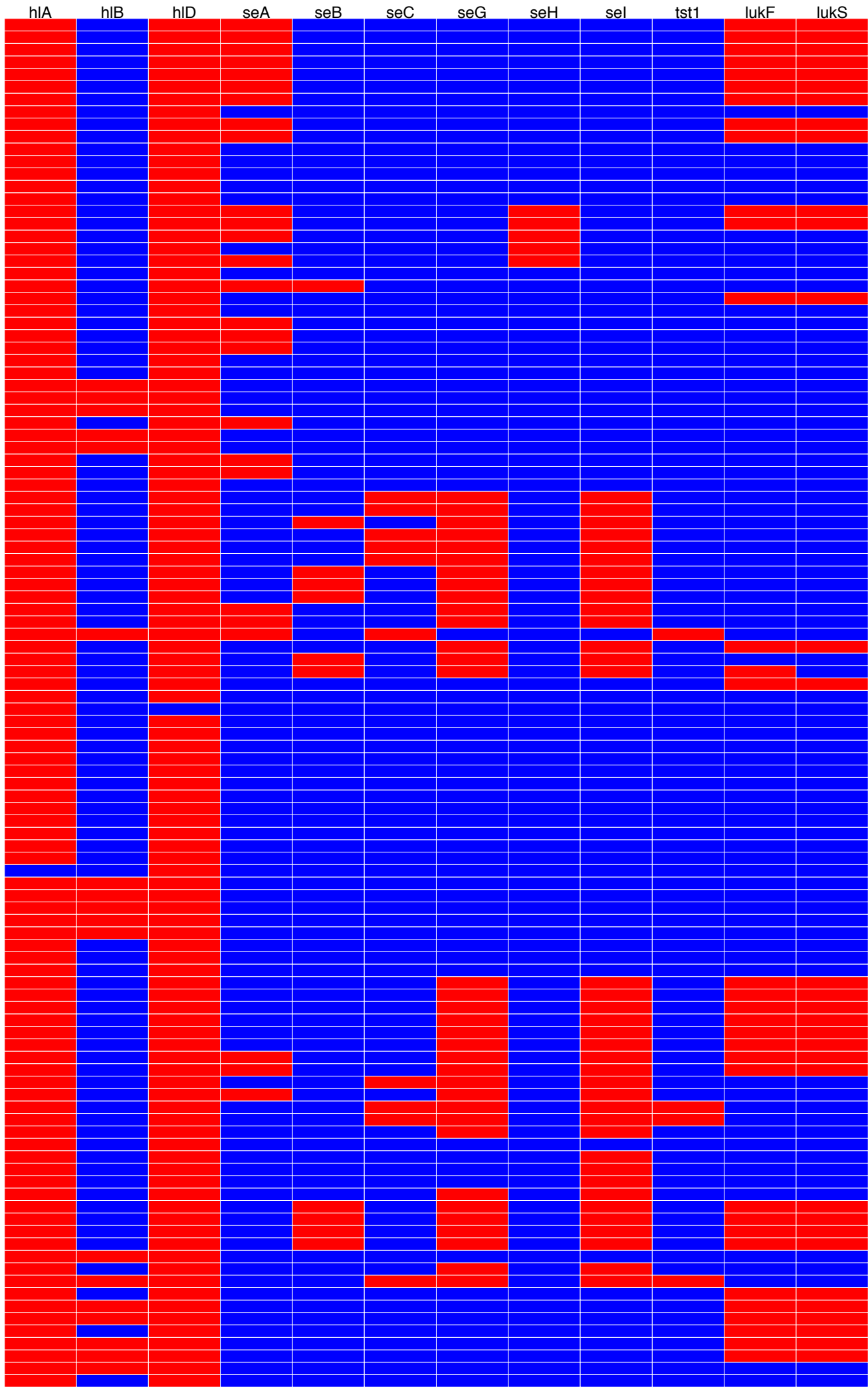
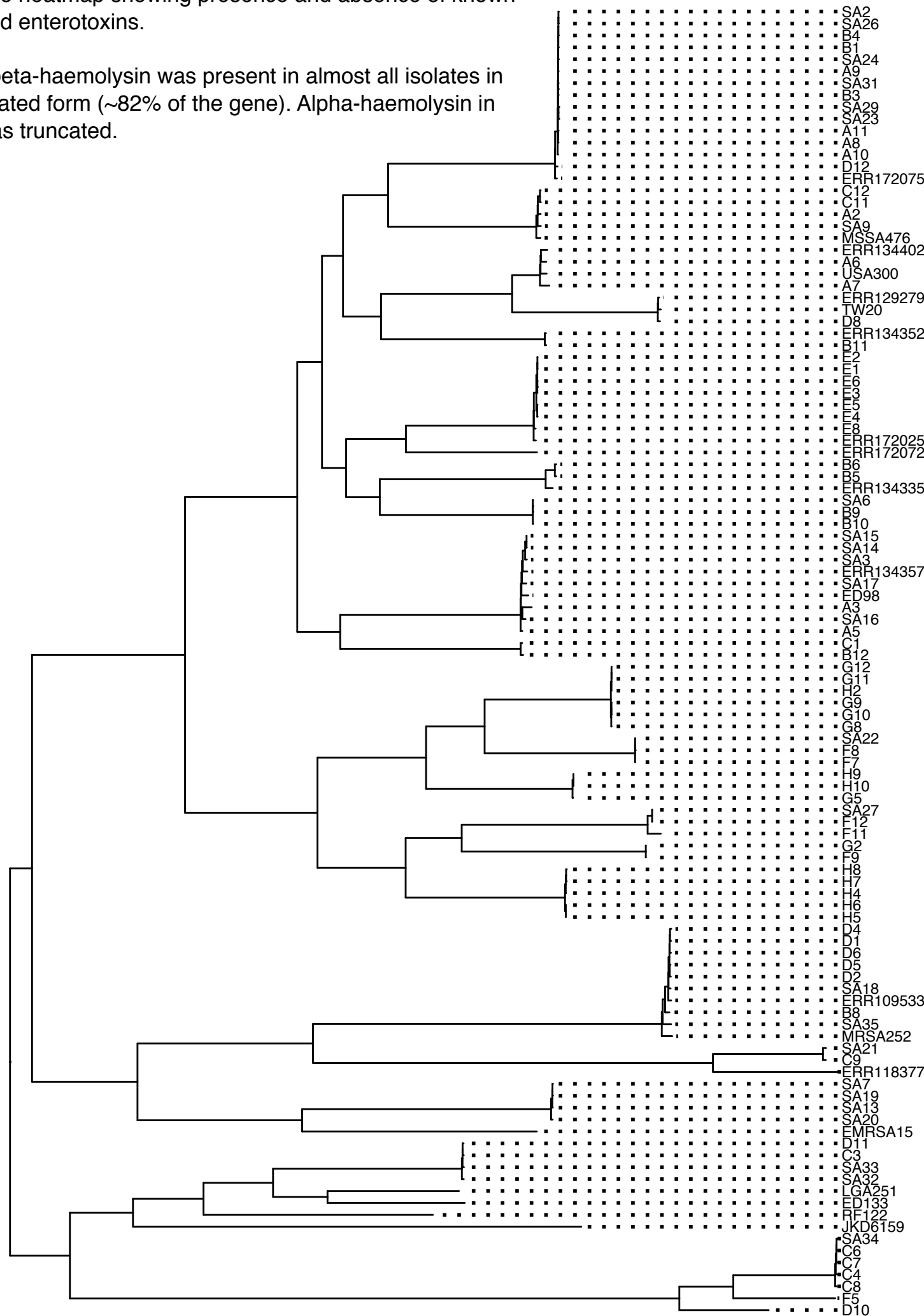


