

A synthetic bioresorbable polymeric matrix* to treat recalcitrant wounds with bioburden: A clinical case series

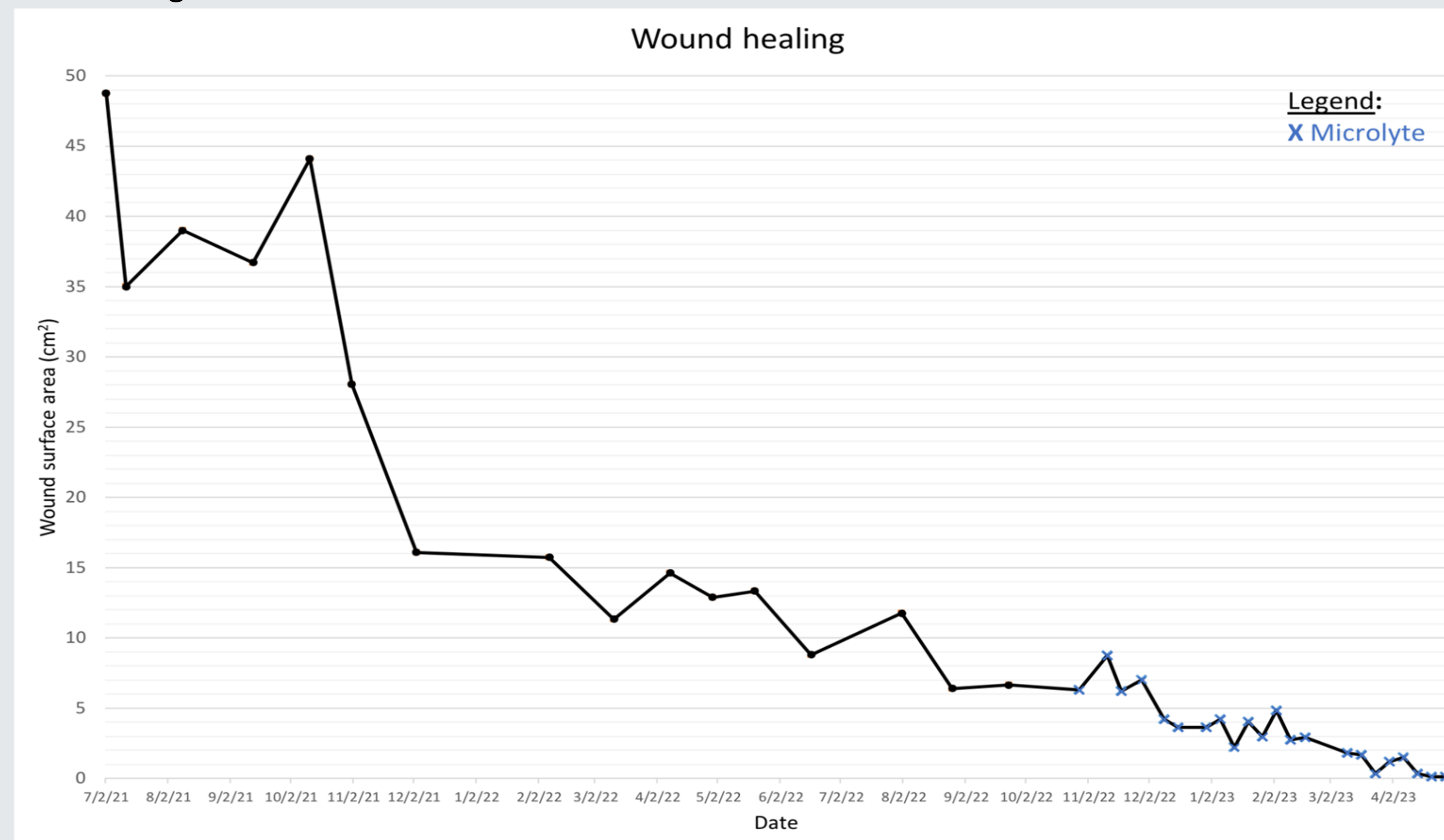
INTRODUCTION

- **Chronically stalled wounds** that have entered a **nonhealing** phase due to **altered wound milieu, persistent inflammatory state, and biofilm formation** represent a **difficult clinical problem**.
- Hypothesis: **Chronically infected wounds** and those with **high bioburden** may respond well to a **novel synthetic bioresorbable polymeric matrix***

