### TABLE S1  Cefiderocol MICs interpreted by approved CLSI, FDA, and EUCAST MIC breakpoints for combined North America and Europe isolates of Enterobacterales, *P. aeruginosa*, *A. baumannii* complex, and *S. maltophilia* collected in five consecutive annual SIDERO-WT surveillance studies from 2014 to 2019

| Organism/phenotype (no. of isolates) | CLSI MIC interpretation\(^a\) | FDA MIC interpretation\(^b\) | EUCAST MIC interpretation\(^c\) |
|-------------------------------------|---------------------------------|-----------------------------|-------------------------------|
|                                     | % Susceptible | Intermediate | Resistant | % Susceptible | Intermediate | Resistant | % Susceptible | Resistant |
| **Enterobacterales**                |                |              |           |                |              |           |                |           |
| All isolates (31,896)               | 99.8           | 0.2          | 0.1       | 99.8           | 0.2          | 0.1       | 98.3          | 1.7       |
| Meropenem-nonsusceptible (1,021)   | 96.7           | 2.5          | 0.8       | 96.7           | 2.5          | 0.8       | 79.9          | 20.1      |
| **P. aeruginosa**                   |                |              |           |                |              |           |                |           |
| All isolates (7,700)                | 99.9           | 0.1          | 0         | 97.5           | 1.9          | 0.6       | 99.4          | 0.6       |
| Meropenem-nonsusceptible (1,759)   | 99.8           | 0.2          | 0         | 94.2           | 4.3          | 1.5       | 98.5          | 1.5       |
| **A. baumannii complex**            |                |              |           |                |              |           |                |           |
| All isolates (5,225)                | 96.0           | 1.3          | 2.7       | 90.0           | 4.1          | 5.9       | 94.1          | 5.9       |
| Meropenem-nonsusceptible (2,810)   | 94.2           | 2.1          | 3.7       | 84.9           | 6.2          | 8.9       | 91.1          | 8.9       |
| **S. maltophilia**                  |                |              |           |                |              |           |                |           |
| All isolates (2,030)                | 98.6           | NA           | NA        | NA             | NA           | NA        | 99.6          | 0.4       |
| Meropenem-nonsusceptible (2,810)   | 94.2           | 2.1          | 3.7       | 84.9           | 6.2          | 8.9       | 91.1          | 8.9       |

\(^a\) CLSI approved MIC clinical breakpoints for *Enterobacterales*, *P. aeruginosa*, and *Acinetobacter* spp. are ≤4 µg/ml (susceptible), 8 µg/ml (intermediate), and ≥16 µg/ml (resistant), and for *S. maltophilia* are ≤1 µg/ml (susceptible) and >1 µg/ml (nonsusceptible). These MIC clinical breakpoints were approved by the CLSI in February 2021 (https://clsi.org/meetings/ast-file-resources/).

\(^b\) FDA approved MIC breakpoints for *Enterobacterales* are ≤4 µg/ml (susceptible), 8 µg/ml (intermediate), and ≥16 µg/ml (resistant); and for *P. aeruginosa* and *Acinetobacter* spp. are ≤2 µg/ml (susceptible), 2 µg/ml (intermediate), and ≥4 µg/ml (resistant) (https://www.fda.gov/drugs/development-resources/fda-recognized-antimicrobial-susceptibility-test-interpretative-criteria). The FDA has not published cefiderocol MIC breakpoints for *S. maltophilia*.

