

Supplementary Table S1. Characteristics of 16 orthopedic *Corynebacterium* sp. infections

No.	Age ^a , sex	Diagnosis, year	Joint/ site	Clinic	Relevant pathogens	Diagnostic under AB	Surgical treatment	Targeted AB treatment
1	67, m	PJI, 2015	Knee	Sinus tract, wound secretion	<i>Corynebacterium simulans.</i> <i>Staphylococcus epidermidis,</i> <i>Pseudomonas aeruginosa</i>	Yes	Two-stage	Vancomycin/cefepime (iv) then vancomycin (iv)/ciprofloxacin (po)
2	67, m	PJI, 2015	Knee	Wound secretion, sinus tract	<i>Corynebacterium. aurimucosum,</i> <i>Staphylococcus lugdunensis,</i> <i>Enterococcus faecalis,</i> <i>Stenotrophomonas maltophilia</i>	No	Two stage	Amoxicillin/vancomycin (iv), then trimethoprim/sulfamethox (po)/amoxicillin (po)

No.	Age ^a , sex	Diagnosis, year	Joint/ site	Clinic	Relevant pathogens	Diagnostic under AB	Surgical treatment	Targeted AB treatment
3	84, f	PJI, 2012	Hip	Pain, sinus tract	<i>Corynebacterium</i> sp., <i>Candida albicans</i>	Yes	Girdlestone	Suppression tx with amoxicillin, fluconazole (po)
4	55, m	PJI, 2015	Knee	Erythema, fever, sinus tract	<i>C. striatum</i>	Yes	Amputation	No
5	80, f	OIAI, 2007	Knee	Hematoma, wound healing disorder	<i>C. amycolatum</i>	No	DAIR	Vancomycin (iv)/rifampin (po)
6	52, f	OIAI, 2010	Foot	Wound secretion, sinus tract	Coagulase-negative staphylococci, <i>C.</i> <i>tuberculostearicum</i>	Yes	DAIR	Ciprofloxacin/rifampin/clinda mycin (po)
7	44, m	OIAI, 2012	Foot	Pain with persistent	<i>C. ureicelerivorans</i>	Yes	Amputation	No

No.	Age ^a , sex	Diagnosis, year	Joint/ site	Clinic	Relevant pathogens	Diagnostic under AB	Surgical treatment	Targeted AB treatment
				infection since 2010, sinus tract				
8	65, f	OIAI, 2011	Foot/Fi bula	Wound healing disorder	<i>C. striatum</i>	No	Osteosynthesis removal	Vancomycin (iv)/rifampin (po) then fusidic acid/rifampin (po)
9	39, m	OIAI, 2009	Foot	Wound healing disorder, pseudarthrosis	<i>C. tuberculostearicum</i> , coagulase-negative staphylococci	No	Osteosynthesis removal	Vancomycin (iv)/clindamycin (po)
10	60, f	Septic arthritis, 2013	Hip	Wound healing disorder, swelling, pain	<i>C. striatum</i>	No	Debridement	Vancomycin (iv) then levofloxacin/rifampin (po)
11	25, m	STI after sarcoma	Hip	Wound healing disorder	<i>C. tuberculostearicum</i>	Yes	Debridement	Vancomycin (iv)

No.	Age ^a , sex	Diagnosis, year	Joint/ site	Clinic	Relevant pathogens	Diagnostic under AB	Surgical treatment	Targeted AB treatment
		surgery, 2011						
12	55, f	STI after amputation, 2007	Knee	Wound healing disorder	<i>C. amycolatum</i> , <i>E. coli</i>	Yes	Debridement	Amoxicillin/clavulanate (iv)
13	51, m	U, 2015	Foot	Wound healing disorder	<i>Corynebacterium diphtheriae</i> biovar mitis, <i>Streptococcus anginosus</i> , <i>Escherichia coli</i> , <i>Eikenella corrodens</i>	No	Amputation	Amoxicillin/clavulanate (iv) levofloxacin (po)
14	62, f	UwO, 2007	Foot	Wound healing disorder	<i>C. amycolatum</i> , <i>E. coli</i> , <i>S. epidermidis</i>	No	Debridement	Ciprofloxacin/clindamycin (po)

No.	Age ^a , sex	Diagnosis, year	Joint/ site	Clinic	Relevant pathogens	Diagnostic under AB	Surgical treatment	Targeted AB treatment
15	48, m	UwO, 2013	Foot	Abscess, wound secretion	<i>C. aurimucosum</i> , <i>C. amycolatum</i> , <i>Streptococcus agalactiae</i> , <i>Staphylococcus caprae</i>	Yes	Amputation	Vancomycin (iv)
16	51, m	UwO, (pressure) 2013	Gluteal	Wound secretion	<i>Corynebacterium auris</i> , <i>Klebsiella pneumoniae</i> , <i>Enterococcus faecalis</i> , <i>S. epidermidis</i> , <i>Actinomyces turicensis</i>	No	Debridement	Ertapenem/amoxicicillin (iv)

^a age at diagnosis, AB, antibiotics; PJI, periprosthetic joint infection; OIAI, orthopedic implant-associated infections; STI, soft tissue infection; U, ulcer; UwO, ulcer with osteomyelitis, DAIR, debridement, antibiotics and implant retention, MR, methicillin resistant; wks, weeks; S, susceptible; R, resistant.

Supplementary Table S2. Antibiotic susceptibility testing (AST) of the four most frequently isolated *Corynebacterium* from orthopedic and blood culture samples (2011-2015) using EUCAST breakpoints (1).

Species	Susceptible isolates (%)							
	GEN ¹	PEN	TET	VAN	CIP	CLI	LZD	RIF
<i>Corynebacterium amycolatum</i> (n=10)	50	20	100	100	20	10	100 ²	80 ²
<i>Corynebacterium tuberculostearicum</i> (n=9)	56	22	89	100	11	0	100 ²	50 ²
<i>Corynebacterium afermentans</i> (n=8)	88	38	88	100	75	0	100 ²	100 ²
<i>Corynebacterium striatum</i> (n=7)	86	0	57	100	29	14	100 ²	100 ²

¹ GEN, gentamicin; PEN, penicillin; TET, tetracycline; VAN, vancomycin; CIP, ciprofloxacin; CLI, clindamycin; LZD, linezolid; RIF, rifampin.

² AST data available only for a subset of isolates: *C. amycolatum*, LZD n=4, RIF n=5; *C. tuberculostearicum*, LZD n=5, RIF n=6; *C. afermentans*, LZD n=2, RIF n=3; *C. striatum*, LZD n=1, RIF n=2.

References

1. **EUCAST.** 2014. The European Committee on Antimicrobial Susceptibility Testing. Breakpoint tables for interpretation of MICs and zone diameters. Version 4.0. <http://www.eucast.org>.