*Microlyte® Matrix, Imbed Biosciences, Inc., Middleton, WI

CASE 1

- **91 year-old female** with **recalcitrant chronic venous ulcer of 11 year duration**
- Underwent multiple venous ablation procedures and arterial revascularization (anterior tibial angioplasty) without healing

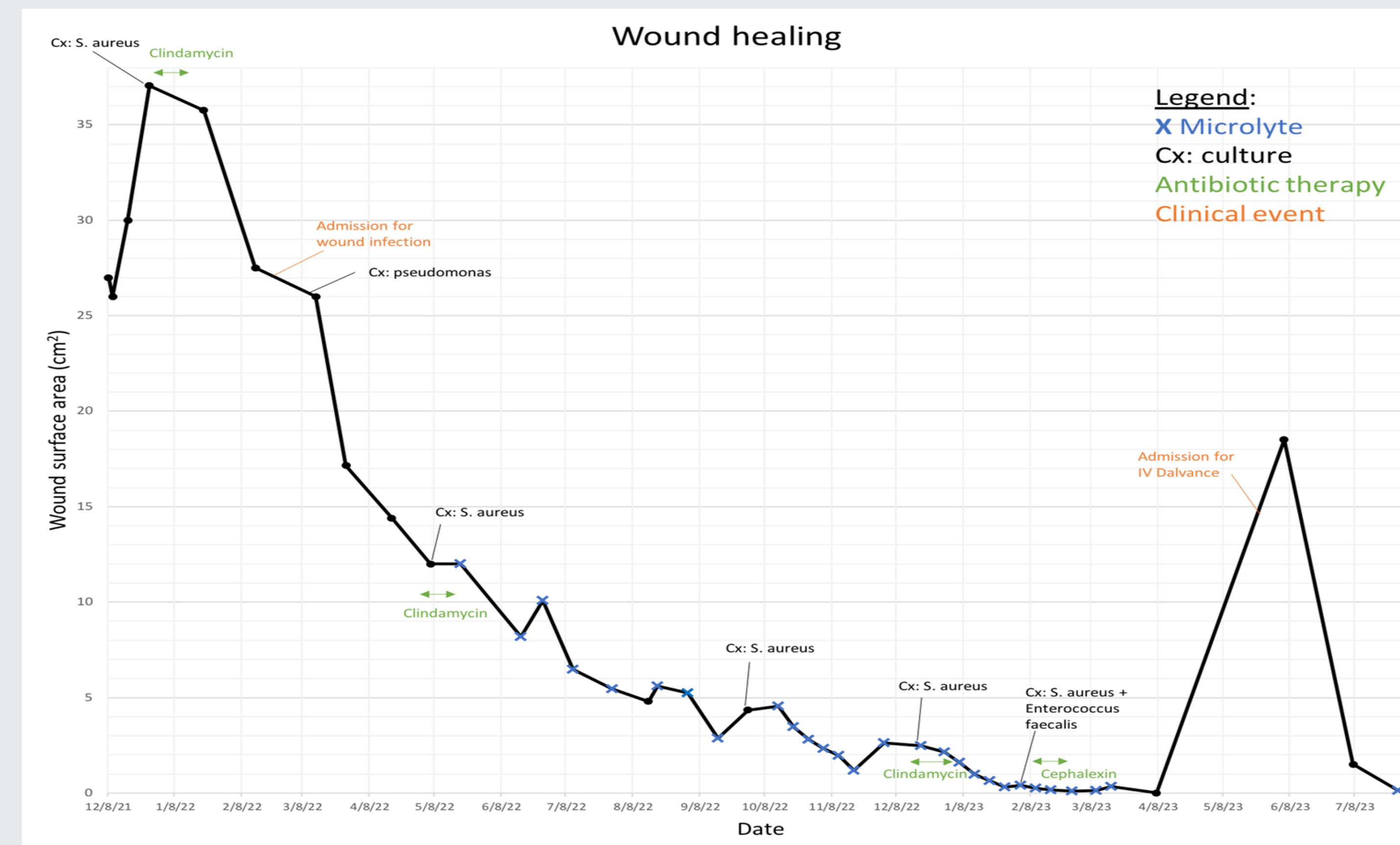


METHODS

- **Retrospective case series** of 5 patients (2 patients not included here) with **chronic infection and wound bioburden**. Additional patients and clinical details available upon request.
- Patients underwent **standard local wound care** including debridement, compression therapy, and antibiotics.
- **Polymeric matrix was applied serially** to the nonhealing wounds.
- **Wound dimension, clinical events, culture results, and antibiotics** administered were collected and tracked over time.

CASE 2

- **69 year-old female** with history of venous insufficiency, diabetes, smoking, and **chronic recurrent ankle ulcers for 13 years**
- Presented with stalled **ulcer of 7 months duration**

