

**Table S1.** The measured concentrations (mean±SD) of meropenem in sepsis rats treated with four dosing regimens attaining different PK/PD targets.

| PK/PD targets               |                         |                                |                         |                                |                         |                                |                         |
|-----------------------------|-------------------------|--------------------------------|-------------------------|--------------------------------|-------------------------|--------------------------------|-------------------------|
| 40%fT>MIC<br>(75 mg/kg q6h) |                         | 100%fT>MIC<br>(50 mg/kg q2.4h) |                         | 100%fT>MIC<br>(75 mg/kg q2.4h) |                         | 100%fT>4×MIC<br>(75 mg/kg q2h) |                         |
| Time (h)                    | Concentration<br>(mg/L) | Time<br>(h)                    | Concentration<br>(mg/L) | Time<br>(h)                    | Concentration<br>(mg/L) | Time (h)                       | Concentration<br>(mg/L) |
| 0.083                       | 7.92±1.49               | 0.083                          | 7.18±4.09               | 0.083                          | 19.2±3.48               | 0.083                          | 11.83±4.74              |
| 0.5                         | 12.88±0.70              | 0.5                            | 7.67±2.04               | 0.5                            | 12.44±4.56              | 0.5                            | 12.35±2.15              |
| 1.5                         | 2.22±0.70               | 1.5                            | 1.52±0.76               | 1                              | 5.56±2.32               | 1.5                            | 1.58±0.48               |
| 6.167                       | 17.15±4.14              | 9.767                          | 14.29±5.32              | 9.683                          | 10.59±4.65              | 10.167                         | 22.66±11.12             |
| 7                           | 6.52±1.50               | 10.6                           | 4.36±1.50               | 10.6                           | 6.78±3.20               | 11                             | 6.47±1.28               |
| 8                           | 1.52±0.72               | 11.6                           | 0.58±0.15               | 11.6                           | 2.19±1.45               | 11.917                         | 1.59±0.93               |

\*Each treatment group has 12 rats, while at each time-point six rats were sampled for concentration measurement.