

REQ-2023-098 Supplementary material

Table 1S. Distribution of MIC values of cefiderocol and comparators in meropenem susceptible and resistant Enterobacterales using EUCAST breakpoints

| Enterobacterales (220) | MEROPENEM | MIC (mg/L) | | | | | | | | | | | % Resistance |
|---------------------------|-------------|------------|---------------|---------------|-----------|----------|----|----------|----------|----------|----------|-----------|--------------|
| | | ≤0.03 | 0.06 or ≤0.06 | 0.12 or ≤0.12 | 0.25 | 0.5 | 1 | 2 | 4 | 8 or >4 | 16 or >8 | >16 or 32 | |
| CFDC | MEM-R (34) | 1 | 5 | 3 | 10 | 1 | 5 | 6 | 2 | 1 | | | 8.8% |
| | MEM-S (186) | 33 | 21 | 19 | 35 | 26 | 18 | 25 | 9 | 0 | | | 4.8% |
| FEP | MEM-R (34) | | | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 3 | 26 | 97% |
| | MEM-S (186) | | | 57 | 9 | 4 | 4 | 5 | 11 | 7 | 21 | 68 | 51% |
| CZA | MEM-R (34) | | | 13 | 0 | 0 | 1 | 3 | 1 | <u>7</u> | 2 | 7 | 26.5% |
| | MEM-S (186) | | | 138 | 15 | 12 | 5 | 0 | 2 | 2 | 1 | 11 | 6.4% |
| C/T | MEM-R (34) | | | 0 | 0 | 4 | 3 | 3 | 0 | 1 | 1 | 22 | 70% |
| | MEM-S (186) | | | 32 | 34 | 20 | 14 | 13 | 6 | 7 | 17 | 43 | 36% |
| MEV | MEM-R (34) | | 7 | 1 | 0 | 1 | 2 | 1 | 1 | <u>2</u> | 7 | 12 | 55.8% |
| | MEM-S (186) | | 107 | 4 | 8 | 18 | 23 | 14 | 4 | 8 | | | 0% |
| IMR | MEM-R (34) | | | 6 | 2 | 1 | 6 | 3 | 2 | 4 | 2 | 8 | 47% |
| | MEM-S (186) | 1 | 6 | 72 | 24 | 19 | 24 | 17 | 4 | 10 | 5 | 4 | 12.3% |
| AZA | MEM-R (34) | | | 13 | 0 | 2 | 6 | <u>1</u> | 0 | 1 | 1 | 10 | - |
| | MEM-S (186) | | | 135 | 18 | 15 | 6 | 4 | 0 | 1 | 1 | 6 | -- |
| CIP | MEM-R (34) | | 0 | 1 | 1 | 3 | 2 | 0 | 2 | 3 | 22 | | 94% |
| | MEM-S (186) | | 54 | 12 | 5 | 5 | 1 | 9 | 2 | 4 | 94 | | 61% |
| TGC | MEM-R (34) | | | | 2 | 3 | 12 | 4 | <u>3</u> | 10 | | | 85% |
| | MEM-S (186) | | | 26 | 38 | 42 | 34 | 25 | 16 | 5 | | | 43% |
| CST | MEM-R (34) | | | 3 | 10 | 9 | 3 | 0 | 1 | 1 | 7 | | 26% |
| | MEM-S (186) | | | 22 | 76 | 54 | 7 | 2 | 0 | 3 | 22 | | 13% |

Cefiderocol (CFDC), Cefepime (FEP), Ceftazidime-avibactam (CZA), Ceftolozane-tazobactam (C/T), Meropenem (MEM), Meropenem-vaborbactam (MEV), Imipenem-relebactam (IMR), Aztreonam-avibactam (AZA), Ciprofloxacin (CIP), Tigecycline (TGC), Colistin (CST), MEN-S: meropenem susceptible, MEN-R: meropenem resistant

