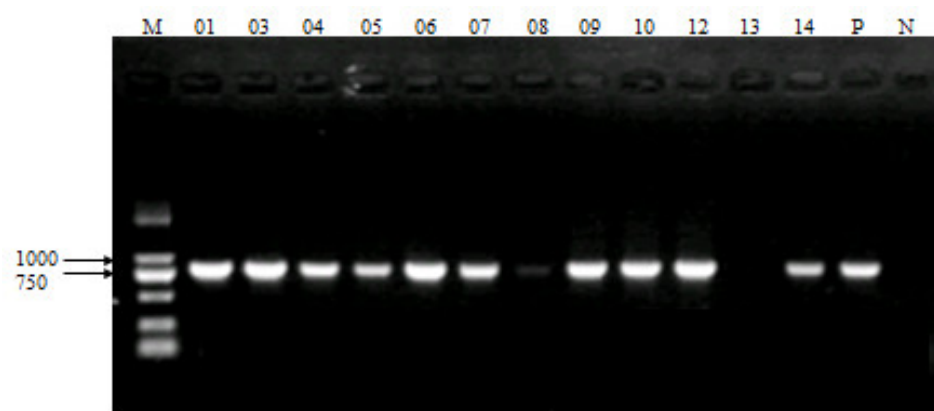
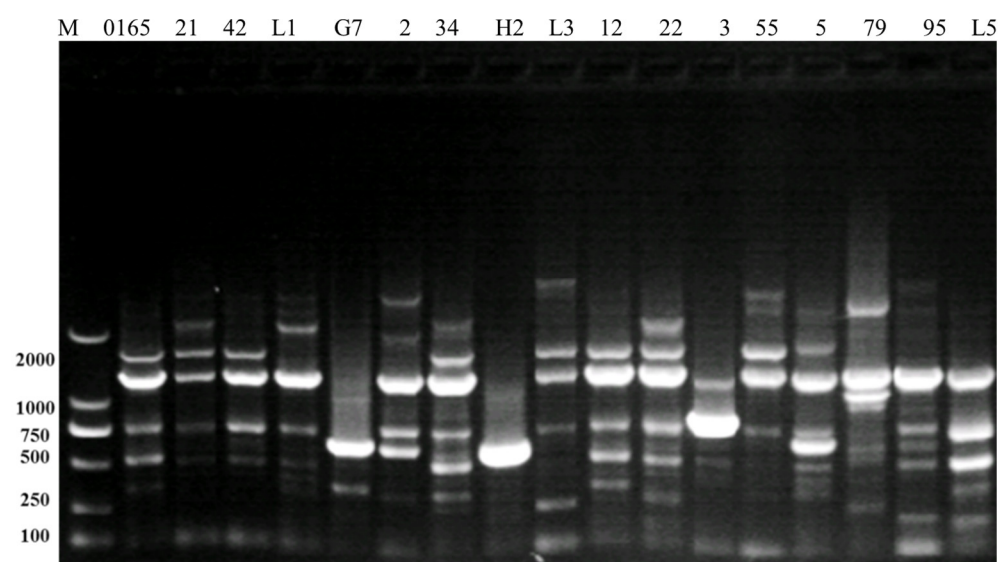


