

# A randomised controlled study to evaluate the use of silicone dressings for the treatment of skin tears

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## Why?

### Objectives

1. To undertake the first randomised controlled trial to evaluate the use of soft silicone dressings to promote healing of skin tears
2. To compare the effectiveness of soft silicone dressings for the healing of skin tears with local best practices that do not include soft silicone dressings

### Research questions

1. Is there a difference in the proportion of complete healing between soft silicone dressings and non-soft silicone dressings for treatment of skin tears?
2. Is there a difference in healing rates between soft silicone dressings and non-soft silicone dressings for treatment of skin tears?

## How?

### Study design:

Randomised controlled prospective pragmatic clinical study

- Adults  $\geq 18$  years (n=126)
- Male 44.4%, female 55.6%, mean age 82.9 (+/- 8 years; 45-102 y.o.)
- Long-term care facility and complex continuing care hospital in Ottawa and Toronto, Canada

### Products:

#### Treatment group (65 individuals)

Mepilex<sup>®</sup> Border Flex (soft silicone all-in-one foam dressing) for exudative Type 2 and Type 3 skin tears

Mepitel<sup>®</sup> One (soft silicone wound contact layer) for Type 1 and Type 2 skin tears with minimal exudate

#### Control group (61 individuals)

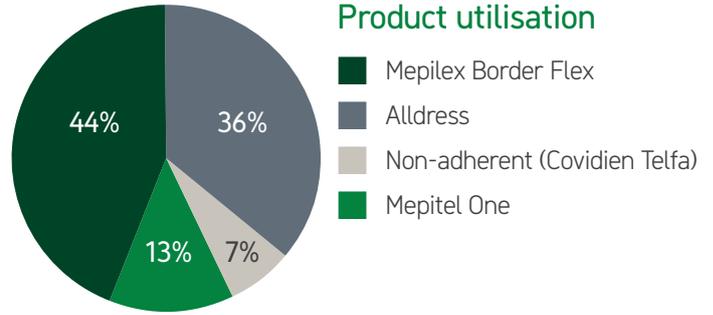
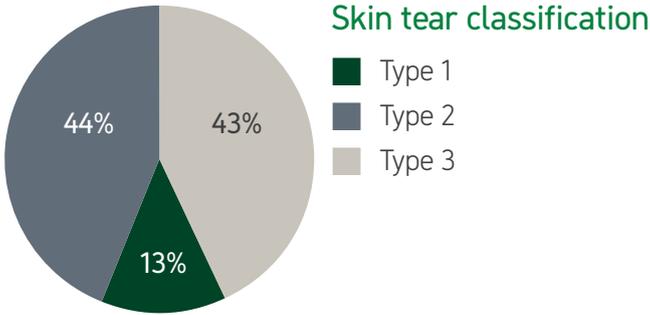
Alldress<sup>®</sup> (non-silicone foam dressing) for exudative Type 2 and Type 3 skin tears

Telfa<sup>®</sup> (non-adherent non-silicone dressing) for Type 1 and Type 2 skin tears with minimal exudate

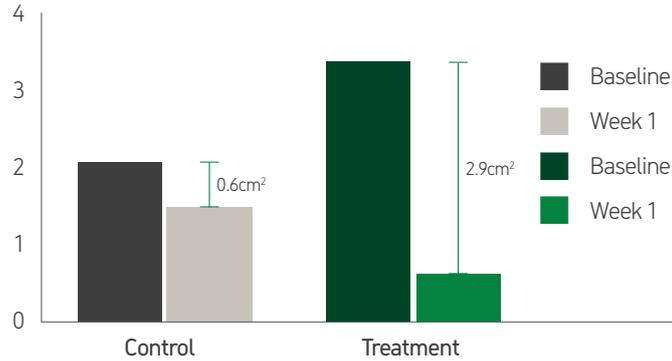
### Key measures:

- All subjects were evaluated at week 0, week 1 and week 3 (i.e. at the end of the study)
- Weekly measurement of wound sizes and wound surface areas
- Proportionate changes in mean surface area over the 3-week period
- Photography of the wounds
- Pain: Numeric Rating Scale (NRS) or Pain Assessment in Advanced Dementia (PAINAD) scale
- Adverse events

# Key outcomes

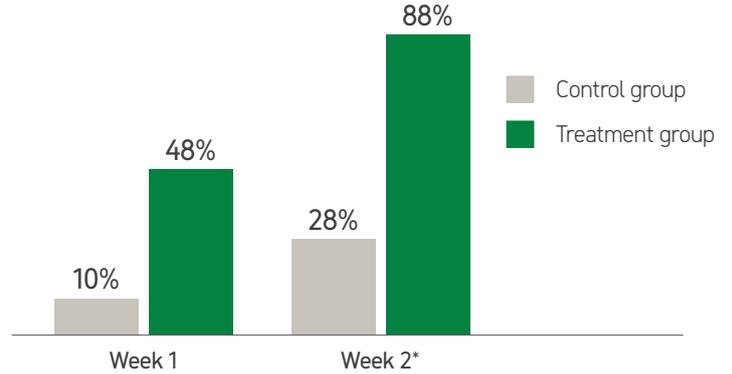


## Mean wound surface area



**Control** (n=58): 2.1-1.5= 0.6cm<sup>2</sup>  
**Treatment** (n=64): 3.4-0.64= 2.9cm<sup>2</sup>  
**t value** = -3.04 (df=73.6); p=0.003

## Complete wound closure



\*Cumulative week 1 and 2

## Skin tear healing time

95% Confidence Interval

Group assignments	Time to heal (days)	Std Error	Lower	Upper
Control	20.000	.964	18.111	21.889
Silicone	8.615	.858	6.934	10.297
Overall	15.037	1.307	1.307	17.598

X<sup>2</sup> 16.516 p<.0001

- **Mepitel One** showed clinical benefits in the treatment of skin tears **Type 1 and 2 and Mepilex Border Flex** in the treatment of skin tears **Type 2 and 3**
- **Significantly greater reduction** in wound surface area relative to baseline in Treatment group (2.9cm<sup>2</sup>) compared to Control group (0.6cm<sup>2</sup>) (p=0.003)
- **88% of patients** achieved **complete wound closure** at week 2 in the Treatment group compared to **28%** in the Control group
- Skin tears in elderly patients (mean age 82.9) healed over **50% faster with soft silicone dressings** compared with conventional non-adherent dressings (**-8 days vs 20 days**)

**Results of this study suggest that silicone dressings are superior (quicker complete wound closure and faster mean healing time) to non-silicone dressing for the treatment of skin tears.**

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