

Supplementary files

Supplementary Table S1. Two-by-two diagnostic tables of aspiration culture results including dry taps and laboratory sampling errors classified as test-positives, compared with the reference standard

	PJI ^a	Aseptic failure	Total
Fluoroscopy-guided aspiration			
Aspiration culture positive	36	22	58
Aspiration culture negative	18	41	59
Total	54	63	117
Ultrasound-guided aspiration			
Aspiration culture positive	20	28	48
Aspiration culture negative	5	37	42
Total	25	65	90

^a PJI (periprosthetic joint infection) diagnosis was based on EBJIS (European Bone and Joint Infection Society) criteria after revision surgery.

Supplementary Table S2. Diagnostic accuracy of fluoroscopy-guided and ultrasound-guided aspiration with dry taps and laboratory sampling errors classified as test-positives

	Fluoroscopy % (CI)	Ultrasound % (CI)	Absolute difference percentage points (CI)
Sensitivity	67 (53–79)	80 (59–93)	13 (–9 to 32)
Specificity	65 (52–77)	57 (44–69)	–8 (–25 to 9)

CI = 95% confidence intervals.

Supplementary Table S3. Two-by-two diagnostic tables of aspiration culture results including dry taps and laboratory sampling errors classified as test-negatives, compared with the reference standard.

	PJI ^a	Aseptic failure	Total
Fluoroscopy-guided aspiration			
Aspiration culture positive	16	3	19
Aspiration culture negative	38	60	98
Total	54	63	117
Ultrasound-guided aspiration			
Aspiration culture positive	8	3	11
Aspiration culture negative	17	62	79
Total	25	65	90

^a PJI (periprosthetic joint infection) diagnosis was based on EBJIS (European Bone and Joint Infection Society) criteria after revision surgery

Supplementary Table S4. Diagnostic accuracy of fluoroscopy-guided and ultrasound-guided aspiration with dry taps and laboratory sampling errors classified as test-negatives

	Fluoroscopy % (CI)	Ultrasound % (CI)	Absolute difference percentage points (CI)
Sensitivity	30 (18–44)	32 (15–54)	2 (–18 to 25)
Specificity	95 (87–99)	95 (87–99)	0 (–9 to 9)

CI = 95% confidence intervals.

Supplementary Table S5. Microbiological results of ultrasound-guided biopsy cultures and corresponding intraoperative cultures in patients with a positive biopsy culture (n = 8)

No.	Microorganisms identified in biopsy cultures	Microorganisms identified in intraoperative cultures
1	Group B β -hemolytic streptococci	Group B β -hemolytic streptococci
2	<i>Staphylococcus aureus</i>	<i>Staphylococcus aureus</i>
3	<i>Staphylococcus epidermidis</i>	No growth
4	<i>Candida glabrata</i>	<i>Candida glabrata</i>
5	<i>Staphylococcus epidermidis</i>	No growth
6	<i>Staphylococcus caprae</i>	<i>Staphylococcus caprae</i> and <i>Staphylococcus aureus</i>
7	<i>Staphylococcus epidermidis</i>	<i>Staphylococcus epidermidis</i>
8	<i>Staphylococcus aureus</i>	No growth