

Management of Bone Infection in the Upper Limb

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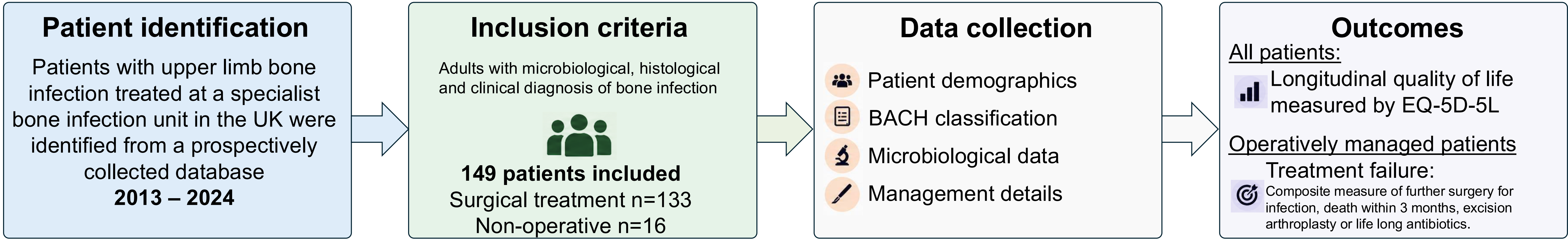
Introduction

Upper limb bone infection is uncommon, heterogeneous and challenging to manage. Treatment frequently requires complex bone and soft-tissue reconstruction. Its impact on patient quality of life remains poorly characterised.

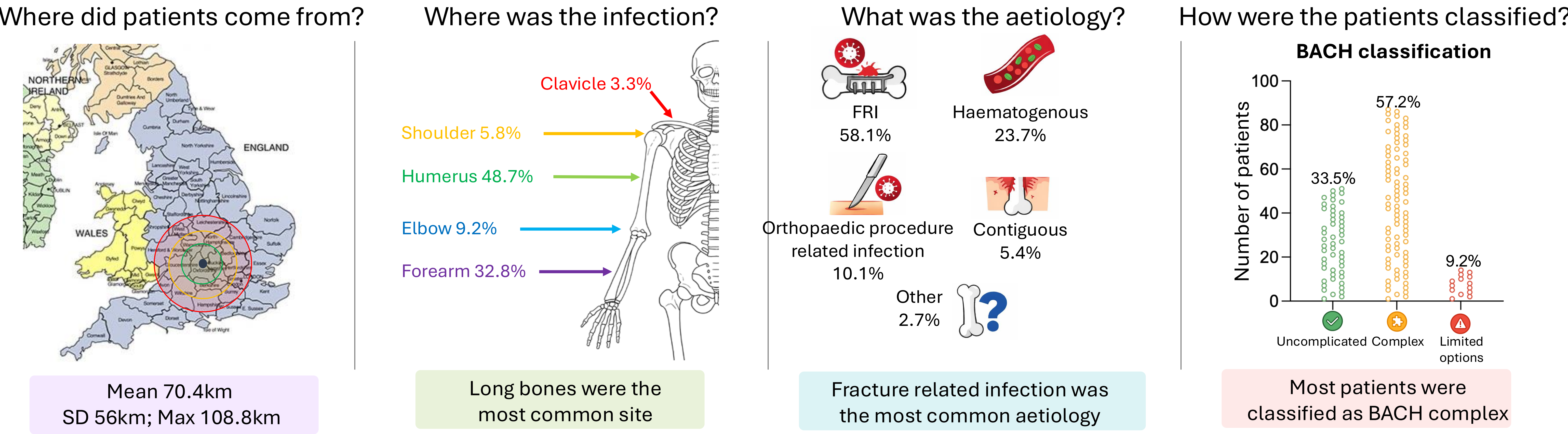
Aims

To describe the case mix, management, microbiology, treatment outcomes and quality of life of patients treated at a specialist bone infection centre with upper limb bone infection.

