

# Cutimed<sup>®</sup> Siltec foam and Cutimed<sup>®</sup> Sorbact<sup>®</sup> gel dressings: a clinical audit

A foam dressing with a silicone layer and super absorbers and an antimicrobial dressing for dry wounds were evaluated over six months in NHS Grampian, Aberdeen; Doncaster and Bassetlaw Hospitals NHS Trust and Worcestershire Primary Care Trust. A supplement and product focus detailing the case reports have previously been published (Pirie et al, 2009; Stephen Haynes and Timmons, 2009; Wounds UK, 2009). This paper features additional cases and the outcome of the consensus meeting which was the culmination of this work by leading clinicians from across the UK.

Jackie Stephen-Haynes, Kathleen Leak, John Timmons, David Gray, Fiona Russell

## KEY WORDS

Wound care  
Cutimed<sup>®</sup> Siltec foam  
Cutimed<sup>®</sup> Sorbact<sup>®</sup> gel  
Product evaluations  
Consensus group

The products evaluated in this review were Cutimed<sup>®</sup> Siltec foam and Cutimed<sup>®</sup> Sorbact<sup>®</sup> gel dressings (BSN medical). The former was assessed for its atraumatic properties and absorbency, and the latter for its performance with critically colonised wounds and its debridement ability. The dressings were used on a total of 32 patients with wounds, including pressure ulcers, leg ulcers, surgical wounds, abdominal wounds and sacral pressure ulcers.

Jackie Stephen-Haynes is a Consultant Nurse and Senior Lecturer in Tissue Viability for Worcestershire Primary Care Trusts and the University of Worcester; Kathleen Leak is a Sister, Wound Care Service, Doncaster and Bassetlaw Hospitals NHS Foundation Trust, Doncaster; John Timmons, David Gray and Fiona Russell are Clinical Nurse Specialists, NHS Grampian, Aberdeen

Carrying out meaningful clinical evaluations can be difficult and often time-consuming. In some cases it can take six months or more to recruit sufficient patient numbers. To reduce the time taken and also to involve multiple clinical sites, a new type of online evaluation system developed by Wounds UK was used.

The system, designed by a clinical software expert, comprises a web-based data collection form which can be securely accessed by clinicians. The form is easy to follow with data entered using tick boxes and drop-down lists. Space is also available for clinicians' comments.

## Method

Evaluations of Cutimed Siltec foam and Cutimed Sorbact gel dressings were undertaken by four TVNs. Patients were recruited from three sites across the UK — NHS Grampian, Aberdeen; Doncaster and Bassetlaw Hospitals NHS Trust and Worcestershire Primary Care Trust — with the TVNs from each centre leading each arm of the project. Data was collected by each group over a period of six months. Some of this work has already been published (Pirie et al, 2009; Stephen Haynes and Timmons, 2009). All data was analysed electronically and a consensus meeting was subsequently held to discuss the results and reach decisions regarding the efficacy of both dressings.

## Cutimed Siltec foam dressings

Cutimed Siltec foam dressings are constructed of a silicone wound contact layer which gently adheres to the wound, minimising pain and trauma at dressing change. Above the polyurethane foam core there is a layer of super absorbers which lock exudate into the dressing, preventing the wound bed drying out and the surrounding skin from becoming macerated. The breathable top film also allows moisture levels to be managed and acts as a bacterial barrier. The dressings are available in non-bordered versions (Cutimed Siltec), with standard or thinner varieties depending upon the levels of exudate. They are also available in a bordered version (Cutimed Siltec B).

Data on Cutimed Siltec dressings was collected on 18 patients, five from Worcester; five from Bassetlaw Hospital and eight from Aberdeen (Table 1).

The four TVNs involved in recruiting the patients and following them up over a six-month period attended the consensus meeting to discuss the results of the evaluation (Box 1).

## Consensus

The overwhelming response from all of the TVNs involved in the evaluation was positive, as they found the product excellent at absorbing and managing exudate. The exudate was retained within the dressing and there were no episodes of maceration.

