Bone & Joint Research

Supplementary Material

10.1302/2046-3758.99.BJR-2019-0362.R1

Table i. Detailed structure of the data from the national registry and controlled variables.

Variable*	Type	Controlled†
Patient identification	Unique identification number	
Age	Integer	X
Sex	Categorical (2 entries)	X
Centre	Categorical (24 entries)	
Date of MM	Date	
Number of presentations	Integer	
Main reason for MM	Categorical (4 entries)	
Weight	Numerical	X
Height	Numerical	X
Body mass index (BMI)	Numerical	X
CRP level	Numerical	X
ASA score	Integer	X
Creatinine level	Numerical	X
Glomerular filtration rate	Numerical	
Comorbidities (≥ 1 from the below)	List	

Diabetes		X
Immunodeficiency		C
Multiple comorbidities		C
Chronic kidney disease		X
Liver failure		X
Heart failure		X
Details on comorbidities	Unstructured	-
Risk factors for BJI (≥ 1 from the below)	List	
Tobacco use		X
Severe obesity (BMI > 30)		X
Complicated diabetes		X
Cirrhosis		X
Evolutive neoplasm		X
Chronic inflammatory disease		X
Sickle cell disease		
Haemophilia		
HIV or viral hepatitis		-
Solid organ transplantation		-
Immunosuppressive therapy		-
Chemotherapy		-
Other		
Other risk factors	Unstructured	-
Allergy/Intolerance	Categorical (2 entries)	X
Details on allergy	Unstructured	

Clinical summary	Unstructured	-
Site of infection	Categorical (18 entries)	X
Side of infection	Categorical (2 entries)	X
Type of infection (≥ 1 from the below)	List	X
Arthritis		
Osteitis		
Pseudarthrosis		
Osteosynthesis device		
Prosthesis		
Other		
Microbiological documentation	Categorical (4 entries)	X
Microorganism: 1 to 9	Categorical (40 entries)	X
Resistance: 1 to 7	Categorical (2 entries)	-
Details on microbiology	Unstructured	-
Surgical procedure advised: 1 to 4	Categorical (18 entries)	X
Details on surgical management	Unstructured	-
Parenteral access	Categorical (5 entries)	
Preoperative antibiotic therapy	Categorical (2 entries)	X
Molecule: 1 to 11	Categorical (52 entries)	
Posology: 1 to 11	Unstructured	
Duration: 1 to 11	Unstructured	
Route of administration: 1 to 9	Unstructured	
Postoperative antibiotic therapy	Categorical (2 entries)	X
Molecule: 1 to 17	Categorical (52 entries)	X

Dosage: 1 to 17	Unstructured	
Duration: 1 to 17	Unstructured	X
Route of administration: 1 to 17	Unstructured	
Suppressive antibiotic therapy	Categorical (2 entries)	
Oxygen therapy	Categorical (2 entries)	
Details on medical management	Unstructured	-
Complexity	Categorical (2 entries)	X
Criteria for complexity (≥ 1 from the below)	List	X
Previous failure		
Difficult-to-treat microorganism		
Complex surgery		
Debilitated background		

*Variable: 1 to "X": some variables are repeated as far as they are represented for an individual patient, for example "Molecule: 1 to 17", one individual patient received 17 lines of postoperative antibiotic treatment, thus the variable is repeated 17 times throughout the whole database.

†The column "Controlled" refers to the variables controlled in the quality analysis: X for those directly controlled, C for those combined before comparison, and – for the variables partially analyzed in order to complete the compared data.

ASA, American Society of Anesthesiologists; BJI, bone and joint infection; MM, multidisciplinary meetings.

