**Figure S1. Distribution of Phenotypic Resistance Profiles and Genetic Resistance Markers Over Time, Serotypes, Clonal Complexes, and Clinical Outcomes (ICU admission & Meningitis).** The top panel illustrates the distribution of phenotypic resistance profiles, as determined through antimicrobial susceptibility testing (AST), spanning the years 2007 to 2021. We have marked a dashed red line on the plot to indicate the revision that occurred in 2010 when the U.S. GBS AIP guidelines for pregnant individuals were updated to exclude erythromycin, due to increasing concerns about resistance. Notably, in 2010, the U.S. GBS AIP guidelines for pregnant individuals were revised, notably removing erythromycin due to concerns about resistance. These profiles include VAN (vancomycin), PEN (penicillin), ERY (erythromycin), and CLI (clindamycin). The middle and bottom panels illustrate the distribution of genetic resistance markers over time, along with their association with serotypes, clonal complexes, and clinical outcomes such as ICU admission and meningitis. The resistance markers identified in our dataset include ant(6)-Ia-aph(3')-III, which confers resistance to aminoglycosides; ermA, ermB, and ermT are associated with the MLSB phenotype, conferring resistance to macrolides (such as erythromycin), lincosamides (such as clindamycin), and streptogramin B antibiotics; mef(A)-msr(D) confers resistance to macrolides; and tetM and tetO confer resistance to tetracyclines.

**Figure S2. Distribution of VLOD Twins in Boston Children's Hospital (BCH) Group B Streptococcus (GBS) Phylogeny.** Both twins were infected with CC23/cpsIa GBS isolates, which are clustered together in the phylogenetic analysis. One twin had GBS isolates from both blood (indicated by a circle) and cerebrospinal fluid (CSF, indicated by a triangle) and was treated in the ICU (highlighted with blue tips). The other twin had GBS isolated only from the blood only and received treatment in the inpatient pediatric unit (highlighted with orange tips).

**Figure 3. GBS Phylogeny split by age of onset and disease severity.** (A) and (B) are phylogenies containing only infants and older patients with GBS infection, respectively. We observe that CC17-cpsIa is more common among infant cases. (C) and (D) are phylogenies containing only patients admitted to the ICU and those not, respectively. (E) and (F) are phylogenies containing only patients with and without meningitis, respectively.