

1    *Supplemental data*

2    **Rapid diagnostics of orthopaedic implant-associated infections using nanopore shotgun metagenomics sequencing on tissue  
3    biopsies**

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17 **Table S1. Results of microbial identification across conventional microbiological methods and nanopore shotgun metagenomic**  
18 **sequencing for all OIAI patients' biopsies.** Culture growth densities are termed as follows: rich, moderate (mod), sparse, spread  
19 single colonies (SSC), and requiring pre-cultivation in enrichment broth (broth). V\* indicates the name of the individual tissue  
20 biopsy, NA (not applicable), NTC (no template control), and EN (extraction negative control).

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Patient ID	Biopsy/control ID	Nanopore results: putative pathogens, reads	Culture results, growth	Nanopore results: putative background (species, reads)	Nanopore results: human DNA reads
101	VB	Negative	Culture negative	<i>E. coli</i> , 4; <i>Arthrobacter sp.</i> , 2; <i>Mucilaginibacter sp.</i> , 1	6
101	V2	Negative	Culture negative	<i>E. coli</i> , 15; <i>Arthrobacter sp.</i> , 1;	3,699

				<i>Muciluginibacter</i> sp., 1	
<b>101</b>	V3	Negative	Culture negative	<i>E. coli</i> , 2; <i>Arthrobacter</i> sp., 1	161
<b>101</b>	V4	Negative	Culture negative	<i>E. coli</i> , 5	46
<b>101</b>	V5	Negative	Culture negative	<i>E. coli</i> , 12	60
<b>101</b>	EN	Negative	NA	<i>E. coli</i> , 3; <i>Arthrobacter</i> sp., 1	18
<b>101</b>	NTC	Negative	NA	<i>E. coli</i> , 5; <i>Arthrobacter</i> sp., 2;	2
				<i>Muciluginibacter</i> sp., 1	
<b>104</b>	VB	<i>S. lugdunensis</i> , 44; <i>S. epidermidis</i> , 6; <i>C. acnes</i> , 2; others <2	<i>S. Lugdunensis</i> , sparse	<i>E. coli</i> , 8; others <2	89
<b>104</b>	V2	Negative	<i>S. Lugdunensis</i> , sparse	Negative	
<b>104</b>	V3	<i>S. lugdunensis</i> , 306; <i>S. epidermidis</i> , 5; <i>C. acnes</i> , 1	<i>S. Lugdunensis</i> , sparse	<i>E. coli</i> , 10; others, 1	308
<b>104</b>	V4	<i>S. lugdunensis</i> , 24;	<i>S. Lugdunensis</i> , ssc;	<i>E. coli</i> , 5; others, <2	168

		<i>C. acnes</i> , 2	<i>C. acnes</i> , ssc		
104	V5	<i>S. lugdunensis</i> , 58; <i>S. epidermidis</i> , 2	<i>S. Lugdunensis</i> , sparse	<i>M. globosa</i> , 160; <i>E. coli</i> , 2; others, <2	46283
104	V6	Negative	<i>S. Lugdunensis</i> , sparse; <i>C. acnes</i> ssc	<i>E. coli</i> , 6; others, 1	36
104	NTC	Negative	NA	Negative	
105	VB	Negative	Culture negative	<i>E. coli</i> , 4	821
105	V2	NA	<i>S. Aureus</i> , broth; <i>S. epidermidis</i> , broth	NA	
105	V3	NA	<i>S. Aureus</i> , broth; <i>S. epidermidis</i> , broth	NA	
105	V4	<i>S. aureus</i> , 49	<i>S. Aureus</i> , broth; <i>S. epidermidis</i> , broth	<i>E. coli</i> , 24	67150
105	V5	Negative	<i>S. Aureus</i> , ssc; <i>S. epidermidis</i> , broth	<i>E. Coli</i> , 16	10235
105	EN	Negative	NA	<i>E. coli</i> , 8;	1

				<i>Mycobacterium abscessus</i> , 2	
<b>105</b>	NTC	Negative	NA	<i>E. coli</i> , 1;	1
<b>107</b>	VB	<i>S. epidermidis</i> , 33; <i>S. aureus</i> , 2	<i>S. epidermidis</i> , ssc	<i>E. coli</i> , 32; <i>B. subtilis</i> , 5; <i>Arthrobacter sp.</i> , 5; <i>M. globosa</i> , 4; <i>Muciluginibacter sp.</i> , 2	1944
<b>107</b>	V2	Negative	<i>S. epidermidis</i> , broth	<i>E. coli</i> , 31; <i>Arthrobacter sp.</i> , 2; <i>Bacillus mycoides</i> , 2	479
<b>107</b>	V3	Negative	<i>S. epidermidis</i> , ssc	<i>E. coli</i> , 31; <i>Arthrobacter sp.</i> , 3; <i>B. subtilis</i> , 3; <i>Muciluginibacter sp.</i> , 2	1173
<b>107</b>	V4	Negative	<i>S. epidermidis</i> , broth	<i>E. coli</i> , 16; <i>Arthrobacter sp.</i> , 3; <i>Muciluginibacter sp.</i> , 3	15
<b>107</b>	V5	Negative	Culture negative	<i>E. coli</i> , 97; <i>B. subtilis</i> , 4; <i>Muciluginibacter sp.</i> , 4; <i>M. globosa</i> , 2; <i>Arthrobacter sp.</i> , 4;	97

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				<i>Bacillus mycoides</i> , 2	
107	EN	Negative	NA	<i>E coli</i> , 15; <i>Arthrobacter sp.</i> , 2; <i>C. acnes</i> , 2; <i>B. mycoides</i> , 2;	4
107	NTC	Negative	NA	<i>E coli</i> , 13; <i>B. subtilis</i> , 4; <i>Mucilaginibacter sp.</i> , 2; <i>Arthrobacter sp.</i> , 2; <i>Bacillus mycoides</i> , 1	
108	VB	<i>S. aureus</i> , 2338	<i>S. aureus</i> , ssc	<i>M. Globosa</i> , 42; <i>E. Coli</i> , 5; others, <5	11400
108	V2	<i>S. aureus</i> , 80	<i>S. aureus</i> , ssc	<i>Arthrobacter sp.</i> , 6; others, <6	2351
108	V3	<i>S. aureus</i> , 369	<i>S. aureus</i> , sparse	<i>M. Globosa</i> , 77; <i>Arthrobacter sp.</i> , 3; Others, <3	38980
108	V4	<i>S. aureus</i> , 4;	<i>S. aureus</i> , ssc	<i>E. Coli</i> , 25 <i>C. Acnes</i> , 4; others, <4	59
108	V5	<i>S. aureus</i> , 182	<i>S. aureus</i> , sparse	<i>E. Coli</i> , 33; <i>B. Subtilis</i> , 2; others, 1	83
108	EN	Negative	NA	Negative	