Patients Included



Patient Information



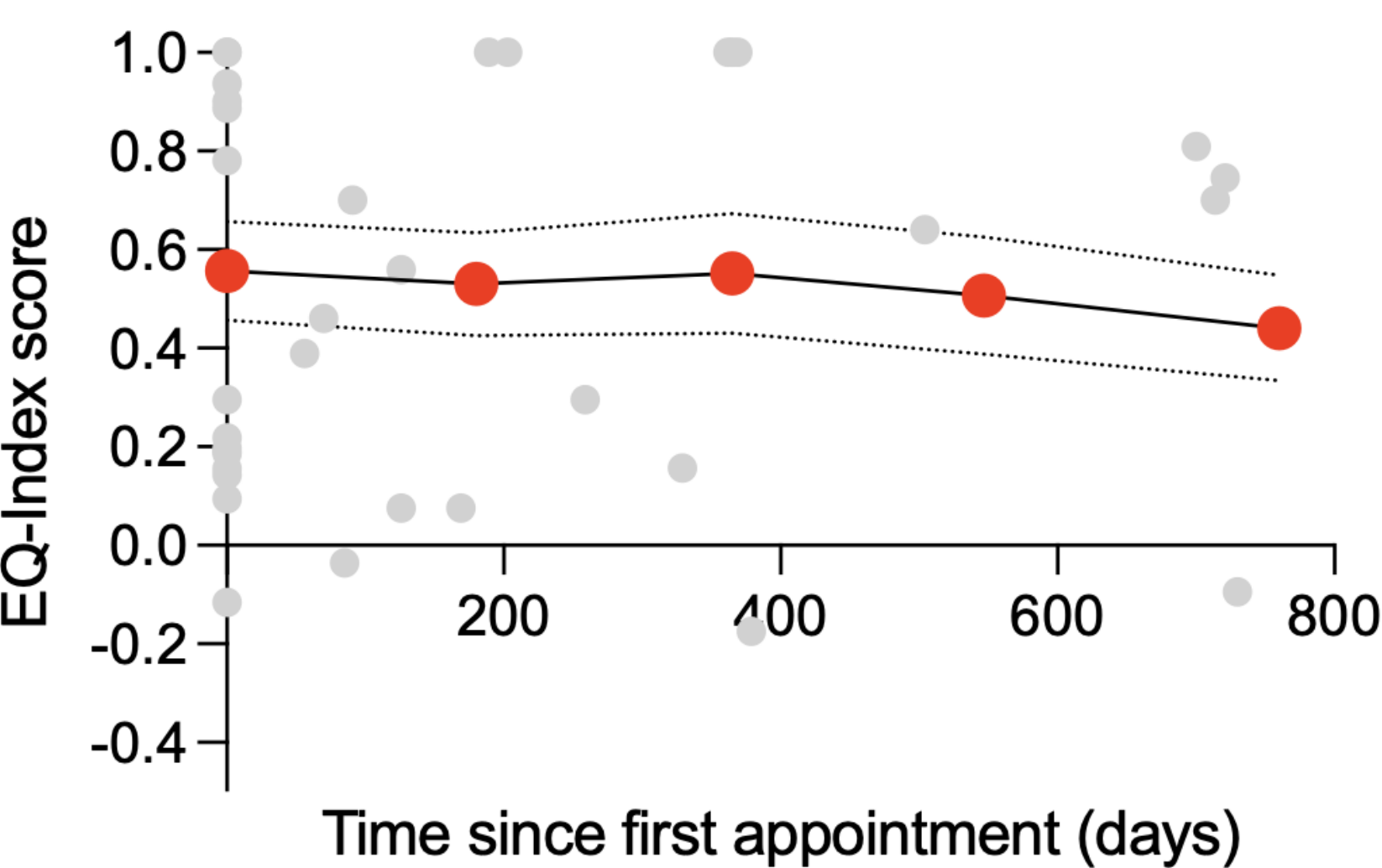
Results

Non-operative group (n=16, 10.7%)

Indication for non-operative management

- Not anaesthetically fit n=7
- Infection settled down (surgery not indicated) n=6
- Did not attend / want surgery n=3

What happens to Quality of Life with non-operative management?



Quality of life did not improve with non-operative management

Results

Operative group (n=133, 89.3%)

What procedures were performed? Did surgery improve quality of life?

