

Seven patients with various non-healing foot wounds case study series.

All wounds progressed in terms of wound area or devitalised tissue reduction.

Initiation of wound healing progression.

# Effectiveness of a Hydro-Responsive Wound Dressings to promote healing in chronic foot wounds: A case series

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## Aim

The Hydro-Responsive Wound Dressing (HRWD®) dressing system consists of a two-step regime to promote wound moisture balance, optimisation of wound bed preparation and healing. Product literature claims that the incorporation of pre activated ringers solution within the core of the dressing allows for a continuous rinsing-absorption mechanism that promotes wound cleansing and the formation of granulation tissue by facilitating autolytic debridement.

The aim is to evaluate the effectiveness of a HRWD® in a case series of seven patients with various foot wounds

## Method

Seven participants with non-healing foot wounds were invited to participate in the case series. All participants were male with wounds to the mid or forefoot, average size 8.77 cm<sup>2</sup>, with devitalised tissue within the wound bed, ranging from 40 to 97% of wound bed covered with devitalised tissue, (photographs week 0)

All participants received optimised standards of care, including offloading, with the addition of HRWD® twice weekly for 10 weeks. Wounds were photographed and wound area measured using Image-J software. Outcome measures include % wound area reduction and % removal of devitalised tissue at 8 weeks.

## Results

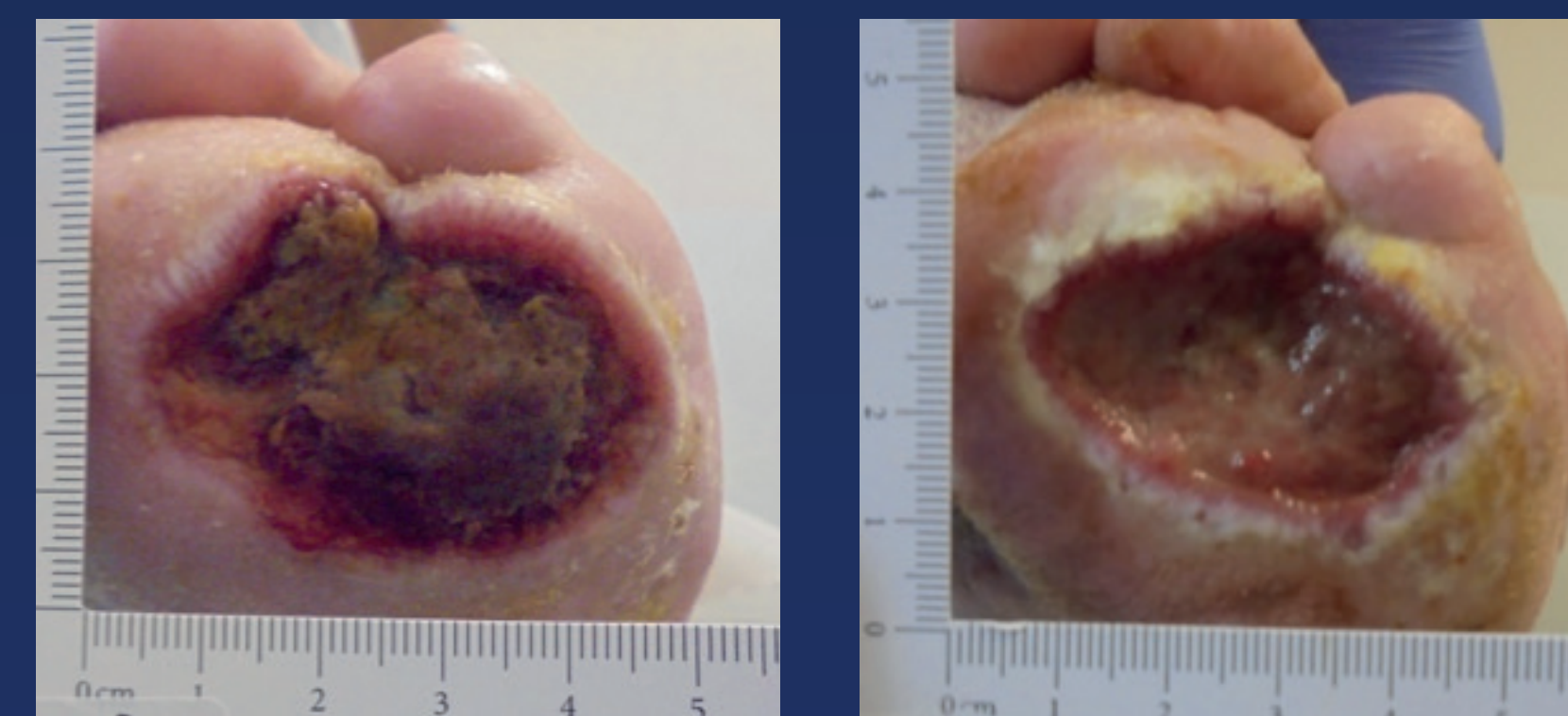
Two participants were withdrawn from the evaluation as a result of deep tissue infection.

