

# Early Adoption of Collagen/ORC Therapies Improves Clinical Outcome



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## ABSTRACT

**Introduction:** This prospective multi-centre cohort study of venous leg ulcers was designed to investigate prognostic factors predictive of response to collagen/ORC and collagen/ORC/silver treatment.

**Methods:** Venous leg ulcers were randomised on a 1:1 basis to receive either collagen/ORC or collagen/ORC/silver treatment. Wounds were treated for up to 12 weeks and measured on a weekly basis. In this study we used 2 outcome measures; healing (wounds that healed in 12 weeks) and improving (wounds that reduced in area by at least 50% in 12 weeks). A logistic regression model was applied to the data to assess the baseline factors which may be predictive of healing response.

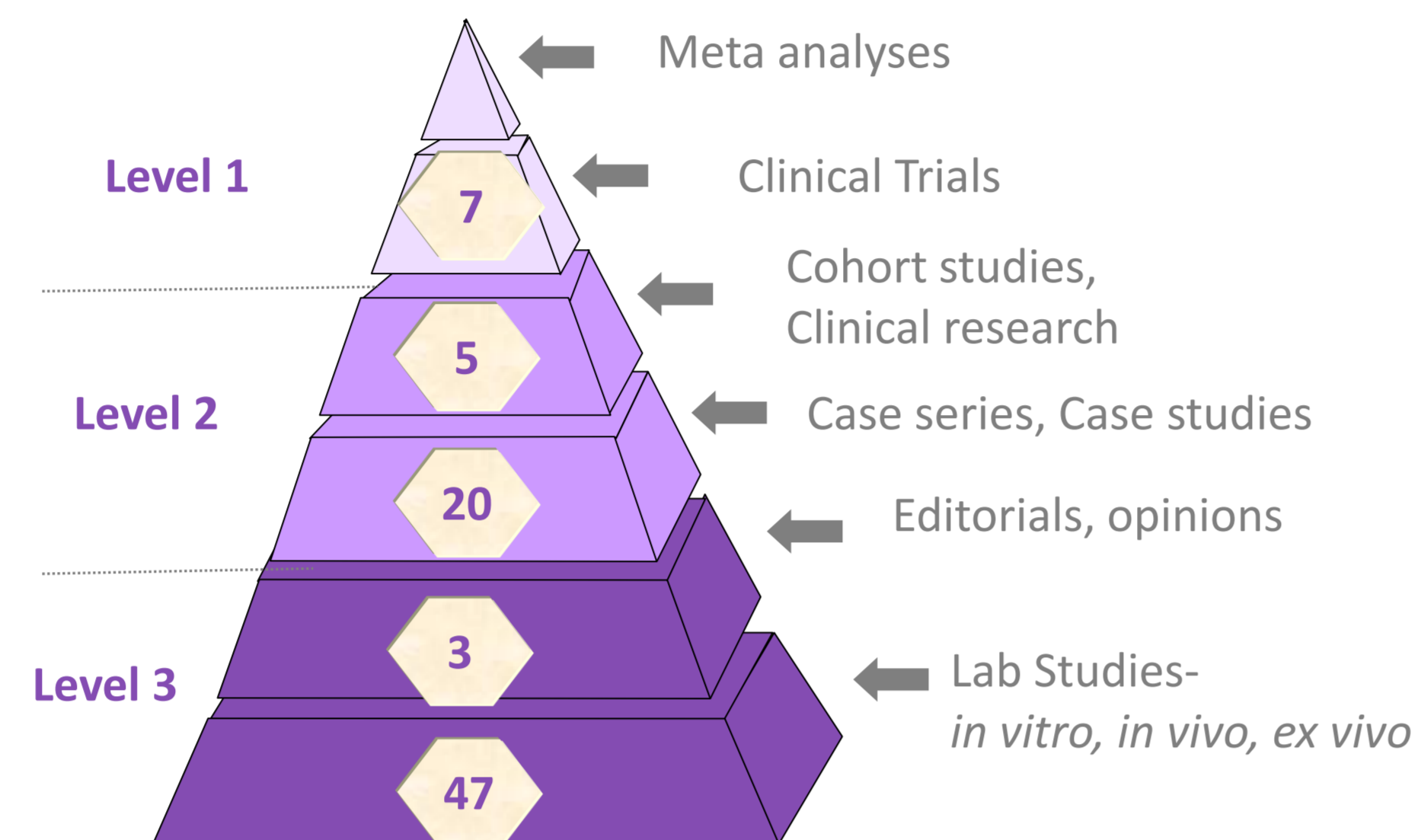
**Results:** 64 patients entered into the study, 8 were excluded due to deviations from the study protocol, and therefore 56 patients were included in the final analysis. Within this population 62.5% of the patients were found to have improved with Collagen/ORC and Collagen/ORC/Silver therapies. The logistic regression model also showed that ulcer duration prior to entering the study was a highly significant factor in predicting response to treatment ( $p > 0.005$ ). The overall healing rate was 46%, however this increased to 70% by only including data for wounds of less than 6 months duration. Similarly, while 62.5% of wounds improved in the study, this increased to 87% in wounds less than 6 months, 88% in wounds under 1 year duration and 73% in wounds less than 2 years old. Thus, when the population was stratified by wound duration it was found that wound age significantly affected overall effectiveness of the therapy. The younger the wound the better the chance of success and older wounds (greater than 2 years old) are much harder to progress to a healing trajectory.