\(^c\) EUCAST (breakpoint tables v. 11.0) MIC clinical breakpoints for cefiderocol for *Enterobacterales* and *P. aeruginosa* are susceptible (≤2 µg/ml) and resistant (>2 µg/ml) (http://www.eucast.org/clinical_breakpoints/). Identical susceptible and resistant non-species related pharmacokinetic/pharmacodynamic MIC breakpoints for cefiderocol are also published by EUCAST which were applied to *Acinetobacter* spp. and *S. maltophilia* MIC data.
| Year | No. of isolates | ≤0.03 | 0.06 | 0.12 | 0.25 | 0.5  | 1    | 2    | 4    | 8    | ≥16  | Total |
|------|----------------|-------|------|------|------|------|------|------|------|------|------|-------|
| 2014 | 721            | 378   | 512  | 395  | 202  | 116  | 48   | 21   | 1    | 0    |      | 2394  |
|      | 30.1           | 15.8  | 21.4 | 16.5 | 8.4  | 4.8  | 2.0  | 0.9  | 0.1  | 0    |      | 100   |
| 2015 | 1500           | 842   | 847  | 691  | 382  | 222  | 113  | 38   | 8    | 1    |      | 4644  |
|      | 32.3           | 18.1  | 18.2 | 14.9 | 8.2  | 4.8  | 2.4  | 0.8  | 0.2  | 0.1  |      | 100   |
| 2016 | 2396           | 956   | 1211 | 1428 | 1077 | 602  | 242  | 92   | 6    | 5    |      | 8015  |
|      | 29.9           | 11.9  | 15.1 | 17.8 | 13.4 | 7.5  | 3.0  | 1.2  | 0.1  | 0.1  |      | 100   |
| 2017 | 1869           | 614   | 767  | 1178 | 688  | 417  | 151  | 112  | 4    | 2    |      | 5802  |
|      | 32.2           | 10.6  | 13.2 | 20.3 | 11.9 | 7.2  | 2.6  | 1.9  | 0.1  | 0.03 |      | 100   |
| 2018 | 1635           | 566   | 682  | 830  | 707  | 314  | 134  | 67   | 8    | 5    |      | 4948  |
|      | 33.0           | 11.4  | 13.8 | 16.8 | 14.3 | 6.3  | 2.7  | 1.4  | 0.2  | 0.1  |      | 100   |
| 2019 | 1426           | 890   | 1121 | 1105 | 771  | 385  | 220  | 141  | 24   | 10   |      | 6093  |
|      | 23.4           | 14.6  | 18.4 | 18.1 | 12.7 | 6.3  | 3.6  | 2.3  | 0.4  | 0.2  |      | 100   |
| Total| 9547           | 4246  | 5140 | 5627 | 3827 | 2056 | 908  | 471  | 51   | 23   |      | 31896 |
|      | 29.9           | 13.3  | 16.1 | 17.6 | 12.0 | 6.5  | 2.8  | 1.5  | 0.2  | 0.1  |      | 100   |
### TABLE S3 Cefiderocol MIC distributions for *P. aeruginosa* by year from 2014 to 2019

