

# Advanced Therapy Algorithm

## Mechanisms of action:

Negative Pressure Wound Therapy (**NPWT**) – NPWT removes interstitial fluids allowing improved circulation and better oxygen delivery to the healing tissue. Additionally, NPWT mechanically deforms tissue which stimulates cell growth.

SofPulse® targeted Pulsed Electromagnetic Field Therapy (**tPEMF**) creates a micro current that accelerates the local anti-inflammatory response decreasing pain and edema.

tPEMF is CMS approved for treatment of all chronic wounds

## Prophylactic tPEMF Therapy:

- Suspected Deep Tissue Injury
- Intact surgical incisions with a high risk for dehiscence: i.e. Bariatric surgery, amputation
- Stalled wound healing

## Combination NPWT/tPEMF therapy:

- Chronic/Acute wounds
- Traumatic wounds
- Full thickness burns
- Dehisced wounds
- Diabetic ulcers
- Pressure Ulcers
- Flaps
- Grafts
- Surgical wounds
- Explored fistulae
- Vascular wounds

## tPEMF Therapy:

- Deep Tissue Injury
- Burns (any degree)
- Traumatic wounds
- Diabetic ulcers
- Pressure Ulcers
- Painful dressing change
- Desiccated wounds
- Wounded patients with bleeding disorders
- Treated Osteomyelitis
- Wounds not easily treated with NPWT: i.e. allergy to tape or adhesive, unable to achieve a reliable seal, combative patient
- Use when NPWT is contraindicated

## Circulatory:

- Wounds with inadequate circulation
- Vascular wounds (arterial and venous)
- Devitalized wounds with eschar

## Surgery:

- Dehisced wounds
- Flaps (prior to surgery to prepare site, post surgical to strengthen and heal)
- Grafts (prior to surgery to prepare site, post surgical to strengthen and heal)
- All Surgical wounds

**Combination NPWT/tPEMF therapy:** Best used on wounds with a large tissue void and/or large amount of exudate. **NPWT** can be discontinued when the exudate can be managed with an absorptive dressing or the depth reaches <2cm. **tPEMF** therapy can be continued until closure.

**tPEMF Warnings:** Electronic pacemaker, internal defibrillator. **Precautions:** pregnant women, children with non-mature growth plates.

*There are no pertinent contraindications for tPEMF use.  
It may be used with other treatment modalities.*

**NPWT Contraindications include but are not limited to:** Malignancies, untreated osteomyelitis, exposed organs, exposed blood vessels, unexplored fistulas and necrotic tissue > 25% of wound tissue content.

**Standard of Care** should include but not be limited to: nutritional support, control systemic infections, manage underlying comorbidities that may affect wound healing, relieve pressure, reduce shearing and friction, and control moisture