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<b>108</b>	NTC	Negative	NA	Negative	
<b>109</b>	VB	<i>S. aureus</i> , 70	<i>S. aureus</i> , ssc	<i>M. globosa</i> , 22; <i>E.coli</i> , 17; <i>C. acnes</i> , 7; <i>Arthrobacter sp.</i> , 4; <i>B. subtilis</i> , 2	16781
<b>109</b>	V2	<i>S. aureus</i> , 3	<i>S. aureus</i> , ssc	<i>M. globosa</i> , 27; <i>E. coli</i> , 22; <i>B. subtilis</i> , 10; <i>Arthrobacter sp.</i> , 4	21171
<b>109</b>	V3	<i>S. aureus</i> , 2	<i>S. aureus</i> , ssc	<i>E. coli</i> , 16; <i>Arthrobacter sp.</i> , 5; <i>M. globosa</i> , 16; <i>C. acnes</i> , 3; <i>B. subtilis</i> , 3	25931
<b>109</b>	V4	<i>S. aureus</i> , 1	<i>S. aureus</i> , ssc	<i>E. coli</i> , 16; <i>Arthrobacter sp.</i> , 3; <i>B. subtilis</i> , 2	323
<b>109</b>	V5	Negative	<i>S. aureus</i> , ssc	<i>E. coli</i> , 9; <i>Arthrobacter sp.</i> , 2; <i>B. subtilis</i> , 3	56
<b>109</b>	EN	Negative	NA	<i>E coli</i> , 7; <i>B. subtilis</i> , 5	3
<b>109</b>	NTC	Negative	NA	Negative	5

<b>110</b>	VB	Negative	<i>S. aureus</i> , ssc	<i>M. globosa</i> , 2; <i>E. coli</i> , 2; others, <2	38222
<b>110</b>	V2	Negative	<i>S. aureus</i> , ssc	<i>M. globosa</i> , 56; <i>E. coli</i> , 9; others, 1	1029
<b>110</b>	V3	Negative	<i>S. aureus</i> , ssc	<i>M. globosa</i> , 9; <i>E. coli</i> , 5; others, 1	2043
<b>110</b>	V4	Negative	<i>S. aureus</i> , ssc	<i>E. coli</i> , 8; others, 1	28
<b>110</b>	V7	Negative	<i>S. aureus</i> , ssc	<i>E. coli</i> , 7; other, 1	1
<b>110</b>	NTC	Negative	NA	Negative	
<b>111</b>	VB	<i>S. aureus</i> , 537	<i>S. aureus</i> , rich	<i>M. globosa</i> , 12; others, <5	945
<b>111</b>	V2	<i>S. aureus</i> , 5683	<i>S. aureus</i> , rich	<i>M. globosa</i> , 141; <i>E. coli</i> , 5; others, <5	75837
<b>111</b>	V4	<i>S. aureus</i> , 217057;  <i>S. argenteus</i> 68;  <i>S. lugdunensis</i> , 53;  <i>S. epidermidis</i> , 42;  <i>S. pseudointermedius</i> , 30	<i>S. aureus</i> , rich	<i>E. coli</i> , 19; others <19	1799
<b>111</b>	V5	<i>S. aureus</i> , 55397;	<i>S. aureus</i> , rich	<i>M. globosa</i> , 24; <i>E. coli</i> , 16;	15138

		<i>S. lugdunensis</i> , 17		others <16	
<b>111</b>	V6	<i>S. aureus</i> , 2875	<i>S. aureus</i> , rich	<i>C. acnes</i> , 15; <i>E.coli</i> , 11; <i>M. globosa</i> , 4; others, <4	2064
<b>111</b>	NTC	Negative	NA	<i>E. coli</i> , 1; <i>B. mycoides</i> , 1	
<b>112</b>	VB	<i>S. aureus</i> , 19	<i>S. aureus</i> , sparse	others, 1	29
<b>112</b>	V2	<i>S. aureus</i> , 6150	<i>S. aureus</i> , sparse	<i>M. globosa</i> , 15; <i>E. coli</i> , 8; others <3	8022
<b>112</b>	V3	<i>S. aureus</i> , 3326;  <i>S. lugdunensis</i> , 4	<i>S. aureus</i> , rich	others, <4	154
<b>112</b>	V4	<i>S. aureus</i> , 143	<i>S. aureus</i> , sparse	<i>M. globosa</i> , 9; <i>E. coli</i> , 4; others <4	2334
<b>112</b>	NTC	Negative	NA	Negative	
<b>114</b>	V2	<i>S. aureus</i> , 190119;  <i>S. argenteus</i> , 64;  <i>S. lugdunensis</i> , 27	<i>S. aureus</i> , mod	many others, <25	3524
<b>114</b>	V3	<i>S. aureus</i> , 582103;  <i>S. argenteus</i> , 113;  <i>S. lugdunensis</i> , 42;	<i>S. aureus</i> , rich	many others <25	449

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		<i>S. epidermidis</i> , 29			
<b>114</b>	V4	<i>S. aureus</i> , 360674; <i>S. argenteus</i> , 56; <i>S. lugdunensis</i> , 18	<i>S. aureus</i> , mod	many others <25	70
<b>114</b>	V5	<i>S. aureus</i> , 52	<i>S. aureus</i> , rich	many others <3	5397
<b>114</b>	V6	<i>S. aureus</i> , 526710; <i>S. argenteus</i> , 150; <i>S. lugdunensis</i> , 68; <i>S. epidermidis</i> , 39	<i>S. aureus</i> , mod	many others <30	142
<b>114</b>	EN	<i>S aureus</i> , 29	NA	many others <3	11
<b>114</b>	NTC	Negative	NA	<i>S. aureus</i> , 7; <i>M. oryzae</i> , 1	
<b>115</b>	VB	<i>C. acnes</i> , 23	<i>C. acnes</i> , ssc, anaerobic	<i>E. coli</i> , 4; others 1	880
<b>115</b>	V2	<i>C. acnes</i> , 11	Culture negative	<i>S. equorum</i> , 3; others, <3	3722
<b>115</b>	V3	<i>C. acnes</i> , 31	Culture negative	<i>M. globosa</i> , 22; <i>E. coli</i> , 10; <i>Klebsiella pneumoniae</i> , 4; others, <4	9722

