



Living Your Life, Without Limits.

An Innovative, Patient-Friendly NPWT System



The MicroDoc® system is an advanced single-use negative pressure wound therapy system that effectively treats diverse wound types while supporting patient quality of life through its discreet and user-friendly design.



Powered By Clinical Need

Using single-use negative pressure wound therapy (sNPWT) for closed incisions can significantly lower rates of surgical site infections while also reducing costs compared to traditional NPWT (tNPWT).

10 Billion¹

Annual cost of surgical site infections (SSIs) in the United States.

\$25k - \$90k²

Cost of surgical site infections (SSI) per infection.

0.5 - 3%³

Procedures result in surgical site infections (SSIs).

20%⁴

Of all Healthcare-Associated Infections (HAIs) are Surgical Site Infections (SSIs).

¹ Zimlichman E, *et al.*, JAMA Intern Med. 2013 Dec 9-23

² Berríos-Torres SI, *et al.*, CDC 2017 eAppendix. JAMA Surg. Published online May 3, 2017

³ Shepard J, *et al.*, JAMA Surg. 2013;148(10):907-9

⁴ Maraş G, *et al.*, Explor Res Hypothesis Med. 2023;8(4):366-371

Enhancing Patient Quality of Life

The MicroDoc's low profile sNPWT system empowers patients with the freedom to continue their daily activities while receiving effective wound care. Its compact, lightweight design and adaptable pressure settings ensure not only ease of use but also enhanced comfort.



I love the MicroDoc. The portability and adjustability is outstanding.

I utilized it on a patient and they were able to travel to Mexico and it bridged their treatments.”

Benefits of the MicroDoc NPWT System



Quiet, Discreet Operation

MicroDoc operates with a gentle hum, ensuring minimal disruption and an optimal solution during treatment.



Portable For Active Patients

Designed with mobile patients in mind, the MicroDoc is compact and lightweight, fitting easily on a belt, in a pocket, or under clothing.



Effective Wound Healing

MicroDoc enhances wound healing with adjustable pressures and advanced exudate management, promoting a moist environment ideal for treating a variety of wounds.

Healing In Your Pocket

The MicroDoc sNPWT System

Compact, portable, and designed for single use, the MicroDoc NPWT system efficiently delivers adjustable pressure settings (-50, -80, -125mmHg) with a simple button press. Engineered for a usage period of 7 days,* MicroDoc offers versatile therapy duration, accommodating both short-term and extended care needs across various care settings.



StingRay™ Suction Bell and Transparent Self-Adherent Drape

Velcro Strap

Integrated, Adaptive Dressing

MicroDoc Control Unit

Compact Device, Mighty Features

Simple, One-Button Operation

Simple one-button operation simplifies startup and easy pressure-setting adjustments, reducing the technology learning curve for healthcare professionals.

Multiple Pressure Settings

The MicroDoc's three pressure settings (-50, -80, -125mmHg) are designed to deliver negative pressures for effective healing for a range of wound types.

Robust Battery Life

The single-use disposable MicroDoc provides ample power for 7 days* of wound therapy, reducing the need for frequent replacements.

Safety-First Engineering

Built with multiple safety mechanisms including automatic shut-off post-pump life, an enclosed design preventing charging issues, visual and haptic alarms, and dressings designed for swift, efficient changes.

MicroDoc's Self-Adapting Wound Dressing

MicroDoc Smart Wound Dressings enhance healing and comfort by efficiently managing exudates and maintaining optimal moisture levels, ensuring faster healing and improved patient outcomes with intuitive change indicators.

Enhanced Healing with Advanced Materials

- + This superabsorbent-based dressing uses proprietary structural polymer matrices embedded with hydrogel and is self-regulating to the underlying tissue conditions.

Innovative Fluid Handling

- + Designed to avoid gel blocking problems and helps fluid and air communication between layers even under exudate load.

Secure Exudate Management

- + The system's hydrophilic polymers lock the exudates within the dressing, ensuring no backflow towards the wound or maceration issues.