**At 4 weeks** >50% wound area reduction was noted in 1/5 participants.

**At 10 weeks** 1 wound healed and 1 wound reduced in area by 90%, (figure 1).

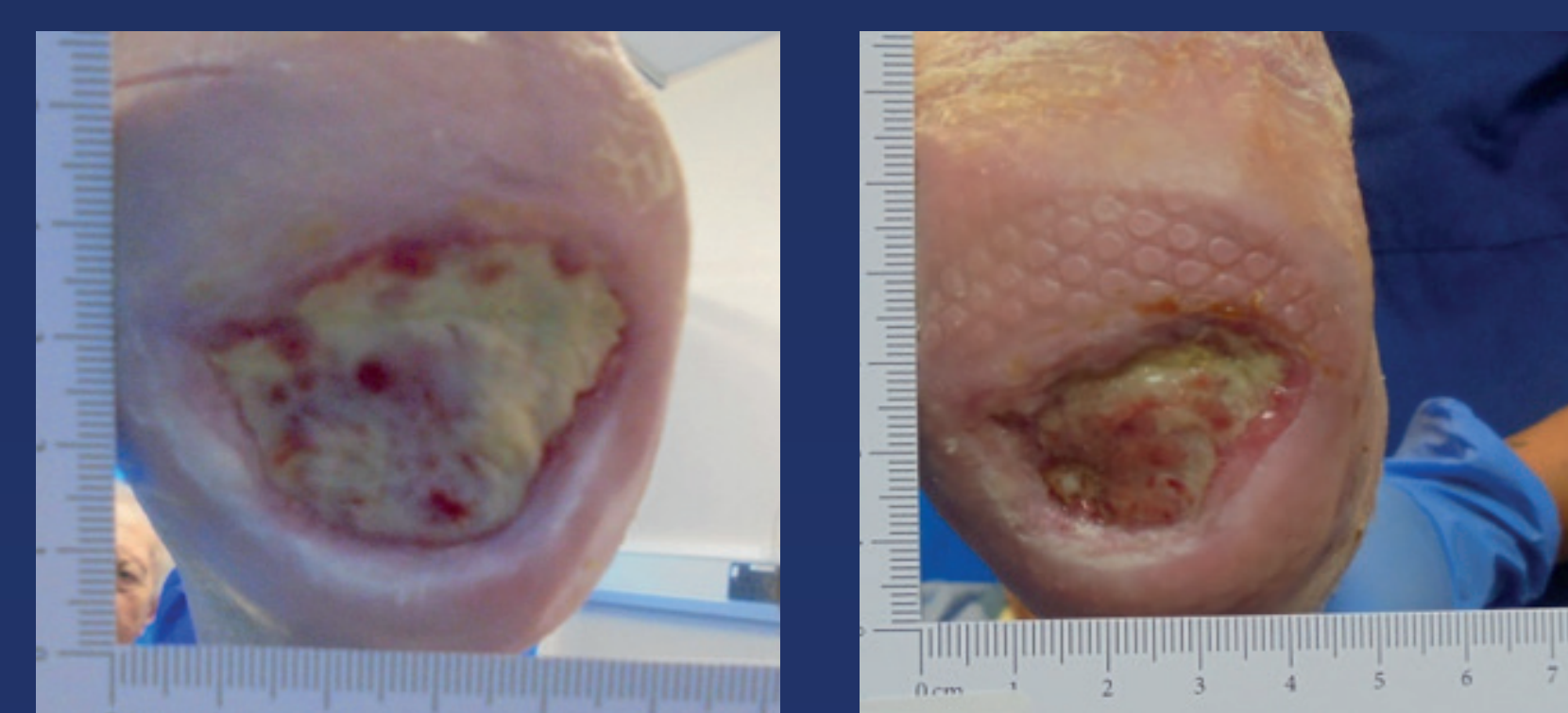
**At 10 weeks** the % wound area covered by devitalised tissue reduced by 50% in 1/5 and 100% in 3/5 participants, (Figure 2).