A

Centre	Age	Sex	Weight	Height	BMI	CRP	Creatinine	ASA score	Diabetes	Insulin	Obesity	Tobacco	Alcohol	Immunodeficiency	Inflammatory disease	Cancer	Heart failure	Kidney injury	Liver failure	Anticoagulation	Dementia	Intracardiac device
1	100	100	0	NaN	NaN	100	NaN	83,33	100	100	33,33	75	100	100	100	100	100	91,67	100	75	91,67	91,67
2	94,12	94,12	NaN	NaN	NaN	66,67	NaN	94,12	90,91	0	100	81,82	81,82	100	100	100	100	81,82	100	63,64	100	100
3	100	100	100	100	83,33	66,67	100	0	100	100	100	83,33	83,33	100	100	100	100	100	100	100	100	100
4	100	92,31	100	100	100	87,5	100	100	100	0	91,67	100	100	100	100	88,89	100	92,31	100	100	100	90
5	100	100	50	100	0	80	100	66,67	100	0	90,91	72,73	100	90,91	90,91	100	90	72,73	100	72,73	100	81,82
6	100	100	100	83,33	100	100	100	100	100	0	94,44	94,44	94,44	88,89	100	94,44	100	100	94,44	66,67	94,44	88,89
7	100	100	NaN	0	0	44,44	NaN	69,23	100	0	88,89	85,71	75	100	100	100	57,14	90	100	80	100	100
8	100	100	100	88,89	100	90	83,33	92,31	86,67	93,33	80	93,33	73,33	86,67	100	92,86	62,5	80	93,33	100	100	86,67
9	100	100	100	100	100	100	100	100	90	100	100	100	90	90	100	88,89	40	100	100	100	100	100
10	100	100	83,33	83,33	72,22	41,18	66,67	71,43	100	100	100	90,91	91,67	100	100	100	100	85,71	91,67	58,33	100	83,33
11	100	100	92,31	92,86	84,62	0	84,62	NaN	100	90,91	90,91	81,82	72,73	100	100	100	100	92,86	100	90,91	90,91	100
12	100	100	100	NaN	NaN	75	NaN	100	100	0	100	77,78	88,89	88,89	100	87,5	57,14	88,89	100	88,89	100	100
13	100	100	100	75	75	42,86	83,33	66,67	75	0	80	66,67	100	100	100	66,67	100	85,71	75	100	100	100
14	88,24	100	66,67	57,14	40	85,71	88,89	40	90	90	85,71	75	100	80	100	90	50	100	100	87,5	100	100
15	100	100	100	100	100	100	100	100	100	100	100	100	100	81,82	90	77,78	87,5	100	100	100	100	90,91
16	100	100	82,35	94,44	76,47	38,46	83,33	50	100	80	86,67	100	100	93,33	100	91,67	88,89	88,89	100	86,67	100	93,33
17	100	100	100	100	100	NaN	85,71	NaN	100	0	100	100	100	100	100	100	60	92,86	83,33	100	100	100
18	88,24	100	88,24	82,35	70,59	63,64	93,75	82,35	100	0	92,86	100	76,92	100	100	100	100	100	100	84,62	92,31	100
19	100	100	100	100	100	100	33,33	92,86	87,5	75	100	100	100	100	100	100	50	100	100	100	100	100
Mean	98,45	99,29	86,05	84,83	75,14	71,23	86,86	77,00	95,79	48,91	90,28	88,34	90,95	94,76	99,00	93,62	81,22	91,76	96,72	87,10	98,39	95,09

Centre	Drug intolerance	Site	Side	Type of infection	Orthopaedic implant	Microbiology	Microorganism	Surgical procedure	Post-operative antibiotics	Antibiotic drug	Complexity	Global
1	33,33	100	100	55,56	61,11	100	83,33	83,33	100	100	100	85,27767
2	NaN	88,24	94,12	31,25	88,24	100	82,35	87,5	100	87,5	82,35	85,37821
3	50	83,33	60	66,67	66,67	100	83,33	100	100	100	100	88,68667
4	NaN	100	100	38,46	83,33	84,62	76,92	100	91,67	80	100	90,5525
5	NaN	93,75	100	50	93,33	69,23	52,94	71,43	68,75	100	94,12	79,78
6	100	94,44	94,12	61,11	77,78	68,75	88,89	50	100	100	100	88,77303
7	100	93,33	84,62	46,67	80	66,67	60	70	91,67	57,14	93,33	75,28516
8	80	100	93,75	29,41	94,12	94,12	94,12	81,25	100	92,86	70,59	88,28606
9	0	92,86	100	76,92	84,62	91,67	85,71	81,82	100	92,86	100	91,07121
10	NaN	100	100	44,44	83,33	76,47	94,44	76,92	100	100	100	87,35563
11	100	91,67	100	38,46	84,62	85,71	66,67	80	100	73,33	80	86,435
12	100	100	100	42,86	91,67	100	85,71	100	69,23	88,89	92,86	87,47333
13	NaN	92,31	100	57,14	85,71	92,86	85,71	64,29	100	78,57	64,29	81,64969
14	0	87,5	100	43,75	81,25	75	70,59	90,91	100	100	100	80,72303
15	100	100	100	64,71	76,47	100	88,24	93,75	100	100	100	95,4903
16	50	94,44	94,12	38,89	77,78	83,33	83,33	55,56	88,89	87,5	77,78	83,82182
17	NaN	93,75	100	43,75	100	87,5	87,5	100	80	83,33	100	89,92433
18	100	100	100	94,12	88,24	100	82,35	88,24	82,35	71,43	94,12	88,38545
19	100	100	100	26,67	100	100	84,62	31,25	100	86,67	88,24	89,58
Mean	70,26	95,03	95,83	50,04	84,12	88,21	80,88	79,28	93,29	88,43	91,46	86,52