**Conclusion:** This study has shown that early treatment of chronic wounds with Collagen/ORC or Collagen/ORC/Silver leads to increased rates of healing. In the first 6 months of a wound, its ability to heal is greatest with the healing rate with advanced treatments such as Collagen/ORC or Collagen/ORC/Silver as high as 70%. This study has highlighted the need for early adoption of advanced therapies such as Collagen/ORC and Collagen/ORC/Silver to improve clinical outcomes.

## OBJECTIVES

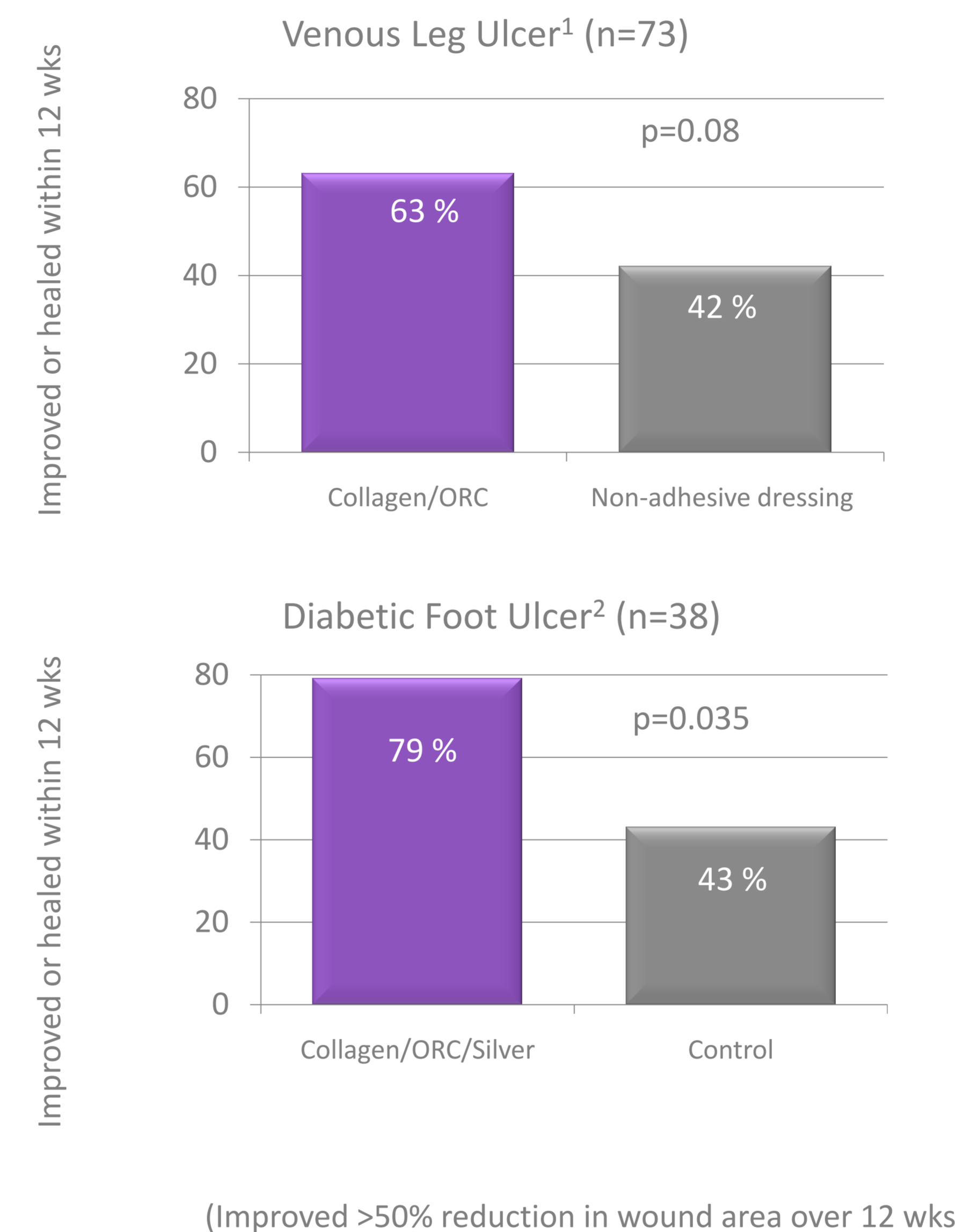
- To investigate the prognostic factors predictive of response to collagen/ORC and collagen/ORC/silver treatment
- To maximise efficacy of collagen/ORC therapies by promoting the appropriate use of these treatments