| Year | MIC (µg/ml) | ≤0.03 | 0.06 | 0.12 | 0.25 | 0.5  | 1   | 2   | 4   | 8   | ≥16 | Total |
|------|-------------|-------|------|------|------|------|-----|-----|-----|-----|-----|-------|
| 2014 | No. of isolates | 111   | 96   | 117  | 82   | 42   | 17  | 6   | 0   | 0   | 0   | 471   |
|      | % of isolates  | 23.6  | 20.4 | 24.8 | 17.4 | 8.9  | 3.6 | 1.3 | 0   | 0   | 0   | 100   |
| 2015 | No. of isolates | 229   | 280  | 247  | 188  | 75   | 52  | 14  | 6   | 1   | 0   | 1092  |
|      | % of isolates  | 21.0  | 25.6 | 22.6 | 17.2 | 6.9  | 4.8 | 1.3 | 0.5 | 0.1 | 0   | 100   |
| 2016 | No. of isolates | 194   | 334  | 591  | 461  | 167  | 72  | 36  | 8   | 1   | 0   | 1864  |
|      | % of isolates  | 10.4  | 17.9 | 31.7 | 24.7 | 9.0  | 3.9 | 1.9 | 0.4 | 0.1 | 0   | 100   |
| 2017 | No. of isolates | 162   | 199  | 427  | 462  | 166  | 80  | 31  | 14  | 0   | 0   | 1541  |
|      | % of isolates  | 10.5  | 12.9 | 27.7 | 30.0 | 10.8 | 5.2 | 2.0 | 0.9 | 0   | 0   | 100   |
| 2018 | No. of isolates | 100   | 152  | 343  | 392  | 166  | 60  | 29  | 3   | 0   | 0   | 1245  |
|      | % of isolates  | 8.0   | 12.2 | 27.6 | 31.5 | 13.3 | 4.8 | 2.3 | 0.2 | 0   | 0   | 100   |
| 2019 | No. of isolates | 129   | 228  | 406  | 408  | 209  | 65  | 31  | 9   | 2   | 0   | 1487  |
|      | % of isolates  | 8.7   | 15.3 | 27.3 | 27.4 | 14.1 | 4.4 | 2.1 | 0.6 | 0.1 | 0   | 100   |
| Total| No. of isolates | 925   | 1289 | 2131 | 1993 | 825  | 346 | 147 | 40  | 4   | 0   | 7700  |
|      | % of isolates  | 12.0  | 16.7 | 27.7 | 25.9 | 10.7 | 4.5 | 1.9 | 0.5 | 0.1 | 0   | 100   |
| Year | No. of isolates | MIC ≤0.03 | 0.06 | 0.12 | 0.25 | 0.5 | 1 | 2 | 4 | 8 | ≥16 | Total |
|------|----------------|-----------|------|------|------|-----|---|---|---|---|-----|------|
| 2014 | 71             | 157       | 108  | 44   | 35   | 43  | 12 | 8 | 11 | 1  | 1    | 490  |
|      | % of isolates  | 14.6      | 32   | 22   | 9    | 7.1 | 8.8| 2.5| 1.6| 2.2| 0.2 | 100  |
| 2015 | 141            | 180       | 159  | 74   | 47   | 59  | 9  | 4 | 11 | 5  | 2    | 689  |
|      | % of isolates  | 20.5      | 26.1 | 23.1 | 10.7 | 6.8 | 8.6| 1.3| 0.6| 1.6| 0.7 | 100  |
| 2016 | 77             | 178       | 227  | 249  | 151  | 131 | 63 | 20| 17 | 22 | 1    | 1135 |
|      | % of isolates  | 6.8       | 15.7 | 20   | 21.9 | 13.3| 11.5|5.6|1.8|1.5|1.9 | 100  |
