

THE USE OF A NEW, ACTIVE TREATMENT OPTION TO HEAL 10 STALLED WOUNDS

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Introduction

A stalled wound can be defined as one where the wound has not decreased in size by 40% in a four week period using standard therapy.¹

The management of 'hard-to-heal' wounds calls for relevant supportive evidence where innovative wound management products have been used to regulate and promote healing.

An evaluation was undertaken to assess the effects of a wound healing gel containing Beta-glucan* in stalled wounds of different aetiologies.

Gel with Beta-glucan

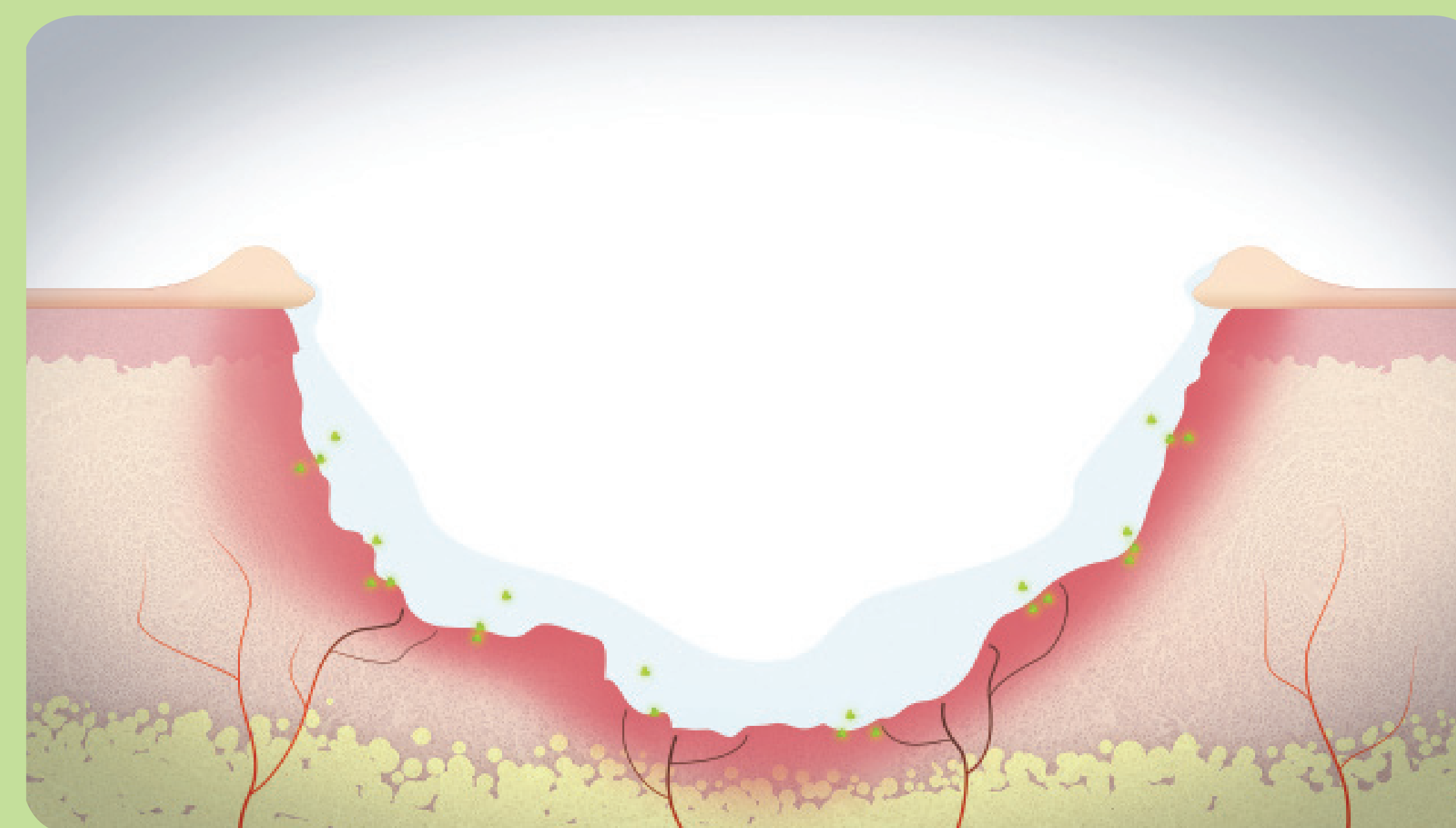
The product comes in a gel format and provides all the typical benefits of gels. On top of that, it contains Beta-glucan which accelerates the healing process by targeting the white blood cells and activating macrophages in the wound bed*. This cell type is the key coordinator of the healing process.