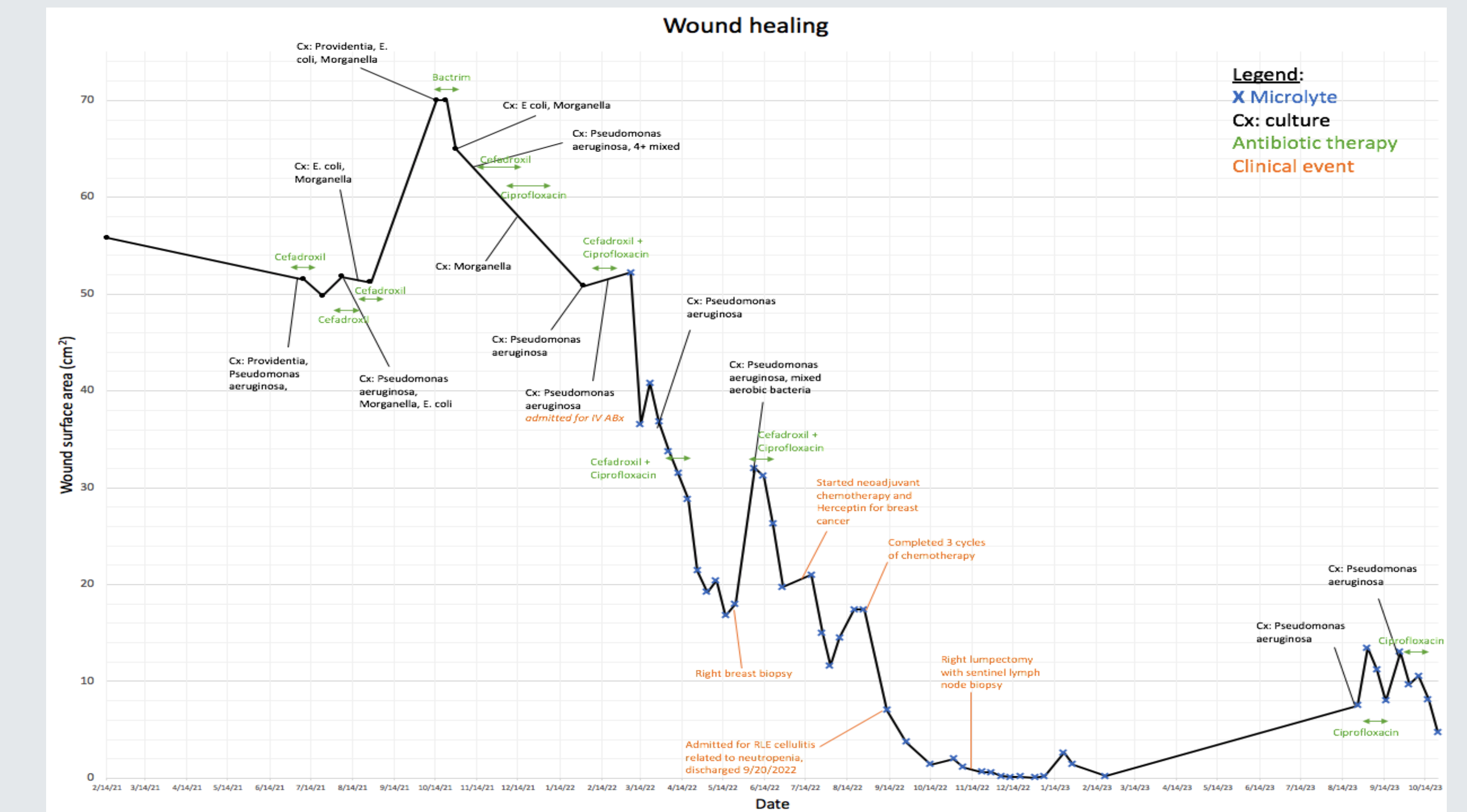


DISCUSSION

- **In challenging, long-standing wounds (months to years duration), all patients healed completely with serial Microlyte® Matrix application.**
- This novel bioresorbable polymeric matrix shows promise in treating **chronically infected wounds and those with bioburden** that have failed multiple antibiotics and standard silver-based dressings.
- Matrix provides a sustained release of **antimicrobial silver ions** and a **breathable** environment that supports **vascularization and reduces colonization**.
- **Larger multicenter trials** are needed to delineate the ideal wound population and to optimize treatment technique.

CASE 3

