Extended-spectrum beta-lactamase (ESBL)-producing and non-ESBL-producing *Escherichia coli* isolates causing bacteremia in the Netherlands (2014 – 2016) differ in clonal distribution, antimicrobial resistance gene and virulence gene content

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**S1 Appendix - content**

**S1A Figure.** ST distribution among different onset of ECB

**S1B Table.** ST distribution among different onset of ECB

**S1C Figure.** ST distribution among different primary foci of ECB

**S1D Table.** ST distribution among different primary foci of ECB
**S1A Figure.** ST distribution among different onset of ECB<sup>a</sup>

![Proportion of MLST per onset of ECB - stratified for ESBL positivity]

<sup>a</sup>ESBL-positivity based on phenotypic ESBL production.

ECB, *E. coli* bacteremia; ESBL, extended spectrum beta-lactamase; ST, sequence type.

Only STs that occurred >5% within non-ESBL-Ec or ESBL-Ec were grouped into main ST groups, the rest is categorized as “Other”.

**S2 Table.** ST distribution among different onset of ECB

|                   | **ESBL E. coli**<sup>a</sup> |                  | **Non-ESBL E. coli**<sup>a</sup> |
|-------------------|-------------------------------|-----------------|-----------------------------------|
|                   | Hospital (N=25)                | Community (N=44)| Hospital (N = 40)                  | Community (N = 172)                  |
| ST131, N (%)      | 11 (44)                       | 19 (43)         | 5 (13)                            | 17 (10)                             |
| ST73, N (%)       | -                             | -               | 4 (10)                            | 22 (13)                             |
| ST69, N (%)       | -                             | 2 (5)           | 2 (5)                             | 17 (10)                             |
| ST38, N (%)       | 3 (12)                        | 2 (5)           | -                                 | 2 (1)                               |
| ST95, N (%)       | -                             | -               | 3 (8)                             | 9 (5)                               |
| ST12, N (%)       | 1 (4)                         | -               | 2 (5)                             | 10 (6)                              |
| Other ST, N (%)   | 10 (40)                       | 21 (48)         | 24 (60)                           | 95 (55)                             |

<sup>a</sup>ESBL-positivity based on phenotypic ESBL production.

ECB, *E. coli* bacteremia; ESBL, extended spectrum beta-lactamase; HB, hepatic-biliary; GI, gastro-intestinal; ST, sequence type.
S3 Figure. ST distribution among different primary foci of ECB

ESBL positivity based on phenotypic ESBL production.
ECB, E. coli bacteremia; ESBL, extended spectrum beta-lactamase; ST, sequence type
Only STs that occurred >5% within non-ESBL-Ec or ESBL-Ec were grouped into main ST groups, the rest is categorized as “Other”.

S4 Table. ST distribution among different primary foci of ECB

|                 | Urinary (N=30) | HB (N=14) | GI (N=7) | Other (N=5) | Unknown (N=13) |
|-----------------|----------------|-----------|----------|-------------|----------------|
| **ST131, N (%)** | 19 (63)        | 3 (21)    | 4 (57)   | 1 (20)      | 3 (23)         |
| **ST73, N (%)**  | -              | -         | -        | -           | -              |
| **ST69, N (%)**  | 1 (3)          | -         | -        | 1 (20)      | -              |
| **ST38, N (%)**  | 1 (3)          | -         | 1 (14)   | 2 (40)      | 1 (8)          |
| **ST95, N (%)**  | -              | -         | -        | -           | -              |
| **ST12, N (%)**  | -              | -         | 1 (14)   | -           | -              |
| **Other ST, N (%)** | 9 (30)      | 11 (79)   | 1 (14)   | 1 (20)      | 9 (69)         |

|                 | Urinary (N=103) | HB (N=46) | GI (N=23) | Other (N=10) | Unknown (N=30) |
|-----------------|-----------------|-----------|-----------|--------------|----------------|
| **ST131, N (%)** | 12 (12)         | 4 (9)     | 3 (13)    | -            | 3 (10)         |
| **ST73, N (%)**  | 19 (18)         | 3 (7)     | 1 (4)     | 1 (10)       | 2 (7)          |
| **ST69, N (%)**  | 7 (7)           | 3 (7)     | 1 (4)     | 2 (20)       | 6 (20)         |
| **ST38, N (%)**  | 1 (1)           | -         | -         | -            | 1 (3)          |
| **ST95, N (%)**  | 6 (6)           | 1 (2)     | 1 (4)     | 1 (10)       | 3 (10)         |
| **ST12, N (%)**  | 8 (8)           | 1 (2)     | -         | -            | 3 (10)         |
| **Other ST, N (%)** | 50 (49)      | 34 (74)   | 17 (74)   | 6 (60)       | 12 (40)        |

ESBL-positivity based on phenotypic ESBL production.
ECB, E. coli bacteremia; ESBL, extended spectrum beta-lactamase; HB, hepatic-biliary; GI, gastro-intestinal; ST, sequence type