Methods

Patients whose wounds had been stalled for four weeks or more were identified from five different centres in North-East England, and invited to take part in the evaluation of the product.

Data was recorded on the wound surface area, tissue type, and patient level of wound pain at baseline (0) and at weeks 1, 2, 3, 4, and 8.

Of the total 39 patients enrolled in the study, 26 patients who complied with the protocol criteria completed the minimum four-week study period.



Inclusion Criteria

- informed consent
- wound size between 0.5 cm² and 45 cm²
- dry or low to moderate levels of exudate
- no signs of infection present
- available for evaluation timeframe of 4 weeks
- compression/offloading if required

Exclusion Criteria

- unable to give informed consent
- presence of co-existing infection
- under therapy with immunosuppressant or steroids
- if diabetic, HbA1c greater than 10%
- chronic underlying skin condition

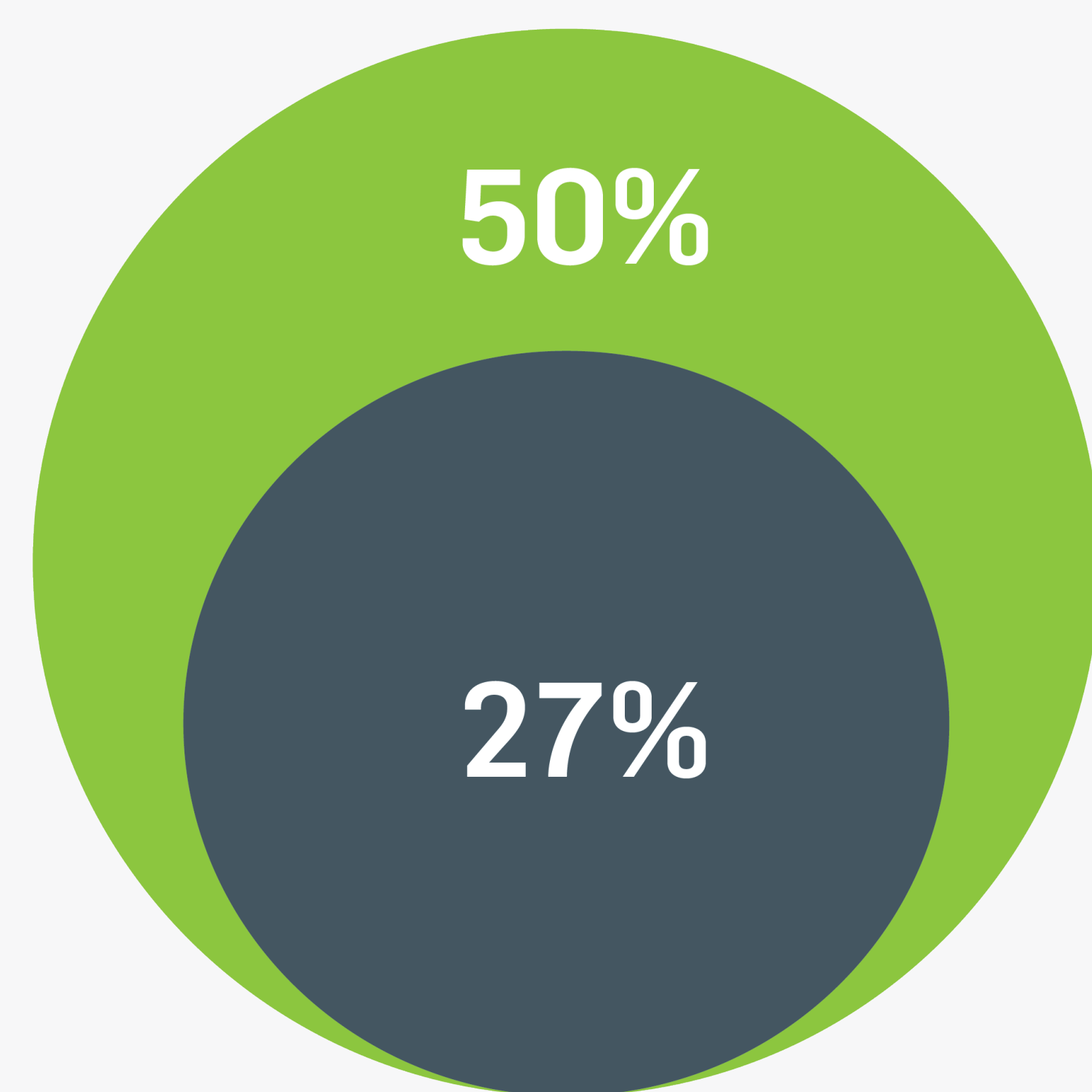
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Results & Discussion