Table 2S. Distribution of MIC values of cefiderocol and comparators in meropenem susceptible and resistant *P.aeruginosa* using EUCAST breakpoints

| <i>P. aeruginosa</i> (159) | MEROPENEM | MIC (mg/L) | | | | | | | | | | | % Resistance |
|-------------------------------|-------------|------------|---------------|---------------|---------------|-----|----|---------|----|---------|----------|-----------|--------------|
| | | ≤0.03 | 0.06 or ≤0.06 | 0.12 or ≤0.12 | 0.25 or ≤0.25 | 0.5 | 1 | 2 or ≤2 | 4 | 8 or >4 | 16 or >8 | >16 or 32 | |
| CFDC | MEM-R (58) | 3 | 12 | 17 | 19 | 3 | 2 | 2 | | | | | 0% |
| | MEM-S (101) | 13 | 34 | 23 | 15 | 6 | 2 | 7 | 1 | | | | 1% |
| FEP | MEM-R (58) | | | | | | | | 2 | 11 | 21 | 24 | 77.5% |
| | MEM-S (101) | | | | 2 | 2 | 11 | 24 | 17 | 13 | 21 | 11 | 31.6% |
| CZA | MEM-R (58) | | | | | | 2 | 1 | 11 | 28 | 8 | 14 | 37.9% |
| | MEM-S (101) | | | 7 | 2 | 3 | 5 | 29 | 32 | 15 | 2 | 6 | 7.9% |
| C/T | MEM-R (58) | | | | | 9 | 11 | 12 | 0 | 7 | 0 | 19 | 44.8% |
| | MEM-S (101) | | | 3 | 19 | 33 | 20 | 9 | 1 | 1 | 2 | 13 | 15.8% |
| MEV | MEM-R (58) | | | | | | 1 | 0 | 1 | 6 | 27 | 23 | 86% |
| | MEM-S (101) | | 5 | 8 | 15 | 10 | 18 | 17 | 4 | 23 | 1 | | 1% |
| IMR | MEM-R (58) | | | | | | 16 | 15 | 5 | 1 | 4 | 17 | 46% |
| | MEM-S (101) | 3 | 0 | 8 | 26 | 28 | 24 | 3 | 1 | 3 | 3 | 3 | 10% |
| AZA | MEM-R (58) | | | | | 1 | 0 | 0 | 0 | 0 | 12 | 45 | - |
| | MEM-S (101) | | | 5 | 3 | 2 | 3 | 2 | 1 | 7 | 30 | 48 | - |
| CIP | MEM-R (58) | | | 1 | 2 | 7 | 6 | 3 | 2 | 2 | 35 | | 94.8% |
| | MEM-S (101) | | 17 | 22 | 13 | 4 | 3 | 11 | 1 | 3 | 27 | | 48.5% |
| TGC | MEM-R (58) | | | | | 1 | 0 | 1 | 6 | 50 | | | - |
| | MEM-S (101) | | | 2 | 1 | 0 | 8 | 5 | 25 | 60 | | | - |
| CST | MEM-R (58) | | | 2 | 12 | 31 | 10 | 0 | 0 | 1 | 2 | | 5.1% |

| | | | | | | | | | | | | | |
|--|-------------|--|--|---|----|----|----|---|---|---|---|--|----|
| | MEM-S (101) | | | 5 | 27 | 46 | 17 | 3 | 1 | 1 | 1 | | 3% |
|--|-------------|--|--|---|----|----|----|---|---|---|---|--|----|

Cefiderocol (CFDC), Cefepime (FEP), Ceftazidime-avibactam (CZA), Ceftolozane-tazobactam (C/T), Meropenem (MEM), Meropenem-vaborbactam (MEV), Imipenem-relebactam (IMR), Aztreonam-avibactam (AZA), Ciprofloxacin (CIP), Tigecycline (TGC), Colistin (CST); MEN-S: meropenem susceptible, MEN-R: meropenem resistant