

Supplementary Material

Table S1. Origin of SSI infection and a glance with the certainty level of interpretation.

Intraoperative origin	Arthroplasty	Bacteria	Certainty level	Origin of infection
0	1	E. cloacae, S. epidermidis MRSE	2	Urinary
0	0	unknown	2	Ulcer
0	0	unknown	2	Ulcer
0	1	MSSA	2	Ulcer
0	0	S. epidermidis MRSE	2	Necrosis
1	0	E. cloacae, S. simulans	2	SSI
0	0	unknown	1	Necrosis
1	0	E. faecalis, P. mirabilis	1	SSI
1	0	Anaerococcus murdochii	2	SSI
1	0	C. acnes	1	SSI
0	0	unknown	1	Ulcer
0	1	MSSA, C. koseri	1	Postoperative trauma
1	0	S. epidermidis MRSE	1	SSI
1	1	Aerococcus viridans, S. epidermidis	2	SSI
1	1	MSSA	2	SSI
1	0	S. mitis, E. faecalis	2	SSI
1	0	S. epidermidis MSSE	1	SSI
0	0	MSSA	2	Postoperative trauma
1	0	P. mirabilis, MSSA, P. aeruginosa, E. faecalis	2	SSI
0	1	P. aeruginosa	1	Unknown
1	0	S. epidermidis MRSE, E. coli	2	SSI
0	1	MSSA	1	Ulcer
1	0	MSSA, Heliococcus kunzi, F. magna	2	SSI
0	1	MSSA, S. haemolyticus, C. acnes, Corynebacterium	2	Ulcer, Elephantiasis
1	0	unknown	2	SSI
1	0	S. saccharyticus	2	SSI
1	1	S. lugdunensis	2	SSI
0	0	E. coli	2	Urinary
0	0	S. caprae, S. pettenkoferi	1	Debridement extern
1	0	S. dysgalactiae	1	SSI
1	0	MSSA	2	SSI
1	0	S. epidermidis MSSE	2	SSI
1	0	Mundflora, C.albicans	1	SSI
1	0	S. epidermidis MRSE, S. pettenkoferi. S.anginosus, E. faecalis	2	SSI
1	0	C. acnes	2	SSI

1	0	MSSA	2	SSI
1	0	C. acnes, MSSA	2	SSI
1	0	CA-MRSA	2	SSI
1	0	unknown	2	SSI
1	0	S. epidermidis MRSE	2	SSI
1	0	S. lugdunensis	2	SSI
0	0	MSSA	1	PIN
0	0	MSSA	1	Ulcer
1	1	S. epidermidis MSSE	1	SSI
0	0	F. magna, Corynebacterium	1	Necrosis
1	0	S. epidermidis MRSE	1	SSI
0	0	S. epidermidis MRSE, F. magna	1	Debridement extern
1	0	M. morgani, B. fragilis	2	SSI
1	0	S. epidermidis MSSE	1	SSI
1	0	S. pettenkoferi, C. jejuni, C. confusum, S. epidermidis MRSE	2	SSI
0	1	MSSA	2	Postoperative trauma
1	0	Skin commensals	1	SSI
1	0	HA-MRSA	2	SSI
1	0	K. pneumoniae	2	SSI
1	0	C. spongiosum, C. acnes, E. coli	2	SSI
1	0	MSSA	2	SSI
1	0	MSSA	1	SSI
1	0	unknown	2	SSI
1	0	unknown	2	SSI
0	0	S. epidermidis, Anaerobes, Dermatobacter hominis	2	Ulcer
1	0	MSSA, S. simulans, S. hominis, Prevotella dissiens	2	SSI
1	1	S. epidermidis MSSE	2	SSI
1	0	unknown	2	SSI
0	1	unknown	1	Hematogenous
1	1	S. warneri	2	SSI
0	0	MSSA, E. cloacae	2	PIN
0	1	S. bovis	1	Haematogenous. Colon Ca
0	0	E. cloacae, S. caprae, S. lugdunensis	2	Debridement extern
0	0	S. marcescens	1	Ulcer
0	1	E. cloacae	1	Postoperative trauma
1	0	S. agalactiae	1	SSI
0	0	MSSA	1	Wound dehiscence
1	0	C. acnes	2	SSI