Table 1

Cutimed Siltec foam dressings evaluation table

Sex	Age	Wound type	Exudate level	Wound size at start of treatment	Improvement with Cutimed Siltec
Female, case 1	88	Outer leg wound	Heavy	1.5x3cm	Wound reduced in size, exudate reducing in volume
Female, case 2	89	Leg wound/calf	Low	1.5x1.5cm	Wound debrided and decreased in size
Female, case 3	85	Knee wound/trauma	Moderate	3x2cm	Wound improved, decreased in size, atraumatic removal
Male, case 5	78	Sacral pressure ulcer	Low/moderate	5x4cm	Excellent exudate management, wound debrided and granulating, surrounding skin in good condition
Female	96	Pressure ulcer	Moderate	14x7x4cm	Debrided, surrounding skin intact, good absorbency, re-epithelialisation
Male	57	Pressure ulcer	Heavy	4x5x2cm	Wound debrided. Surrounding skin in good condition. Granulation tissue in wound bed
Male	70	Pressure ulcer	Moderate	3x3cm	Debridement, surrounding skin condition improved, granulation tissue noted
Male	62	Leg ulcer	Moderate	2x1cm	Skin condition excellent, no adherence
Female	65	Surgical wound	Light	10x2cm	Skin condition excellent, wound healed
Male	81	Leg ulcer	Light	None given	Easy to apply and remove the dressing
Female	78	Abdominal wound	Heavy	14x15cm	Surrounding skin was protected from exudate, excellent dressing retention
Male	57	Cannulation wounds	Moderate	2.5x1.3cm;1.5x1.1cm	Wounds healing, exudate managed well, surrounding skin in condition good
Male	75	Heel ulcer	Low	1x1cm	Removal of maceration from peri-wound area
Female	76	Leg ulcer	Moderate	3.3cm	Wound improved, decreased in size, atraumatic removal
Female	68	Leg wound	Low	1.5x1.5cm	Wound debrided and decreased in size
Female	59	Abdominal wound	Heavy	14x15cm	Surrounding skin was protected from exudate, excellent dressing retention
Female	78	Leg ulcer	Moderate	6x5cm	Wound decreased in size and debridement noted, good moisture control
Female	87	Sacral pressure ulcer	Moderate	8x5cm	Excellent exudate management, wound debrided and granulating, surrounding skin in good condition

Any lateral spread of exudate was also minimal and was absorbed directly into the dressing at the point of contact — a property that is again

helpful in preventing skin damage due to maceration. The product was also assessed as being effective under compression.

Each clinician involved in the evaluations was impressed by the gentle adherence afforded by the dressing. There were no episodes

## BOX 1

## Results of the Cutimed Siltec foam dressing evaluation

- ▶▶ There were 18 patients involved, most of whom had chronic wounds: six patients with pressure ulcers, four with leg ulcers, and three with surgical wounds, one with cannulation wounds, four with traumatic leg wounds.
- ▶▶ In seven of the wounds that had sloughy tissue present, Cutimed Siltec was used as a primary dressing which assisted in autolytic debridement. The consensus group agreed the dressing appeared to provide an optimally moist environment for wound healing.
- ▶▶ No patients developed signs of wound infection while the dressing was being used.
- ▶▶ 12 of the wounds were classified as having either moderate or heavy levels of exudate, and in all cases, there were no episodes of maceration or skin damage as a result of exudate on the skin.
- ▶▶ In eight patients, the clinicians reported Cutimed Siltec supported and protected granulation tissue formation and re-epithelialisation. There were also no episodes of new tissue growth being damaged by dressing removal.
- ▶▶ During this evaluation there were no episodes of patient allergy to the product.

## BOX 2

## Results of the Cutimed Sorbact gel dressing evaluation

- ▶▶ A total of 14 patients were evaluated using Cutimed Sorbact gel as the primary dressing. There were eight patients with leg ulceration, two with pressure ulcers and four with other wound types.
- ▶▶ The majority of the wounds had been present for longer than three months.
- ▶▶ In five of the cases, the dressing assisted in autolytic debridement of the wound, and in three cases there was no reported change in the wound status.
- ▶▶ In three cases the wounds were described as deteriorating, however in one of these cases the patient was non-concordant and continually removed the dressing.
- ▶▶ In two of these cases the dressing was applied to wounds which had heavy levels of exudate. This is not recommended practice, as the hydrogel in the product is more appropriate for wounds which require hydration.
- ▶▶ In four cases, the dressing was viewed as supporting granulation tissue and re-epithelialisation.

of skin stripping, pain on removal or movement/slippage/leakage under compression garments during the evaluation.

Another benefit that was highlighted by the TVNs was the ability of the dressing to stay in place — there were

no reported episodes of the dressing falling off or rolling up/rucking. The dressing was used both as a primary and secondary dressing and performed well in both roles. It was also used on a variety of wound types including pressure and leg ulcers with positive comments from all patients. In addition,

it was found to provide a moist warm environment which supported autolytic debridement of sloughy tissue.

With the move towards pain-free dressing changes, Cutimed Siltec foam dressings not only offer atraumatic wound management, but combine this with good absorbency.

