

Table S1. *Staphylococcus aureus* and MRSA loads (CFU) in 1075 pig nasal swabs originating from 15 MRSA-positive farms.

<i>S. aureus</i> load*		MRSA load*					Total
		0	A	B	C	D	
0	n	390	30	7	1	0	428
	%	91.12	7.01	1.64	0.23	0.00	
A	n	140	143	7	0	0	290
	%	48.28	49.31	2.41	0.00	0.00	
B	n	100	56	80	1	0	237
	%	42.19	23.63	33.76	0.42	0.00	
C	n	28	24	18	19	0	89
	%	31.46	26.97	20.22	21.35	0.00	
D	n	10	6	4	5	6	31
	%	32.26	19.35	12.90	16.13	19.35	
Total		668	259	116	26	6	1075

* Nasal loads were categorized as 0 (<100 CFUs), A (≥ 100 and <1000), B (≥ 1000 and < 10000), C (≥ 10000 and <100000) and D (≥ 100000 CFUs).

Table S2. Correlation between IgG levels against ten *Staphylococcus aureus*-specific antigens and five random effects. Random effects associated to the environment (*farm*, *pen* and *farmpen*) were the only significant effects in linear regression analysis.

<i>S. aureus</i>						<i>Significance</i>
<i>antigens</i>						<i>in linear</i>
(Function)	<i>farm</i>	<i>pen</i>	<i>farmpen</i>	<i>totalpig</i>	<i>pig</i>	<i>regression</i>
ClfA	0.32238	0.22692	0.32892	0.26830	0.16485	<i>farmpen</i>
(Adhesion)	<0.0001	0.0036	<0.0001	0.0005	0.0355	
IsdA	0.28514	0.08372	0.22819	0.15229	0.07811	<i>farm</i>
(Adhesion)	<0.0001	0.2572	0.0018	0.0385	0.2906	
SdrD	0.07870	0.12511	0.13425	0.09542	0.05621	None
(Adhesion)	0.2950	0.0952	0.0732	0.2039	0.4548	
α-tox	0.19378	0.12722	0.19223	0.10612	0.04016	<i>farmpen</i>
(Toxin)	0.0121	0.1014	0.0128	0.1723	0.6063	
HlgB	0.19170	-0.00064	0.11452	0.02307	-0.06380	<i>farm</i>
(Toxin)	0.0131	0.9935	0.1406	0.7672	0.4127	
LytM	0.03724	0.09966	0.07985	0.00617	-0.02405	None
(Toxin)	0.6109	0.1724	0.2747	0.9329	0.7426	
SEI	-0.02287	0.01813	0.00702	-0.03239	-0.04399	None
(Toxin)	0.7510	0.8013	0.9224	0.6530	0.5414	
SSL-1	0.24617	0.24418	0.29202	0.26586	0.21922	<i>farmpen</i>
(Toxin)	0.0012	0.0013	0.0001	0.0004	0.0040	
SSL-5	0.12372	0.09390	0.12169	0.04156	-0.00089	None
(Toxin)	0.0873	0.1951	0.0927	0.5670	0.9902	
TSST-1	0.25840	0.05158	0.18107	0.15384	0.09632	<i>farm</i>
(Toxin)	0.0005	0.4942	0.0156	0.0403	0.2009	