B

Centre	Age	Sex	Weight	Height	BMI	CRP	Creatinine	ASA score	Diabetes	Insulin	Obesity	Tobacco	Alcohol	Immunodeficiency	Inflammatory disease	Cancer	Heart failure	Kidney injury	Liver failure	Anticoagulation	Dementia	Intracardiac device
1	100	100	0	NaN	NaN	100	NaN	83,33	100	100	27,78	72,22	94,44	100	100	100	100	94,44	100	83,33	94,44	94,44
2	94,12	94,12	NaN	NaN	NaN	66,67	NaN	94,12	88,24	35,29	88,24	82,35	88,24	100	100	100	100	88,24	100	76,47	94,12	100
3	100	100	100	100	83,33	66,67	100	0	100	100	100	83,33	83,33	100	100	100	100	100	100	100	100	100
4	100	92,31	100	100	100	87,5	100	100	100	23,08	92,31	100	100	100	100	92,31	100	92,31	100	100	100	92,31
5	100	100	50	100	0	80	100	66,67	100	46,15	88,24	76,47	94,12	94,12	94,12	100	94,12	82,35	100	82,35	94,12	88,24
6	100	100	100	83,33	100	100	100	100	100	0	94,44	94,44	94,44	88,89	100	94,44	100	100	94,44	66,67	94,44	88,89
7	100	100	NaN	0	0	44,44	NaN	69,23	100	33,33	92,86	77,78	80	100	100	100	80	93,33	100	86,67	100	100
8	100	100	100	88,89	100	90	83,33	92,31	88,24	94,12	76,47	88,24	76,47	88,24	100	94,12	76,47	82,35	94,12	100	100	88,24
9	100	100	100	100	100	100	100	100	92,86	100	100	100	92,86	92,86	100	92,86	78,57	100	100	100	100	100
10	100	100	83,33	83,33	72,22	41,18	66,67	71,43	100	100	100	93,33	93,75	100	100	100	100	87,5	93,75	68,75	100	87,5
11	100	100	92,31	92,86	84,62	0	84,62	NaN	100	93,33	93,33	80	80	100	100	100	100	93,33	100	86,67	93,33	100
12	100	100	100	NaN	NaN	75	NaN	100	100	35,71	100	85,71	92,86	92,86	100	92,86	78,57	92,86	100	92,86	100	100
13	100	100	100	75	75	42,86	83,33	66,67	92,86	76,92	92,86	75	100	100	100	92,86	100	92,86	92,86	92,86	100	100
14	88,24	100	66,67	57,14	40	85,71	88,89	40	88,24	93,75	70	72,73	100	88,24	100	94,12	82,35	100	100	92,86	100	100
15	100	100	100	100	100	100	100	100	100	100	100	100	100	88,24	93,75	88,24	94,12	100	100	100	100	94,12
16	100	100	82,35	94,44	76,47	38,46	83,33	50	100	83,33	88,89	100	100	94,44	100	94,44	94,44	88,89	100	88,89	100	94,44
17	100	100	100	100	100	NaN	85,71	NaN	100	62,5	100	87,5	100	100	100	93,75	87,5	93,75	87,5	93,75	100	100
18	88,24	100	88,24	82,35	70,59	63,64	93,75	82,35	100	23,53	94,12	94,12	82,35	100	100	100	100	100	100	82,35	94,12	100
19	100	100	100	100	100	100	33,33	92,86	88,24	88,24	76,47	94,12	94,12	100	100	100	82,35	100	100	100	100	88,24
Mean	98,45	99,29	86,05	84,83	75,14	71,23	86,86	77,00	96,77	67,86	88,21	87,23	91,95	96,20	99,36	96,32	92,03	93,80	98,04	89,18	98,14	95,60