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<b>115</b>	V4	<i>C. acnes</i> , 30	<i>C. acnes</i> , ssc, anaerobic	<i>E. coli</i> , 15; <i>Arthrobacter sp.</i> , 3; others, <3	44
<b>115</b>	V5	<i>C. acnes</i> , 60	<i>C. acnes</i> , ssc, anaerobic	<i>E. coli</i> , 19; <i>M. globosa</i> , 3; others, <3	1105
<b>115</b>	EN	Negative	NA	<i>E. coli</i> , 7; <i>C. jeikeium</i> , 1	
<b>115</b>	NTC	Negative	NA	Negative	
<b>116</b>	VB	<i>S. aureus</i> , 18; <i>S. epidermidis</i> , 4;	<i>S. aureus</i> , ssc	<i>E. coli</i> , 37; <i>B. subtilis</i> , 6	684
<b>116</b>	V2	<i>S. aureus</i> , 13277; <i>S. argenteus</i> , 15; <i>S. nepalensis</i> , 12; <i>S. epidermidis</i> , 11; <i>S. agnetis</i> , 10; <i>S. haemolyticus</i> , 6	<i>S. aureus</i> , sparse	Negative	34
<b>116</b>	V3	<i>S. aureus</i> , 10	<i>S. aureus</i> , ssc	<i>E. coli</i> , 13;	176

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			<i>M. osloensis</i> , 3;		
			<i>B. subtilis</i> , 2		
<b>116</b>	V4	<i>S. aureus</i> , 1	<i>S. aureus</i> , ssc	<i>E. coli</i> , 24; <i>B. subtilis</i> , 5	875
<b>116</b>	R4	<i>S. aureus</i> , 450  <i>S. epidermidis</i> , 1	<i>S. aureus</i> , sparse	<i>E. coli</i> , 23; <i>B. subtilis</i> , 7	3226
<b>116</b>	EN	<i>S. epidermidis</i> , 1	NA	<i>E. coli</i> , 8; others, 1	1
<b>116</b>	NTC	Negative	NA	Negative	1
<b>117</b>	VB	<i>S. aureus</i> , 150	<i>S. aureus</i> , mod	Others, 2	124
<b>117</b>	V2	<i>S. aureus</i> , 8	<i>S. aureus</i> , sparse	Others, 2	1634
<b>117</b>	V3	<i>S. aureus</i> , 70;  <i>S. epidermidis</i> , 2	<i>S. aureus</i> , sparse	Others, 2	410
<b>117</b>	V4	<i>S. aureus</i> , 6	<i>S. aureus</i> , ssc	Others, 2	102
<b>117</b>	V5	<i>S. aureus</i> , 156;  <i>S. epidermidis</i> , 4	<i>S. aureus</i> , sparse	Negative	66
<b>117</b>	NTC	Negative	NA	Others, 1	20
<b>118</b>	VB	Negative	Culture negative	Negative	1821

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<b>118</b>	V2	Negative	Culture negative	Negative	417
<b>118</b>	V3	Negative	Culture negative	Negative	1077
<b>118</b>	V4	Negative	Culture negative	<i>Ralstonia insidiosa</i> , 1	1835
<b>118</b>	V5	Negative	Culture negative	<i>Yersinia enterocolitica</i> , 1	8570
<b>118</b>	EN	Negative	Culture negative	IA	IA
<b>118</b>	NTC	Negative	NA	<i>E. coli</i> , 1	0
<b>120</b>	VB	Negative	<i>S. caprae</i> , ssc	<i>E. coli</i> , 85; <i>B. subtilis</i> , 18; <i>Arthrobacter sp.</i> , 13; <i>Muciluginibacter sp.</i> , 6; <i>B. mycoides</i> , 4; others < 4	9660
<b>120</b>	V2	Negative	<i>S. caprae</i> , ssc	<i>E. coli</i> , 66; <i>B. subtilis</i> , 18; <i>Arthrobacter sp.</i> , 11; <i>Muciluginibacter sp.</i> , 3; <i>B. mycoides</i> , 2; others,< 2	28
<b>120</b>	V3	Negative	<i>S. caprae</i> , ssc	<i>E. coli</i> , 66; <i>B. subtilis</i> , 18; <i>Arthrobacter sp.</i> , 11;	2848

				<i>Muciluginibacter</i> sp., 3; <i>B. mycoides</i> , 2; others < 2	
120	V4	Negative	<i>S. caprae</i> , ssc	<i>E. coli</i> , 44; <i>B. subtilis</i> , 14; <i>Arthrobacter</i> sp., 8; <i>Muciluginibacter</i> sp., 5; <i>B. mycoides</i> , 3	220
120	V5	Negative	<i>S. caprae</i> , ssc	<i>E. coli</i> , 57; <i>B. subtilis</i> , 18; <i>Arthrobacter</i> sp., 5; <i>Muciluginibacter</i> sp., 6; <i>B. mycoides</i> , 4; others < 4	34
120	EN	Negative	NA	<i>E. coli</i> , 7; <i>Arthrobacter</i> sp., 5; <i>C. acnes</i> 2; <i>B. subtilis</i> 1; <i>B. mycoides</i> 1, others, 1	4
120	NTC	Negative	NA		1
121	V2	Numerous GPAC;	<i>S. aureus</i> , ssc; <i>Peptoniphilus</i>	>2000 distinct species/subspecies, apparent	4998

		<i>S. aureus</i> , 984	<i>harei</i> , mod	2nd infection	
121	V3	Numerous GPAC; <i>S. aureus</i> , 1	<i>S. aureus</i> , broth; <i>Peptoniphilus harei</i> , sparse	>2000 distinct species/subspecies, apparent 2nd infection	144506
121	V4	Numerous GPAC	<i>S. aureus</i> , broth; <i>Peptoniphilus harei</i> , ssc	>2000 distinct species/subspecies, apparent 2nd infection	584
121	V6	Numerous GPAC	<i>S. aureus</i> , broth; <i>Peptoniphilus harei</i> , ssc	>2000 distinct species/subspecies, apparent 2nd infection	305
121	V8	Numerous GPAC; <i>S. aureus</i> , 1	Culture negative	>2000 distinct species/subspecies, apparent 2nd infection	27903
121	EN	Negative	NA	<i>E. coli</i> , 14; <i>S. mitis</i> , 5; <i>S. oralis</i> , 3; <i>B. subtilis</i> , 3; <i>C. acnes</i> , 3; others <3	67
121	NTC	Negative	NA	<i>E. coli</i> , 5; <i>B. subtilis</i> , 1	5
122	VB	Negative	<i>S. aureus</i> , sparse	<i>M. globosa</i> , 181; others <1	10187
122	V2	<i>S. aureus</i> , 117	<i>S. aureus</i> , ssc	<i>S. aureus</i> , 117; <i>S. parasanguinis</i> , 1	9

