## Retrospective Real World Comparative Effectiveness of Ovine Forestomach Matrix and Collagen/Oxidized Regenerated Cellulose in the Management of Venous Leg Ulcers: An Interim Analysis

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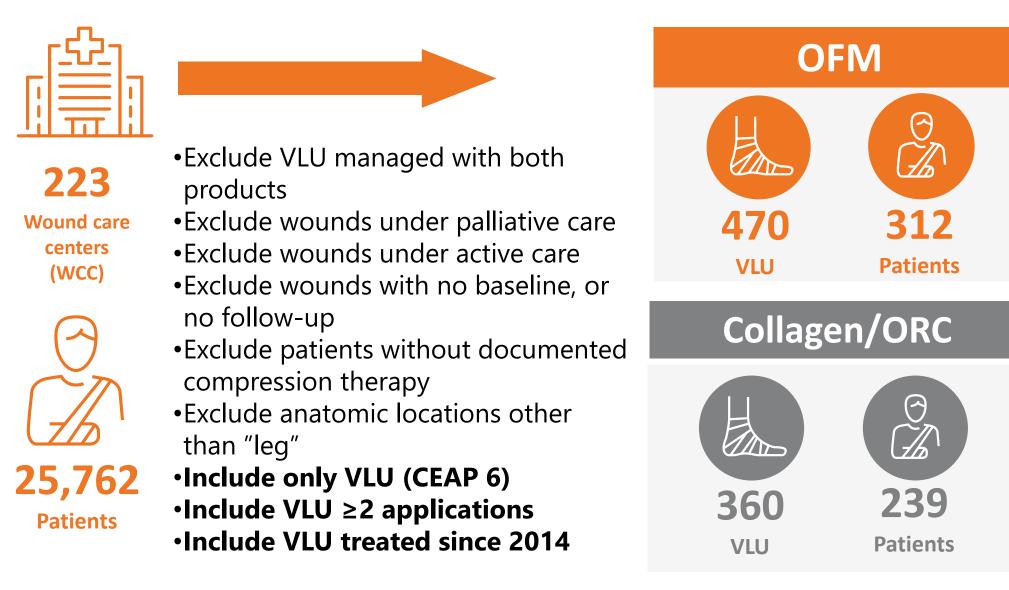
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#### **INTRODUCTION**

Deciphering the relative efficacy of various treatment modalities for venous leg ulcers (VLUs) has proven to be challenging. Retrospective real-world evidence (RWE) studies have emerged as an innovative method to evaluate treatment efficacy in challenging cohorts that otherwise might be excluded in strictly designed randomized controlled trials. This retrospective pragmatic RWE study compared the healing outcomes of venous leg ulcers treated with either ovine forestomach matrix (OFM)\* or collagen/oxidized regenerated cellulose (ORC)^

#### **METHODS**

Data was extracted from a wound database from 2014 to 2020, representing 449 wound care centers (WCC) across the United States. Data was extracted from a pool of 31,883 wounds and filtered based on the inclusion and exclusion criteria. The median time to wound closure and the percentage of wounds closed at standard time intervals were estimated using the Kaplan-Meier method, and probability of closure by Cox proportional hazards (CPH) analysis. Sub-group analysis was conducted based on the number of WCC applications.



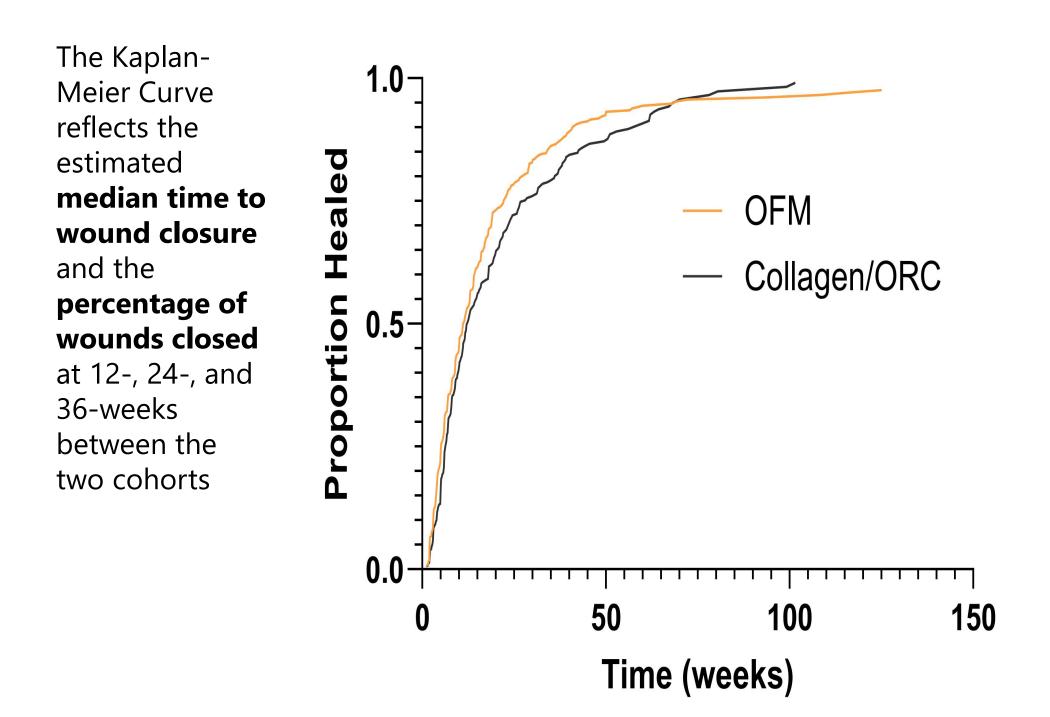
# **RESULTS – PATIENT DEMOGRAPHICS** OFM 67.4±13.1 (56.9%) (43.1%) mean±SD (years) Collagen/ORC

