

Table S1. All investigated resistance- and virulence genes in the 34 *S. haemolyticus* isolates. P-values calculated with Fisher's exact test, comparing the outbreak clone to the non-outbreak isolates. Virulence genes previously associated with clinical *S. haemolyticus* isolates (1).

Gene	Function/resistance	Outbreak clone n (%)	Non-outbreak isolates n (%)	p-value
Resistance genes				
<i>aac(6')-aph(2'')</i>	aminoglycoside	20 (100)	10 (71)	0.022
<i>aadD</i>	aminoglycoside	0	1 (7)	0.412
<i>ant(9)-Ia</i>	aminoglycoside	0	1 (7)	0.412
<i>aph(3')-III</i>	aminoglycoside	0	0	1
<i>str</i>	aminoglycoside	0	0	1
<i>qacB</i>	antiseptic	0	0	1
<i>blaZ</i>	β -lactam	20 (100)	14 (100)	1
<i>cat (pC221)</i>	chloramphenicol	0	4 (29)	0.022
<i>qacA</i>	disinfectant	17 (85)	12 (86)	1
<i>fusB</i>	fusidic acid	0	4 (29)	0.022
<i>fusC</i>	fusidic acid	0	1 (7)	0.412

<i>lnuA</i>	lincosamide	0	2 (14)	0.162
<i>lsaA</i>	lincosamides and streptogramin a	0	0	1
<i>ermA</i>	macrolide	0	1 (7)	0.412
<i>ermC</i>	macrolide	0	1 (7)	0.412
<i>mphC</i>	macrolide	18 (90)	7 (50)	0.017
<i>vga(A)LC</i>	macrolide	0	2 (14)	0,162
<i>msrA</i>	macrolide	18 (90)	7 (50)	0.017
<i>mecA</i>	methicillin	20 (100)	11 (79)	0.061
<i>tet(K)</i>	tetracycline	0	4 (29)	0.022
<i>tet(M)</i>	tetracycline	0	1 (7)	0.412
<i>dfpG</i>	trimethoprim	0	3 (21)	0.061
MDR		20 (100)	13 (93)	0.412

Virulence genes

<i>ugpQ</i>	Glycerophosphoryl diester phosphodiesterase	20 (100)	11 (79)	0.061
<i>paaZ</i>	Domain protein	20 (100)	11 (79)	0.061

<i>mecA</i>	Methicillin resistance	20 (100)	11 (79)	0.061
<i>SH0155_NA</i>	MFS transporter	20 (100)	14 (100)	1
<i>nikA</i>	Nickel-binding periplasmic protein	20 (100)	14 (100)	1
<i>secA2</i>	Protein translocase subunit seca2	20 (100)	13 (93)	0.412
<i>fabG</i>	Fabg	20 (100)	13 (93)	0.412
<i>yjgG</i>	Pyrimidine 5'-nucleotidase yjgG	20 (100)	14 (100)	1
<i>ansA</i>	Putative L-asparaginase	20 (100)	14 (100)	1
<i>aacA-aphD</i>	Bifunctional AAC/APH	20 (100)	10 (71)	0.022
<i>SH1612_NA</i>	Acetyltransferase GNAT	20 (100)	10 (71)	0.022
<i>blaI</i>	Penicillinase repressor	20 (100)	13 (93)	0.412
<i>blaR1</i>	Regulatory protein blaR1	20 (100)	12 (86)	0.162
<i>blaZ</i>	B-lactamase	20 (100)	14 (100)	1
<i>SH2156_NA</i>	Ferrichrome ABC transporter truncated	20 (100)	13 (93)	0.412
<i>tagE</i>	Truncated glycosyltransferase	20 (100)	13 (93)	0.412

<i>folB</i>	Dihydroneopterin aldolase	20 (100)	8 (57)	0.002
<i>folP</i>	Dihydropteroate synthase	20 (100)	9 (64)	0.007
<i>SH2607_NA</i>	ATP-binding protein (plasmid)	20 (100)	4 (29)	<0.001
<i>sraP</i>	Serine-rich adhesin for platelets	20 (100)	13 (93)	0.412

Table S2. Frequency of combinations of antibiotic resistance phenotype, genotype and virulence seen in the 34 S. haemolyticus isolates.