Centre	Drug intolerance	Site	Side	Type of infection	Orthopaedic implant	Microbiology	Microorganism	Surgical procedure	Post-operative antibiotics	Antibiotic drug	Complexity	Global
1	77,78	100	100	55,56	61,11	100	83,33	83,33	100	100	100	86,851
2	75	88,24	94,12	31,25	88,24	100	82,35	87,5	100	87,5	82,35	86,44034
3	83,33	83,33	60	66,67	66,67	100	83,33	100	100	100	100	89,69667
4	100	100	100	38,46	83,33	84,62	76,92	100	91,67	80	100	91,73121
5	100	93,75	100	50	93,33	69,23	52,94	71,43	68,75	100	94,12	82,56424
6	100	94,44	94,12	61,11	77,78	68,75	88,89	50	100	100	100	88,77303
7	90,91	93,33	84,62	46,67	80	66,67	60	70	91,67	57,14	93,33	77,16065
8	82,35	100	93,75	29,41	94,12	94,12	94,12	81,25	100	92,86	70,59	88,91455
9	85,71	92,86	100	76,92	84,62	91,67	85,71	81,82	100	92,86	100	95,21758
10	81,25	100	100	44,44	83,33	76,47	94,44	76,92	100	100	100	87,86636
11	100	91,67	100	38,46	84,62	85,71	66,67	80	100	73,33	80	86,71438
12	100	100	100	42,86	91,67	100	85,71	100	69,23	88,89	92,86	90,35033
13	92,86	92,31	100	57,14	85,71	92,86	85,71	64,29	100	78,57	64,29	86,83879
14	88,24	87,5	100	43,75	81,25	75	70,59	90,91	100	100	100	84,4297
15	100	100	100	64,71	76,47	100	88,24	93,75	100	100	100	96,41333
16	94,44	94,44	94,12	38,89	77,78	83,33	83,33	55,56	88,89	87,5	77,78	85,72333
17	87,5	93,75	100	43,75	100	87,5	87,5	100	80	83,33	100	92,10613
18	100	100	100	94,12	88,24	100	82,35	88,24	82,35	71,43	94,12	89,10909
19	94,12	100	100	26,67	100	100	84,62	31,25	100	86,67	88,24	89,38
Mean	91,24	95,03	95,83	50,04	84,12	88,21	80,88	79,28	93,29	88,43	91,46	88,23

Fig a. Detailed analysis of data consistency.

a) Crude data consistency by centre and by variables. b) Data consistency by considering missing data for qualitative variables in the medical history as negative results. The red colour indicates a data consistency of less than 70%; yellow, between 70% and 80%; green, between 80% and 90%; and blue, above 90%. ASA, American Society of Anesthesiologists; BMI, body mass index.