In the remaining participant the percentage wound area covered by slough reduced by 18%, however, the wound area itself had reduced by 90%, (patient 5)



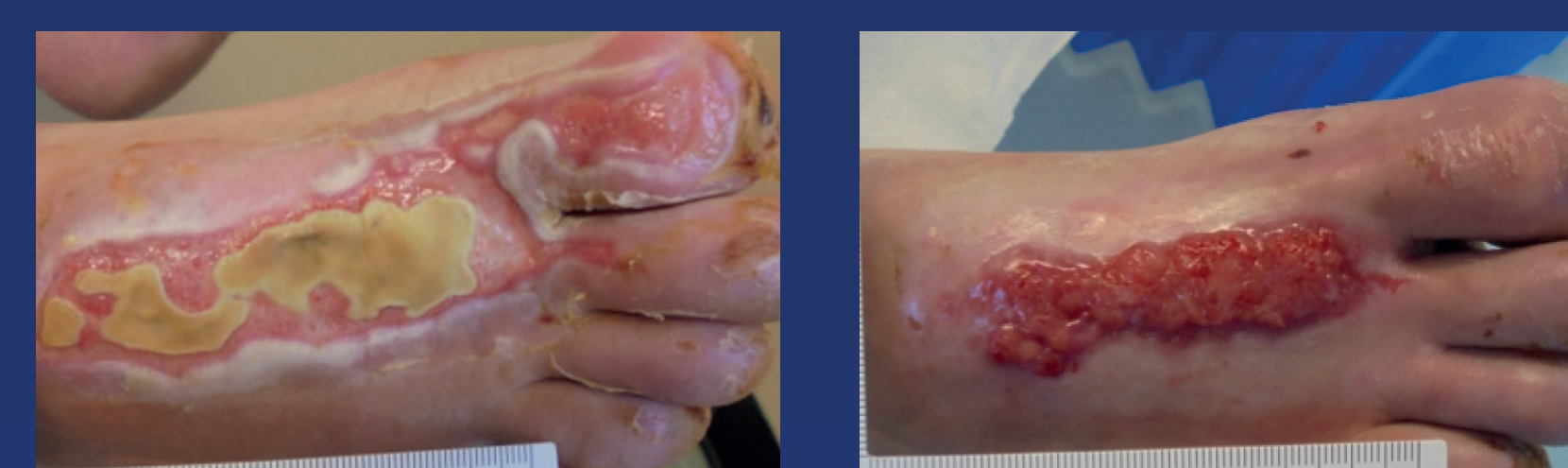
Patient 1 - Week 0