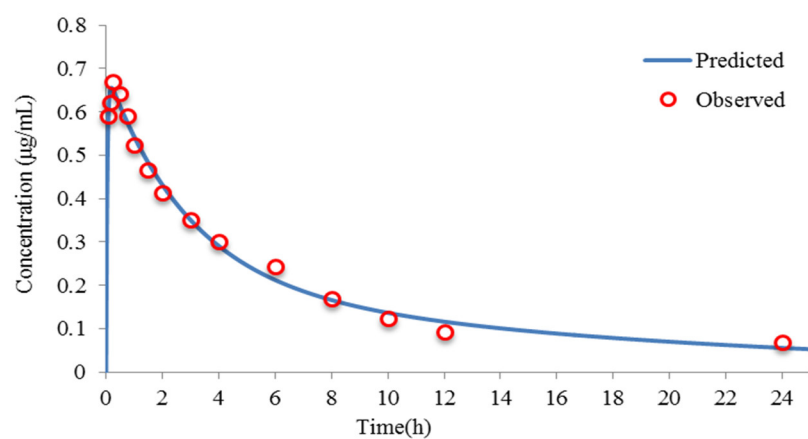
## Supplementary materials

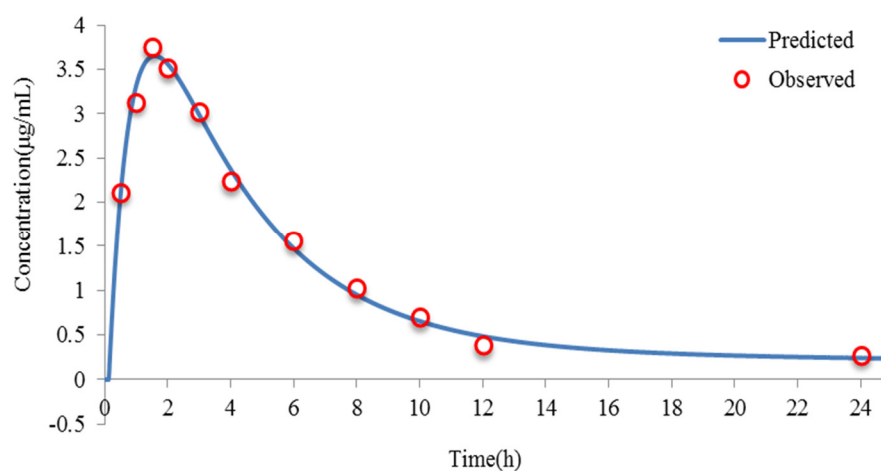
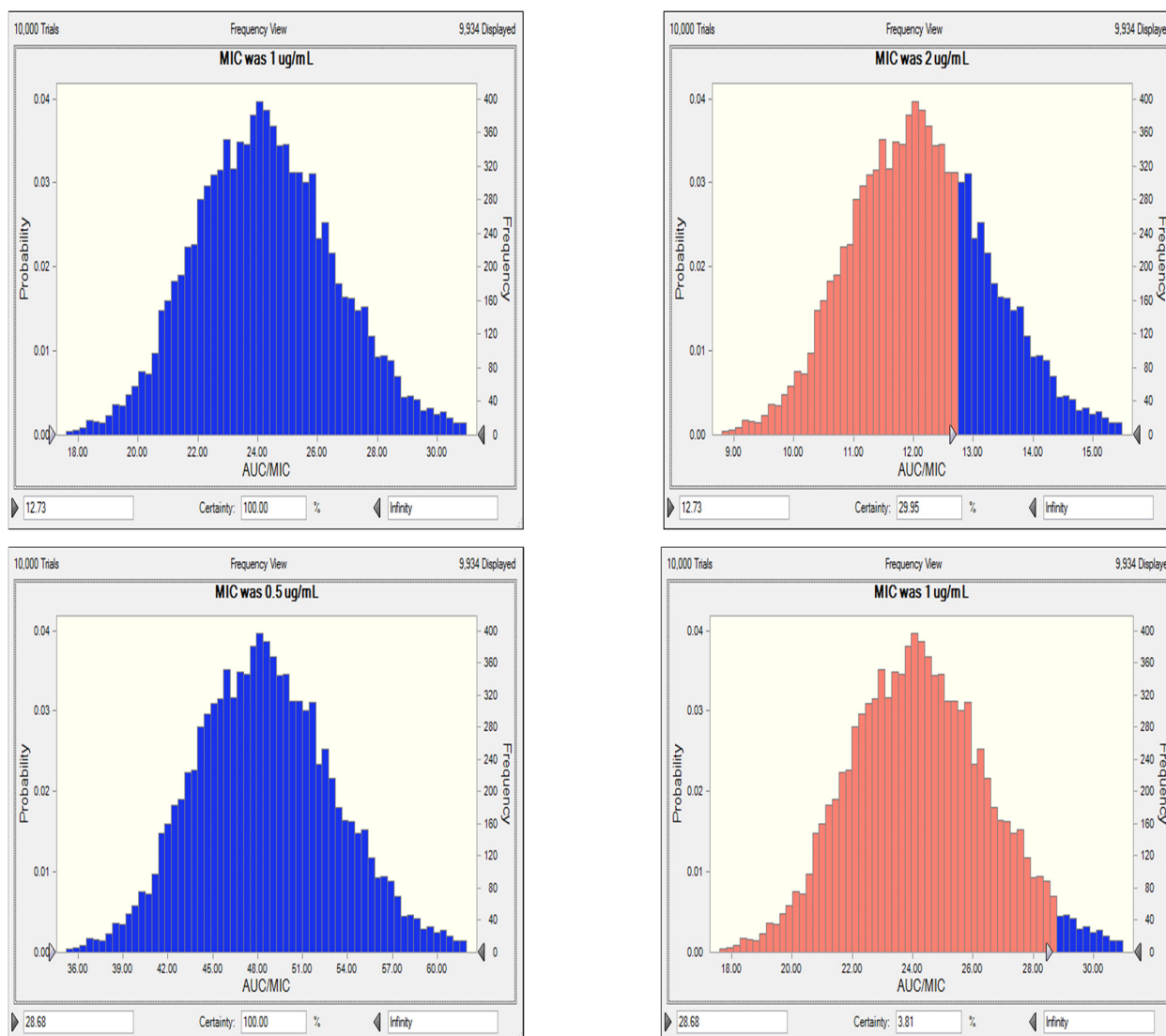