All patients had debridement, deep sampling and anti-microbial therapy

Fixation

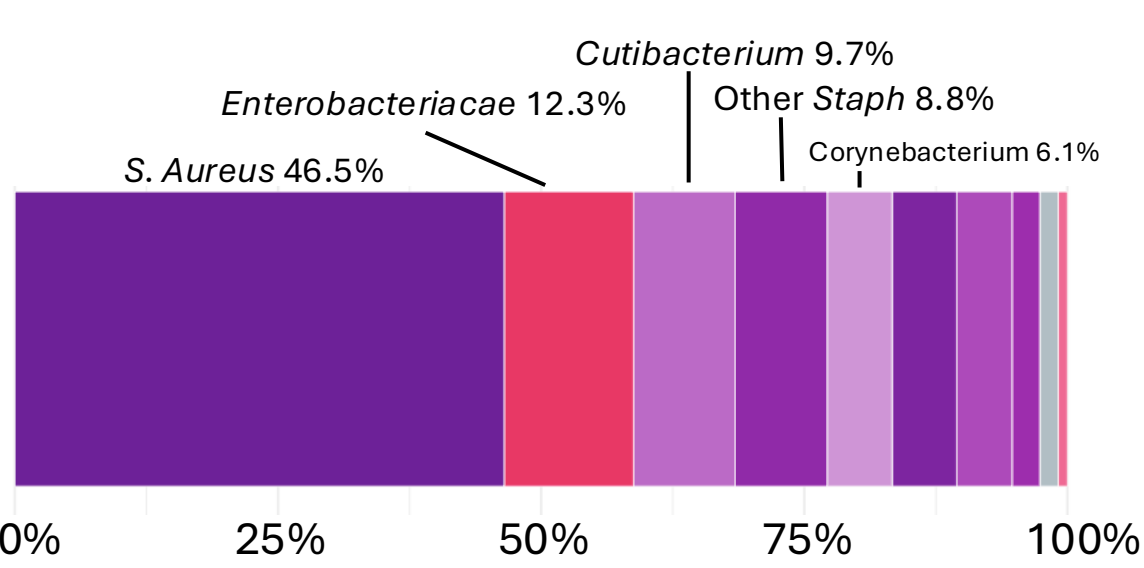
None 121/133 (91.0%)
Plate 7/133 (5.2%)
Ex-fix 5/133 (3.8%)

