

AIM

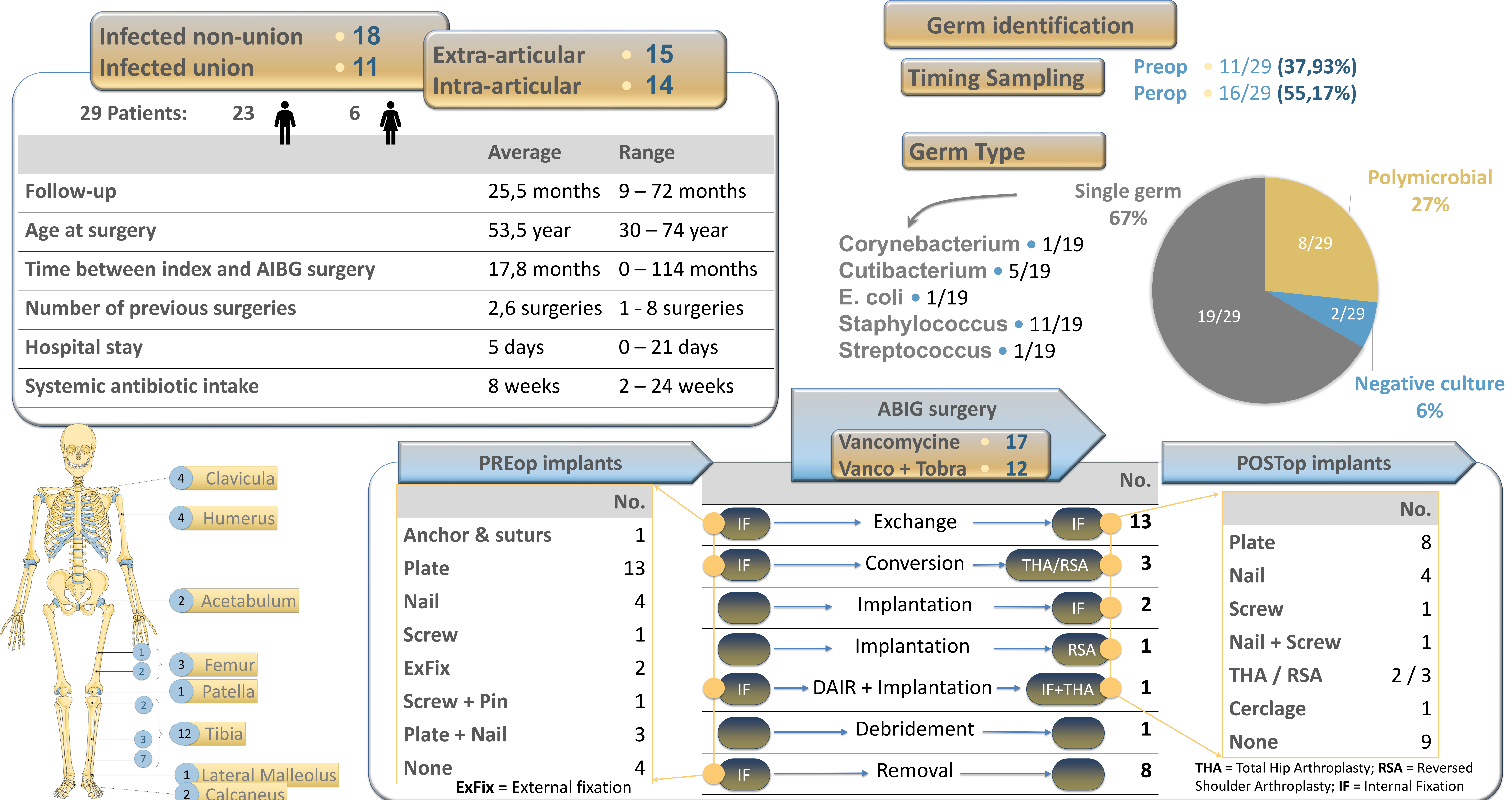
The use of cancellous bone allografts is an established technique in bone reconstruction surgery, but its use is avoided in the presence of infection. Purified cancellous **bone grafts impregnated with antibiotics (AIBG)** have shown their effectiveness as a local antibiotic delivery system. This study evaluates the outcomes of **one-stage treatment** for **fracture-related infections (FRI)** using AIBG