The key attributes of the dressing, unanimously agreed by the panel are:

- ▶▶ Atraumatic removal
- ▶▶ Prevention and management of skin maceration
- ▶▶ Excellent absorbency
- ▶▶ Minimal lateral wicking of exudate
- ▶▶ Healing achieved under compression
- ▶▶ Good retention as both primary and secondary dressing
- ▶▶ No rucking.

## Cutimed Sorbact gel

The second product evaluated by the consensus group was Cutimed Sorbact gel. This dressing consists of a Cutimed Sorbact wound contact layer coated with an amorphous hydrogel. Cutimed Sorbact dressings are coated with dialkylcarbomoylchloride (DACC), which gives the dressing's hydrophobic properties. The gel formulation of this dressing is ideal for providing moisture to dry wounds, which is needed to assist with debridement.

The moist environment also facilitates the irreversible binding of bacteria to the dressing (Pirie et al, 2009). This is crucial as many bacteria and fungi have what is known as cell surface hydrophobicity, which in moist wound environments causes the microbes to congregate or cluster together and colonise the wound.

## Consensus

Data was collected on 14 patients (Box 2). Good results were seen using the product as a debridement agent as it had the ability to autolytically debride sloughy tissue. In addition, the group felt that the presentation of the dressing allowed for ease of application and removal.

Some success was noted on



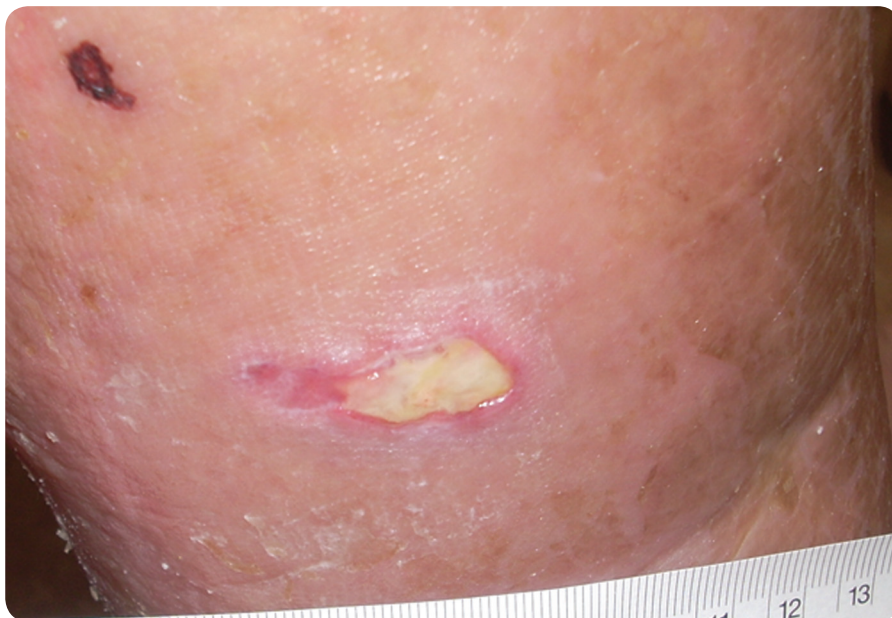


Figure 1. Sloughy lesion on outer leg.