- **80 year-old female** with history of venous insufficiency, **ulcer of 6 year duration**
- Course complicated by hospital admission for neutropenia and sepsis due to chemotherapy for breast cancer.



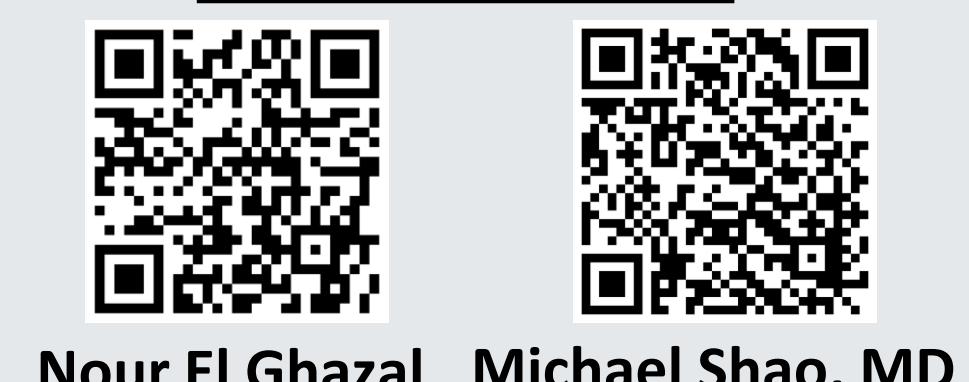
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ACKNOWLEDGEMENTS

We are indebted to the nurses and staff at Swedish Hospital Wound Care Center for their outstanding care of our patients under the leadership of Dr. Andrew Agos and Kristen Alario RN. We thank Dr. Michael Schurr at Imbed Biosciences. We are grateful for the support and friendship of Dr. Mark Melin (Mayo Clinic).

Contact information



Nour El Ghazal Michael Shao, MD

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