Week 10



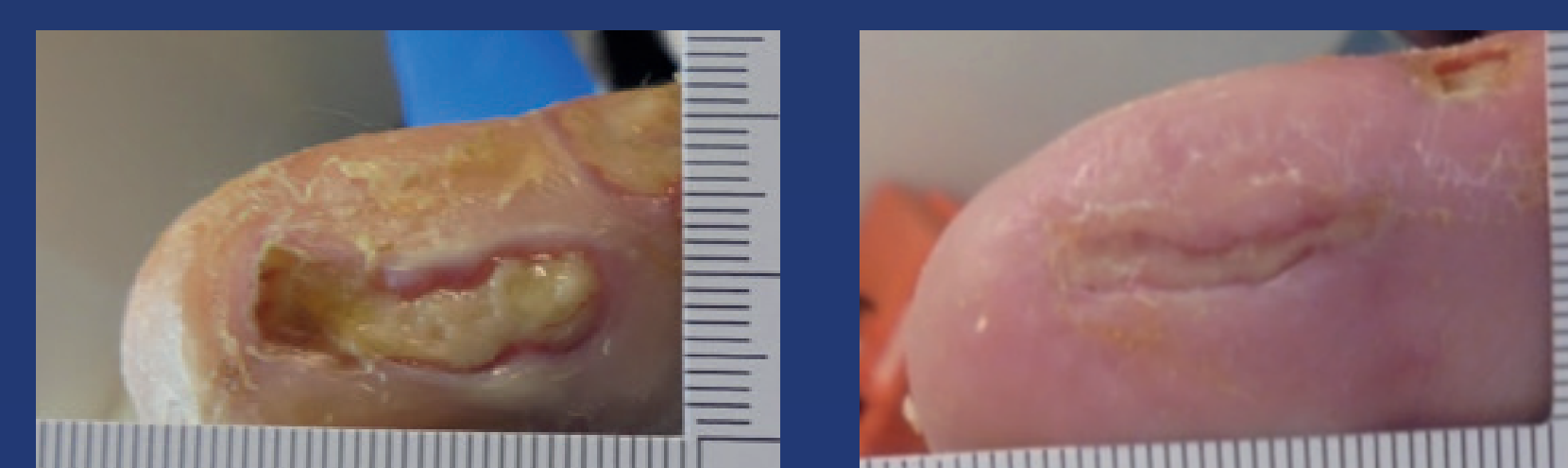
Patient 2 - Week 0

Week 10



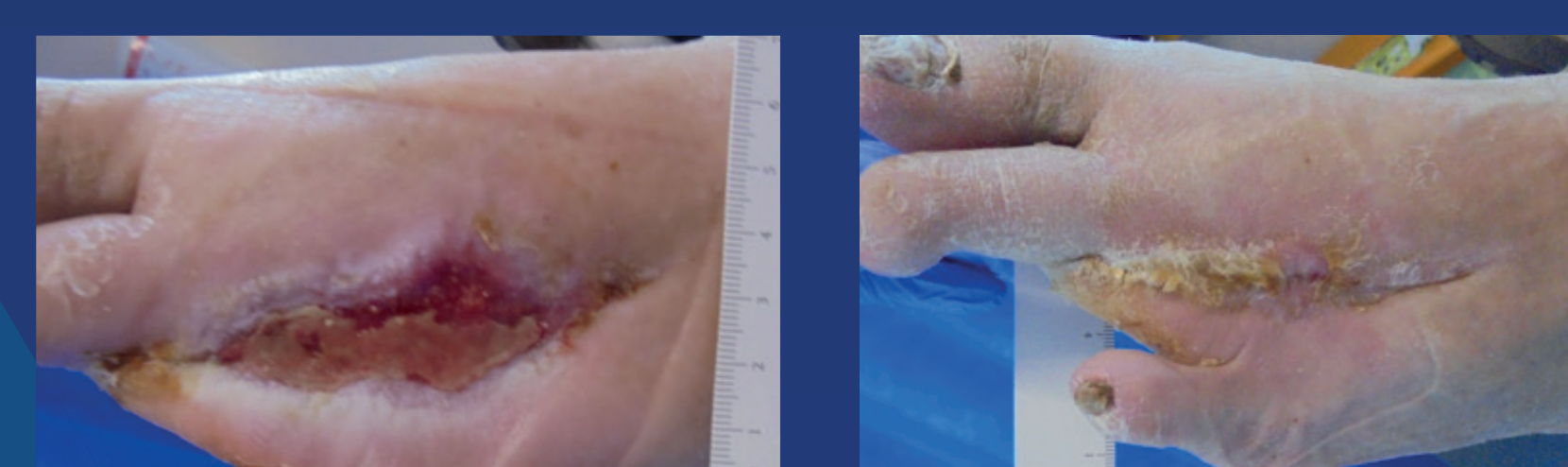
Patient 4 - Week 0

Week 10



Patient 5 - Week 0

Week 10



Patient 7 - Week 0

Week 8