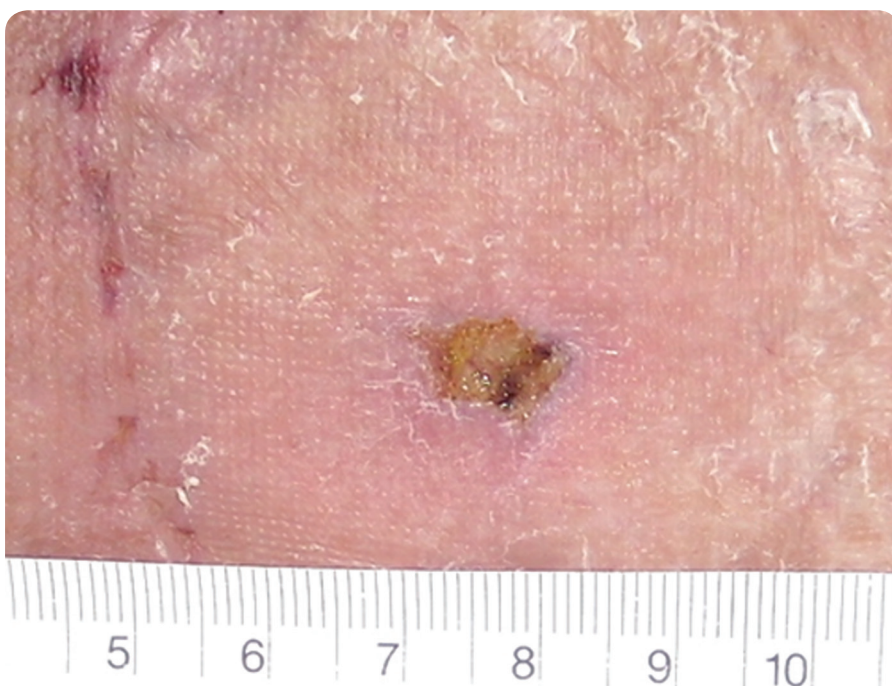


Figure 2. After seven days' treatment with Cutimed Siltec foam dressing.



Figure 3. Sloughy and granulating lesion on calf area.

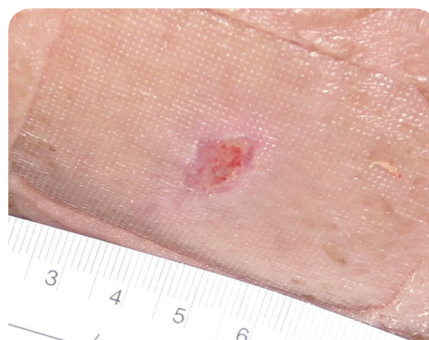


Figure 4. Evidence of contraction and healing after seven days' treatment with Cutimed Siltec foam dressing.

wounds that appeared to be critically colonised/static. While the TVNs involved in the evaluations have successfully used other products in the Cutimed Sorbact range, and would recommend these products for use in wounds that are critically colonised, the main benefit of the Cutimed Sorbact gel dressing was seen as its ability to effectively debride sloughy wounds.

Key messages from the Cutimed Sorbact gel evaluations included:

- ▶▶ Good debridement agent
- ▶▶ Works well on necrotic and sloughy wounds
- ▶▶ Ease of application and removal
- ▶▶ May have a role on critically colonised wounds.

### Case reports

#### Case report one

In this case an 88-year-old female patient presented with a non-infected wound to her outer leg measuring 1.5x3cm. The wound bed was 100% sloughy and produced a large amount of fluid — this was probably related to the underlying oedema in the limb (Figure 1). The wound was treated using Cutimed Siltec foam dressing, secured with a layer of Soffban® (BSN medical) sandwiched between two layers of toe-to-toe blue line Tubifast® (Mölnlycke). The dressing was changed every 2–3 days as required.

#### Review

After seven days the wound had reduced in size to 1.5x1cm and the

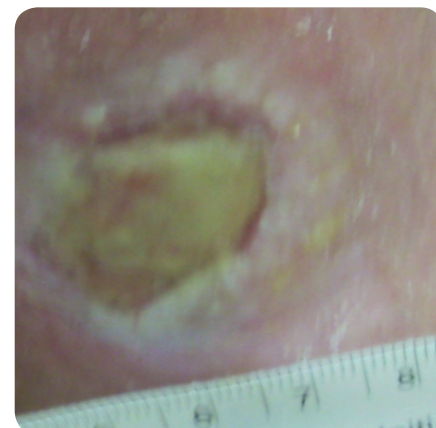


Figure 5. Sloughy pre-tibial wound with macerated wound margins.





**Figure 6.** After seven days the maceration has resolved and healing is ongoing.



**Figure 7.** Pre-tibial wound with history of infection.



**Figure 8.** Pre-tibial wound after seven days' treatment with Cutimed Sorbact Gel.

amount of exudate produced had reduced (*Figure 2*). The peri-wound area was undamaged and the overall size of the limb had reduced as a result of the light compression used.

#### Summary

In this case the wound began to heal and the patient's limb reduced in size as a result of the combination of appropriate compression and an absorbent foam dressing. The use of Cutimed Siltec foam dressings ensured the exudate was removed from the wound bed and did not result in trauma to the peri-wound area.

#### Case report two

This case featured an 89-year-old female patient who presented with a trauma wound to her calf area, which had been healing slowly in previous weeks. The wound measured 1.5x1.5cm and the wound bed was sloughy (*Figure 3*).

The wound was treated using Cutimed Siltec foam dressings, secured with a layer of Soffban sandwiched between two layers of toe-to-toe blue line Tubifast. The dressing was changed every 2–3 days as required.

#### Review

After seven days of treatment the wound measured 3x4mm surrounded with new epithelium and a healthy peri-wound area (*Figure 4*).