Optimal Moisture Management

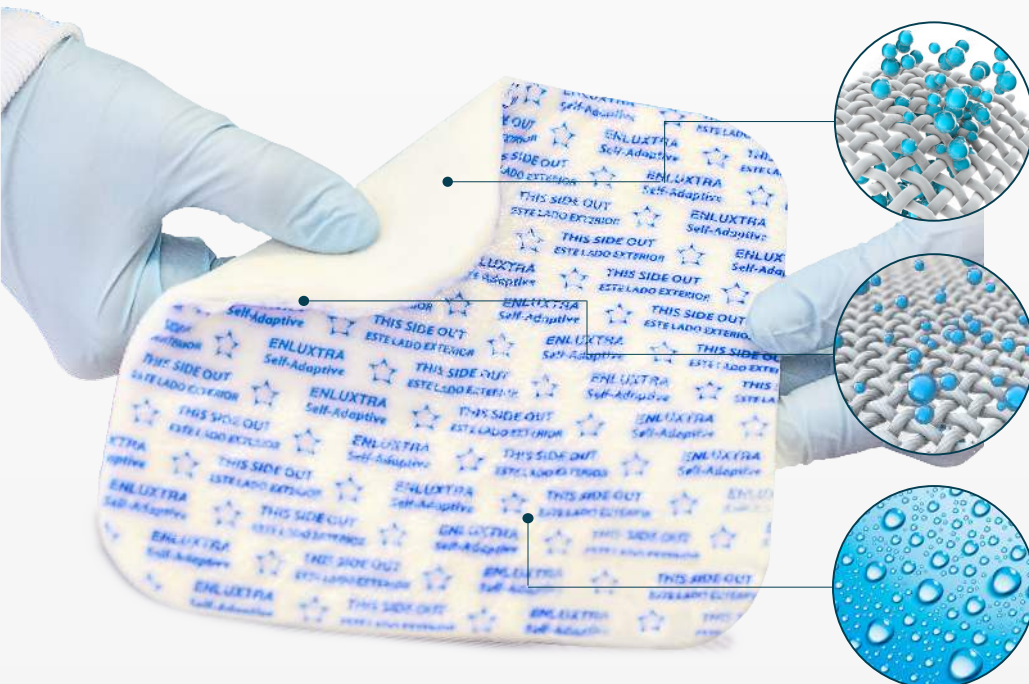
- + Localized adaptive absorbency and built-in hydration function help maintain the moist environment for optimum healing.

Responsive Absorbency for Excessive Drainage

- + Allows for linearly increasing absorptive capacity to handle excessive draining wounds.



Triple-Layer Healing System



Superabsorbent Layer

Absorbs drainage efficiently.

Moisture-Locking Layer

Channels and locks drainage, maintaining a moist environment.

Waterproof Outer Layer

Prevents leakage, ensuring protection.



Enhanced Features of MicroDoc® sNPWT Dressing System

MicroDoc® Smart Wound Dressings are equipped with powerful features for advanced wound care management, including high absorbency for a range of exudate volumes and multiple sizes for different wound types.



Highly Absorbent

+ Features exceptional absorption capabilities for efficient exudate management, enhancing patient comfort.



Exudate Management

+ Handles 100cc - 250cc of exudate, varying by size.



Intuitive Visual Cues

+ Indicators on the dressing signal when a change is needed.



Compatibility with Wound Fillers

+ Suitable for use with AMD gauze in deeper wounds.



The MicroDoc is as easy as carrying a smartphone in your pocket and compatible with our modern, active lifestyles.

This tiny, portable high-tech unit is our missing link in transitioning patients who need negative pressure therapy but have wounds that are too small for large, bulky, noisy units.”

— Plastic Surgeon



Hydrogel Integration

+ Infused within the dressing to nourish dry wound areas with moisture.



Structural Polymer Support

+ Integrated with durable polymer matrices for added strength and stability in the healing process.



Varied Sizes for Flexibility

+ Available in 4x4, 6x6, and 1.5” x 80”, these sizes accommodate different wound dimensions.

sNPWT in the Management of Abdominoplasty Dehiscence

Patient Profile

- 44-year-old female
- Comorbidity of obesity
- Engaged in tobacco use
- Patient presented with an abdominal wound dehiscence following an abdominoplasty procedure accompanied by ischemia and soft tissue necrosis (Fig. 1).