Soft tissue reconstruction

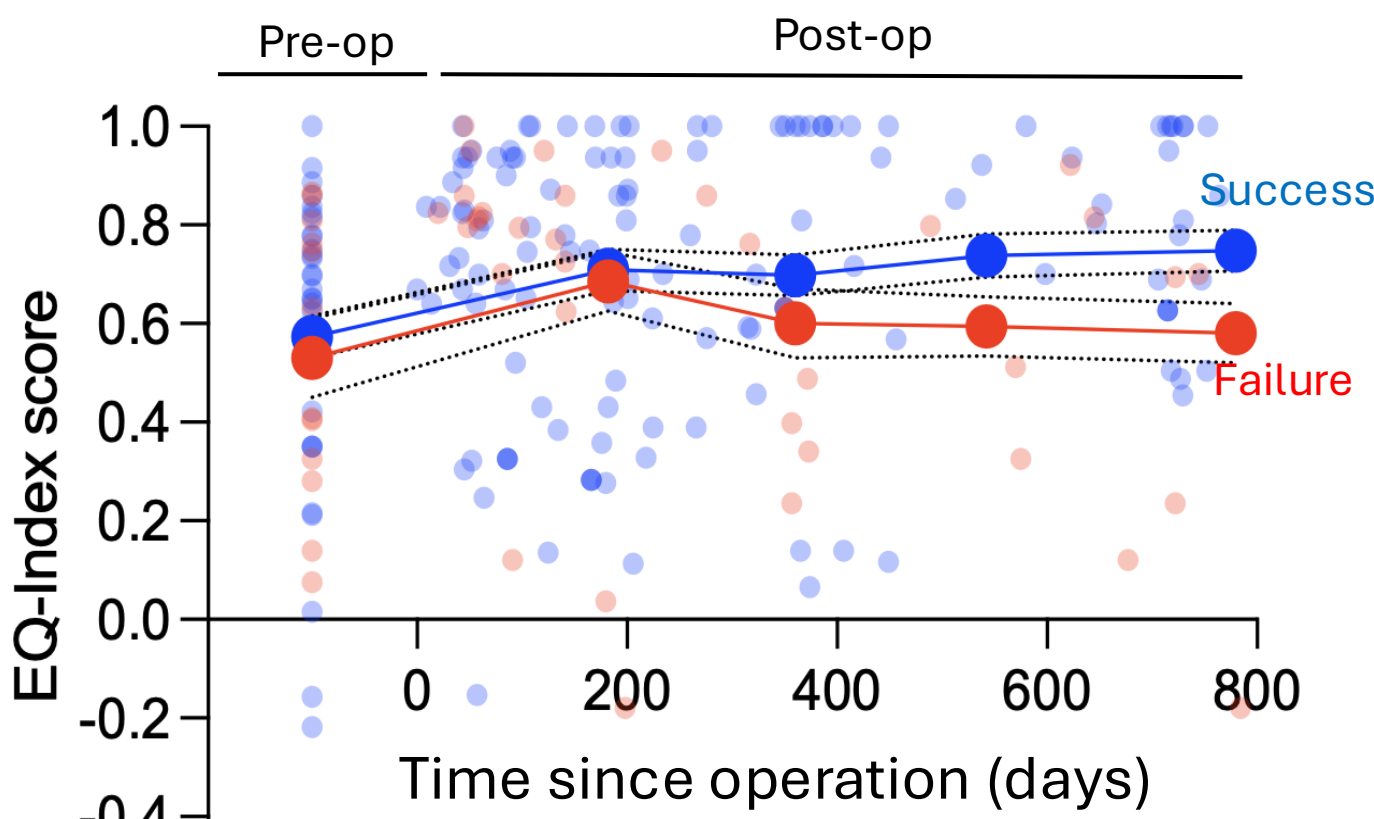
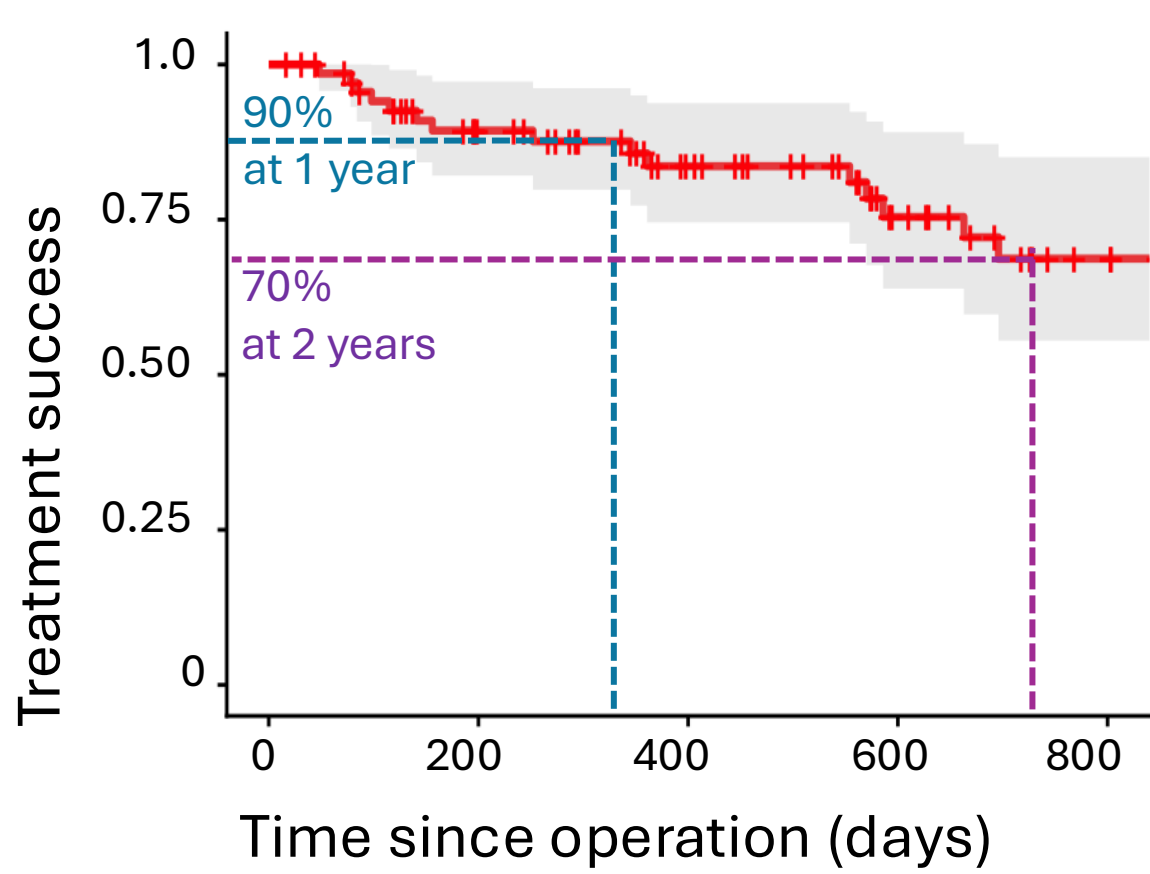
None 120/133
Local flap 11/133
Free flap 3/133