Combination	Antibiotic resistance phenotype	Outbreak clone n (%)	Non-outbreak isolates n (%)
1	Aminoglycoside, Methicillin, β -lactam, Macrolide	16 (80)	5 (36)
2	Aminoglycoside, Methicillin, β -lactam	2 (10)	0 (0)
3	Aminoglycoside, Methicillin, β -lactam, Macrolide, Trimethoprim-sulfamethoxazole	2 (10)	0 (0)
4	Fusidic acid, β -lactam	0 (0)	1 (7)
5	Aminoglycoside, Methicillin, β -lactam, Fluoroquinolone	0	1 (7)
6	Aminoglycoside, Methicillin, β -lactam, Fusidic acid	0	1 (7)
7	Aminoglycoside, Methicillin, β -lactam, Fluoroquinolone, Fusidic acid, Lincosamide, Macrolide, Trimethoprim-sulfamethoxazole	0	2 (14)
8	Macrolide, β -lactam	0	1 (7)
9	Methicillin, β -lactam	0	1 (7)
10	Aminoglycoside, Methicillin, β -lactam, Fluoroquinolone, Lincosamide, Macrolide, Trimethoprim-sulfamethoxazole	0	1 (7)
11	β -lactam	0	1 (7)

Combination	Antibiotic resistance genotype	Outbreak clone n (%)	Non-outbreak isolates n (%)
1	<i>aac(6')-aph(2'')</i> , <i>blaZ</i> , <i>qacA</i> , <i>mphC</i> , <i>msrA</i> , <i>mecA</i>	15 (75)	4 (29)
2	<i>aac(6')-aph(2'')</i> , <i>blaZ</i> , <i>mphC</i> , <i>msrA</i> , <i>mecA</i>	3 (15)	0
3	<i>aac(6')-aph(2'')</i> , <i>blaZ</i> , <i>qacA</i> , <i>mecA</i>	2 (10)	0
4	<i>blaZ</i> , <i>qacA</i>	0 (0)	1 (7)
5	<i>aadD</i> , <i>blaZ</i> , <i>cat</i> (pC221), <i>qacA</i> , <i>fusB</i>	0	1 (7)
6	<i>aac(6')-aph(2'')</i> , <i>blaZ</i> , <i>mecA</i> , <i>tet(M)</i>	0	1 (7)
7	<i>aac(6')-aph(2'')</i> , <i>blaZ</i> , <i>cat</i> (pC221), <i>qacA</i> , <i>fusB</i> , <i>lsaA</i> , <i>mphC</i> , <i>vga(A)LC</i> , <i>msrA</i> , <i>mecA</i> , <i>tet(K)</i> , <i>dfi-G</i>	0	2 (14)
8	<i>aac(6')-aph(2'')</i> , <i>blaZ</i> , <i>cat</i> (pC221), <i>qacA</i> , <i>mecA</i> , <i>tet(K)</i>	0	1 (7)
9	<i>aph(3')-III</i>	0	1 (7)
10	<i>blaZ</i> , <i>qacA</i> , <i>mecA</i> , <i>tet(K)</i>	0	1 (7)
11	<i>aac(6')-aph(2'')</i> , <i>blaZ</i> , <i>qacA</i> , <i>fusB</i> , <i>fusc</i> , <i>mecA</i>	0	1 (7)
12	<i>aac(6')-aph(2'')</i> , <i>blaZ</i> , <i>qacA</i> , <i>ermC</i> , <i>mphC</i> , <i>msrA</i> , <i>mecA</i> , <i>dfi-G</i>	0	1 (7)

Combination	Virulence	Outbreak clone n (%)	Non-outbreak isolates n (%)
1	All 20 virulence genes (Table S1)	20 (100)	2 (14)
2	All virulence genes except <i>SH2607_NA</i> (Table S1)	0	5 (36)
3	All virulence genes except <i>folB</i> (Table S1)	0	1 (7)
4	<i>SH0155_NA, nikA, yjjG, ansA, blaZ, SH2156_NA</i>	0	1 (7)
5	<i>SH0155_NA, nikA, secA2, fabG, yjjG, ansA, blaI, blaR1, blaZ, SH2156_NA, tagE, sraP</i>	0	2 (14)
6	<i>ugpQ, paaZ, mecA, SH0155_NA, nikA, secA2, fabG, yjjG, ansA, aacA-aphD, SH1612_NA, blaI, blaR1, blaZ, SH2156_NA, tagE, sraP</i>	0	1 (7)
7	<i>ugpQ, paaZ, mecA, SH0155_NA, nikA, secA2, fabG, yjjG, ansA, aacA-aphD, SH1612_NA, blaI, blaZ, tagE, folB, folP, SH2607_NA, sraP</i>	0	1 (7)
8	<i>ugpQ, paaZ, mecA, SH0155_NA, nikA, secA2, fabG, yjjG, ansA, blaI, blaR1, blaZ, SH2156_NA, tagE, sraP</i>	0	1 (7)

Supplementary reference

1. Pain M, Hjerde E, Klingenberg C, Cavanagh JP. 2019. Comparative Genomic Analysis of *Staphylococcus haemolyticus* Reveals Key to Hospital Adaptation and Pathogenicity. *Front Microbiol* 10:2096.