| 2017 | 98             | 157       | 170  | 189  | 110  | 65  | 44 | 33| 9  | 52 | 9    | 927  |
|      | % of isolates  | 10.6      | 16.9 | 18.3 | 20.4 | 11.9| 7  | 4.7|3.6|1  |5.6 | 100  |
| 2018 | 93             | 186       | 213  | 166  | 109  | 74  | 32 | 19|3   |48  | 3    | 943  |
|      | % of isolates  | 9.9       | 19.7 | 22.6 | 17.6 | 11.6| 7.8|3.4|2  |0.3|5.1 | 100  |
| 2019 | 69             | 195       | 280  | 168  | 133  | 98  | 52 | 18|15  |13  | 1    | 1041 |
|      | % of isolates  | 6.6       | 18.7 | 26.9 | 16.1 | 12.8| 9.4|5  |1.7|1.5|1.3 | 100  |
| Total| 549            | 1053      | 1157 | 890  | 585  | 470 | 212|102|66  |141 | 13   | 5225 |
|      | % of isolates  | 10.5      | 20.1 | 22.1 | 11.2 | 9   | 4.1|2  |1.3|2.7|1.3 | 100  |
# TABLE S5  Cefiderocol MIC distributions for *S. maltophilia* by year from 2014 to 2019

| Year | MIC ≤0.03 | 0.06 | 0.12 | 0.25 | 0.5 | 1 | 2 | 4 | 8 | ≥16 | Total |
|------|-----------|-----|-----|-----|-----|---|---|---|---|----|-------|
|      | No. of isolates |     |     |     |     |   |   |   |   |    |       |       |
| 2014 | 31         | 22  | 26  | 17  | 6   | 3 | 4 | 0 | 0 | 0  | 109   |
|      | % of isolates | 28.4 | 20.2 | 23.9 | 15.6 | 5.5 | 2.8 | 3.7 | 0 | 0 | 0 | 100   |
| 2015 | 128        | 73  | 60  | 50  | 13  | 8 | 4 | 2 | 0 | 0  | 338   |
|      | % of isolates | 37.9 | 21.6 | 17.8 | 14.8 | 3.8 | 2.4 | 1.9 | 0.6 | 0 | 0 | 100   |
| 2016 | 99         | 100 | 107 | 62  | 26  | 11 | 2 | 0 | 0 | 0  | 409   |
|      | % of isolates | 24.2 | 24.4 | 26.2 | 15.2 | 6.4 | 2.7 | 0.5 | 0 | 0 | 0.5 | 100   |
| 2017 | 139        | 60  | 54  | 45  | 13  | 8 | 1 | 0 | 0 | 0  | 320   |
|      | % of isolates | 43.4 | 18.9 | 16.9 | 14.1 | 4.1 | 2.5 | 0.3 | 0 | 0 | 0 | 100   |
| 2018 | 70         | 78  | 94  | 87  | 37  | 13 | 6 | 1 | 0 | 0  | 388   |
|      | % of isolates | 18.0 | 20.1 | 24.2 | 22.4 | 9.5 | 3.4 | 1.5 | 0.3 | 0 | 0.5 | 100   |
| 2019 | 186        | 145 | 77  | 29  | 17  | 7 | 4 | 1 | 0 | 0  | 466   |
|      | % of isolates | 39.9 | 31.1 | 16.5 | 6.2 | 3.6 | 1.5 | 0.9 | 0.2 | 0 | 0 | 100   |
| Total| No. of isolates | 653 | 478 | 418 | 290 | 112 | 50 | 42 | 4 | 0 | 4 | 2,030 |
|      | % of isolates | 32.2 | 23.5 | 20.6 | 14.3 | 5.5 | 2.5 | 2.1 | 0.2 | 0 | 0.2 | 100   |
### TABLE S6  Cefiderocol MIC distributions for B. cepacia complex by year from 2014 to 2019