A

Centre	Age	Sex	Weight	Height	BMI	CRP	Creatinine	ASA score	Diabetes	Insulin	Obesity	Tobacco	Alcohol	Immunodeficiency	Inflammatory disease	Cancer	Heart failure	Kidney injury	Liver failure	Anticoagulation	Dementia	Intracardiac device
1	100	100	5,56	0	0	5,56	0	100	66,67	66,67	66,67	66,67	66,67	66,67	66,67	66,67	16,67	66,67	66,67	66,67	66,67	66,67
2	100	100	0	0	0	52,94	0	100	64,71	64,71	64,71	64,71	64,71	64,71	64,71	52,94	52,94	64,71	64,71	64,71	64,71	64,71
3	100	100	100	100	100	100	100	33,33	100	100	100	100	100	100	100	83,33	66,67	100	100	83,33	100	100
4	100	100	100	92,31	92,31	61,54	92,31	38,46	76,92	76,92	92,31	76,92	76,92	76,92	76,92	69,23	7,69	100	76,92	76,92	76,92	76,92
5	100	100	11,76	17,65	11,76	29,41	11,76	17,65	64,71	41,18	64,71	64,71	64,71	64,71	64,71	23,53	58,82	64,71	64,71	64,71	64,71	64,71
6	100	100	100	100	100	66,67	100	72,22	100	100	100	100	100	100	100	100	27,78	100	100	100	100	100
7	100	100	0	6,67	6,67	60	0	86,67	66,67	66,67	60	46,67	53,33	66,67	66,67	33,33	46,67	66,67	66,67	66,67	66,67	66,67
8	100	100	58,82	52,94	47,06	58,82	35,29	76,47	88,24	88,24	88,24	88,24	88,24	88,24	88,24	82,35	47,06	88,24	88,24	88,24	88,24	88,24
9	100	100	64,29	57,14	57,14	64,29	57,14	100	71,43	71,43	64,29	71,43	71,43	71,43	71,43	64,29	35,71	85,71	71,43	71,43	71,43	71,43
10	100	100	100	100	100	94,44	83,33	77,78	66,67	66,67	66,67	61,11	66,67	66,67	66,67	66,67	38,89	77,78	66,67	66,67	66,67	66,67
11	100	100	86,67	93,33	86,67	13,33	86,67	0	73,33	73,33	73,33	73,33	73,33	73,33	73,33	73,33	20	93,33	73,33	73,33	73,33	73,33
12	100	100	7,14	0	0	28,57	0	7,14	64,29	64,29	64,29	64,29	64,29	64,29	64,29	57,14	50	64,29	64,29	64,29	64,29	64,29
13	100	100	50	28,57	28,57	50	42,86	21,43	28,57	21,43	35,71	21,43	21,43	28,57	28,57	21,43	21,43	50	28,57	28,57	28,57	28,57
14	100	100	35,29	41,18	29,41	41,18	52,94	29,41	58,82	58,82	41,18	47,06	41,18	58,82	58,82	58,82	11,76	64,71	58,82	47,06	58,82	58,82
15	100	100	100	100	100	70,59	100	94,12	64,71	52,94	64,71	64,71	64,71	64,71	58,82	52,94	47,06	100	64,71	58,82	64,71	64,71
16	100	100	94,44	100	94,44	72,22	66,67	11,11	83,33	83,33	83,33	77,78	83,33	83,33	83,33	66,67	50	100	83,33	83,33	83,33	83,33
17	100	100	93,75	93,75	93,75	0	87,5	0	37,5	37,5	56,25	37,5	37,5	37,5	37,5	25	31,25	87,5	37,5	37,5	37,5	37,5
18	100	100	100	100	100	64,71	94,12	100	76,47	76,47	82,35	76,47	76,47	76,47	76,47	76,47	58,82	94,12	76,47	76,47	76,47	76,47
19	100	100	58,82	58,82	58,82	17,65	17,65	82,35	47,06	47,06	41,18	47,06	47,06	47,06	47,06	47,06	23,53	58,82	47,06	47,06	47,06	47,06
Mean	100,00	100,00	61,40	60,12	58,24	50,10	54,12	55,17	68,43	66,19	68,94	65,79	66,42	68,43	68,12	59,01	37,51	80,38	68,43	66,62	68,43	68,43

Centre	Drug intolerance	Site	Side	Type of infection	Orthopaedic implant	Microbiology	Microorganism	Surgical procedure	Post-operative antibiotics	Antibiotic drug	Complexity	Global
1	16,67	100	88,89	100	100	100	100	100	100	100	94,44	66,5
2	0	100	100	94,12	100	94,12	100	94,12	100	94,12	100	67,02485
3	33,33	100	83,33	100	100	100	100	50	16,67	33,33	83,33	86,86818
4	0	100	100	100	92,31	100	100	76,92	92,31	76,92	100	80,41879
5	0	94,12	76,47	82,35	88,24	76,47	100	41,18	94,12	35,29	100	58,29
6	11,11	100	94,44	100	100	88,89	100	100	100	100	100	92,76091
7	13,33	100	86,67	100	100	100	100	66,67	80	93,33	100	64,8497
8	29,41	100	94,12	100	100	100	100	94,12	100	82,35	100	82,35424
9	14,29	100	100	92,86	92,86	85,71	100	78,57	92,86	100	100	76,40758
10	0	100	100	100	100	94,44	100	72,22	100	100	100	79,79879
11	6,67	80	86,67	86,67	86,67	93,33	100	100	66,67	100	100	74,74667
12	7,14	100	85,71	100	85,71	100	100	50	92,86	64,29	100	60,82364
13	0	92,86	92,86	100	100	100	100	100	100	100	100	54,54545
14	5,88	94,12	82,35	94,12	94,12	94,12	100	64,71	76,47	70,59	94,12	61,31879
15	11,76	88,24	100	100	100	94,12	100	94,12	94,12	100	100	79,85848
16	11,11	100	94,44	100	100	100	100	50	100	88,89	100	82,15364
17	0	100	100	100	100	100	100	100	93,75	75	93,75	63,82576
18	5,88	100	100	100	100	100	100	100	100	82,35	100	85,56121
19	5,88	88,24	94,12	88,24	94,12	76,47	76,47	94,12	100	88,24	100	61,85455
Mean	9,08	96,71	92,64	96,76	96,53	94,61	98,76	80,36	89,46	83,41	98,19	72,63