There was an average wound surface area reduction of 41% as shown in Figure 1B. During the 12-week evaluation period, seven of 26 wounds fully healed, and an additional eight wounds showed a reduction in size of more than 50% (Figure 1A). Of the remaining 11, five wounds showed moderate healing progression, and six wounds did not respond to treatment.

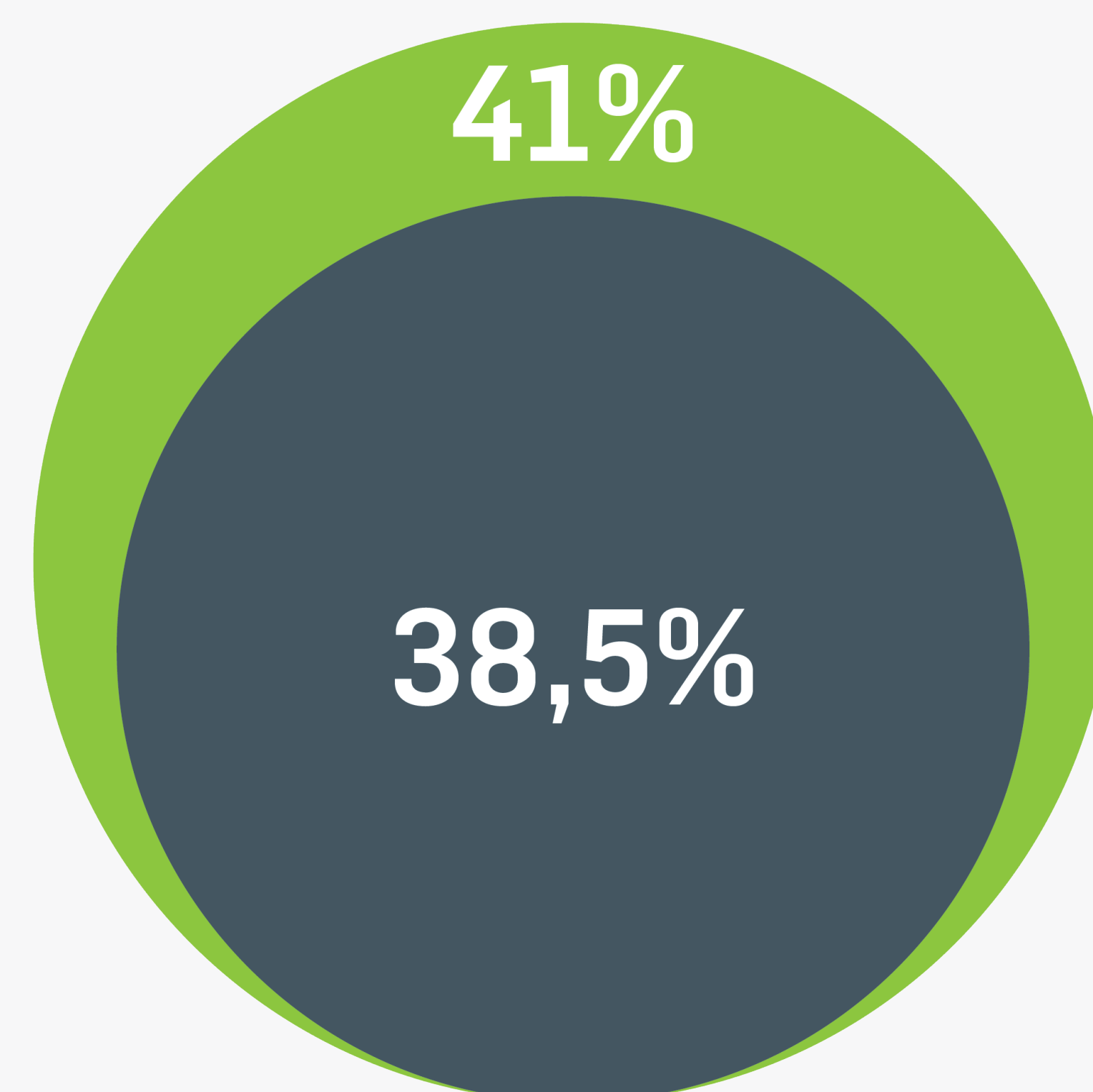
Following the 12 week evaluation time point, clinicians reported that a further three wounds had healed—leading to a 38,5% healing rate. A summary of the 10 wounds that healed after treatment with the Beta-glucan gel is seen in Table 1.