1	0	unknown	2	SSI
1	0	unknown	2	SSI
0	0	MSSA; S. lugdunensis, S. epidermidis	1	Debridement extern
1	0	unknown	2	SSI
1	0	E. faecium, F. magna	2	SSI
0	0	unknown	1	Debridement extern
0	0	unknown	1	Debridement extern
0	0	S. agalactiae	2	PIN
0	0	S. epidermidis MSSE	1	Hematoma
1	1	S. epidermidis MRSE	2	SSI
1	0	S. epidermidis MSSE	2	SSI
1	0	S. epidermidis MRSE	1	SSI
1	0	K. pneumoniae	2	SSI
1	0	unknown	2	SSI
0	0	C. acnes, S. pettenkoferi	2	PIN
1	0	S. mitis	2	SSI
0	0	MSSA	2	Hematoma
1	1	C. acnes	2	Unknown
0	1	CA-MRSA	2	SSI
1	0	P. aeruginosa	1	SSI
1	0	E. faecalis	2	SSI
0	1	Abiotrophia defectiva	1	Gastrointestinal
1	0	S. epidermidis MRSE	2	SSI
1	0	Porphyromonas somerae	2	SSI
1	0	E. cloacae	2	SSI
0	0	unknown	1	Debridement extern
1	1	S. sanguis	1	SSI
1	1	S. caprae MSSE	2	SSI
1	0	MSSA	1	SSI
0	0	MSSA, Peptostreptokokken, F. magna	2	Debridement extern
1	1	Granulacitella djacens	1	SSI
1	0	P. aeruginosa	2	SSI
0	0	MSSA	2	Ulcer
1	1	C. acnes	1	SSI
1	0	C. koseri, E. cloacae	2	SSI
1	0	unknown	2	SSI
0	0	MSSA, S. viridans	2	Debridement extern
1	1	H. parainfluenzae, Fusobacterium	2	SSI
1	0	S. agalactiae	2	SSI
1	0	C. acnes	1	SSI
1	1	MSSA	1	SSI
0	0	P. mirabilis	2	Debridement extern
1	0	P. vulgaris	2	SSI

1	0	MSSA	2	SSI
0	0	S. epidermidis MRSE	1	Seroma
0	0	K. pneumoniae, S. epidermidis MRSE	1	Debridement extern
1	0	C. koseri	2	SSI
1	0	P. mirabilis	2	SSI
1	1	P. aeruginosa panresistent	2	SSI
1	0	S. caprae ? C. acnes	2	SSI
1	1	S. caprae	2	SSI
0	0	S. epidermidis MRSE	2	Dehiscence
1	0	MSSA, S. warneri	2	SSI
1	0	MSSA, S. mitis	2	SSI
1	1	C. acnes	1	SSI
1	1	S. agalactiae	2	SSI
1	0	E. cloacae, MSSA	2	SSI
1	0	S. epidermidis MRSE	2	SSI
0	0	E. coli, E. faecalis, E. cloacae	1	Debridement extern
0	0	unknown	1	Debridement extern
1	0	C. acnes	1	SSI
1	0	C. acnes	1	SSI
1	0	S. epidermidis MRSE	1	SSI
1	0	MSSA	1	SSI
0	0	unknown	1	Colon Cancer
1	0	unknown	1	SSI
1	0	S. epidermidis MRSE	2	SSI
0	1	S. agalactiae	2	Ulcer
1	0	P. aeruginosa	2	SSI
1	1	S. epidermidis MRSE	2	SSI
1	0	K. oxytoca, F. magna	2	SSI
1	0	MSSA	1	SSI
0	0	S. epidermidis MRSE, E. faecalis	2	Debridement extern
0	0	MSSA	2	Debridement extern
0	0	E. cloacae, Enterococcus, Klebsiella, Alcaligenes	1	Seroma
1	1	S. lugdunensis	1	SSI
0	1	HA-MRSA	1	Hematogenous
0	0	E. cloacae, MSSA	1	Debridement extern
1	0	C. acnes	1	SSI
1	0	MSSA	1	SSI
0	0	S. epidermidis MRSE	1	Debridement extern
1	0	S. epidermidis MRSE, S. pettenkoferi	2	SSI
0	0	E. cloacae, MSSA, C. striatum	2	Debridement extern
0	0	S. epidermidis MRSE	1	PIN

