

Supplementary Table S1. Genotypic characteristics of the strains typed

Code	Strain	Host	Country	<i>arcC</i>	<i>aroE</i>	<i>glpF</i>	<i>gmk</i>	<i>pta</i>	<i>tpi</i>	<i>yqiL</i>	ST*	CC†	Ridom‡	<i>agr</i> type§	<i>sasA</i>	<i>sasB</i>	<i>sasD</i>	<i>sasE</i>	<i>sasF</i>	<i>sasH</i>	<i>sasI</i>	<i>sas</i> type	Reference	Source
DS72	496	Chicken	N. Ireland	1	1	1	1	1	1	1	1	1		3									Rodgers <i>et al.</i> (1999)	John Rodgers
DS55	11	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5	t002	2	2	3	2	1	6	5	5	1	Rodgers <i>et al.</i> (1999)	John Rodgers
DS56	18	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5	t002	2	2	3	2	1	6	5	5	1	Rodgers <i>et al.</i> (1999)	John Rodgers
DS58	31	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5		2	2	3	2	1	6	5	5	1	Rodgers <i>et al.</i> (1999)	John Rodgers
DS62	34	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5	t002	2	2	3	2	1	6	5	5	1	Rodgers <i>et al.</i> (1999)	John Rodgers
DS63	47	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5	t002	2	2	3	2	1	6	5	5	1	Rodgers <i>et al.</i> (1999)	John Rodgers
DS65	564	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5		2	2	3	2	1	6	5	5	1	Rodgers <i>et al.</i> (1999)	John Rodgers
DS66	589	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5	t002	2	2	3	2	1	6	5	5	1	Rodgers <i>et al.</i> (1999)	John Rodgers
DS60	39	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5		2									Rodgers <i>et al.</i> (1999)	John Rodgers
DS61	70	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5		2									Rodgers <i>et al.</i> (1999)	John Rodgers
DS67	72	Chicken	N. Ireland	1	4	1	4	12	1	10	5	5		2									Rodgers <i>et al.</i> (1999)	John Rodgers
DS68	82	Chicken	N. Ireland	12	89	1	1	4	5	90	692	NK		1	31	21	21	31	38	40	10	16	Rodgers <i>et al.</i> (1999)	John Rodgers
DS40	CH498	Cow	Argentina	1	1	1	1	1	1	1	1	1		3										José Penadés
1006	1006	Cow	USA	3	3	1	1	4	4	3	8	8		1	2	2	3	1	39	6	3	19	Smyth <i>et al.</i> (2005)	J. Ross Fitzgerald
DS37	V299	Cow	Spain	4	9	1	8	1	10	8	20	20		1										José Penadés
1363	1363	Cow	USA	4	1	4	1	5	5	4	25	25	t081	1	7	15	9	8	28	22	12	4	Fitzgerald <i>et al.</i> (2001)	J. Ross Fitzgerald
103	103	Cow	Ireland	18	1	1	1	1	5	3	71	97	t524	1	13	10	3	8	16	15	10	8	Fitzgerald <i>et al.</i> (2001)	J. Ross Fitzgerald
104	104	Cow	Ireland	18	1	1	1	1	5	3	71	97	t524	1	13	10	3	8	16	15	10	8	Fitzgerald <i>et al.</i> (2001)	J. Ross Fitzgerald
79	79	Cow	Ireland	18	1	1	1	1	5	3	71	97		1									Fitzgerald <i>et al.</i> (2000)	J. Ross Fitzgerald
105	105	Cow	Ireland	18	1	1	1	1	5	3	71	97		1									Fitzgerald <i>et al.</i> (2001)	J. Ross Fitzgerald
123	123	Cow	Ireland	18	1	1	1	1	5	3	71	97		1									Fitzgerald <i>et al.</i> (2001)	J. Ross Fitzgerald
291	291	Cow	Ireland	18	1	1	1	1	5	3	71	97		1									Smyth <i>et al.</i> (2005)	J. Ross Fitzgerald

