



Prospera®

Negative Pressure Wound Therapy

# Introducing the all-new PRO-II™

*Advancing the Art and Science of NPWT*



# Prospera® PRO-II™

*Portable. Compact. Lightweight.*

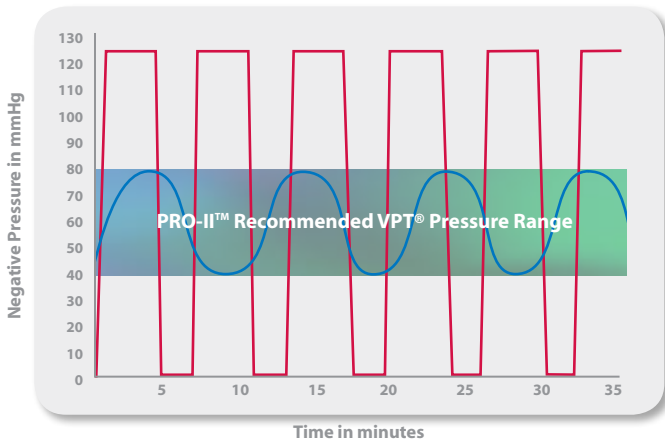


*Looking for a better NPWT option for your homecare and ambulatory patients? Take a look at the all-new PRO-II. Now you can get all the features, benefits and flexibility of the PRO-I™ and more...in a comfortable, compact package.*

***Your patients will thank you.***

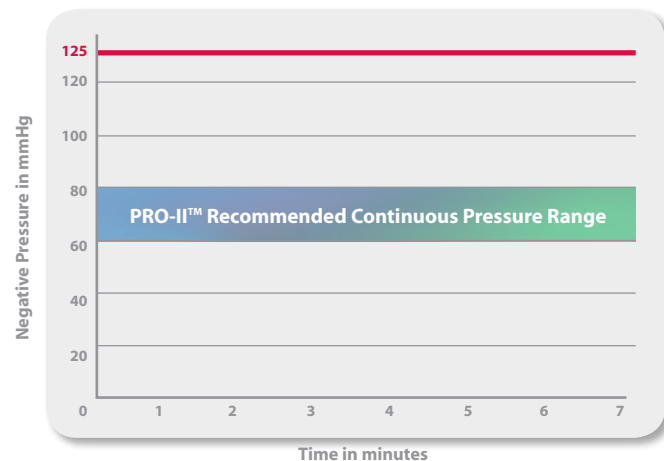
## VPT® Variable Pressure Therapy

- Intermittent pressure levels of other brands = 125–0mmHg (spike)
- Intermittent pressure ranges of PRO-II = 80–40mmHg (gradual)



## CPT Continuous Pressure Therapy

- Continuous pressure level of other brands = 125mmHg



## The Portable PRO-II™ Means Quality of Life for Your Patients

The portable PRO-II delivers all the benefits of NPWT without pain and discomfort for the patient. Lightweight and discreet, the PRO-II is portable and comfortable so your ambulatory and homecare patients can get on with their lives.

### FEATURES

- Contoured design for patient comfort
- Virtually silent operation
- Discreet, disposable canister
- Over 24-hour battery run time
- Carrying case that can be worn on the waist or over the shoulder
- Lower pressure settings enhance comfort during use
- VPT® provides intermittent pressure in the form of a gentle massage effect eliminating painful high to low spikes characteristic of traditional intermittent pressure

### BENEFITS

- Flexible, easy to use settings with CPT (Continuous) or VPT (Variable) Pressure Therapies
- Contoured design makes pump easy to wear at the waist or over the shoulder
- Reduces pain and discomfort with wear time and dressing changes
- Alleviates excruciating dressing changes because moist AMD™\* Gauze under negative pressure will not adhere to the wound or allow “in-growth” of new tissue
- Reduces the need for narcotic medication prior to dressing changes

## VPT® Variable Pressure Therapy

The literature has confirmed that intermittent negative pressure increases blood flow to the wound site more effectively than continuous negative pressure and that proliferation of new granulation tissue is significantly higher. But until now, pumps available on the market were not able to provide practical, comfortable intermittent therapy. New Prospera VPT technology is engineered to deliver comfortable, massaging intermittent pressure therapy for best results and patient comfort.

