

Description of Additional Supplementary Files:

Supplementary Data 1: List of 1,400 screened human skeletal remains

Supplementary Data 2: Summary of the three ancient *Y. pestis* genomes recovered in this study

Supplementary Data 3: Annotation statistics of clade-fixed and genomewide SNPs and indels

Supplementary Data 4: Genomic annotation of clade-fixed indels in early aDNA lineages

Supplementary Data 5: Genomic annotation of clade-fixed SNPs in early aDNA lineages

Supplementary Data 6: Clade-specific gain and loss events in early ancient *Y. pestis* genomes

Supplementary Data 7: Genome assemblies included in the custom HOPS database

Supplementary Data 8: Competitive alignment result of 1,400 screened human skeletal remains

Supplementary Data 9: Ancient and modern *Y. pestis* genomes analyzed in this study, along with *Y. pseudotuberculosis* and *Y. similis*