#### Summary

In this case the wound was managed with Cutimed Siltec foam dressings and light compression. This helped the wound to heal in a short time with a healthy peri-wound area.

#### Case report three

In this case the patient was an 85-year-old female who presented with a four-week old trauma wound in the pre-tibial area that measured 3x2cm. The peri-wound area was significantly macerated and the wound bed was covered with wet slough (*Figure 5*).

The wound was dressed using Cutimed Siltec B foam dressings and



**Figure 9.** Sacral ulcer with shallow cavity and vulnerable peri-wound area.

secured with Soffban and toe-to-toe blue line Tubifast. The dressing was changed every 2–3 days as required.

#### Review

After seven days of treatment the wound was reviewed and found to measure 1.5x1.5cm with no maceration present. The wound bed had developed new granulation tissue with only a thin covering of slough.

#### Summary

In this case the wound presented with a significant ring of maceration around the full wound margin. After seven days of treatment with Cutimed Siltec B foam dressings the wound had returned to a healthy and healing state with no maceration or peri-wound trauma (*Figure 6*).

#### Case report four

This 82-year-old woman presented with a wound to her upper tibial/knee area, which had occurred secondary to trauma and formed a haematoma. The wound measured 6x6cm and had previously been infected. Although the infection had resolved, the exudate levels in the wound were increasing with malodour present (*Figure 7*). Based on this, a decision was taken to treat the patient with Cutimed Sorbact gel, with the aim of reducing the bacterial load while also desloughing the wound. Cutimed Sorbact gel was applied every second day and covered with an absorbent pad and secured using yellow-line Tubifast.

#### Review

After seven days of treatment the wound measured 3x5cm (*Figure 8*). The slough had been removed, there was no infection and the wound showed signs of healing.



**Figure 10.** After seven days' treatment using Cutimed Siltec B foam contraction and healthy peri-wound skin are seen.

*Summary*

In this case the patient presented with a recent history of wound infection with a perceived risk of re-infection, based upon the slough and malodour present. Following treatment the risk of re-infection had lessened and the wound had moved towards healing.

**Case report five**

A 78-year-old man presented with a healing, shallow, cavity pressure ulcer to his sacrum. The peri-wound area consisted of fragile skin with patches of newly-formed epithelium, which were vulnerable to skin stripping. The wound measured 5x4cm with a granulating, non-infected wound bed, but producing medium volumes of low viscosity exudate (Figure 9).

The wound was dressed with a Cutimed Siltec B foam dressing. This was partly used because the patient had found previous adhesive dressings difficult to keep in place for sufficient periods of time.

*Review*

After two weeks of treatment, with

the dressing being changed every 2–3 days the wound measured 2x2.5cm with a granulating wound bed, a small amount of slough and no infection. The vulnerable peri-wound area had been maintained in a healthy state (Figure 10).

*Summary*

In this case wound healing was facilitated and the vulnerable peri-wound area was protected by the use of Cutimed Siltec B foam dressings. There was no evidence of skin stripping due to the dressing's gentle silicone adhesive.

**Conclusion**

Both the dressings examined by the group were well received by the clinicians involved. The atraumatic removal of Cutimed Siltec was a major positive feature noted by the TVNs, as was the dressing's excellent absorbency, minimal lateral spread of exudate and good dressing retention.

The Cutimed Sorbact gel dressing was viewed positively as a debridement

**Key points**

- ▶▶ Clinical evaluations are a useful method of examining dressing performance in small patient groups.
- ▶▶ Using centres of excellence across the UK to evaluate products can help to view the dressings in a variety of clinical settings.
- ▶▶ Online recording of wound status can assist in collecting patient information and collating data.
- ▶▶ Consensus opinion on products is a way to help reduce bias in conclusions.

agent, although the group were less clear about the role of this product as an antimicrobial dressing. However, data gathered as part of this audit and previously published supported the use of Cutimed Sorbact gel in the management of critically colonised wounds (Pirie et al, 2009).

This method of clinical evaluation has proven useful in reducing the time spent recruiting patients for larger trials and also in giving a broader range of opinion on the benefits and drawbacks of clinical products. **WUK**

**References**

Pirie G, Duguid K and Timmons JP (2009) Cutimed® Sorbact® gel: a new infection management dressing. *Wounds UK* 5(2): 74–8

Stephen Haynes J, Timmons J (2009) Cutimed Siltec: a foam dressing range with super absorbers and a silicone wound contact layer. *Wounds UK* 5(2): 69–72

Wounds UK (2000) *Wound Management Solutions for Everyday Practice: Advanced wound care products from BSN medical*. Wounds UK, Aberdeen