- Pressure levels and time settings for high and low pressures are completely customizable
- Recommended pressures of between -40 and -80mmHg are calibrated to increase and decrease in comfortable 5mmHg increments providing a gentle massage effect
- Discomfort and pain due to sudden high to low pressure spikes is virtually eliminated
- Negative pressure is always maintained at the wound site because pressures never drops to 0mmHg

## Dressing Protocol is Simple for You, Painless for Your Patients

AMD™ gauze dressings are proven, safe and extremely cost effective. In our judgment, antimicrobial gauze is a superior dressing for NPWT. Consider these benefits:

- Easy to apply to oddly shaped, tunneled and undermined wounds
- Can be removed from the wound in one piece decreasing the danger of the dressing fragments being left in the wound bed
- Delivers superior and proven antimicrobial protection
- Moist AMD™ gauze under NPWT will not adhere to the wound and will not allow for in-growth of granulation tissue into the dressing
- Decreases the need for narcotic pain medications during excruciating dressing changes
- Reduces nursing time required for dressing changes
- Allows clinician to “read” the wound at the wound site by assessing the present exudate, not exudate that has separated in the collection canister

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## Case Study

Wound was the result of flap surgery and graft surgery to treat cancer of the bone and skin. The wound circumvented the left forearm. Surgeon was considering amputation.

### Patient Profile

**Age/Gender:** 73 year-old female

**Co-Morbidities:** Left arm bone/skin neoplasm post surgical resection, HTN, CVA with right sided weakness, hyperlipidemia, Hx heroin use.

**Comments:** Foam NPWT initiated at acute care hospital. Admitted to LTAC and switched to Gauze NPWT. Patient noted significant decrease in pain.

### Wound Profile

**Exudate:** Moderate, fully-controlled

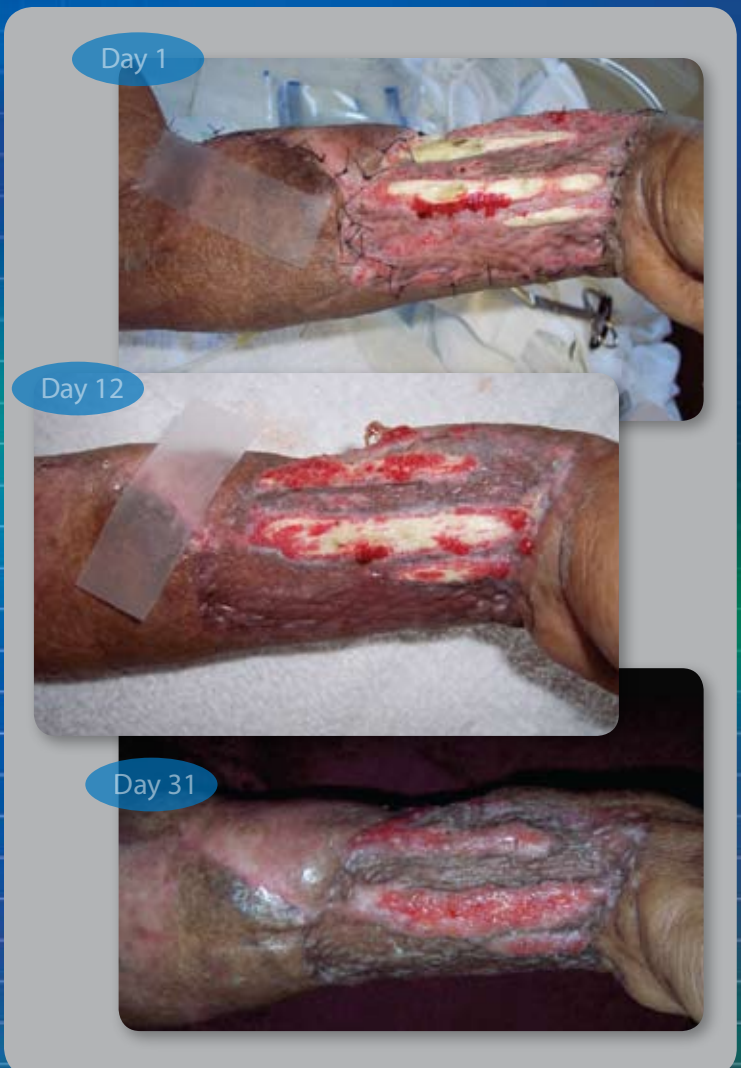
**Dressing Frequency:** 3x per week

**NPWT Setting:** Week 1: -80mmHg continuous

Day 8 – Day 31: Variable Pressure Therapy:

-80mmHg 3 min/-40mmHg 3 min

**Length of NPWT Therapy:** 31 days\*



\* Therapy was discontinued on day 31 when wound became shallow and granulation tissue covered the radial tendons. The wound was closed by secondary intention.