STUDY DESIGN and METHODS

Study design: Retrospective consecutive case series retrieved from the **AIBG database** at a level 1 trauma centre
Recruitment period: From **December 2016 till July 2025**
Inclusion criteria: **FRI** with diagnosis based on one or more positive confirmatory criteria ; treated in a **single stage** ; upper and lower limb, with or without intra-articular extension ; with and without union ; a **minimum follow up of 9 months**
Exclusion criterium: Use of **other AB carriers**



POPULATION



RESULTS

5/29 (17%) • Recurrences of infection

- 2x no germ, but wound complication and fistula
- 1x same germ
- 2x different germ

Treatment

4x Union:

- 3x removal of IF resulted in infection control
- 1x refusal of treatment for infected proximal dia/metaphyseal tibia

1x Non-union:

- 1x amputation for distal tibia non-union (S. epid)

3/29 (10%) • Persistent non-union without infection

Treatment

- 1x distal tibia union achieved with IMN
- 1x ankle union achieved with ExFix
- 1x clavicle refixation, however failed, loss to FU

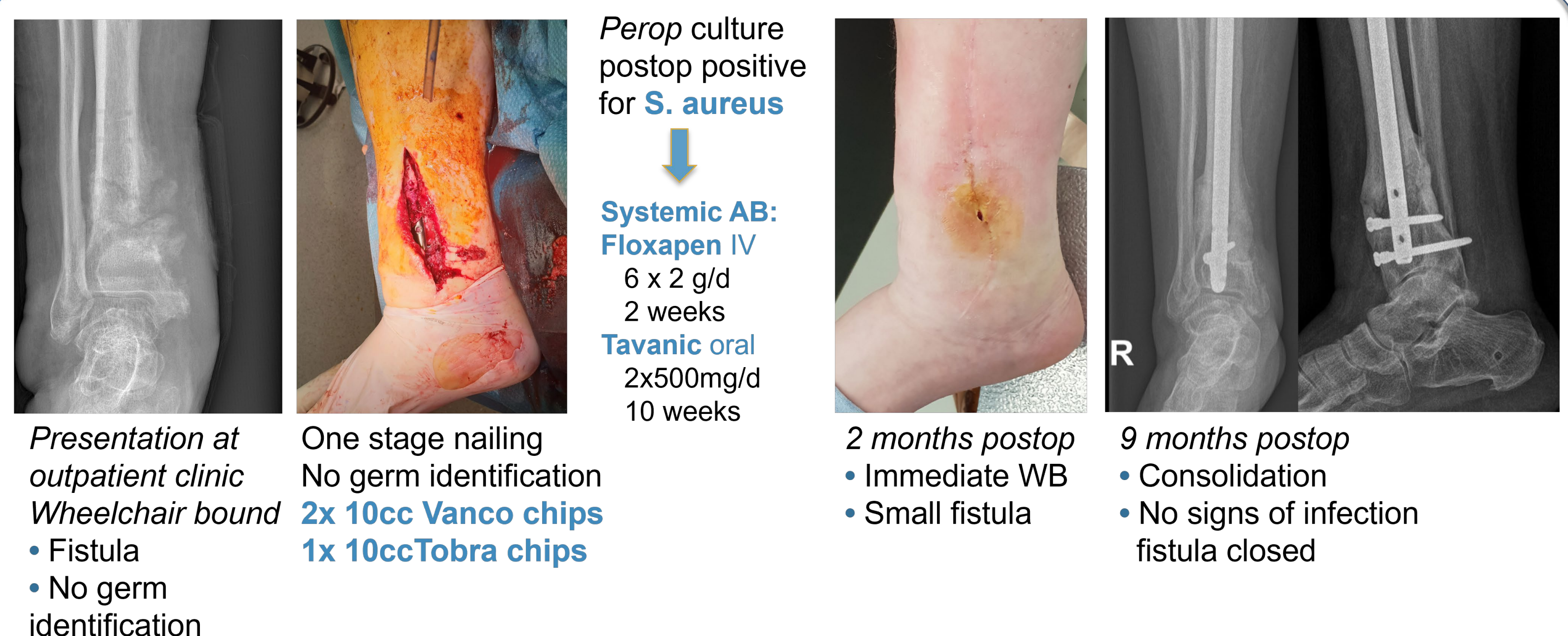


Fig. 1: Case AIB-038: 54 years old female with an infected distal tibia non-union after removal of a failed plate osteosynthesis

CONCLUSION

The elimination of infection following one-stage surgical treatment of FRI using AIBG, **even without preoperative identification of the germ**, was **successful in 80% of cases**, which compares favorably with multistage approaches.

Reference list :



Contact info :

Dr. Guy Putzeys
Guy.Putzeys@azgroeninge.be
0032 56 63 35 55