Supplementary figure 3 virulence figure. Phylogenetic tree linked to heatmap showing presence and absence of known selected enterotoxins.

Note: beta-haemolysin was present in almost all isolates in a truncated form (~82% of the gene). Alpha-haemolysin in F12 was truncated.



Nucleotide sequences for virulence associated genes alpha-hemolysin (hIA), beta-hemolysin (hIB), delta-hemolysin(hID), staphylococcal enterotoxins A (seA), B (seB), C (seC), G (seG), H (seH) and I (sel), toxic shock syndrome toxin gene 1 (tst1) and Panton-Valentine leukocidin genes (lukF-PV and lukS-PV) were identified from the Virulence Factors of Pathogenic Bacteria database (<http://www.mgc.ac.cn/Vfs/>). The presence of the virulence genes in isolates used in this study was identified using BLAST against the whole genome assemblies with a cutoff of >90% base identity and length similarity to the reference gene. Red = presence and Blue = absence.

Supplementary table 1. Table showing a summary of the sampling information for three epidemiological classes in our study including approximate dates of isolation and geographical data.

Epidemiology	Study site	Start date	End Date	MLST analysis done	Whole Genome Analysis
Human invasive disease	MRC Clinic Fajara	2002	2010	116	46
Human Carriage	Sibanor, Foni District	Dec-04	Apr-05	100	13
Monkey carriage	Mainly: Bijilo Forest Park and Abuko Nature Reserve,	Apr-11	May-11	82	31

Table lists the site where the patients were sampled or where the monkeys were trapped, the start and end dates of sampling, the number of *S. aureus* isolates that were characterised by MLST and the number of *S. aureus* genomes that were analysed in a given epidemiological class (i.e invasive disease, human and monkey carriage respectively).

Supplementary Figure 4. A google maps screen shot of the Western region of Gambia highlighting the sites where our isolates were sampled from in three previous studies.



Red stars indicate the two sites, both within a 10 km radius from Fajara, where most of the monkey isolates were isolated from: Bijilo Forest Park and The Abuko Nature Reserve. The Blue star is showing Sibanor, a village in the Foni District (approximately 80 km from Fajara), where the carriage study was carried out. The invasive disease isolates were collected from archived samples of patients that reported to the MRC clinic in Fajara.