# The Science of Negative Pressure Wound Therapy

## Intermittent Therapy Recommended for Best Results

A strong and growing number of studies have found that intermittent negative therapy increases blood flow to the wound site more effectively than continuous negative pressure and that proliferation of new granulation tissue is significantly higher (63.4%) over continuous negative pressure. One theory regarding increased blood flow is that this may be due to the fact that during higher pressure settings there is increased perfusion of blood flow to the wound with a hypoperfused “halo” at the wound edge. As pressure levels decrease this “halo” decreases as blood flow disperses into the surrounding tissue minimizing possible ischemic effects.

## Low Levels of Continuous Pressure Recommended

Recent research indicates that lower pressure may be beneficial especially in soft tissue to minimize ischemia in the hypoperfused zone surrounding the wound edge. Research done at the Lund University Medical Center recommends levels of -80mmHg for soft tissue and slightly higher for muscle tissue.

## Basic Mechanisms of Negative Pressure Wound Therapy

The responses of wounds to NPWT are the result of controllable and equally distributed negative pressures, not from the particular dressing and drain combinations used to apply negative pressure therapy. Three leading mechanisms of action are thought to contribute to the wound healing benefits of NPWT therapy.

### ■ Vacuum Assisted Drainage

The removal of excess exudate is the first mechanism. The fluid removed contains microorganisms, debris, proteolytic enzymes, and other components which can prolong inflammation and edema, and delay healing. Removal of this exudate results in antimicrobial control and maintenance of a moist environment important for healing.

### ■ Reduction of Interstitial Fluid

Removal of interstitial fluid reduces edema, which decompresses the tissues. As a result, capillary blood flow is increased, allowing for improved perfusion, angiogenesis, and increased supplies of oxygen, nutrients and growth factors important for healing. Increased blood flow and perfusion also improves access for infection-fighting cells.

### ■ Mechanical Effects on Blood Flow, Cell Growth and Cell Proliferation

NPWT produces mechanical stress and a pressure gradient across tissue that results in surges of blood flow to the wound area. In addition, NPWT places physical strain on cells, stimulating them to interact with soluble growth factors in the extracellular matrix. This effect is often referred to as cell stretch. The stretched cells begin proliferating, dividing, and maturing, leading to the growth of new vessels, collagen deposition, and granulation tissue formation.

*Prospera® offers a complete line of pumps, disposable wound dressing kits, collection canisters, and an assortment of silicone drains.*



### Indications for Use

The PRO-II™ Negative Pressure Wound Therapy System is indicated for patients who would benefit from a suction device, particularly as the device may promote wound healing.

### Contraindications

When used for wound healing, the PRO-II is contraindicated in the presence of:

- Necrotic tissue.
- Unexplored or non-enteric fistulas.
- Untreated osteomyelitis.
- Wounds containing malignant tissue.
- Exposed arteries, veins, or organs.

### Precautions

Precautions should be taken in the presence of:

- Anticoagulation or active bleeding.
- Difficult wound hemostasis.
- Close proximity of blood vessels, organs, muscle, and fascia requiring adequate protection.
- Irradiated vessels and tissue.
- Bony fragments.
- Untreated malnutrition.
- Non-compliance.

### Technical Data

Air-flow rate of pump .....	8 liters/min
Negative pressure .....	Max. -200mmHg (Conversion factor: 1kPa ~ 7.5mmHg)
Nominal voltage of power supply adapter .....	100-240V primary, 12VDC secondary
Power requirements .....	100-240V, 50/60Hz, 45W
Maximum load current .....	1.25 A
Mains frequency of power supply adapter .....	50/60Hz
Nominal voltage of electronic circuit board .....	12V
Power consumption .....	15W (charging operation)/10W (charging only)
Current consumption .....	1.25A
Rechargeable battery .....	7.4V, 4.4Ah – lithium-ion battery
Charging time of empty battery .....	6 – 7 hours
half empty battery .....	3 – 3.5 hours
Dimensions (W x H x D) .....	8.4" x 6.5" x 3.5"
Weight (basic unit) .....	1.3kg (2.65 lbs.), with canister
Operating time	AC operation: continuous operation DC operation: approx. 24 – 48 hours, depending on use
Degree of protection according to IEC 601-1 .....	Type BF
Risk class according to 93/42/EEC, IX .....	Ila
Sound emission .....	35dB (A)
Protection class according to IEC 601-1 .....	II

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