| Year | MIC  | ≤0.03 | 0.06 | 0.12 | 0.25 | 0.50 | 1.00 | 2.00 | 4.00 | 8.00 | ≥16 | Total |
|------|------|-------|------|------|------|------|------|------|------|------|-----|-------|
| 2014 | No. of isolates | 1     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 1    |
|      | % of isolates    | 100   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 100  |
| 2015 | No. of isolates | 10    | 4    | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 1   | 18   |
|      | % of isolates    | 55.6  | 22.2 | 0    | 0    | 5.6  | 5.6  | 0    | 0    | 0    | 5.6 | 100  |
| 2016 | No. of isolates | 64    | 6    | 7    | 2    | 2    | 2    | 1    | 0    | 2    | 3   | 89   |
|      | % of isolates    | 71.9  | 6.7  | 7.9  | 2.2  | 2.2  | 2.2  | 1.1  | 0    | 2.2  | 3.4 | 100  |
| 2017 | No. of isolates | 53    | 3    | 3    | 1    | 0    | 0    | 0    | 0    | 0    | 2   | 62   |
|      | % of isolates    | 85.5  | 4.8  | 4.8  | 1.6  | 0    | 0    | 0    | 0    | 0    | 3.2 | 100  |
| 2018 | No. of isolates | 76    | 4    | 4    | 2    | 1    | 3    | 2    | 0    | 0    | 3   | 95   |
|      | % of isolates    | 80.0  | 4.2  | 4.2  | 2.1  | 1.1  | 3.2  | 2.1  | 0    | 0    | 3.2 | 100  |
| 2019 | No. of isolates | 104   | 14   | 17   | 3    | 5    | 5    | 1    | 3    | 2    | 6   | 160  |
|      | % of isolates    | 65.0  | 8.8  | 10.6 | 1.9  | 3.1  | 3.1  | 0.6  | 1.9  | 1.3  | 3.8 | 100  |
| Total| No. of isolates  | 309   | 31   | 31   | 8    | 9    | 11   | 4    | 3    | 4    | 15  | 425  |
|      | % of isolates    | 72.7  | 7.3  | 7.3  | 1.9  | 2.1  | 2.6  | 0.9  | 0.7  | 0.9  | 3.5 | 100  |
| Organism/phenotype (no. of isolates) | Antimicrobial agent | MIC (µg/ml) | % Susceptible | % Intermediate | % Resistant |
|-----------------------------------|---------------------|-------------|--------------|----------------|-------------|
|                                   | Range               | MIC<sub>50</sub> |               |               |             |
| **Enterobacterales**<sup>a</sup>  |                     |             |              |                |             |
| All isolates (6,093)              |                     |             |              |                |             |
|                                  | Cefiderocol         | ≤0.03 - 16  | 0.12         | 1              | 99.4        |
|                                  | Ceftazidime         | ≤0.12 - >16 | ≤0.12 >16    | 84.7           | 3.0         |
|                                  | Cefepime            | ≤0.12 - >16 | ≤0.12 >16    | 98.9           | NA          |
|                                  | Ceftriaxone         | ≤0.12 - >16 | ≤0.12 >16    | 91.6           | 1.7         |
|                                  | Meropenem           | ≤0.06 - >16 | ≤0.06 >16    | 98.9           | 0.2         |
|                                  | Meropenem           | ≤0.06 - >16 | ≤0.06 >16    | 85.0           | 9.5         |
| Meropenem-nonsusceptible (MIC ≥2 µg/ml) (220) |                     |             |              |                |             |
|                                  | Cefiderocol         | ≤0.03 - 16  | 1            | 4              | 93.2        |
|                                  | Ceftazidime         | ≤0.12 - >16 | >16           | 7.3            | 5.9         |
|                                  | Meropenem           | ≤0.06 - >16 | >16           | 74.1           | NA          |
| Ceftazidime-avibactam-nonsusceptible (MIC ≥16 µg/ml) (65) |                     |             |              |                |             |
|                                  | Cefiderocol         | ≤0.03 - 16  | 2            | 4              | 90.8        |
|                                  | Ceftazidime         | ≤0.12 - >16 | >16           | 6.4            | 6.2         |
|                                  | Meropenem           | ≤0.06 - >16 | >16           | 71.5           | 2          |
| Ceftazidime-avibactam-nonsusceptible (MIC ≥4 µg/ml) (511) |                     |             |              |                |             |
|                                  | Cefiderocol         | ≤0.03 - 16  | 1            | 4              | 94.7        |
|                                  | Ceftazidime         | ≤0.12 - >16 | >16           | 27.6           | 13.7        |
|                                  | Meropenem           | ≤0.06 - >16 | >16           | 87.5           | NA          |
| P. aeruginosa                    | All isolates (1,487) |             |              |                |             |
|                                  | Cefiderocol         | ≤0.03 - 8   | 0.12          | 0.5            | 99.9        |
|                                  | Cefepime            | ≤0.12 - >16 | >16           | 83.7           | 9.6         |
|                                  | Meropenem           | ≤0.06 - >16 | >16           | 94.2           | NA          |
| Meropenem-nonsusceptible (MIC ≥4 µg/ml) (343) |                     |             |              |                |             |
|                                  | Cefiderocol         | ≤0.03 - 8   | 0.25          | 1              | 99.4        |