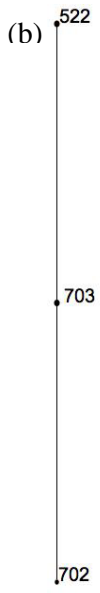
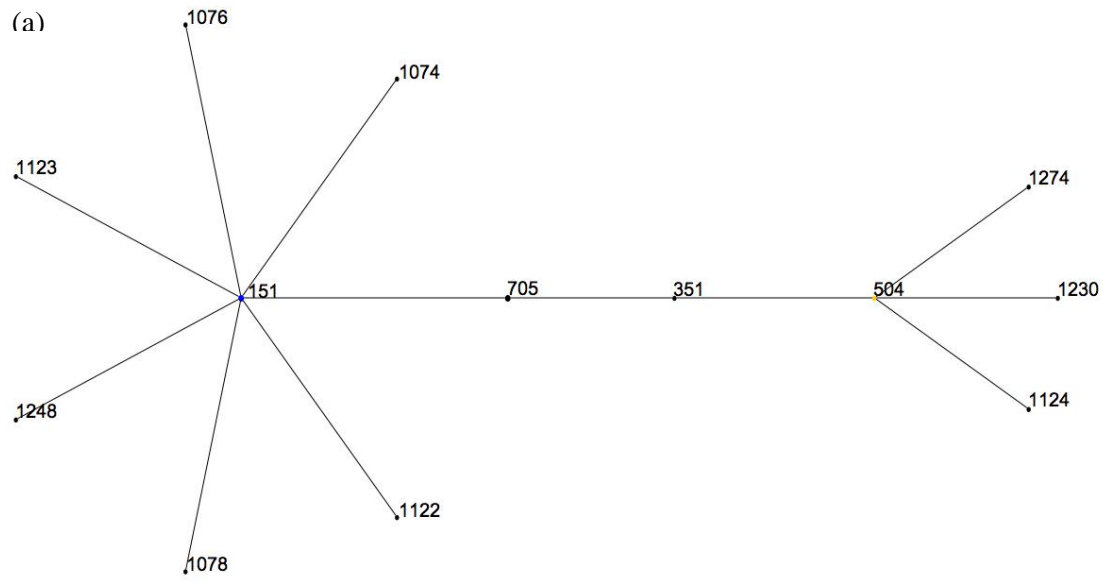
Smyth, D. S., Feil, E. J., Meaney, W. J., Hartigan, P. J., Tollersrud, T., Fitzgerald, J. R., Enright, M. C. & Smyth, C. J. (2009). Molecular genetic typing reveals further insights into the diversity of animal-associated *Staphylococcus aureus*. *J Med Microbiol* **58**, 1343-1353.