B

Centre	Age	Sex	Weight	Height	BMI	CRP	Creatinine	ASA score	Diabetes	Insulin	Obesity	Tobacco	Alcohol	Immunodeficiency	Inflammatory disease	Cancer	Heart failure	Kidney injury	Liver failure	Anticoagulation	Dementia	Intracardiac device
1	100	100	5,56	0	0	5,56	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	100	100	0	0	0	52,94	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	100	100	100	100	100	100	100	33,33	100	100	100	100	100	100	100	100	83,33	100	100	83,33	100	100
4	100	100	100	92,31	92,31	61,54	92,31	38,46	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	100	100	11,76	17,65	11,76	29,41	11,76	17,65	100	76,47	100	100	100	100	100	100	100	100	100	100	100	100
6	100	100	100	100	100	66,67	100	72,22	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	100	100	0	6,67	6,67	60	0	86,67	100	100	93,33	60	66,67	100	100	100	100	100	100	100	100	100
8	100	100	58,82	52,94	47,06	58,82	35,29	76,47	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	100	100	64,29	57,14	57,14	64,29	57,14	100	100	100	85,71	100	100	100	100	100	100	100	100	100	100	100
10	100	100	100	100	100	94,44	83,33	77,78	88,89	88,89	94,44	83,33	88,89	88,89	88,89	88,89	88,89	88,89	88,89	88,89	88,89	88,89
11	100	100	86,67	93,33	86,67	13,33	86,67	0	100	100	100	100	100	100	100	100	86,67	100	100	100	100	100
12	100	100	7,14	0	0	28,57	0	7,14	100	100	100	100	100	100	100	100	100	100	100	100	100	100
13	100	100	50	28,57	28,57	50	42,86	21,43	100	92,86	100	85,71	71,43	100	100	100	100	100	100	100	100	100
14	100	100	35,29	41,18	29,41	41,18	52,94	29,41	100	94,12	58,82	64,71	52,94	100	100	100	100	100	100	82,35	100	100
15	100	100	100	100	100	70,59	100	94,12	100	88,24	100	100	100	100	94,12	100	100	100	100	94,12	100	100
16	100	100	94,44	100	94,44	72,22	66,67	11,11	100	100	100	88,89	100	100	100	100	100	100	100	100	100	100
17	100	100	93,75	93,75	93,75	0	87,5	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	100	100	100	100	100	64,71	94,12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
19	100	100	58,82	58,82	58,82	17,65	17,65	82,35	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mean	100,00	100,00	61,40	60,12	58,24	50,10	54,12	55,17	99,42	96,87	96,44	93,82	93,68	99,42	99,11	99,42	97,84	99,42	99,42	97,30	99,42	99,42

Drug intolerance	Site	Side	Type of infection	Orthopaedic implant	Microbiology	Microorganism	Surgical procedure	Post-operative antibiotics	Antibiotic drug	Complexity	Global
100	100	88,89	100	100	100	100	100	100	100	94,44	84,6803
94,12	100	100	94,12	100	94,12	100	94,12	100	94,12	100	85,56182
100	100	83,33	100	100	100	100	50	16,67	33,33	83,33	89,89848
100	100	100	100	92,31	100	100	76,92	92,31	76,92	100	94,40576
100	94,12	76,47	82,35	88,24	76,47	100	41,18	94,12	35,29	100	77,71818
100	100	94,44	100	100	88,89	100	100	100	100	100	97,64303
73,33	100	86,67	100	100	100	100	66,67	80	93,33	100	81,21242
100	100	94,12	100	100	100	100	94,12	100	82,35	100	90,90879
100	100	100	92,86	92,86	85,71	100	78,57	92,86	100	100	91,77485
88,89	100	100	100	100	94,44	100	72,22	100	100	100	92,59242
100	80	86,67	86,67	86,67	93,33	100	100	66,67	100	100	89,49545
100	100	85,71	100	85,71	100	100	50	92,86	64,29	100	79,43697
100	92,86	92,86	100	100	100	100	100	100	100	100	86,5803
100	94,12	82,35	94,12	94,12	94,12	100	64,71	76,47	70,59	94,12	80,21424
100	88,24	100	100	100	94,12	100	94,12	94,12	100	100	97,32697
100	100	94,44	100	100	100	100	50	100	88,89	100	92,76061
100	100	100	100	100	100	100	100	93,75	75	93,75	91,85606
100	100	100	100	100	100	100	100	100	82,35	100	98,21758
100	88,24	94,12	88,24	94,12	76,47	76,47	94,12	100	88,24	100	87,70091
97,70	96,71	92,64	96,76	96,53	94,61	98,76	80,36	89,46	83,41	98,19	88,95