<sup>a</sup> Antimicrobial agent tested for Enterobacteriaceae: meropenem, ceftazidime, cefepime, ceftazidime-avibactam, meropenem-avibactam.
| Organism/phenotype (no. of isolates) | Antimicrobial agent | MIC (µg/ml) | CLSI MIC interpretation<sup>a,b,c</sup> |
|------------------------------------|---------------------|------------|----------------------------------------|
|                                    | Range | MIC<sub>S</sub> | MIC<sub>90</sub> | % Susceptible | % Intermediate | % Resistant |
| Cefepime                           | 0.5 - >16 | 8 | >16 | 51.9 | 23.3 | 24.8 |
| Ceftazidime-avibactam              | 0.5 - >16 | 4 | >16 | 77.0 | NA | 23.0 |
| Ceftriaxone-tazobactam             | 0.25 - >16 | 1 | >16 | 77.6 | 23.0 | 24.8 |
| Meropenem-avibactam                | 0.25 - >16 | 8 | >16 | NA | NA | NA |
| Imipenem-avibactam                 | 0.25 - >16 | 2 | >16 | 32.9 | 28.3 | 38.8 |
| Meropenem                          | 4 - >16 | 16 | >16 | 0 | 25.1 | 74.9 |
| Ceftazidime-avibactam-nonsusceptible (MIC ≥16 µg/ml) (86) | Cefiderocol | ≤0.03 - 4 | 0.25 | 2 | 100 | 0 | 0 |
| Cefepime                           | 8 - >16 | >16 | >16 | 2.3 | 19.8 | 77.9 |
| Ceftazidime-avibactam              | 16 - >16 | >16 | >16 | 0 | NA | 100 |
| Ceftriaxone-tazobactam             | 1 - >16 | >16 | >16 | 31.4 | 4.7 | 64.0 |
| Meropenem-avibactam                | 0.5 - >16 | >16 | >16 | NA | NA | NA |
| Imipenem-avibactam                 | 0.25 - >16 | 16 | >16 | 11.6 | 14.0 | 74.4 |
| Meropenem                          | 1 - >16 | >16 | >16 | 8.1 | 2.3 | 89.5 |
| Ceftriaxone-tazobactam-nonsusceptible (MIC ≥8 µg/ml) (82) | Cefiderocol | ≤0.03 - 4 | 0.25 | 2 | 100 | 0 | 0 |
| Cefepime                           | 4 - >16 | >16 | >16 | 6.1 | 23.2 | 70.7 |
| Ceftazidime-avibactam              | 1 - >16 | >16 | >16 | 28.1 | NA | 72.0 |
| Ceftriaxone-tazobactam             | 8 - >16 | >16 | >16 | 0 | 12.2 | 87.8 |
| Meropenem-avibactam                | 0.25 - >16 | >16 | >16 | NA | NA | NA |
| Imipenem-avibactam                 | 0.25 - >16 | >16 | >16 | 11.0 | 8.5 | 80.5 |
| Meropenem                          | 0.5 - >16 | >16 | >16 | 6.1 | 2.4 | 91.5 |
| A baumannii complex                 | All isolates (1,041) | | | | | |
| Cefiderocol                        | ≤0.03 - >64 | 0.12 | 1 | 97.3 | 1.4 | 1.3 |
| Cefepime                           | ≤0.12 - >16 | 0.25 | 16 | 89.2 | 1.0 | 9.9 |
| Meropenem-avibactam                | ≤0.06 - >16 | 2 | >16 | NA | NA | NA |
| Imipenem-avibactam                 | ≤0.03 - >16 | 0.5 | >16 | 51.4 | 1.3 | 47.4 |
| Meropenem                          | ≤0.06 - >16 | 4 | >16 | 48.4 | 1.6 | 50.0 |
| Meropenem-nonsusceptible (MIC ≥4 µg/ml) (537) | Cefiderocol | ≤0.03 - >64 | 0.25 | 2 | 95.0 | 2.6 | 2.4 |
| Cefepime                           | ≤0.12 - >16 | 0.5 | >16 | 80.1 | 1.7 | 18.3 |
| Meropenem-avibactam                | 0.25 - >16 | >16 | >16 | NA | NA | NA |
| Imipenem-avibactam                 | 0.25 - >16 | >16 | >16 | 5.8 | 2.4 | 91.8 |
| Meropenem                          | 4 - >16 | >16 | >16 | 0 | 3.2 | 96.8 |
| S. maltophilia                     | All isolates (466) | | | | | |
| Cefiderocol                        | ≤0.03 - 4 | 0.06 | 0.25 | 100 | 0 | 0 |
| Cefepime                           | ≤0.12 - >16 | ≤0.12 | 1 | NA | NA | NA |
| Meropenem-avibactam                | ≤0.06 - >16 | >16 | >16 | NA | NA | NA |
| Imipenem-avibactam                 | ≤0.03 - >16 | >16 | >16 | NA | NA | NA |
| Meropenem                          | ≤0.06 - >16 | >16 | >16 | NA | NA | NA |
| B. cepacia complex                 | All isolates (160) | | | | | |
| Cefiderocol                        | ≤0.03 - 32 | ≤0.03 | 1 | NA | NA | NA |
| Meropenem-avibactam                | 0.12 - >16 | 1 | 4 | NA | NA | NA |
| Organism/phenotype (no. of isolates) | Antimicrobial agent       | MIC (µg/ml) | % Susceptible | % Intermediate | % Resistant |
|-----------------------------------|---------------------------|-------------|---------------|----------------|------------|
|                                   |                           | Range MIC<sub>50</sub> MIC<sub>90</sub> |               |                |            |
| Imipenem-relebactam               | 0.06 - >16                | 1           | 4             | NA             | NA         | NA         |
| Meropenem                         | 0.5 - >16                 | 8           | >16           | 35.0           | 40.0       | 25.0       |
| Meropenem-nonsusceptible (MIC ≥8 µg/ml) (104) | Cefiderocol               | ≤0.03 - 32  | ≤0.03         | 0.5            | NA         | NA         | NA         |
| Meropenem-vaborbactam             | 0.5 - >16                 | 1           | 4             | NA             | NA         | NA         | NA         |
| Imipenem-relebactam               | 0.25 - >16                | 1           | 4             | NA             | NA         | NA         |
| Meropenem                         | 8 - >16                   | 8           | >16           | 61.5           | 38.5       | 30.0       |