<b>122</b>	V3	<i>S. aureus</i> , 3480	<i>S. aureus</i> , rich	<i>M. globosa</i> , 154; <i>E. coli</i> , 9; <i>Mucilaginibacter sp.</i> , 5; others <5	31949
<b>122</b>	V4	<i>S. aureus</i> , 1269	<i>S. aureus</i> , ssc	<i>E. coli</i> , 4; others <4	1589
<b>122</b>	V5	<i>S. aureus</i> , 99	<i>S. aureus</i> , sparse	<i>M. globosa</i> , 27; <i>E. coli</i> , 5; others <5	2398
<b>122</b>	EN	Negative	NA	<i>E. coli</i> , 10; <i>M. osloensis</i> , 3; others <3	9
<b>122</b>	NTC	Negative	NA	Negative	
<b>123</b>	VB	<i>S. aureus</i> , 15	<i>S. aureus</i> , ssc	<i>E. coli</i> , 10; <i>M. globosa</i> , 14; others, 1	56
<b>123</b>	V2	Negative	<i>S. aureus</i> , ssc; $\beta$ -hemolytic streptococci, broth	<i>M. globosa</i> , 14; <i>E. coli</i> , 2; others, 1	6646
<b>123</b>	V3	<i>S. aureus</i> , 2	<i>S. aureus</i> , ssc; $\beta$ -hemolytic streptococci, broth	<i>E. coli</i> , 6; others, 1	36
<b>123</b>	V4	<i>S. aureus</i> , 8	<i>S. aureus</i> , ssc	<i>E. coli</i> , 2; <i>S. oralis</i> , 2; others, 1	70
<b>123</b>	V5	Negative	<i>S. aureus</i> , ssc	Negative	2

<b>123</b>	EN	Negative	NA	<i>E. coli</i> , 2; <i>C. acnes</i> , 2; others, 1	56
<b>123</b>	NTC	Negative	NA	Negative	0
<b>124</b>	VB	Negative	<i>S. epidermidis</i> , broth; <i>Corynebacterium amycolatum</i> and <i>Neisseria subflava</i> , broth (both presumed contamination)	<i>C. acnes</i> , 2; <i>E. coli</i> , 2	12
<b>124</b>	V2	Negative	Culture negative	<i>C. acnes</i> , 11	7
<b>124</b>	V3	Negative	Culture negative	<i>C. acnes</i> , 3;  <i>Propionibacterium sp.</i> , 2;  <i>C. granulosum</i> , 2	0
<b>124</b>	V4	Negative	<i>S. epidermidis</i> , broth	<i>C. acnes</i> , 6	33
<b>124</b>	V5	Negative	Culture negative	Negative	0
<b>124</b>	EN	Negative	NA	<i>C. acnes</i> , 2	10
<b>124</b>	NTC	Negative	NA	Negative	NA
<b>125</b>	VB	Negative	<i>S. aureus</i> , ssc	<i>E. coli</i> , 2; others, 1	1
<b>125</b>	V2	<i>S. aureus</i> , 2	Culture negative	<i>E. coli</i> , 6; <i>M. globosa</i> , 4; others, 1	222

125	V3	Negative	<i>M. luteus</i> , broth; <i>S. aureus</i> , broth	<i>Arthrobacter sp.</i> , 1	12
125	V4	<i>S. aureus</i> , 1300	<i>M. luteus</i> , broth	<i>E. coli</i> , 5; others, <5	1943
125	EN	Negative	NA	<i>E. coli</i> , 4; others, 1	2
125	NTC	Negative	NA	Negative	0
127	VB	<i>S. aureus</i> , 4	<i>S. aureus</i> , sparse	others, 1	8
127	V2	<i>S. aureus</i> , 922;	<i>S. aureus</i> , rich	others, 2	310
127	V3	<i>S. aureus</i> , 2256	<i>S. aureus</i> , rich	others, 1	221
127	V4	<i>S. aureus</i> , 103	<i>S. aureus</i> , mod		17
127	V5	<i>S. aureus</i> , 734	<i>S. aureus</i> , rich	others, 1	30
128	VB	<i>S. aureus</i> , 9	<i>S. aureus</i> , sparse	others, 1	95
128	V2	<i>S. aureus</i> , 304	<i>S. aureus</i> , mod	others, 1	611
128	V3	<i>S. aureus</i> , 1	<i>S. aureus</i> , mod	<i>M. Osloensis</i> , 1	6
128	V4	<i>S. aureus</i> , 2	<i>S. aureus</i> , sparse	others, 1	19
128	V5	<i>S. aureus</i> , 31618	<i>S. aureus</i> , sparse	<i>S. Lugdunensis</i> , 17; others <17	2240
128	EN	Negative	NA	others, 1	1

<b>128</b>	NTC	Negative	NA	<i>S. Aureus</i> , 2	0
<b>130</b>	VB	<i>S. aureus</i> , 452	<i>S. aureus</i> , broth	<i>M. globosa</i> , 10; others 2 reads	656
<b>130</b>	V2	<i>S. aureus</i> , 12	<i>S. aureus</i> , broth	<i>M. globosa</i> , 18; <i>E. coli</i> , 4; others 1	1019
<b>130</b>	V3	<i>S. aureus</i> , 141	<i>S. aureus</i> , ssc	<i>A. oris</i> , 51; <i>V. parvula</i> , 43; <i>R. dentocariosa</i> , 34; <i>S. sanguinis</i> , 33; <i>M. globosa</i> , 7; <i>Cutibacterium sp.</i> , 31; <i>N. sicca</i> , 21; <i>F. nucleatum</i> , 9; <i>S. gordonii</i> , 5; others <5	8556
<b>130</b>	NTC	Negative	NA	Negative	11
<b>133</b>	VB	Negative	$\beta$ -hemolytic streptococci, broth	<i>E. coli</i> , 9; <i>Klebsiella sp.</i> , 9; others <2	85
<b>133</b>	V2	<i>S. agalactiae</i> , 57	$\beta$ -hemolytic streptococci, broth	<i>M. osloensis</i> , 11; <i>E. coli</i> , 5; others <5	275
<b>133</b>	V3	<i>S. agalactiae</i> , 131	$\beta$ -hemolytic streptococci, rich	others, 1	53

133	V4	<i>S. agalactiae</i> , 30	β-hemolytic streptococci, sparse	<i>M. osloensis</i> , 5; others <5	199
133	V5	Negative	β-hemolytic streptococci, ssc	<i>E. coli</i> , 7; <i>F. nucleatum</i> , 6; others <5	37
133	EN	Negative	NA	<i>C. acnes</i> , 45; <i>S. capitis</i> , 7; others, <3	7
133	NTC	Negative	NA	<i>B. subtilis</i> , 1	0
134	V3	Negative	β-hemolytic streptococci, mod	<i>M. globosa</i> , 271; <i>Arthrobacter sp.</i> , 2; others <2	7556
134	V4	Negative	β-hemolytic streptococci, ssc	<i>E. coli</i> , 2; others <2	90
134	V5	Negative	β-hemolytic streptococci, sparse	<i>M. globosa</i> , 5; <i>E. coli</i> , 1	431
134	V6	<i>S. agalactiae</i> , 33	β-hemolytic streptococci, mod	<i>Arthrobacter sp.</i> , 2; others, <2	715
134	EN	Negative	NA	<i>E. coli</i> , 2; others <2	2
134	NTC	Negative	NA	Negative	0