**Figure S1.** Amplification of *G. parasuis* 16S rRNA with PCR. Lane M: DL-2000 DNA Marker; Lane P: positive control; Lane N: Negative control; Lane2-13: Samples to be amplified.



**Figure S2.** Results of ERIC-PCR for *G. parasuis*. Lane M: DL-2000 DNA Marker; Lane 2: SH0165 strain; Lane 17: Negative control; Lane 3-16: Samples to be amplified.



**Figure S3.** Distribution of danofloxacin in simulated drug time curve in plasma.**Figure S4.** Distribution of danofloxacin in simulated drug time curve in PELF.

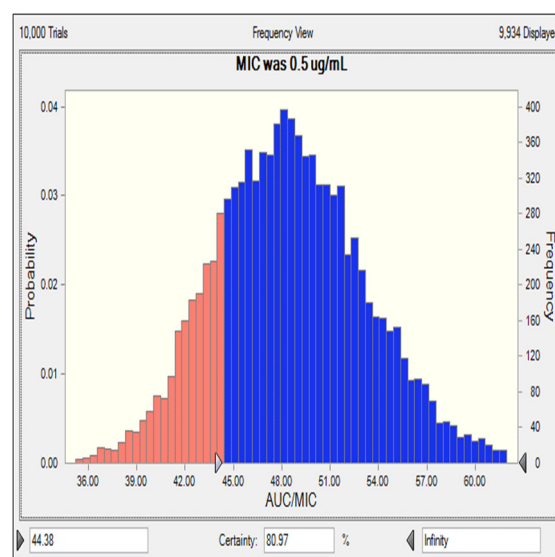
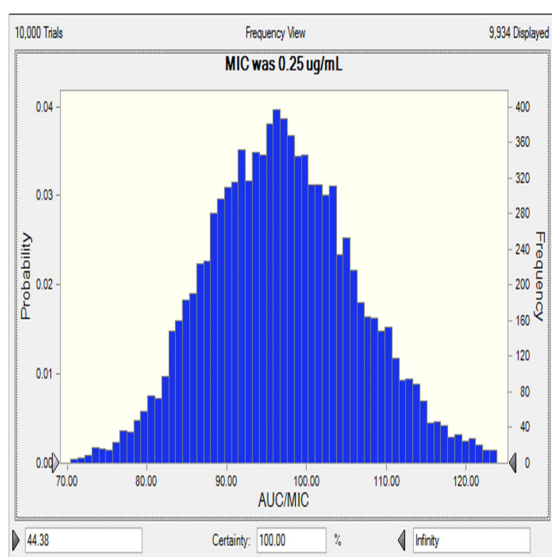
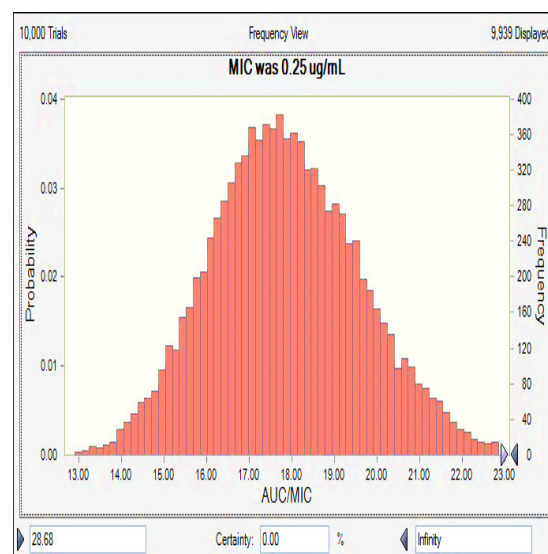
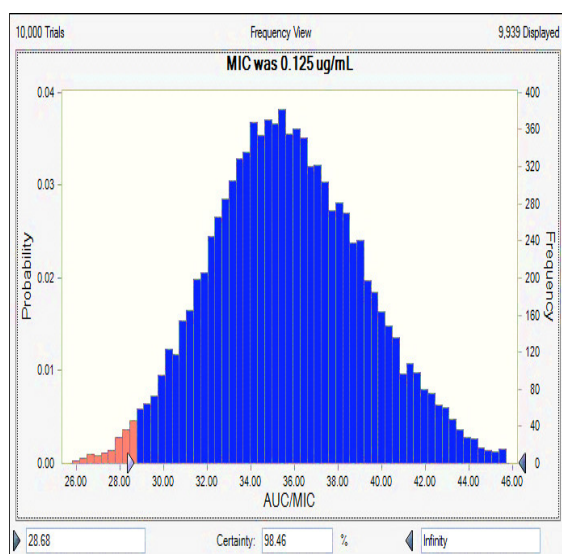
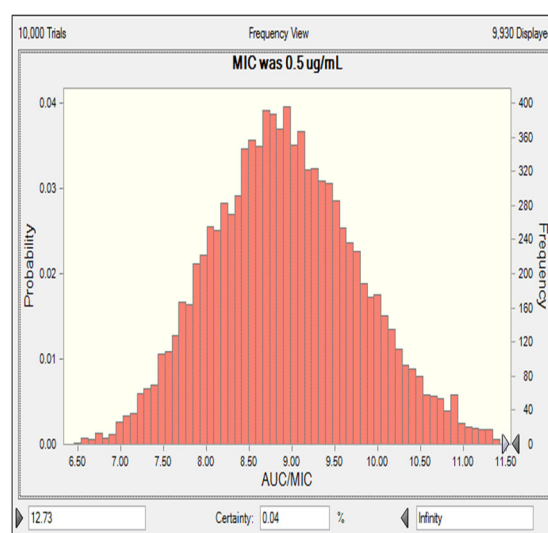
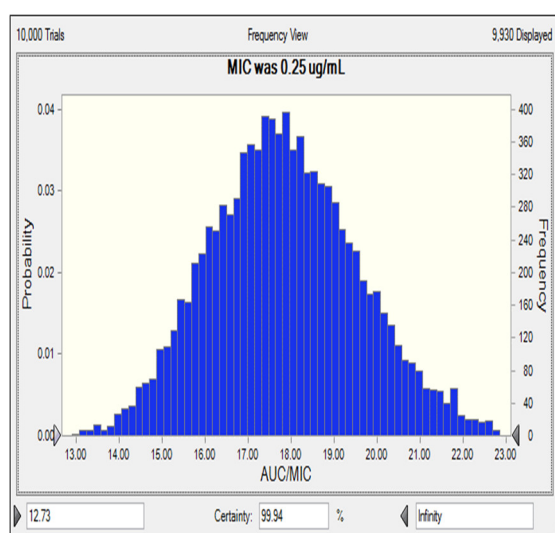


Figure S5. PTA of danofloxacin against *G. parasuis* in PELF.