Figure 1A:
Progression during evaluation period:



■ Wounds where improvement was observed
■ Wounds where complete healing was observed within the 12 week study period

Figure 1B: Total results of evaluation:



■ average wound surface area reduction
■ overall healing rate of 26 wounds

Table 1. Details of healed wounds

Case	Wound	Wound age at start	Wound size at start	Healed at
1	LU with mixed aetiology	22 weeks	2.4 cm ²	Week 8
2	Ischaemic DFU	4 weeks	5.0 cm ²	Week 12
3	Surgical lower LU	16 weeks	3.9 cm ²	Week 6
4	LU pretibial laceration	12 weeks	12.0 cm ²	Week 7
5	DFU at dorsum	5 weeks	2.4 cm ²	Week 2
6	DFU forefoot amputation	312 weeks	0.5 cm ²	Week 9
7	LU	14 weeks	0.5 cm ²	Week 7*
8	LU	16 weeks	5,2 cm ²	Post-study*
9	LU	16 weeks	3cm ²	Post-study*
10	LU	>104 weeks	45cm ²	Post-study*

* Patient treated with a gel containing Soluble Beta-glucan in the first four weeks

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5 week old diabetic foot ulcer at the start of treatment with the gel containing Beta-glucan, and two weeks later when complete healing was observed

Conclusion

Based on the findings during the evaluation study, it can be concluded that the therapy with a gel containing Beta-glucan is able to restart the healing process in a range of stalled wounds, including those that had been present for long periods.

In the present study, 80% (21/26) of the wounds treated were 16 weeks or older. The results give promise that this advanced gel, containing a macrophage activating substance, can be a tool in re-activating healing in stalled wounds where standard of care is no longer giving the desired healing progression.

A recommendation for use of the gel with Beta-glucan would be to use it on stalled wounds for up to six weeks treatment period, and discontinue its use if no progress is observed.

***the gel with Beta-glucan is marketed as Woulgan® Gel
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Biotec Beta-Glucans, Tromso, Norway**

References:

1. Steed, D.L., Attinger, C., Colaizzi, T. et al. Guidelines for the treatment of diabetic ulcers. *Wound Repair Regen* 2006; 14: 6, 680–692.
2. King et al. Clinical evaluation of a bioactive beta-glucan gel in the treatment of 'hard-to-heal' wounds. *Journal of Wound Care* 2017; 26: 2.