

Descriptions of Additional Supplementary Files

Supplementary Data 1

Description: Metadata, assembly stats, typing information and species identification of the *S. Typhi* public genomes available on Pathogenwatch.

Supplementary Data 2

Description: Metadata and accessions of 118 *S. Typhi* genomes comprising tree benchmarking Dataset I.

Supplementary Data 3

Description: Metadata and accessions of 138 *S. Typhi* genomes comprising tree benchmarking Dataset II.

Supplementary Data 4

Description: Metadata and accessions of 43 *S. Typhi* genomes comprising tree benchmarking Dataset III.