### Evidence for Collagen/ORC (+Silver) Therapies



- Collagen/ORC therapy has been proven to be more effective than control therapy.
- However, there are some wounds that do not respond to the therapy.
- Could earlier treatment improve the effectiveness of Collagen/ORC or Collagen/ORC/Silver?

### Randomised controlled trials have shown Collagen/ORC and Collagen/ORC/Silver to be more effective than control treatments



### Could earlier treatment improve therapy effectiveness?

#### CLINICAL PROTOCOL

- A prospective multi-centre cohort study
- Venous leg ulcers randomised on a 1:1 basis to receive either Collagen/ORC or Collagen/ORC/Silver therapy
- Wound area was measured every 2 weeks for up to 12 weeks

#### CLINICAL ENDPOINTS

- Improvement: 50% reduction in wound area by week 12
- Healing: Healing by week 12

#### RESULTS

- 64 patient recruited, 8 of which were excluded due to deviation from protocol; Analysis population was 56 patients
- Regression analysis used to identify baseline factors which were predictive of response to treatment (improved/ healed within 12 wks)
- Univariate logistic regression (n=56) identified that for every one year increase in ulcer duration, the odds of responding to treatment decreased by 0.24 units ( $p = 0.0002$ )
- Multivariate analysis (n=55) found that **target ulcer duration was predictive of healing response; wounds with a longer duration were less likely to respond to treatment** ( $p = 0.0004$ )

Clinical study was managed by Clinical Trials Research Unit, Leeds

## CONCLUSIONS

Randomised Controlled trials have shown that Collagen/ORC therapies are more effective than standard care.

The efficacy of these therapies can be further improved by earlier use.