Fig. b. Detailed analysis of data completeness.

a) Crude data completeness by centre and by variables. b) Data completeness by considering missing data for qualitative variables in the medical history as negative results. Remaining missing data in medical history correspond to missing data in the controlled dataset. Data were considered as complete for quantitative variables when missing only in the controlled dataset. The red colour indicates a data completeness of less than 70%; yellow, between 70% and 80%; green, between 80 and 90%; and blue, above 90%. ASA, American Society of Anesthesiologists; BMI, body mass index.

Supplementary Text

Composition of the Scientific Council for Complex Bone and Joint Infections Referral Centers (CRIOAc) and of the CRIOAc network.

Members of the Scientific council of the CRIOAc network: Prof. Tristan Ferry (Président), Dr. Simon Marmor (Orthopedic Surgeon), Prof. Didier Mainard (Orthopedic Surgeon), Prof. Eric Stindel (Orthopedic Surgeon), Prof. Éric Senneville (Infectiologist), Prof. Andreas Stein (Infectiologist), Dr. Pascale Bemer (Microbiologist), and Prof. Véronique Dubois (Microbiologist).

CRIOAc network collaborators: CRIOAc: Groupe Hospitalier Diaconesses-Croix Saint Simon, Paris; Dr. Simon Marmor (Orthopedic Surgeon, Coordinator), Dr. Valérie Zeller (Infectiologist), Dr. Béate Heym (Microbiologist); AP-HP Hôpital Ambroise-Paré, Boulogne-Billancourt; Dr. Thomas Bauer (Orthopedic Surgeon, Coordinator), Dr. Aurélien Dinh (Infectiologist), Dr Anne-Laure Roux (Microbiologist); CHRU de Lille - CH de Tourcoing; Prof. Éric Senneville (Infectiologist, Coordinator), Prof. Henri Migaud (Orthopedic Surgeon), Dr. Caroline Loiez (Microbiologist); CHU de Nancy et Centre Chirurgical Émile Gallé, Nancy; Prof. Didier Mainard (Orthopedic Surgeon, Coordinator), Dr Olivier Roche (Orthopedic Surgeon), Dr. Sibylle Bevilacqua (Infectiologist), Dr. Philippe Cailloux (Microbiologist); Hospices Civils de Lyon, Lyon; Prof. Tristan Ferry (Infectiologist, Coordinator), Prof. Sébastien Lustig (Orthopedic Surgeon), Prof. Frédéric Laurent (Microbiologist); Assistance Publique des Hôpitaux de Marseille, Marseille; Prof. Andreas Stein (Infectiologist, Coordinator), Prof. Jean Noël Argenson (Orthopedic Surgeon), Prof. Pierre-Edouard Fournier (Microbiologist); CHU de Tours, Chambray-Lès-Tours; Prof. Louis Bernard (Infectiologist, Coordinator), Prof. Philippe Rosset (Orthopedic Surgeon), Dr. Anne-Sophie Valentin (Microbiologist); CHU de Rennes, Rennes; Dr. Cédric Arvieux (Infectiologist, Coordinator), Prof. Hervé Thomazeau (Orthopedic Surgeon), Prof. Anne Jolivet-Gougeon (Microbiologist); CHU de Bordeaux, Bordeaux; Dr Frédéric-Antoine Dauchy (Infectiologist, Coordinator), Prof. Thierry Fabre (Orthopedic Surgeon), Prof. Michel Dupon (Infectiologist), Prof. Véronique Dubois (Microbiologist).

