Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Baker KS, Mather AE, McGregor H, et al. The extant World War 1 dysentery bacillus NCTC1: a genomic analysis. Lancet 2014; 384: 1691–97.
The NCTC1 genome and draft genome. The NCTC1 genome is represented circularly with the two outer tracks showing annotation coordinates of the forward and reverse strands. The third track shows coordinates of contiguous sequences generated in the draft genome, often bound by insertion sequences (shown in black on the fourth track). The GC content is shown as the fifth track and the GC skew is innermost.

Number of annotations related to IS elements in NCTC1

| IS element | No. annotations | IS CDSs (number) |
|------------|-----------------|-----------------|
| IS1        | 125             | 2               |
| IS150      | 13              | 2               |
| IS2        | 71              | 2               |
| IS294      | 4               | 1               |
| IS3        | 7               | 2               |
| IS4        | 21              | 2               |
| IS600      | 56              | 2               |
| IS629      | 15              | 2               |
| IS91       | 8               | 1               |
| IS911      | 34              | 2               |
| ISEhe      | 6               | 2               |
| Iso-IS1    | 2               | 2               |
| ISSfl3     | 10              | 1               |
| ISSfl4     | 19              | 3               |
The phylogenetic context of Shigella flexneri. The portion of the tree that is shown in Figure 2 is highlighted in grey. The names of reference genomes are followed by their accession numbers in the following databases: European Nucleotide Archive, National Center for Biotechnology Information, American Type Culture Collection, or National Collection Type Cultures. All bootstrap values were at least 96.
### Genomic islands identified as dynamic among chromosomal sequences of the *S. flexneri* 2a lineage

| Genomic island                  | Function               | Reference genomes | Genomic position |
|---------------------------------|------------------------|-------------------|------------------|
|                                |                        | NCTC1  | 2457T  | 301   | 2002017 | Positions | Genome |
| SHI-O                           | Serotype conversion    | Absent  | Absent  | Absent | Present  | 310331..348225 | 2002017 |
| SfII (serotyping island)        | Serotype conversion    | Present | Present | Present | Absent   | 311757..340670 | 301     |
| ipaH island 1                   | Virulence              | Absent  | Present | Present | Present  | 714172..749781 | 301     |
| Uncharacterised island (mdfA)   | Drug resistance        | Absent  | Present | Present | Present  | 823260..832507 | 2457T   |
| SRL-like pathogenicity island   | Drug resistance        | Absent  | Absent  | Absent  | Present  | 1081929..1130024 | 2002017 |
| Uncharacterised island          | Metabolism             | Absent  | Present | Present | Present  | 1841204..1852440 | 2457T   |
| Uncharacterised island (sul2)   | Drug resistance        | Absent  | Present | Absent  | Absent   | 2598561..2613997 | 2457T   |
| SHI-1 (shePAI)                  | Virulence              | Absent  | Present | Present | Present  | 3054015..3104758 | 301     |
| Tn7-like element                | Drug resistance        | Absent  | Absent  | Absent  | Present  | 3944748..3958815 | 2002017 |
| Uncharacterised island          | Other                  | Present | Absent  | Present | Present  | 1346849..1360536 | NCTC1   |
| Uncharacterised island          | Other                  | Present | Absent  | Absent  | Absent   | 1438229..1442289 | NCTC1   |
| Uncharacterised island          | ND                     | Present | Present | Present | Absent   | 1527448..1533616 | 301     |
| Uncharacterised island          | ND                     | Present | Present | Present | Absent   | 2149044..2161115 | 301     |
| Uncharacterised island          | ND                     | Present | Present | Present | Absent   | 3845970..3853803 | 301     |

ND Not determined