

# Choosing a RENASYS NPWT Dressing Kit



Smith & Nephew offers the clinician flexibility in the choice of dressing kit for use with NPWT.

The following options are available: foam with Soft Port, gauze with Soft Port or a selection of drain with gauze options.

The factors to consider when choosing a kit are based on the patient, the wound characteristics and clinical judgment of the Healthcare Professional.

Clinical studies have demonstrated that the overall healing rates, defined as percent reduction in wound volume/surface area per week, are similar with both gauze and foam<sup>1,2</sup>. This validates that the HCP can expect similar efficacy from either type of filler.

The following guidelines have been developed based on feedback and insights from HCPs who have used all dressing kit options.

**Factors to consider include:**

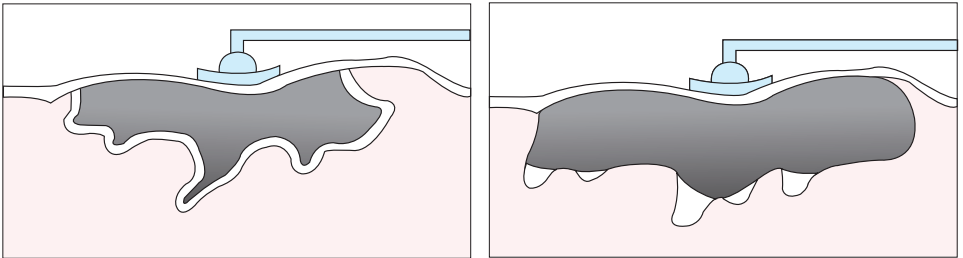
- Wound size and volume
- Contour of wound bed
- Amount and type of exudate
- Location of wound e.g. weight bearing area
- Patient comfort and preference
- Characteristics of granulation tissue
- Caregiver skills

Note: It is important that a holistic assessment is made of the patient and wound characteristics and that a decision is not just made on only one factor alone. The above list is not exhaustive and local clinical judgement must always be used.

## Wound size

- Small to moderate size wounds with shallow to deep depth: both foam and gauze may be used with similar ease of application.
- Moderate to large surface area wounds with shallow depth: gauze is generally considered easier to apply.
- Moderate to large surface area wounds with deep depth: foam may be considered easier to use.

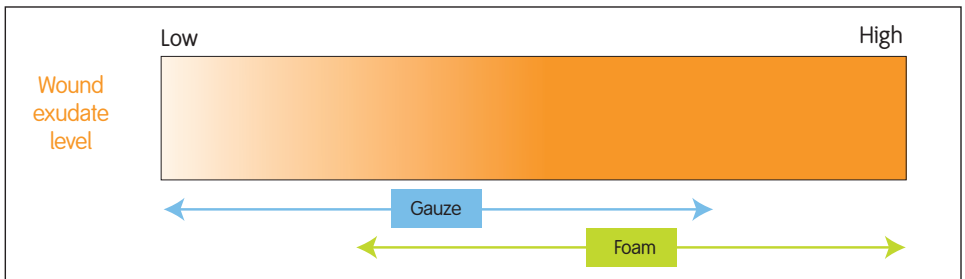
## Wound bed contour<sup>3</sup>



Gauze wound filler easily maintains contact with an irregular surface.

Foam wound filler may not intimately contact irregular shape spaces in wound bed.

## The choice of wound filler will be influenced by the amount and consistency of wound exudate

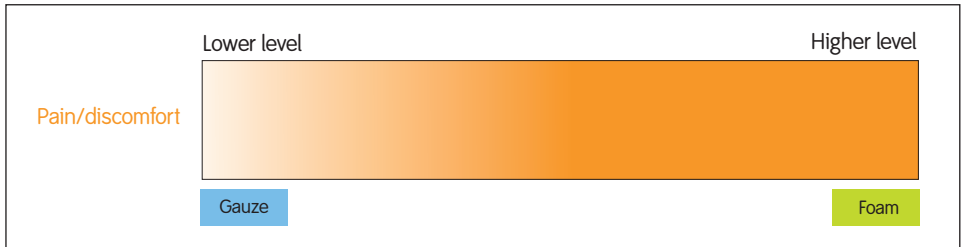


Note:

- In wounds with large amounts of exudate a wound interface (non-adherent layer) is generally not recommended.
- If using gauze with larger amounts of exudate, select a flat drain kit. Ensure the drain is placed close to the wound bed over a single layer of gauze.
- Ensure gauze is placed into the contours of the wound rather than tightly packed in to aid fluid transference.

## Patient comfort<sup>2</sup>

- The RENASYS<sup>®</sup>-G Dressing Kit should be changed 48 hours after initiating therapy to assess the patient's response to the therapy. If the patient is comfortable and the wound is responding positively to the therapy, the subsequent dressing change frequency is 2-3 times per week.
- Pain is a very subjective experience and will vary with each patient. Research has validated that patients report less pain with gauze.<sup>2</sup>



## Granulation tissue

Rate of healing with either filler the same however character of granulation tissue can differ.