0	0	unknown	1	Debridement extern
0	0	unknown	2	PIN
0	0	<i>P. mirabilis</i> , <i>S. caprae</i>	1	Debridement extern
0	0	unknown	2	Debridement extern
1	0	<i>Peptostreptococcus</i>	2	SSI
1	0	<i>C. acnes</i>	1	SSI
1	0	<i>E. cloacae</i>	2	SSI
0	0	unknown	1	Debridement extern
0	0	unknown	1	Debridement extern
1	1	unknown	1	SSI
1	1	<i>C. avidum</i>	1	SSI
1	0	<i>E. coli</i> , <i>S. dysgalactiae</i>	1	SSI
1	0	MSSA	2	SSI
1	0	MSSA	2	SSI
0	0	MSSA	1	Hematogenous
1	0	<i>P. aeruginosa</i> , <i>E. cloacae</i>	2	SSI
1	0	<i>S. haemolyticus</i>	2	SSI
0	0	<i>S. epidermidis</i> MRSE, <i>P. aeruginosa</i>	2	Wound discharge
1	0	MSSA	2	SSI
1	1	MSSA, <i>E. cloacae</i>	2	SSI
1	0	<i>S. epidermidis</i> MRSE	1	SSI
1	0	<i>C. acnes</i>	2	SSI
1	1	unknown	1	SSI
1	0	MSSA	2	SSI
0	0	unknown	1	Debridement extern
1	0	<i>S. epidermidis</i> MRSE	2	SSI
1	0	<i>S. epidermidis</i> MRSE	2	SSI
0	0	<i>S. epidermidis</i> MRSE, <i>Actinomyces neuli</i>	1	Debridement extern
1	1	HA-MRSA	2	SSI
1	0	<i>S. caprae/capitis</i>	2	SSI
1	1	<i>S. mitis</i>	1	SSI
0	0	unknown	2	Debridement extern
1	1	<i>C. pavidum</i>	1	SSI
1	1	<i>E. faecalis</i>	1	SSI
1	0	unknown	2	SSI
0	0	<i>E. coli</i> , <i>E. faecalis</i> , Anaerobes	1	Debridement extern
0	0	<i>P. aeruginosa</i> MDR	1	Debridement extern
1	0	unknown	2	SSI
0	0	<i>E. cloacae</i> , <i>E. faecalis</i> , <i>K. pneumoniae</i>	1	Debridement extern
1	0	<i>P. aeruginosa</i>	2	SSI
1	0	MSSA, <i>B. cereus</i>	2	SSI

1	0	P. aeruginosa, S. lugdunensis	1	SSI
1	0	MSSA, S. lugdunensis	2	SSI
1	0	unknown	2	SSI
1	0	S. lugdunensis	2	SSI
0	0	MSSA	1	Debridement extern
1	0	E. cloacae, K. pneumoniae	2	SSI
1	0	K. pneumoniae, M. morgani, Actinomyces	2	SSI
0	0	MSSA	1	Debridement extern
0	0	S. dysgalactiae, S. anginosus	1	Debridement extern
1	0	MSSA	2	SSI
0	0	E. cloacae	1	Debridement extern
0	0	unknown	1	Debridement extern
1	0	unknown	2	SSI
1	0	S. epidermidis MRSE, S. caprae MSSE, C. acnes	2	SSI
1	0	S. haemolyticus, S. epidermidis	2	SSI
1	0	S. epidermidis MRSE	2	SSI
0	0	unknown	1	Debridement extern
1	0	K. pneumoniae	2	SSI
0	0	S. marcescens, P. mirabilis	1	Debridement extern
1	0	E. cloacae	2	SSI
1	0	CA-MRSA	2	SSI
1	1	S. epidermidis MRSE	1	SSI
1	0	unknown	2	SSI
0	0	unknown	1	Debridement extern
0	0	P. mirabilis, E. faecalis, MSSA	2	Debridement extern
1	0	S. epidermidis MSSE	2	SSI
1	1	MSSA	1	SSI
1	1	S. epidermidis MRSE	2	SSI
1	0	S. epidermidis MRSE	2	SSI
1	0	K. pneumoniae	2	SSI
1	0	E. coli	2	SSI
1	0	C. acnes	2	SSI
1	1	C. acnes	1	SSI
0	0	MSSA	1	Debridement extern
1	0	E. coli, E. faecalis, P. aeruginosa	2	SSI
0	0	MSSA, S. epidermidis MSSE	1	Debridement extern
1	0	C. acnes	1	SSI
0	0	MSSA, S. marcescens	1	Debridement extern
0	0	unknown	1	Debridement extern
1	0	unknown	2	SSI
1	0	MSSA	2	SSI
1	0	C. acnes	2	SSI