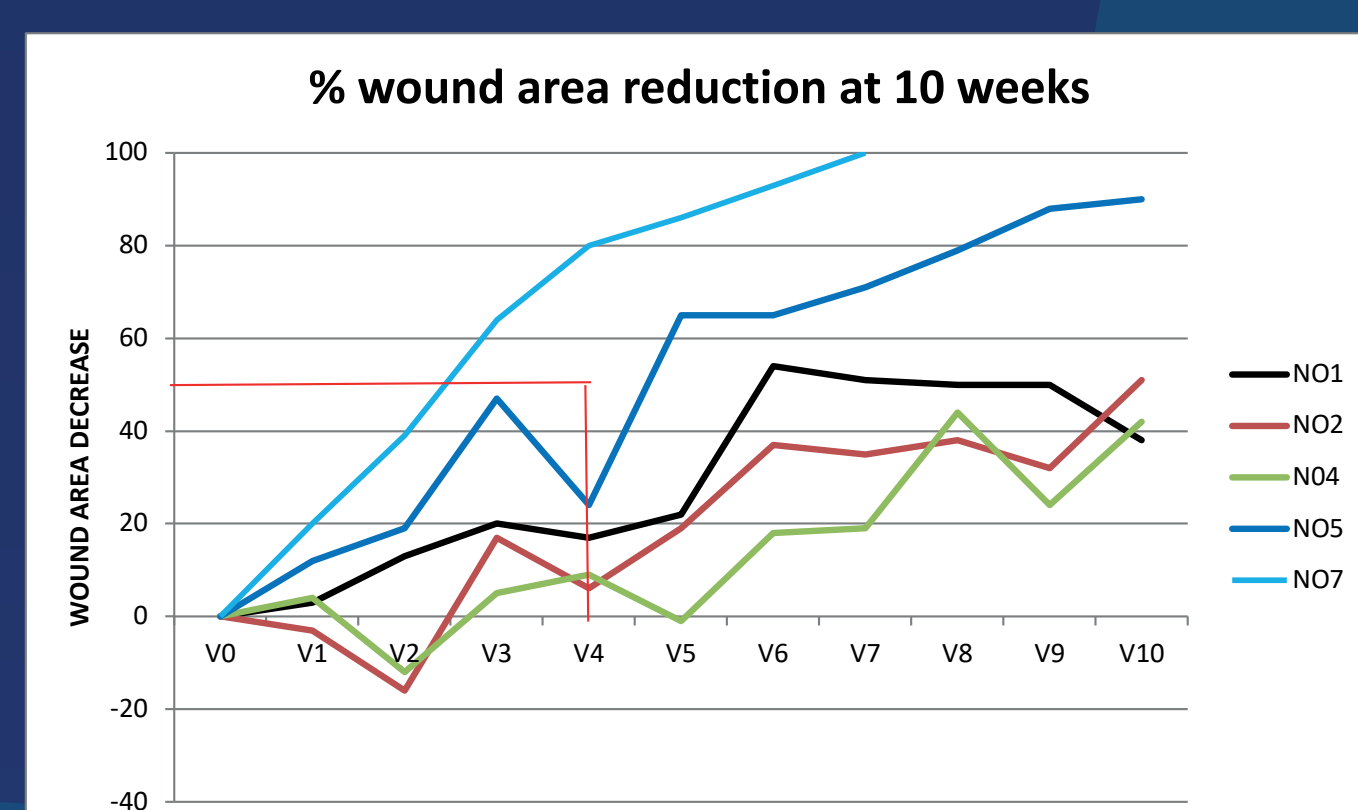


Figure 1

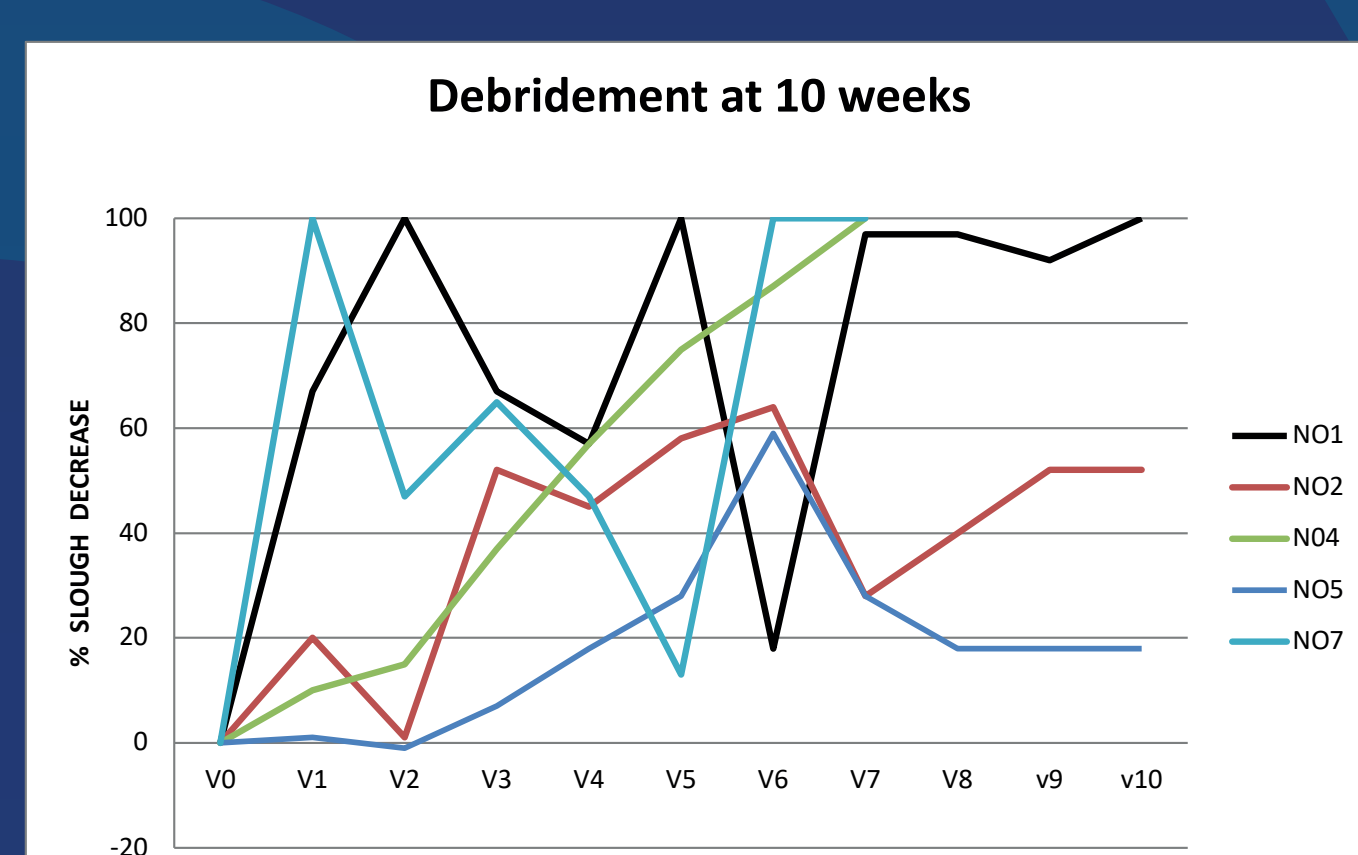


Figure 2

## Discussion

Whilst wound healing was seen in one participant, all wounds progressed in terms of wound area or devitalised tissue reduction. HRWD®, using the two-step system, has shown the ability to promote autolytic debridement and initiate healing in a series of foot wounds.

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