Foam - thick granulation tissue. Use where scarring does not pose a problem eg. Sternotomy wounds.<sup>4</sup>

Gauze - Less thick but dense granulation tissue. Use where cosmetic result is greater importance or where scar tissue may restrict movement.<sup>4</sup>

## Skin grafts






NPWT with foam wound filler has historically been used to prepare wounds for grafting. More recently gauze has been used by plastic surgeons and feedback suggests that it creates an excellent wound bed for receiving a STSG.<sup>4</sup>

NPWT with gauze has been found to give excellent results on irregular and mobile surfaces<sup>5</sup>.

## Chronic wounds

Foam may be expected to benefit a chronic wound which requires a 'kick start' in healing.

# Guide to supporting the most appropriate dressing kit choice

<p><b>Foam with Soft Port</b></p> 	<ul style="list-style-type: none"> <li>• For wounds which require fast granulation</li> <li>• Where exudate is heavy and viscous</li> <li>• Most suitable for wounds where the edges are uniform and there is no undermining</li> <li>• Works equally well on large and small wounds</li> <li>• Ideal for promoting healing in static chronic wounds</li> <li>• For wounds in load-bearing areas</li> <li>• Use a non-adherent contact layer to prevent adherence</li> </ul>
<p><b>Gauze with Soft Port</b></p> 	<ul style="list-style-type: none"> <li>• For wounds which have low-moderate exudate levels</li> <li>• Better at handling serous exudate than more viscous or fatty exudate</li> <li>• Ideal for shallow wounds</li> <li>• Ideal for patients who are experiencing pain at dressing change</li> <li>• Suitable for wounds which have areas of undermining or are an irregular shape</li> <li>• Not suitable for load bearing areas where the gauze may become compressed</li> </ul>
<p><b>Gauze with flat drain</b></p> 	<ul style="list-style-type: none"> <li>• Ensures negative pressure is targeted at the wound bed, flat drain will also facilitate optimal fluid removal</li> <li>• Can be used on heavily exuding wounds which have more viscous exudate</li> <li>• May be used on weight bearing areas</li> <li>• Can be used on wounds which have undermining present</li> <li>• May be used on larger deeper wounds</li> <li>• Suitable for large circumferential wounds with high levels of exudate but application of foam may be difficult</li> </ul>
<p><b>Gauze with channel drain</b></p> 	<ul style="list-style-type: none"> <li>• A unique drain which will not collapse so remains patent at all times</li> <li>• Ideal for use in sinus tracts, wounds with tunneling and/or undermining</li> <li>• This drain allows fluid to pass through the channels of the drain into the canister</li> <li>• The channel drain will not adhere to the tissue lining the tract – does not need to be wrapped in gauze</li> </ul>
<p><b>Gauze with round drain</b></p> 	<ul style="list-style-type: none"> <li>• For wounds or sinus tracts which have narrower openings which require more targeted negative pressure</li> <li>• The 10f drain is able to handle low- moderate levels of less viscous exudate due to hole sizes and is ideal for shallow wounds.</li> <li>• The 19fr drain has larger hole sizes and can deal with moderate to heavy levels of exudate</li> <li>• Drains should be wrapped in gauze to avoid adherence of tissue to drain holes</li> </ul>

## Dressing Kit Options Summary

Wound characteristics	Foam with Soft Port	Gauze with Soft Port	Gauze with flat drain	Gauze with channel drain	Gauze with round drain
Large wound with regular contours	✓		✓		
Presence of undermining	✓	✓	✓		
Patient has pain on dressing removal		✓	✓		
Weight bearing area	✓		✓		
Heavy exudate levels	✓		✓		
Moderate exudate levels	✓	✓	✓		
Viscous exudate	✓		✓		
Serous exudate	✓	✓	✓		
Static chronic wound	✓				
Skin grafts	✓	✓	✓		
Sinus wound or wound with narrow opening				✓	✓
Combination wounds cavity plus sinus	✓		✓	✓	✓

## References

1. Campbell PE, Smith GS, Smith JM. Retrospective clinical evaluation of gauze-based Negative Pressure Wound Therapy. *Int. Wound J.* 2008 Jun;5(2):280-6.
2. Dorafshar AH, Franczyk M, Lohman R, Gottlieb LJ. 2009. Prospective Randomized Study Comparing Gauze Suction Negative Pressure Wound Therapy with Standard Vacuum Assisted Closure Device. *Annals of plastic surgery* 2011.
3. Jeffery LC. Advanced wound therapies in the management of severe military lower limb trauma: a new perspective. *Eplasty.* 2009 Jul 21;9e28.
4. Malmjö M, Borgquist O. NPWT Settings and Dressing Choices Made Easy. *Wounds International* 2010; 1(3).
5. Negative Pressure Wound Therapy as a Dressing for Split-Thickness Skin Grafts: Our Experience. O'Brien, *et al*, Presented at CSAWC San Antonio Oct 2009.

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