135	VB	<i>S. dysgalactiae</i> , 17; <i>S. agalactiae</i> , 3; <i>S. mitis</i> , 3; <i>S. pyogenes</i> , 3	β-hemolytic streptococci, ssc	<i>M. globosa</i> , 68; <i>E. coli</i> , 18; <i>M. osloensis</i> , 11; others, 3	35999
135	V2	<i>S. dysgalactiae</i> , 240706, <i>S. pyogenes</i> , 10761; <i>S. agalactiae</i> , 8037; <i>S. anginosis</i> , 2038; <i>S. lutetiensis</i> , 410; <i>S. gallolyticus</i> , 342; <i>S. mutans</i> , 193; <i>S. gordonii</i> , 188	β-hemolytic streptococci, ssc	<i>A. mediterraneensis</i> , 883; <i>M. vaginalis</i> , 452; others, <200	1159
135	V3	Negative	Culture negative	<i>E. coli</i> , 8; <i>M. globosa</i> , 3; <i>B. subtilis</i> , 3; others, <3	631
135	V4	Negative	Culture negative	<i>M. globosa</i> , 338;	207550
135	V5	Negative	β-hemolytic streptococci,	<i>M. globosa</i> , 15; <i>E. coli</i> , 4;	7106

			ssc	<i>B. subtilis</i> , 3; others, <3	
135	EN	Negative	NA	<i>E. coli</i> , 30; <i>M. osloensis</i> , 11; <i>S. mitis</i> , 5; others, <5	475
135	NTC	Negative	NA	Negative	1
136	VB	Mitis group streptococci tot, 4; <i>S. capitis</i> , 3;	<i>Granulicatella adiacens</i> , sparse  <i>S. parasanguinis</i> , 2	<i>M. globosa</i> , 68; <i>E. coli</i> , 41; <i>Arthrobacter sp.</i> , 4; others, <4	47624
136	V2	Mitis group streptococci tot, 18;  staphylococci tot, 2	<i>Granulicatella adiacens</i> , sparse	<i>M. globosa</i> , 45; <i>E. coli</i> , 19, <i>B. subtilis</i> , 4; others, <4	29168
136	V3	Staphylococci tot, 1	<i>Granulicatella adiacens</i> , sparse;  <i>Staphylococcus sp.</i> , broth	<i>E. coli</i> , 10; <i>M. globosa</i> , 7; <i>Arthrobacter sp.</i> , 5; others, <5	2351
136	V4	Mitis group streptococci tot, 4;  staphylococci tot, 3	<i>Granulicatella adiacens</i> , ssc	<i>E. coli</i> , 21; <i>M. globosa</i> , 42; <i>Arthrobacter sp.</i> , 3; others, <3	24965
136	V5	Negative	<i>Granulicatella adiacens</i> , sparse	<i>E. coli</i> , 45; <i>M. globosa</i> , 244; <i>Arthrobacter sp.</i> , 3; <i>B. subtilis</i> , 3;	81413

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			others, <3;		
136	EN	Negative	NA	<i>E. coli</i> , 4; <i>S. capitis</i> , 4; others, <4	27
136	NTC	Negative	NA	Negative	2
137	VB	Negative	Culture negative	Negative	15
137	V2	Negative	Culture negative	Negative	9
137	V3	Negative	Culture negative	Negative	2
137	V4	Negative	<i>Bacillus sp.</i> , broth (presumed contamination)	Negative	27
137	V5	Negative	Culture negative	Negative	8
137	EN	Negative	NA	Negative	1
137	NTC	Negative	NA	Negative	0
139	VB	<i>S. aureus</i> , 189	<i>S. aureus</i> , ssc	<i>E. coli</i> , 30; others <3	1277
139	V2	<i>S. aureus</i> , 12962; <i>S. argenteus</i> , 6	<i>S. aureus</i> , rich	<i>E. coli</i> , 19; others, <6	234
139	V3	<i>S. aureus</i> , 12423	<i>S. aureus</i> , rich	<i>E. coli</i> , 25; <i>C. acnes</i> , 7; others, <7	638

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139	V4	<i>S. aureus</i> , 7362	<i>S. aureus</i> , sparse	<i>E. coli</i> , 18; <i>M. globosa</i> , 4; others, < 4	3317
139	V5	<i>S. aureus</i> , 18	<i>S. aureus</i> , sparse	<i>E. coli</i> , 18; <i>C. acnes</i> , 5; others, <5	40
139	EN	Negative	NA	<i>E. coli</i> , 9; others, 1	14
139	NTC	Negative	NA	<i>B. subtilis</i> , 2; <i>E. coli</i> , 1; <i>Arthrobacter sp.</i> , 1	1
140	VB	<i>S. aureus</i> , 714226; <i>S. argenteus</i> , 122; <i>S. epidermidis</i> , 108; <i>S. lugdunensis</i> , 94; <i>Staphylococcus sp.</i> , <50*	<i>S. aureus</i> , rich	<i>Bacillus sp.</i> , 12; others, < 10	2785
140	VB	<i>S. aureus</i> , 661866; <i>S. argenteus</i> , 142; <i>S. epidermidis</i> , 57; <i>S. lugdunensis</i> , 70; <i>Staphylococcus sp.</i> , <50*	<i>S. aureus</i> , rich	<i>B. cereus</i> , 16; <i>B. thuringiensis</i> , 14; others, < 10	653

<b>140</b>	V2	<i>S. aureus</i> , 776139; <i>S. argenteus</i> , 175; <i>S. epidermidis</i> , 93; <i>S. lugdunensis</i> , 106; <i>Staphylococcus</i> sp., <50*	<i>S. aureus</i> , rich	<i>B. cereus</i> , 38; others, <10	372
<b>140</b>	V3	<i>S. aureus</i> , 18112; <i>Staphylococcus</i> sp., <50*	<i>S. aureus</i> , rich	<i>E. coli</i> , 3; others, 1	382
<b>140</b>	V4	<i>S. aureus</i> , 18417; <i>Staphylococcus</i> sp., <50*	<i>S. aureus</i> , rich	<i>E. coli</i> , 4; <i>M. globosa</i> , 3; others, <2	527
<b>140</b>	EN	Negative	NA	<i>S. aureus</i> , 2; <i>S. argenteus</i> , 5; <i>E. coli</i> , 2; <i>C. acnes</i> , 2; others, <2	1
<b>140</b>	NTC	Negative	NA	<i>S. aureus</i> , 2; <i>B. subtilis</i> , 2; <i>E. coli</i> , 2; <i>Mucilaginibacter</i> sp., 1	0
<b>141</b>	VB	<i>S. aureus</i> , 2123024; <i>S. lugdunensis</i> , 542; <i>S. epidermidis</i> , 431;	<i>S. aureus</i> , rich	<i>M. globosa</i> , 205; <i>B. thuringiensis</i> , 114; <i>Bacillus</i> sp., 72;	160982