* Cefiderocol MICs and MICs for other antimicrobial agents were interpreted by CLSI breakpoints. CLSI MIC breakpoints for cefiderocol tested against *Enterobacterales* are: susceptible, ≤4 µg/ml; intermediate, 8 µg/ml; and resistant, ≥16 µg/ml. CLSI MIC breakpoints for cefiderocol tested against *P. aeruginosa* are: susceptible, ≤4 µg/ml; intermediate, 8 µg/ml; and resistant, ≥16 µg/ml. CLSI MIC breakpoints for cefiderocol tested against *Acinetobacter* spp. are: susceptible, ≤4 µg/ml; intermediate, 8 µg/ml; and resistant, ≥16 µg/ml. CLSI MIC breakpoints for cefiderocol tested against *S. maltophilia* are: susceptible, ≤1 µg/ml; nonsusceptible, >1 µg/ml. CLSI currently does not publish cefiderocol MIC breakpoints for *B. cepacia* complex.

* For cefepime tested against *Enterobacterales* with MICs interpreted using CLSI breakpoints, susceptible-dose dependent isolates were classified as intermediate.

* NA, not available. MIC interpretative criteria are currently not available for this organism-antimicrobial agent combination.
TABLE S8  Demographic information associated with the 14,880 isolates of Enterobacterales, 3,548 isolates of P. aeruginosa, 1,999 isolates of A. baumannii complex, 963 isolates of S. maltophilia, and 196 isolates of B. cepacia complex tested by the SIDERO-WT surveillance program from North America from 2014 to 2019

| Specimen source            | Enterobacterales (no. of isolates) | P. aeruginosa (no. of isolates) | A. baumannii complex (no. of isolates) | S. maltophilia (no. of isolates) | B. cepacia complex (no. of isolates) |
|----------------------------|-----------------------------------|---------------------------------|----------------------------------------|----------------------------------|--------------------------------------|
| Intra-abdominal            | 1,695                             | 205                             | 46                                     | 58                               | 3                                    |
| Urinary tract              | 4,614                             | 617                             | 348                                    | 50                               | 10                                   |
| Lower respiratory tract    | 3,727                             | 1,739                           | 817                                    | 671                              | 129                                  |
| Skin and soft tissue       | 1,712                             | 512                             | 437                                    | 108                              | 17                                   |
| Bloodstream                | 2,732                             | 353                             | 289                                    | 45                               | 31                                   |
| Other                      | 400                               | 122                             | 62                                     | 31                               | 6                                    |
| Total                      | 14,880                            | 3,548                           | 1,999                                  | 963                              | 196                                  |

| Country (number of participating medical centers) | Enterobacterales (no. of isolates) | P. aeruginosa (no. of isolates) | A. baumannii complex (no. of isolates) | S. maltophilia (no. of isolates) | B. cepacia complex (no. of isolates) |
|-----------------------------------------------|-----------------------------------|---------------------------------|----------------------------------------|----------------------------------|--------------------------------------|
| Canada (11)                                   | 2,038                             | 461                             | 243                                    | 175                              | 41                                   |
| United States (65)                            | 12,842                            | 3,087                           | 1,756                                  | 788                              | 155                                  |
| Total                                         | 14,880                            | 3,548                           | 1,999                                  | 963                              | 196                                  |

| Year of isolation | Enterobacterales (no. of isolates) | P. aeruginosa (no. of isolates) | A. baumannii complex (no. of isolates) | S. maltophilia (no. of isolates) | B. cepacia complex (no. of isolates) |
|-------------------|-----------------------------------|---------------------------------|----------------------------------------|----------------------------------|--------------------------------------|
| 2014              | 1,310                             | 253                             | 158                                    | 21                               | 0                                    |
| 2015              | 2,070                             | 512                             | 162                                    | 140                              | 10                                   |
| 2016              | 3,430                             | 798                             | 422                                    | 200                              | 41                                   |
| 2017              | 2,492                             | 630                             | 363                                    | 187                              | 35                                   |
| 2018              | 2,608                             | 644                             | 452                                    | 198                              | 46                                   |
| 2019              | 2,970                             | 711                             | 442                                    | 217                              | 64                                   |
| Total             | 14,880                            | 3,548                           | 1,999                                  | 963                              | 196                                  |
TABLE S9 Demographic information associated with the 17,016 isolates of *Enterobacterales*, 4,152 isolates of *P. aeruginosa*, 3,266 isolates of *A. baumannii* complex, 1,067 isolates of *S. maltophilia*, and 229 isolates of *B. cepacia* complex tested by the SIDERO-WT surveillance program from Europe from 2014 to 2019