Fig. 1: Dehisced abdominal wound (Day 1)



Fig. 2: Completion of Therapy (Day 86)

Treatment

- Wound was first treated with the traditional canister-based NPWT system (tNPWT), the WoundPro™ from Pensar Medical™ for a period of 9 days).
- After this initial course of tNPWT, the patient requested to transition to a more portable NPWT system, to facilitate their return to work as well as having a pump that was more convenient for in-home use.
- The sNPWT system, from Pensar Medical, was ordered at -125mm/Hg continuous therapy. A small foam dressing was placed in the wound bed to fill the depth and ensure contact with a self-adaptive dressing. Per standard application protocol, dressing change frequency was upon strike-through reaching dressing edges.

Outcomes

- After 10 days, significant healing progress was observed, with the discontinuation of the foam packing due to the wound bed filling with granulation tissue.
- Reduction in the wound size, facilitating primary wound closure and completion of therapy at day 86 (Fig. 2).
- Patient reported increased comfort, enhanced satisfaction, and ease of use with the sNPWT device.
- Patient was able to return to work sooner than anticipated as well as maintaining their lifestyle through the simplicity, size, and portability of the sNPWT system.

Clinical Assessment of sNPWT in the Management of a Non-Healing Venous Leg Ulcer

Patient Profile

- 62-year-old male
- Multiple comorbidities
- Engaged in daily tobacco use.
- Diagnosed with Peripheral Arterial Disease (PAD), Type 1 Diabetes (using an insulin pump) and Hepatic Cirrhosis.
- Non-healing venous leg ulcer with exposed bone.
- Had a stent placement following vascular intervention and was five months post-op.



Fig. 1: Non-healing venous leg ulcer (Day 1)



Fig. 2: Improved wound healing (Day 7)



Fig. 3: Healthy granulating tissue (Day 9)

Treatment

- MicroDoc sNPWT therapy was ordered with an integrated adaptive dressing. The initial order was for a period of 7 days with a pressure setting of -50 mmHg.
- Initial dressing change frequency was upon strikethrough reaching the dressing edges, and then changed to weekly as drainage decreased.
- The aim was to visibly improve wound healing by identifying epithelialization and reducing hypergranulation with further prevention of infection and skin breakdown through the use of sNPWT system. An additional aim was to ensure patient experience and comfort was optimized during the continuum of care.

Outcomes

- On Day 7 dressing change (Fig. 3), the clinician assessed a reduction in wound depth leading to a more uniform appearance. She noted epithelialization starting to occur and migrate at the wound edges, and that the wound bed was becoming flatter aligning with the edges, indicating ongoing healing processes.
- The hypergranulated tissue also showed improvement and was resolving (Fig. 3).
- No wound odor was detected during dressing change.
- Patient stated a notable decrease in discomfort with the lower pressure setting of -50 mmHg4 as noted with the patient rating a 1 on a pain scale of (1-10).

Product	Product Code	Quantity
MicroDoc Complete System <ul style="list-style-type: none"> • MicroDoc Control Unit • StingRay™ Suction Bell • Transparent Self-Adherent Drape • 4" x 4" Enluxtra Dressing • Velcro Strap 	8465550 1001	1
MicroDoc Dressing Set, w/ 4" x 4" Enluxtra	8465550 1004	1
Enluxtra Dressing, 4" x 4"	8465550 1006	10
Enluxtra Dressing, 6" x 6"	8465550 1007	5
Enluxtra Strips ENLUXTRA-R Wound Dressing Roll for Legs, Arms, Torso and Head 1.5" x 80"	8465550 1008	1
MicroDoc Dressing Kit <ul style="list-style-type: none"> • Stingray Suction Bell • Transparent Self-Adherent Drape • Prep Pad 	8465550 2008	1

Ready to Elevate Your Healthcare Solutions with Pensar Medical?

Contact Us

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