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		<i>S. argenteus</i> , 282; <i>P. pseudointermedius</i> , 252; <i>S. schleiferi</i> , 112; <i>S. stepanovicii</i> , 100; <i>S. simiae</i> , 99; <i>S. capitis</i> , 73		<i>E. coli</i> , 52; many others, <50	
<b>141</b>	V2	<i>S. aureus</i> , 1173	<i>S. aureus</i> , rich	<i>M. globosa</i> , 48; <i>E. coli</i> , 20; <i>C. acnes</i> , 11; others, <10	32184
<b>141</b>	V3	<i>S. aureus</i> , 214625; <i>S. lugdunensis</i> , 63	<i>S. aureus</i> , rich	many, < 50	1820
<b>141</b>	V4	<i>S. aureus</i> , 13941	<i>S. aureus</i> , rich	<i>M. globosa</i> , 58; <i>E. coli</i> , 34; others, <10	23033
<b>141</b>	V5	<i>S. aureus</i> , 31057	<i>S. aureus</i> , rich	<i>E. coli</i> , 24; others< 20	432
<b>141</b>	EN	Negative	NA	<i>S. aureus</i> , 78; <i>E. coli</i> , 16; <i>Arthrobacter sp.</i> , 5; others, <5	12
<b>141</b>	NTC	Negative	NA	<i>S. aureus</i> , 5; <i>E. coli</i> , 1;	0

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				<i>Alkalilimnicaola ehrlichii</i> , 1	
142	VB	<i>S. epidermidis</i> , 8; <i>S. aureus</i> , 7	Culture negative	<i>C. acnes</i> , 128; <i>E. coli</i> , 61; <i>M. globosa</i> , 28; <i>B. subtilis</i> , 17; <i>Arthrobacter sp.</i> , 9; <i>Mucilaginibacter sp.</i> , 4; <i>S. capitis</i> , 3; <i>P. ananatis</i> , 2; <i>M. osloensis</i> , 2; others <2	24252
142	V2	<i>S. epidermidis</i> , 3	Culture negative	<i>C. acnes</i> , 56; <i>E. coli</i> , 57; <i>M. globosa</i> , 4; <i>B. subtilis</i> , 10; <i>Arthrobacter sp.</i> , 11; <i>Mucilaginibacter sp.</i> , 4; <i>B. mycoides</i> , 3; <i>S. mitis</i> , 3	959
142	V3	<i>S. oralis</i> , 4	Culture negative	<i>C. acnes</i> , 21; <i>E. coli</i> , 48; <i>M. globosa</i> , 20; <i>B. subtilis</i> , 5; <i>Arthrobacter sp.</i> , 3	10883
142	V4	Negative	Culture negative	<i>C. acnes</i> , 4; <i>E. coli</i> , 76;	518

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				<i>M. globosa</i> , 20; <i>B. subtilis</i> , 25; <i>Arthrobacter</i> sp., 13; <i>B. mycoides</i> , 4; <i>Muciluginibacter</i> sp., 2	
142	V5	<i>S. oralis</i> , 4;	Culture negative	<i>C. acnes</i> , 6; <i>E. coli</i> , 46; <i>B. subtilis</i> , 19; <i>Arthrobacter</i> sp., 15; <i>B. mycoides</i> , 3; <i>Muciluginibacter</i> sp., 4	198
142	EN	Negative	NA	<i>C. acnes</i> , 8; <i>E. coli</i> , 22; <i>B. subtilis</i> , 4; <i>Arthrobacter</i> sp., 6; <i>Muciluginibacter</i> sp., 2; <i>B. mycoides</i> , 2	0
142	NTC	Negative	NA		0
200	VB	Negative control	Culture negative	<i>E. coli</i> , 37; <i>Arthrobacter</i> sp., 13; <i>M. osloensis</i> , 13; <i>B. subtilis</i> , 12;	843

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				<i>C. acnes</i> , 9 <i>M. globosa</i> , 7; <i>Muciluginibacter sp.</i> , 3	
200	V2	Negative control	Culture negative	<i>E. coli</i> , 68; <i>M. globosa</i> , 34; <i>Arthrobacter sp.</i> , 17; <i>B. subtilis</i> , 12; <i>Muciluginibacter sp.</i> , 7; <i>M. osloensis</i> , 5; <i>C. acnes</i> , 5; <i>B. mycoides</i> , 3; <i>Pantoa ananatis</i> , 3; <i>S. gordonii</i> , 3	35266
200	V3	Negative control	Culture negative	<i>E. coli</i> , 40; <i>Arthrobacter sp.</i> , 7; <i>M. osloensis</i> , 3; <i>B. subtilis</i> , 4; <i>C. acnes</i> , 3; <i>M. globosa</i> , 32;	14882
200	V4	Negative control	Culture negative	<i>E. coli</i> , 37; <i>Arthrobacter sp.</i> , 6; <i>B. subtilis</i> , 13; <i>Muciluginibacter sp.</i> , 7; <i>M. osloensis</i> , 5; <i>B. mycoides</i> , 3;	

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200	V5	Negative control	Culture negative	<i>E.coli</i> , 29; <i>Arthrobacter sp.</i> , 20; <i>M. osloensis</i> , 4; <i>B. subtilis</i> , 10; <i>C. acnes</i> , 6; <i>M. globosa</i> , 14; <i>Mucilaginibacter sp.</i> , 4	10020
200	EN	Negative control	NA	Negative	
200	NTC	Negative control	NA	<i>E. coli</i> , 5;	5
201	VB	Negative control	Culture negative	others, <3	254
201	V2	Negative control	Culture negative	<i>M. globosa</i> , 3	450
201	V3	Negative control	Culture negative	others, <3	141
201	V4	Negative control	Culture negative	others, <3	97
201	V5	Negative control	Culture negative	others, <3	41
201	EN	Negative control	NA	others, <3	1
201	NTC	Negative control	NA	Negative	0
202	VB	Negative control	Culture negative	<i>E. coli</i> , 3; <i>M. globosa</i> , 4;	1783