1	0	S. epidermidis MRSE	2	SSI
1	1	E. faecalis	1	SSI
0	0	E. cloacae, E. faecalis, MSSA, K. oxytoca	1	Necrosis
1	0	S. lugdunensis	2	SSI
1	0	E. cloacae	2	SSI
1	1	MSSA	1	SSI
0	0	MSSA, S. agalactiae	1	Debridement extern
1	1	E. coli	1	SSI
1	0	MSSA, E. cloacae	2	SSI
0	1	P. vulgaris	2	Hematoma
1	0	unknown	2	SSI
1	1	HA-MRSA	1	SSI
0	0	S. maltophilia, Delphitia	1	Debridement extern
0	0	E. coli, M. morgani, P. vulgaris, MSSA, S. anginosus, Anaerobes	1	Debridement extern
0	0	MSSA	1	Debridement extern
0	1	S. dysgalactiae	1	Hematogenous
0	0	unknown	1	Debridement extern
1	0	MSSA	2	SSI
1	0	S. epidermidis MRSE	1	SSI
1	0	P. aeruginosa	1	SSI
1	0	unknown	2	SSI
1	1	Clostridium ramosum	1	SSI
0	0	S. dysgalactiae	1	Debridement extern
0	0	S. epidermidis MRSE	2	Dehiscence
1	0	unknown	1	SSI
1	0	P. aeruginosa	1	SSI
0	0	MSSA	1	Debridement extern
1	0	C. koseri, F. magna	1	SSI
0	0	E. cloacae, S. epidermidis	1	Necrosis, Dehiscence
1	1	MSSA	2	SSI
0	0	unknown	1	Ulcer, Debridement
0	0	unknown	1	Debridement extern
1	0	MSSA	2	SSI
1	0	unknown	2	SSI
1	0	MSSA	1	SSI
1	1	MSSA	2	SSI
1	0	C. acnes	2	SSI
1	0	E. coli, K. pneumoniae	2	SSI
1	0	MSSA, S. dysgalactiae, F. magna	1	SSI
0	0	S. lugdunensis	2	Skin lesion
0	0	MSSA	1	Debridement extern
0	0	S. caprae	1	Ulcer

