

**Supplementary Table S1.** Septic arthritis with isolated organism between 2016 through 2019. Comparison between two pathogenetic subgroups: direct inoculation group<sup>a</sup> and hematogenous group.

	18–64 years	65–79 years	80 years and above
Septic arthritis due to direct inoculation ( <i>n</i> = 54) number (%)	36 (67)	11 (20)	7 (13)
Hematogenous septic arthritis ( <i>n</i> = 216) number (%)	78 (36)	85 (39)	53 (25)

<sup>a</sup> Postoperative within 3 months, septic arthritis one to two weeks after intraarticular injection, trauma or bite at the affected joint.

**Supplementary Table S2.** Demographics and comparison between group of patients where SF-WBC was analysed and group of patients where SF-WBC was missing.

Parameter	SF-WBC is analysed ( <i>n</i> = 74)	SF-WBC is missing ( <i>n</i> = 142)	<i>p</i> -value
Male (%)	41 (55)	84 (59)	NS
Hospitalization days median (range)	19 (1–80)	16 (1–67)	NS
Mortality within 30 days (%)	3 (4)	8 (6)	NS
Osteosynthesis or prosthesis in affected joint	12 (16)	17 (12)	NS
Monoarthritis (%)	71 (96)	125 (88)	NS
Fever ≥ 37.5 Celsius (%)	43 (58)	71 (50)	NS
CRP mg/L mean (SD)	207 (119)	230 (134)	NS
Haemoglobin g/L mean (SD) <i>n</i> = 201	121 (19)	123 (20)	NS
WBC ×10 <sup>9</sup> /L mean (SD)	15 (19)	15 (17)	NS
Platelets ×10 <sup>9</sup> /L mean (SD)	280 (152)	239 (117)	NS
Creatinine μmol/L mean (SD)	126 (123)	128 (106)	NS

**Supplementary Table S3.** Comparison between demographics and characteristics of patients in the youngest age group, 18–64 years, divided into two new groups in order to analyze potential differences.

Parameter	18–30 years ( <i>n</i> = 8)	31–64 years ( <i>n</i> = 70)	<i>p</i> -value
Male (%)	5 (63)	39 (56)	NS
Hospitalization days median (range)	6 (1–14)	14 (2–80)	0.008
Mortality within 30 days (%)	0 (0)	0 (0)	NS
Fever ≥ 37.5 Celsius (%)	<i>n</i> = 7 4 (57)	<i>n</i> = 68 41 (60)	NS
CRP mg/L mean (SD)	74 (47)	209 (137)	0.004
Haemoglobin g/L mean (SD) <i>n</i> = 201	131 (16)	127 (19)	NS
WBC ×10 <sup>9</sup> /L mean (SD)	<i>n</i> = 7 12 (5)	<i>n</i> = 67 13 (7)	NS
Platelets ×10 <sup>9</sup> /L mean (SD)	<i>n</i> = 6 283 (164)	<i>n</i> = 60 278 (138)	NS
Creatinine μmol/L mean (SD)	<i>n</i> = 7 77 (17)	<i>n</i> = 62 112 (110)	NS
SF-WBC ×10 <sup>9</sup> /L mean (SD)	<i>n</i> = 4	<i>n</i> = 21	NS

	53 (55)	42 (30)	
Glucose ratio mmol/L mean (SD)	<i>n</i> = 3 0.33 (0.52)	<i>n</i> = 21 0.39 (0.29)	NS
SF-PMN/WBC ratio mean (SD)	<i>n</i> = 4 0.85 (0.03)	<i>n</i> = 20 0.88 (0.12)	NS
Obesity	0 (0)	14 (20)	NS

<sup>a</sup>Obesity is defined as BMI >30. Mann-Whitney U was used for mean and median. Fishers exact test was used for statistics on sex, mortality within 30 days, fever and obesity. NS; not significant.