202	V2	Negative control	Culture negative	<i>M. globosa</i> , 7;	510
202	V3	Negative control	Culture negative	<i>E. coli</i> , 12; <i>M. globosa</i> , 21;	12678
202	V4	Negative control	Culture negative	<i>E. coli</i> , 8	217
202	V5	Negative control	Culture negative	<i>E. coli</i> , 13; <i>M. globosa</i> , 40;	25376
202	EN	Negative control	NA	<i>E. coli</i> , 6	4
202	NTC	Negative control	NA	Negative	0
203	VB	Negative control	Culture negative	Negative	5
203	V2	Negative control	Culture negative	Negative	6
203	V3	Negative control	Culture negative	<i>M. globosa</i> , 318;	5599
203	V4	Negative control	Culture negative	<i>M. osloensis</i> , 3	3886
203	V5	Negative control	Culture negative	<i>M. globosa</i> , 23; <i>E. coli</i> , 3	1891
203	EN	Negative control	NA	Negative	0
203	NTC	Negative control	NA	Negative	0
204	VB	Negative control	Culture negative	<i>E. coli</i> , 7; <i>M. globosa</i> , 75;	32185
				<i>Arthrobacter</i> sp., 2;	

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				<i>K. pneumoniae</i> , 1; <i>M. osloensis</i> , 11	
204	V2	Negative control	Culture negative	<i>E. coli</i> , 15; <i>M. globosa</i> , 16; <i>Arthrobacter sp.</i> , 1; <i>C. acnes</i> , 3; <i>S. capititis</i> , 3; <i>Klebsiella pneumoniae</i> 3 <i>M. osloensis</i> , 17; <i>Acinetobacter baumanii</i> , 2	20967
204	V3	Negative control	Culture negative	<i>E. coli</i> , 2; <i>M. globosa</i> , 727; <i>Arthrobacter sp.</i> , 2	13571
204	V4	Negative control	Culture negative	<i>E. coli</i> , 4; <i>M. globosa</i> , 132; <i>Arthrobacter sp.</i> , 2	6102
204	V5	Negative control	Culture negative	<i>E. coli</i> , 4; <i>B. subtilis</i> , 2; <i>Mucilaginibacter sp.</i> , 2	210
204	EN	Negative control	NA	<i>M. osloensis</i> , 10; <i>E. coli</i> , 3	14
204	NTC	Negative control	NA	<i>E. coli</i> , 1; <i>B. subtilis</i> , 1	0

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\**S. pseudointermedius*, *S. schleiferi*, *S. capitis*, *S. stepanovicii*, *S. simiae*, *S. pasteurii*, *S. simulans*, *S. lutrae*, *S. saprophyticus*, *S. nepalensis*, *S. piscifermentans*, *S. haemolyticus*, *S. pettenkoferi*, *S. sciuri*, *S. xylosus*, *S. argenteus*

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28 **Table S2. Bioinformatic program versions used.**

Program	Version
MinKNOW	1.15.4 to v. 3.6.5
Guppy	3.0.3 to v. 3.2.10

EPI2ME	2.57.1769546 to v. 2019.7.9.2549693
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31 **Table S3.** Nanopore sequencing QC metrics, totals for each patient.

Patient ID	Total reads	Total bases	Mean quality score	Mean read length (bp)
<b>101</b>	4567	14.1 Mb	10.7	3084
<b>104</b>	52607	144.1 Mb	12.84	2739
<b>105</b>	84234	263.3 Mb	12.1	3126
<b>107</b>	9404	17.5 Mb	9.59	1863
<b>108</b>	60125	141.6 Mb	12.51	2354
<b>109</b>	385891	1.3 Gb	12.74	3296
<b>110</b>	44309	124.6 Mb	12.54	2811
<b>111</b>	394935	1.1 Gb	12.46	2779
<b>112</b>	21750	60.9 Mb	12.48	2800
<b>114</b>	44309	124.6 Mb	12.54	2811

<b>115</b>	17165	41.7 Mb	12.17	2430
<b>116</b>	22074	61.4 Mb	11.84	2780
<b>117</b>	1463935	3.8 Gb	8.07	2621
<b>118</b>	73076	89.3 Mb	5.66	1222
<b>120</b>	81223	345.9 Mb	11.77	4258
<b>121</b>	458946	1.9 Gb	12.8	4186
<b>122</b>	56248	122.2 Mb	11.56	2172
<b>123</b>	7750	20.5 Mb	11.84	2647
<b>124</b>	758	560.9 Kb	8.12	739
<b>125</b>	4423	10.8 Mb	11.86	2445
<b>127</b>	71026	235.4 Mb	10.31	3313
<b>128</b>	37382	111.4 Mb	12.38	2980
<b>130</b>	3880728	14.5 Gb	10.53	3738
<b>133</b>	1536	3.2 Mb	11.46	2091
<b>134</b>	10624	22.4 Mb	11.63	2107
<b>135</b>	535666	2 Gb	12.41	3686

<b>136</b>	195174	604.9 Mb	12.53	3099
<b>137</b>	13690	14.6 Mb	4.46	1069
<b>139</b>	41736	139.9 Mb	12.54	3351
<b>140</b>	2273296	9.8 Gb	12.87	4324
<b>141</b>	2744512	11.9 Gb	12.89	4335
<b>142</b>	30010	103.3 Mb	12.44	3441
<b>200</b>	67637	162.5 Mb	12.59	2402
<b>201</b>	2288	2.1 Mb	9.99	931
<b>202</b>	43111	97.8 Mb	12.39	2267
<b>203</b>	15396	30.8 Mb	11.42	2002
<b>204</b>	79478	198.7 Mb	12.26	2499

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34 **Table S4. Overview of all patients whose biopsies were positive for either an antimicrobial resistance (AMR) phenotype from**  
 35 **conventional antibiotic susceptibility testing (AST) or AMR genotype from shotgun metagenomic sequencing.** Definitions used  
 36 to categorize the isolates' AST results were (S) sensitive, intermediate (I) or resistant (R). Identity cut-off for AMR genotype match  
 37 was set at 90%. *Other* indicates detected AMR genes not reflected in AST phenotype, or putative AMR genes of uncertain function.  
 38 *None detected* indicates that patient's biopsies were sequencing positive, but no AMR genes were detected. *Sequencing negative*  
 39 indicates that sequencing failed to detect the cultured pathogen, and hence its AMR gene(s).

