structural Cardiologist, Rush University Medical Center

What is the MECHANISM OF ACTION behind the HemCon Bandage?

HemCon products are fabricated from chitosan (pronounced “ky-toe-san”), a naturally occurring, biocompatible polysaccharide. HemCon dressings work by becoming extremely adherent when in contact with blood. The adhesive-like action seals the wound and controls bleeding. Chitosan has a positive charge and it attracts red blood cells and platelets, which have a negative charge. As the red blood cells and platelets are drawn towards the bandage through this ionic interaction, a strong seal is formed at the dermal wound site. This supportive, primary seal allows the body to effectively activate its coagulation pathway, initially forming organized platelets. The platelets and red blood cells continue to be drawn towards the bandage and travel up the access tract to strengthen the initial seal.

HemCon dressings are designed to maintain this seal and serve as a frontline support structure as the platelets and red blood cells continue to aggregate until hemostasis is achieved. The dressings contain no human or bovine clotting factors and do not rely solely on the clotting cascade to stop bleeding. The strong sealing action described allows the body to naturally clot.

“Thank you so much for your product. My son was bleeding from an artery for 3 days following a complex cardiac surgery at Boston Children’s Hospital. Fortunately they were trialing your bandage here by request of one of the nurses and my son was the recipient of one of the two remaining patches. It has been 7 hours with no bleeding. I am so amazed and thankful that I had to write in with my gratitude for your commitment to saving lives.”

–Darla, Fort Lauderdale, FL
The revolutionary hemostatic technology behind HemCon Bandages also comes as an oral wound care dressing that suits extraction, oral wound and trauma care needs. These pioneering dressings offer oral surgeons, periodontists and general practitioners an innovation for extractions, soft tissue wounds, free gingival graft donor sites, and other oral surgeries. Also ideal in an emergency department to treat maxillofacial trauma, this next generation medical device is a unique oral wound dressing that can be custom cut to fit your patient’s needs. HemCon Dental Dressings seal the wound surface, while reducing pain and treatment time.

“The HemCon Dental Dressing definitely is a new generation medical device.”

– Jay P. Malmquist, DMD, PC

Battlefield Technology MEETS ORAL WOUND CARE
HemCon® Dental Dressings

HemCon Dental Dressings bring new technology into any dental practice...

- Self-adhesive
- Provides a physical barrier – seals the wound bed
- Offers pain relief
- Proven safe and effective for patients on anticoagulants
- Available in two conveniently sized dressings: 10 mm x 12 mm and 1 inch x 3 inch
“HemCon has expanded from being a provider of military hemorrhage control products to being a full medical technology company. HemCon is applying its platform chitosan technology and other advanced innovations to medical solutions. This further strengthens HemCon’s ability to develop health care breakthroughs and life-saving technologies on a global scale. I am proud of what our team has accomplished so far and, with our commitment to advanced research and development, we can ensure that our finest achievements lie in the future.”

–John W. Morgan,
CEO, HemCon Medical Technologies, Inc.

Leading through Innovation.

HemCon Medical Technologies, Inc. has built a successful product development process to match requirements with solutions. As a technological contributor to the medical device industry, HemCon products serve a unique set of needs within the medical community.

Research, product development and clinical studies are ongoing in surgical hemostasis, and dressings for wound care and burn care.

HemCon is dedicated to improving the standard of care and continuously bringing innovative products that will improve patient safety and infection control.