What was the microbiology?

No growth (n=34)
Monomicrobial (n=65)
Polymicrobial (n=23)

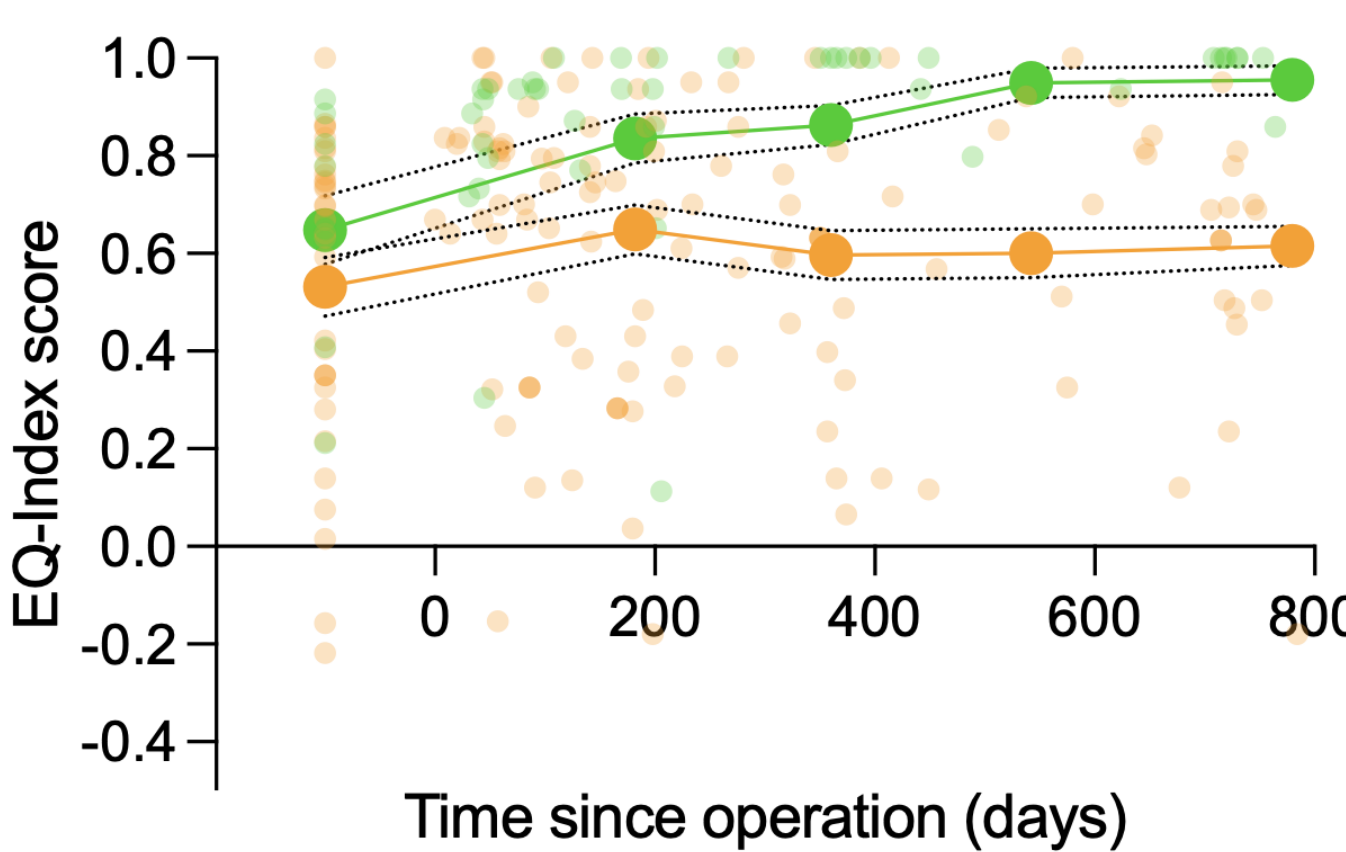
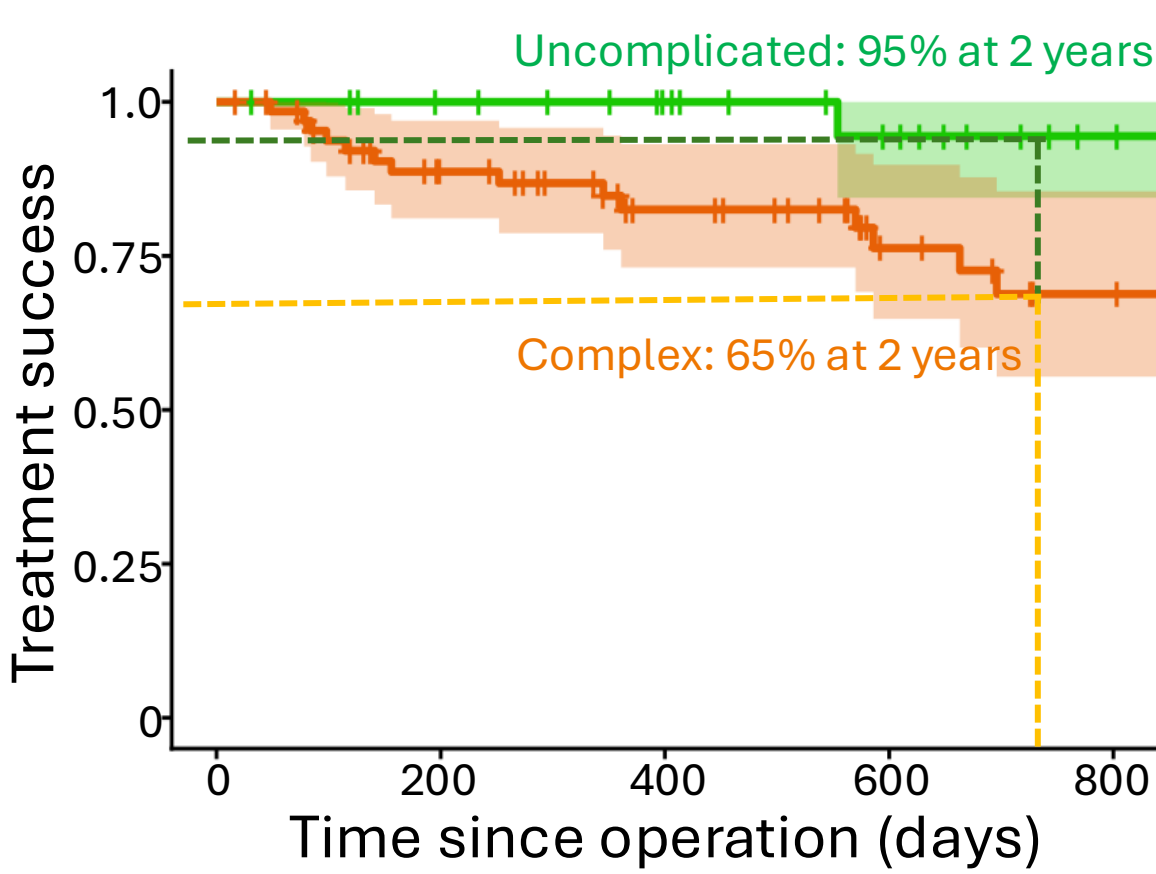


S. aureus was the most common isolate



Quality of life improved following surgery and was associated with treatment outcome

Does BACH classification correlate with outcome or QoL?



BACH complexity predicted treatment failure and poorer quality of life.

Summary

Upper limb bone infection is a complex condition with a substantial impact on quality of life.

Most patients required operative management, and *Staph aureus* was the most common bacterial isolate.

Increasing BACH complexity predicted both treatment failure and poorer patient-reported health status.

Treatment success was associated with significant improvement in QoL. Patients with treatment failure had worse QoL.