Corresponding Centers: CHU de Toulouse, Toulouse; Prof. Jean-Michel Laffosse (Orthopedic Surgeon), Prof. Pierre Delobel (Infectiologist, Coordinator), Dr. Marion Grare (Microbiologist); Centre Hospitalier de Versailles André Mignot, Le Chesnay; Dr. Philippe Boisrenoult (Orthopedic Surgeon, Coordinator), Dr. Audrey Therby (Infectiologist), Dr. Béatrice Pangon (Microbiologist); AP-HP Hôpital Lariboisière, Paris; Prof. Anne-Claude Crémieux (infectiologist, Coordinator), Prof. Pascal Bizot (Orthopedic Surgeon), Dr. Anne-Lise Munier (Infectiologist), Dr. Hervé Jacquier (Microbiologist); AP-HP Hôpital Pitié-Salpetrière, Paris; Dr Stéphane Jaureguiberry (Infectiologist, Coordinator), Dr Eric Fourniols (Orthopedic Surgeon), Dr Alexandre Bleibtreu (Infectiologist), Prof. Véronique Aubry (Microbiologist); AP-HP Hôpital Cochin, Paris; Prof. Yannick Allanore (Orthopedic Surgeon, Coordinator), Prof. Dominique Salmon (Infectiologist), Prof. Philippe Anract (Orthopedic Surgeon), Dr Philippe Morand (Microbiologist); CHU Amiens Picardie, Amiens; Dr. Benoit Brunschweiler (Orthopedic Surgeon, Coordinator), Dr. Cédric Joseph (Infectiologist), Dr. Florence Rousseau (Microbiologist); CHU de Caen, Caen; Dr. Goulven Rochcongar (Orthopedic Surgeon), Dr. Jocelyn Michon (Infectiologist, Coordinator), Dr. Francois Guerin (Microbiologist); CHU de Rouen, Rouen; Prof. Manuel Etienne (Infectiologist, Coordinator), Prof. Xavier Roussignol (Orthopedic Surgeon), Dr Elise Fiaux (Infectiologist), Dr Noélie Frebourg (Microbiologist); CHU de Besançon, Besançon; Prof. Catherine Chirouze (Infectiologist), Dr. Grégoire Leclerc (Orthopedic Surgeon, Coordinator), Dr. Isabelle Patry (Microbiologist); Hôpitaux Universitaires de Strasbourg, Illkirch Graffenstaden; Dr Cécile Ronde-Oustau (Coordinator), Dr. Jeannot Gaudias (Infectiologist), Prof. Jean-Yves Jenny (Orthopedic Surgeon); Dr. Philippe Riegel (Microbiologist); CHU de Reims, Reims; Prof. Firouzé Bani-Sadr (infectiologist, Coordinator), Dr Saidou Diallo (Orthopedic Surgeon), Dr Véronique Vernet-Garnier (Microbiologist); CHU de Grenoble, Grenoble; Dr Patricia Pavese (Infectiologist, Coordinator), Prof. Jerôme Tonetti (Orthopedic Surgeon), Dr. Sandrine Boisset (Microbiologist); CHU de Clermont-Ferrand, Clermont-Ferrand; Prof. Olivier Lesens (Infectiologist, Coordinator), Prof. Stéphane Descamps (Orthopedic Surgeon), Dr. Frédéric Robin (Microbiologist); CHU de Nice, Nice; Prof. Christophe Trojani (Orthopedic Surgeon, Coordinator), Dr Régis Bernard de Dompsure

(Orthopedic Surgeon), Dr. Johan Courjon (Infectiologist), Prof. Raymond Ruimy (Microbiologist); CHU de Nîmes, Nîmes; Prof. Albert Sotto (infectiologist, Coordinator), Prof. Pascal Kouyoumdjian (Orthopedic Surgeon), Dr Catherine Lechiche (infectiologist), Prof. Jean-Philippe Lavigne (Microbiologist); CHU de Limoges, Limoges; Dr. Fabrice Fiorenza (Orthopedic Surgeon, Coordinator), Dr. Hélène Durox (Infectiologist), Dr. Christian Martin (Microbiologist); CHU de Brest, Brest; Prof. Eric Stindel (Orthopedic Surgeon, Coordinator), Prof. Séverine Ansart (Infectiologist), Dr. Didier Tande (Microbiologist); CHU d'Angers, Angers; Dr. Pierre Abgueguen (Infectiologist, Coordinator), Dr Florian Ducellier (Orthopedic Surgeon), Dr. Carole Lemarie (Microbiologist); CHU de Poitiers, Poitiers; Prof. France Roblot-Cazenave (Infectiologist, Coordinator), Prof. Louis Etienne Gayet (Orthopedic Surgeon), Dr. Chloé Plouzeau-Jayle (Microbiologist); CHU de Nantes, Nantes; Dr. Sophie Touchay (Orthopedic Surgeon, Coordinator), Dr. Nathalie Asseray (Infectiologist), Dr. Pascale Bemer (Microbiologist).