DS13	St7	Goat	Italy	6	66	46	2	7	50	18	133	133	1	23	29	3	27	34	15	30	9	Foschino <i>et al.</i> (2002)	Robert Foschino	
DS74	1563-4	Goat	Norway	6	66	46	2	7	50	18	133	133	1	30	29	3	27	34	15	30	10	Mork <i>et al.</i> (2005)	Tore Tollersrud	
DS14	St34	Goat	Italy	6	66	46	2	7	50	18	133	133	1									Foschino <i>et al.</i> (2002)	Robert Foschino	
DS15	St62	Goat	Italy	6	66	46	2	7	50	18	133	133	1										Foschino <i>et al.</i> (2002)	Robert Foschino
DS16	St144	Goat	Italy	6	66	46	2	7	50	18	133	133	1										Foschino <i>et al.</i> (2002)	Robert Foschino
DS2	None	Goat	Austria	6	66	46	2	7	50	18	133	133	1										Smyth <i>et al.</i> (2005)	Petra Winter
DS28	St152	Goat	Italy	6	66	46	2	7	50	18	133	133	1										Foschino <i>et al.</i> (2002)	Robert Foschino
DS73	1518-2	Goat	Norway	6	66	46	2	7	50	18	133	133	1										Mork <i>et al.</i> (2005)	Tore Tollersrud
DS75	1589-1	Goat	Norway	6	66	46	2	7	50	18	133	133	1										Mork <i>et al.</i> (2005)	Tore Tollersrud
DS76	1589-2	Goat	Norway	6	66	46	2	7	50	18	133	133	1										Mork <i>et al.</i> (2005)	Tore Tollersrud
DS77	213-10	Goat	Norway	6	66	46	2	7	50	18	133	133	1										Mork <i>et al.</i> (2005)	Tore Tollersrud
DS78	213-8	Goat	Norway	6	66	46	2	7	50	18	133	133	1										Mork <i>et al.</i> (2005)	Tore Tollersrud
DS81	243-7	Goat	Norway	6	66	46	2	7	50	18	133	133	1										Mork <i>et al.</i> (2005)	Tore Tollersrud
DS80	232-11	Goat	Norway	6	57	63	2	7	58	52	480	130	1	26	28	26	26	33	36	33	21	Mork <i>et al.</i> (2005)	Tore Tollersrud	
DS17	St11	Goat	Italy	18	95	45	2	7	15	5	522	703	1	28	27	3	28	NT	15	31	NT	Foschino <i>et al.</i> (2002)	Robert Foschino	
DS4	None	Goat	Austria	18	95	45	2	7	15	5	522	703	1										Smyth <i>et al.</i> (2005)	Petra Winter
DS24	St16	Goat	Italy	6	57	45	2	7	95	52	700	130	3	27	27	24	26	33	23	28	20	Foschino <i>et al.</i> (2002)	Robert Foschino	
DS3	None	Goat	Italy	6	129	46	2	7	50	18	701	133	1										Smyth <i>et al.</i> (2005)	Petra Winter
DS20	St66	Goat	Italy	18	128	45	2	7	15	5	703	703	t1534	1	28	27	3	28	NT	15	31	NT	Foschino <i>et al.</i> (2002)	Robert Foschino
DS19	St65	Goat	Italy	18	128	45	2	7	15	5	703	703	1										Foschino <i>et al.</i> (2002)	Robert Foschino
DS21	St67	Goat	Italy	18	128	45	2	7	15	5	703	703	1										Foschino <i>et al.</i> (2002)	Robert Foschino
DS23	St140	Goat	Italy	18	128	45	2	7	15	5	703	703	1										Foschino <i>et al.</i> (2002)	Robert Foschino
DS51	KH365	Rabbit	Belgium	1	1	1	1	1	1	1	1	1	t127	3	11	3	8	1	18	12	17	6	Hermans <i>et al.</i> (2000)	Dieter Vancraeynest
DS47	KH275	Rabbit	Belgium	3	3	1	1	4	4	3	8	8	1										Hermans <i>et al.</i> (2000)	Dieter Vancraeynest
DS48	KH21	Rabbit	Belgium	12	1	1	15	11	1	40	96	96	3	19	32	9	1	10	42	35	25	Hermans <i>et al.</i> (2000)	Dieter Vancraeynest	
DS32	PS17	Rabbit	Spain	12	1	1	15	11	1	40	96	96	3										José Penadés	

Smyth, D. S., Feil, E. J., Meaney, W. J., Hartigan, P. J., Tollersrud, T., Fitzgerald, J. R., Enright, M. C. & Smyth, C. J. (2009). Molecular genetic typing reveals further insights into the diversity of animal-associated *Staphylococcus aureus*. *J Med Microbiol* **58**, 1343-1353.