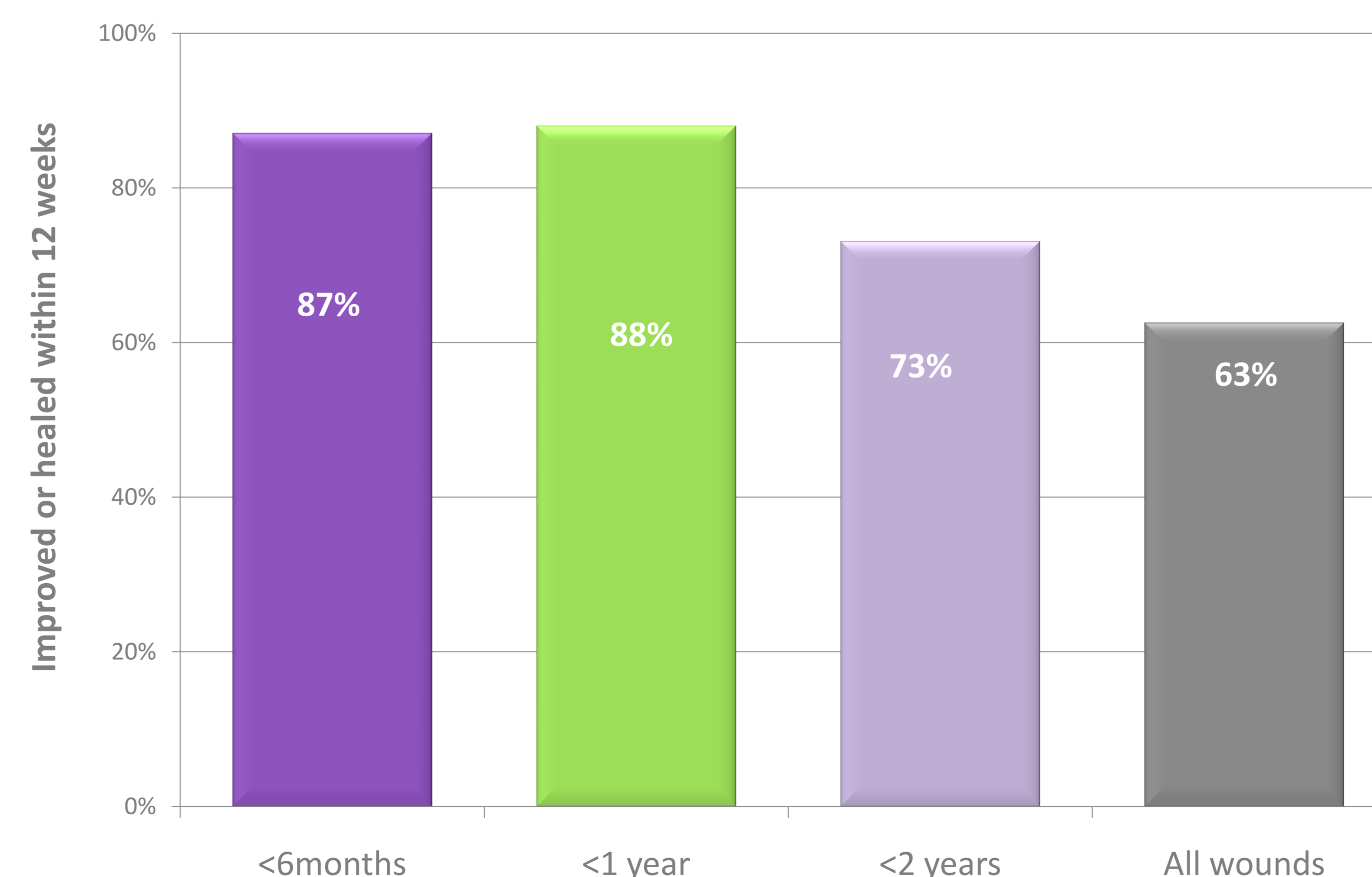
Early adoption of Collagen/ORC and Collagen/ORC/silver improves clinical outcome:-

- Healing rate was 70% in wounds <6 months
- Improvement rate was 88% in wounds <1 year

## References

- Vin F, Teot L, Meaume S. (2002) J Wound Care.; 11 (9): 335-41.
- F. Gottrup, T. Karlsmark, M. Bishoff-Mikkelsen, B. Cullen, M. Gibson, L. Nisbet. A Clinical Study to Determine the Biochemical Differences Between Healing and Non-healing Diabetic Foot Ulcers. Presented at Symposium of Advanced Wound Care 2011.

### Early treatment with Collagen/ORC or Collagen/ORC/Silver significantly increases number of wounds healed or improved within 12 weeks ( $p < 0.0005$ )



### Early treatment with Collagen/ORC or Collagen/ORC/Silver improves healing rate