0	0	S. epidermidis MRSE	2	PIN
0	0	C. koserii, Corynebacteria, koagulase-negative Staphylokokken	2	Ulcer, Debridement
1	0	C. acnes	2	SSI
1	0	unknown	2	SSI
0	0	K. pneumoniae, S. viridans, P. aeruginosa	2	Debridement extern
0	0	unknown	1	Debridement extern
0	0	unknown	1	Debridement extern
1	1	MSSA, E. faecalis	2	SSI
1	1	S. epidermidis MRSE	2	SSI
1	0	S. epidermidis MRSE	2	SSI
0	1	S. pneumoniae	2	Hematogenous
0	1	MSSA, S. epidermidis MRSE	1	Postoperative trauma
1	1	S. epidermidis MSSE, S. caprae	2	SSI
1	0	MSSA	2	SSI
1	1	S. epidermidis MRSE	1	SSI
0	0	unknown	1	Debridement extern
1	0	CA-MRSA	2	SSI
0	0	S. lugdunensis	1	Debridement extern
0	0	unknown	1	Debridement extern
1	0	C. acnes	2	SSI
0	1	unknown	1	Haematogenous, Decubitus
1	0	S. marcescens	2	SSI
1	0	S. epidermidis MRSE	2	SSI
1	0	MSSA, E. cloacae	1	SSI
1	1	Actinomyces radingae, F. magna	1	SSI
0	0	S. epidermidis MRSE	2	PIN
1	0	S. lugdunensis, S. mitis S. epidermidis MRSE	2	SSI
1	0	MSSA	1	SSI
0	0	P. aeruginosa	1	Debridement extern
1	0	P. mirabilis	2	SSI
1	0	S. marcescens, viele CoNS	2	SSI
1	0	MSSA	1	SSI
0	0	F. magna	1	Hematoma
0	0	MSSA, S. agalactiae, S. dysgalactiae	1	Dehiscence
1	1	MSSA	1	SSI
0	1	MSSA	2	Hematogenous
1	1	C. acnes	2	SSI
1	0	P. aeruginosa	2	SSI
1	0	C. acnes	2	SSI
0	0	MSSA	1	PIN

1	1	unknown	2	SSI
1	0	MSSA	2	SSI
1	0	E. coli	2	SSI
0	0	MSSA	1	Debridement extern
0	0	unknown	1	Debridement extern
1	0	S. epidermidis MRSE	2	SSI
0	0	MSSA, S. dysgalactiae, Corynebacterien, Hautkeine	1	Necrosis
1	0	MSSA	2	SSI
1	1	S. agalactiae	2	SSI
1	0	unknown	2	SSI
0	0	E. cloacae. P. mirabilis, Kocuria	1	Dehiscence
1	0	E. coli	1	SSI
1	1	S. epidermidis MSSE	1	SSI
1	1	C. acnes	1	SSI
1	0	C. acnes	2	SSI
0	0	unknown	2	Necrosis
1	0	S. epidermidis MSSE	2	SSI
1	1	E. faecalis	2	SSI
0	0	Clostridium tertium	2	Necrosis
1	0	E. coli, K. pneumoniae	2	SSI
1	0	P. vulgaris, MSSA S. dysgalactiae, S. simulans	2	SSI
1	0	E. coli, E. cloacae	2	SSI
1	0	E. coli	2	SSI
1	1	B. cereus	2	SSI
1	1	S. epidermidis MRSE	2	SSI
0	0	MSSA, E. faecalis	1	Debridement extern
1	0	E. coli, M. morgani	2	SSI
1	0	MSSA, E. cloacae	2	SSI
1	0	S. epidermidis MRSE	1	SSI
1	0	S. epidermidis MRSE	2	SSI
1	0	unknown	2	SSI
1	0	MSSA	2	SSI
1	0	S. epidermidis MRSE	1	SSI
1	1	S. epidermidis MRSE	2	SSI
0	1	Streptococcus intermedius	1	Hematogenous
1	0	MSSA, K. pneumoniae	1	SSI
0	0	MSSA, E. coli	1	Ulcer, Debridement
0	0	S. marcescens	1	Urinary
1	0	C. acnes	2	SSI
0	1	P. mirabilis	1	Hematoma
1	0	unknown	2	SSI

1	1	MSSA	2	SSI
1	0	E. coli ESBL	1	SSI
0	0	MSSA, K. pneumoniae	1	Necrosis
1	0	HA-MRSA, S. epidermidis MRSE	2	SSI
1	0	CA-MRSA	2	SSI
1	0	E. coli, P. vulgaris, E. cloacae	2	SSI
1	0	MSSA	1	SSI

SSI = Surgical site infections. MSSA = Methicillin-susceptible *S. aureus*. MRSE = Methicillin-resistant *S. epidermidis*. MSSE = Methicillin-susceptible *S. epidermidis*. CA-MRSA = Community-acquired methicillin-resistant *S. aureus*. ESBL = Extended-spectrum beta-lactamase carriers. Arthroplasty = Any arthroplasty-related surgery. Certainty level 1 is less certain than level 2.