## 65.8±14.5 109 130 (45.6%) (54.4%) mean±SD (years)

#### **RESULTS - BASELINE WOUND CHARACTERISTICS OFM** 5.8 ± 13.0 1.5 ± 1.0 23.6 ± 130.2 **Wound Area VLU per Patient Wound age** mean±SD, (cm2) mean±SD mean±SD (weeks) Collagen/ORC 4.8 ± 11.7 1.6±1.1 12.8 ± 26.1 **Wound Area** Wound age **VLU** per Patient mean±SD, (cm2) mean±SD (weeks)

mean±SD

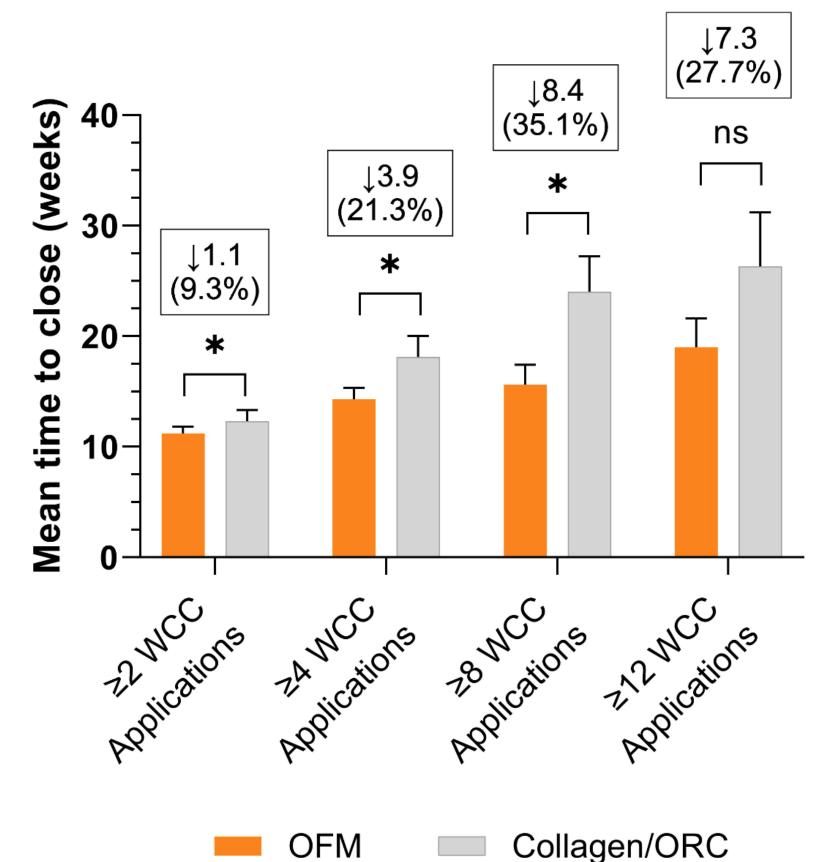
#### **RESULTS – KAPLAN-MEIER SURVIVAL ANALYSIS**



#### **RESULTS - AVERAGE REDUCTION IN TIME TO CLOSE (WEEKS)**

Overall, VLU treated with OFM required **fewer** weekly WCC applications to heal compared to Collagen/ORC.

This bar graph reflects the reduced time to close and percentage difference.



#### **RESULTS – CPH ANALYSIS:PROBABILITY OF CLOSURE**

**CPH Analysis:** ≥12 WCC VLU treated with Applications OFM showed increased ≥8 WCC probability of **Applications** healing compared to ≥4 WCC Collagen/ORC **Applications Forrest Plot** ≥2 WCC shows the **Applications** increased probability of 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 healing using OFM vs Hazards Ratio Collagen/ORC in

> Adjusted Un-adjusted 830 \*Adjusted data accounting for patient age, gender, initial evaluated

### CONCLUSION

- First large-scale real-world data analysis demonstrates that the use of OFM reduced the median time to closure, and also increased the probability of closure of VLUs relative to wounds managed with collagen/ORC.
- This study further substantiates the growing body of evidence<sup>1</sup> to support the use of OFM as a first line intervention to improve wound closure rates.



Up to 8.4 weeks Faster closure with OFM vs

collagen/ORC



with OFM vs collagen/ORC

wound size, and wound duration.

both unadjusted

and adjusted\*

data

1. Bosque, B. A., C. Frampton, A. E. Chaffin, G. A. Bohn, K. Woo, C. DeLeonardis, B. D. Lepow, M. M. Melin, T. Madu, S. G. Dowling and B. C. H. May (2021). "Retrospective real-world comparative effectiveness of ovine forestomach matrix and collagen/ORC in the

treatment of diabetic foot ulcers." Int Wound J 2021 Aug 6; doi/10.1111/iwj.13670. Funding for the study was provided by Aroa Biosurgery Limited. \*=Endoform™ Natural. ^=Promogran™ (KCI/3M™).