- Fitzgerald, J. R., Sturdevant, D. E., Mackie, S. M., Gill, S. R. & Musser, J. M. (2001).** Evolutionary genomics of *Staphylococcus aureus*: insights into the origin of methicillin-resistant strains and the toxic shock syndrome epidemic. *Proc Natl Acad Sci U S A* **98**, 8821–8826.
- Foschino, R., Invernizzi, A., Barucco, R. & Stradiotto, K. (2002).** Microbial composition, including the incidence of pathogens, of goat milk from the Bergamo region of Italy during a lactation year. *J Dairy Res* **69**, 213–225.
- Hermans, K., Haesebrouck, F., Vanechoutte, M., Devriese, L. A., Godard, C. & De Herdt, P. (2000).** Differentiation between high and low virulence *Staphylococcus aureus* strains from rabbits by randomly amplified polymorphic DNA (RAPD) analysis. *Vet Microbiol* **72**, 311–319.
- Mork, T., Tollersrud, T., Kvitle, B., Jorgensen, H. J. & Waage, S. (2005).** Comparison of *Staphylococcus aureus* genotypes recovered from cases of bovine, ovine, and caprine mastitis. *J Clin Microbiol* **43**, 3979–3984.
- Rodgers, J. D., McCullagh, J. J., McNamee, P. T., Smyth, J. A. & Ball, H. J. (1999).** Comparison of *Staphylococcus aureus* recovered from personnel in a poultry hatchery and in broiler parent farms with those isolated from skeletal disease in broilers. *Vet Microbiol* **69**, 189–198.
- Smyth, D. S., Hartigan, P. J., Meaney, W. J., Fitzgerald, J. R., Deobald, C. F., Bohach, G. A. & Smyth, C. J. (2005).** Superantigen genes encoded by the *egc* cluster and SaPI_{bov} are predominant among *Staphylococcus aureus* isolates from cows, goats, sheep, rabbits and poultry. *J Med Microbiol* **54**, 401–411.

Smyth, D. S., Feil, E. J., Meaney, W. J., Hartigan, P. J., Tollersrud, T., Fitzgerald, J. R., Enright, M. C. & Smyth, C. J. (2009). Molecular genetic typing reveals further insights into the diversity of animal-associated *Staphylococcus aureus*. *J Med Microbiol* **58**, 1343-1353.



Smyth, D. S., Feil, E. J., Meaney, W. J., Hartigan, P. J., Tollersrud, T., Fitzgerald, J. R., Enright, M. C. & Smyth, C. J. (2009). Molecular genetic typing reveals further insights into the diversity of animal-associated *Staphylococcus aureus*. *J Med Microbiol* **58**, 1343-1353.

Supplementary Fig. S1. Additional clonal complexes (CCs) containing previously identified animal-associated sequence types (STs) are shown. (a) CC151 contains bovine animal- and milk-associated STs from the Netherlands (ST124, 504, 705 and 1123), USA (ST351) and the UK (151, 1074, 1076, 1078 and 1123). (b) This CC contains ST703, identified in Italian goats in the current study, and ST522, identified in Italian and Austrian goats in the current study. ST522 was also identified in goat's milk from Portugal. (c) CC130 contains ruminant-associated STs. ST130 (also identified in a Norwegian cow), 480 and 483 were identified in Norwegian goats, and ST700 was identified in an Italian goat. (d) CC126 contains bovine-associated STs from the USA, ST126 and ST694 (identified herein), and Brazil (ST741). (e) CC97 contains multiple bovine- and human-associated STs. Of the bovine-associated STs, ST70, 97, 124, 352, 1119, 1125, 1126, 1127, 1128 and 1129 were from the Netherlands; ST124, 347, 349 were from the USA; ST352 and 358 were from Chile; ST116, 117, 118, 1072 and 1077 were from the UK; ST355, 742 and 746 were from Brazil; and ST115 was from Canada. An additional ST, ST747, was found in a Brazilian ostrich. CC8 (f) and CC5 (g) both contain predominantly human-associated STs. Of CC8, bovine isolates of ST8 and rabbit isolates of ST407 were identified in the current study. Of CC5, chicken isolates of ST5, a sheep isolate of ST706 and a bovine isolate of ST708 were identified.