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ID	AST (phenotype)	AMR Genotype (reads)
	Find 1: <i>S. lugdunensis</i>	None detected
104	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Chloramphenicol (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	Find 2: <i>C. acnes</i>	

Clindamycin (S)	
Chloramphenicol (S)	
MeroPenicillin em (S)	
Metronidazole (R)	
Penicillin	
<b>Find 1: <i>S. aureus</i></b>	Sequencing negative
Ciprofloxacin (S)	
Erythromycin (S)	
Fusidic acid (R)	
Gentamicin (S)	
Clindamycin (S)	
Chloramphenicol (S)	
Linezolid (S)	
Oxacillin (S)	
Rifampicin (S)	
Penicillin (R)	
Teicoplanin (S)	
Tetracycline (S)	
Trimethoprim/sulfamethoxazole (S)	
Vancomycin (S)	
<b>Find 2: <i>S. epidermidis</i></b>	
Ciprofloxacin(S)	
Erythromycin (S)	

107

Fusidic acid (R)	
Gentamicin (S)	
Clindamycin (S)	
Chloramphenicol (S)	
Linezolid (S)	
Oxacillin (S)	
Rifampicin (S)	
Teicoplanin (S)	
Tetracycline (S)	
Trimethoprim/sulfamethoxazole (S)	
Vancomycin (S)	
<b>Find: <i>S. epidermidis</i></b>	Sequencing negative
Ciprofloxacin (R)	
Erythromycin (R)	
Fusidic acid (R)	
Gentamicin (S)	
Clindamycin (R)	
Chloramphenicol (S)	
Linezolid (S)	
Oxacillin (R)	
Rifampicin (S)	
Teicoplanin (S)	
Tetracycline (S)	

	Trimethoprim/sulfamethoxazole (R)	
	Vancomycin (S)	
	<b>Find: <i>S. aureus</i></b>	
	Ciprofloxacin(S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Chloramphenicol (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	<i>blaZ</i> (26)
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	other	<i>sav1866</i> (7)
108	<b>Find: <i>S. aureus</i></b>	None detected
	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Chloramphenicol (S)	
109		

	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
111	<b>Find:</b> <i>S. aureus</i> (S)	
	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Chloramphenicol (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
112	Penicillin (R)	<i>blaZ</i> (3390)
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	other	<i>tet38</i> (480), <i>sav1866</i> (394), <i>mepA</i> (376), <i>mgrA</i> (296), <i>arlS</i> (281), <i>mepR</i> (94)
	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin (S)	

114	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	other	<i>sav1866</i> (15), <i>tet38</i> (15), <i>mgra</i> (10), <i>arlS</i> (7), <i>mepA</i> (5), <i>mepR</i> (5)
<b>Find: <i>S. aureus</i></b>		
Ciprofloxacin (S)		
Erythromycin (S)		
Fusidic acid (S)		
Gentamicin (S)		
Clindamycin (S)		
Linezolid (S)		
Oxacillin (S)		
Rifampicin (S)		
Penicillin (R)		
Tetracycline (S)		

	Trimethoprim/sulfamethoxazole (S)	
	Other	<i>blaZ</i> (943) <i>tet38</i> (2403), <i>sav1866</i> (1622), <i>mgrA</i> (1257), <i>arlS</i> (1154), <i>arlR</i> (344), <i>mepR</i> (338)
116	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin(S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	<i>blaZ</i> (156), <i>bla<sub>TEM-4</sub></i> (55)
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
117	Other	<i>sav1866</i> (17), <i>tetC</i> (813) <i>bla<sub>TEM-4</sub></i> (55), <i>mepA</i> (10), <i>arlS</i> (19), <i>mgrA</i> (8)
	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin (R)	<i>mgrA</i> , 1 (87% match)
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	

	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
120	<b>Find:</b> <i>S. caprae</i>	Sequencing negative
	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (R)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Teicoplanin (S)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	Vancomycin (S)	
121	<b>Find:</b> <i>S. aureus</i>	None detected
	Ciprofloxacin (S)	
	Erythromycin (S)	

	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
122	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	<i>blaZ</i> (8)
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
123	other	<i>tet38</i> (12), <i>sav1866</i> (9), <i>mgrA</i> (6)
	<b>Find 1:</b> <i>S. aureus</i>	None detected

	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	<b>Find 2: <math>\beta</math>-hemolytic streptococci</b>	
	Erythromycin (S)	
	Clindamycin (S)	
	Oxacillin (S)	
	Penicillin (S)	
	Trimethoprim/sulfamethoxazole (S)	
	Vancomycin (S)	
124	<b>Find: <i>S. epidermidis</i></b>	Sequencing negative
	Ciprofloxacin (R)	
	Erythromycin (R)	
	Fusidic acid (S)	
	Gentamicin (R)	

	Clindamycin (R)	
	Linezolid (S)	
	Oxacillin (R)	
	Rifampicin (S)	
	Teicoplanin (S)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (R)	
	Vancomycin (S)	
125	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	<i>blaZ</i> (2)
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	other	<i>mepA</i> (5), <i>sav1866</i> (3), <i>tet38</i> (2)
127	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin (R)	<i>arlS</i> (11), <i>mgrA</i> (6),

128	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (S)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	other	<i>sav1866</i> (8)
	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin (I)	<i>mgra</i> (34), <i>arlS</i> (40), <i>arlR</i> (9)
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	<i>blaZ</i> (28)

	Tetracycline (R)	<i>tetK</i> (28), <i>tet38</i> (50), <i>sav1866</i> (52), <i>mepR</i> (12), <i>mepA</i> (36), <i>mgrA</i> (34)
	Trimethoprim/sulfamethoxazole (S)	
130	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	other	<i>mepA</i> (2)
135	<b>Find:</b> <i>B-hemolytic streptococci</i>	
	Erythromycin (R) , Clindamycin (R)	<i>lmrP</i> , 620 (88.8% match)
	Penicillin (S)	
139	<b>Find:</b> <i>S. aureus</i>	
	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	

	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	<i>blaZ</i> (45)
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
	other	<i>tet38</i> (95), <i>mepA</i> (56), <i>sav1866</i> (53), <i>arlS</i> (36), <i>mepR</i> (9), <i>arlR</i> (7)
<b>Find: <i>S. aureus</i></b>	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	<i>blaZ</i> (3392)
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	

	other	<i>tet38</i> (5251); <i>sav1866</i> (4451); <i>mepA</i> (4397); <i>mgrA</i> (3580); <i>arlS</i> (3521); <i>arlR</i> (856); <i>mepR</i> (773)
	<b>Find: <i>S. aureus</i></b>	
	Ciprofloxacin (S)	
	Erythromycin (S)	
	Fusidic acid (S)	
	Gentamicin (S)	
	Clindamycin (S)	
	Linezolid (S)	
	Oxacillin (S)	
	Rifampicin (S)	
	Penicillin (R)	<i>blaZ</i> (3172)
	Tetracycline (S)	
	Trimethoprim/sulfamethoxazole (S)	
141	other	<i>tet38</i> (6479), <i>sav1866</i> (4362), <i>mepA</i> (5456), <i>mgrA</i> (3431), <i>arlS</i> (3106), , <i>arlR</i> (754), <i>mepR</i> (1010)