| Specimen source          | Enterobacterales (no. of isolates) | *P. aeruginosa* (no. of isolates) | *A. baumannii* complex (no. of isolates) | *S. maltophilia* (no. of isolates) | *B. cepacia* complex (no. of isolates) |
|--------------------------|------------------------------------|-----------------------------------|------------------------------------------|-----------------------------------|---------------------------------------|
| Intra-abdominal           | 2,815                              | 409                               | 215                                      | 81                                | 1                                     |
| Urinary tract             | 3,754                              | 512                               | 338                                      | 72                                | 12                                    |
| Lower respiratory tract   | 4,213                              | 1,882                             | 1,531                                    | 638                               | 179                                   |
| Skin and soft tissue      | 2,881                              | 793                               | 627                                      | 101                               | 11                                    |
| Bloodstream               | 3,029                              | 480                               | 445                                      | 153                               | 25                                    |
| Other                     | 324                                | 76                                | 70                                       | 22                                | 1                                     |
| Total                     | 17,016                             | 4,152                             | 3,226                                    | 1,067                             | 229                                   |

| Country (number of participating medical centers) | Enterobacterales (no. of isolates) | *P. aeruginosa* (no. of isolates) | *A. baumannii* complex (no. of isolates) | *S. maltophilia* (no. of isolates) | *B. cepacia* complex (no. of isolates) |
|--------------------------------------------------|------------------------------------|-----------------------------------|------------------------------------------|-----------------------------------|---------------------------------------|
| Austria (3)                                       | 35                                 | 0                                 | 0                                        | 0                                 | 0                                     |
| Belgium (4)                                       | 83                                 | 0                                 | 0                                        | 0                                 | 0                                     |
| Croatia (1)                                       | 3                                  | 0                                 | 0                                        | 0                                 | 0                                     |
| Czech Republic (4)                                | 1,350                              | 334                               | 213                                      | 72                                | 39                                    |
| Denmark (3)                                       | 36                                 | 0                                 | 0                                        | 0                                 | 0                                     |
| France (11)                                       | 1,689                              | 419                               | 289                                      | 129                               | 18                                    |
| Germany (14)                                      | 1,918                              | 473                               | 265                                      | 164                               | 15                                    |
| Greece (6)                                        | 1,490                              | 304                               | 420                                      | 106                               | 3                                     |
| Hungary (5)                                       | 1,114                              | 278                               | 210                                      | 64                                | 11                                    |
| Italy (13)                                        | 1,947                              | 463                               | 505                                      | 154                               | 24                                    |
| Latvia (1)                                        | 3                                  | 0                                 | 0                                        | 0                                 | 0                                     |
| Lithuania (2)                                     | 5                                  | 0                                 | 0                                        | 0                                 | 0                                     |
| Netherlands (2)                                   | 45                                 | 0                                 | 0                                        | 0                                 | 0                                     |
| Poland (3)                                        | 12                                 | 0                                 | 0                                        | 0                                 | 0                                     |
| Portugal (5)                                      | 86                                 | 0                                 | 0                                        | 0                                 | 0                                     |
| Romania (2)                                       | 11                                 | 0                                 | 0                                        | 0                                 | 0                                     |
| Russia (14)                                       | 1,735                              | 520                               | 437                                      | 101                               | 18                                    |
| Serbia (1)                                        | 1                                  | 0                                 | 0                                        | 0                                 | 0                                     |
| Slovenia (1)                                      | 1                                  | 0                                 | 0                                        | 0                                 | 0                                     |
| Spain (14)                                        | 1,930                              | 482                               | 336                                      | 155                               | 51                                    |
| Sweden (4)                                        | 581                                | 124                               | 10                                       | 8                                 | 1                                     |
| Switzerland (0)                                   | 0                                  | 0                                 | 0                                        | 0                                 | 0                                     |
| Year of isolation | Turkey (8) |  |  |  |  |  |
|-------------------|------------|--------|--------|--------|--------|--------|
|                   | 1,376      | 369    | 432    | 64     | 31     |  |
| United Kingdom (8)| 1,565      | 386    | 109    | 114    | 18     |  |
| Total             | 17,016     | 4,152  | 3,226  | 1,067  | 229    |  |

| Year of isolation | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|-------------------|------|------|------|------|------|------|-------|
|                   | 1,084| 2,574| 4,585| 3,310| 2,340| 3,123| 17,016|
|                   | 218  | 580  | 1,066| 911  | 601  | 776  | 4,152 |
|                   | 332  | 527  | 713  | 564  | 491  | 599  | 3,226 |
|                   | 114  | 172  | 209  | 133  | 190  | 249  | 1,067 |
|                   | 1    | 8    | 48   | 27   | 49   | 96   | 229   |