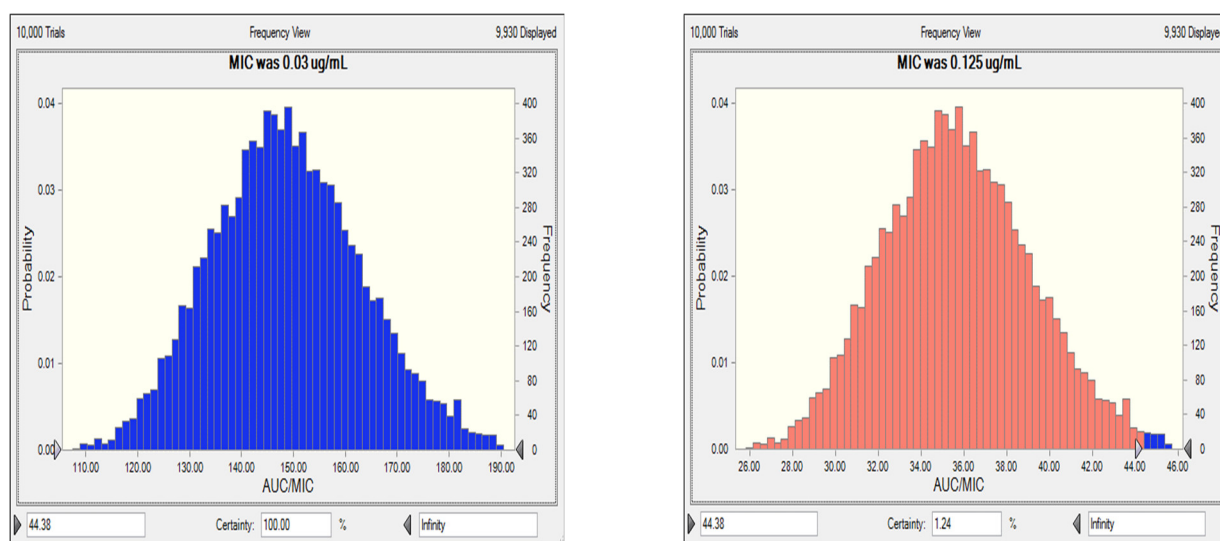


Figure S6. PTA of danofloxacin against *G. parasuis* in plasma.

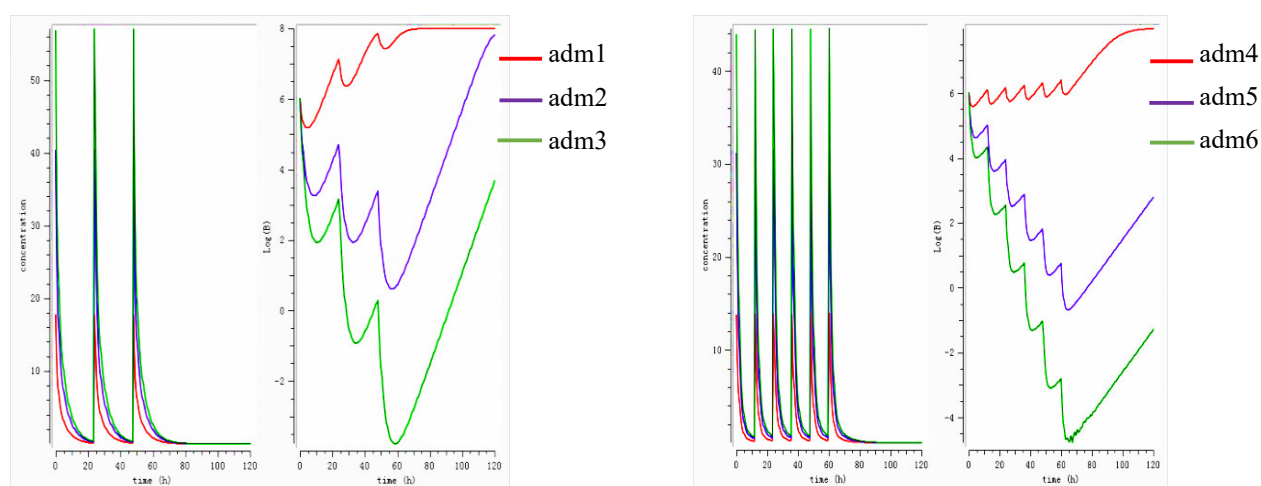


Figure S7. Forecast growth of *G. parasuis* at different dosage regimens. adm 1: prevent dosage: 4.58 mg/kg once daily; adm 2: therapeutic dosage: 10.32 mg/kg once daily; adm 3: eradicate dosage: 15.97 mg/kg once daily; adm 4: prevent dosage: 4.58 mg/kg twice daily; adm 5: therapeutic dosage: 10.32 mg/kg twice daily; adm 6: eradicate dosage: 15.97 mg/kg twice daily.

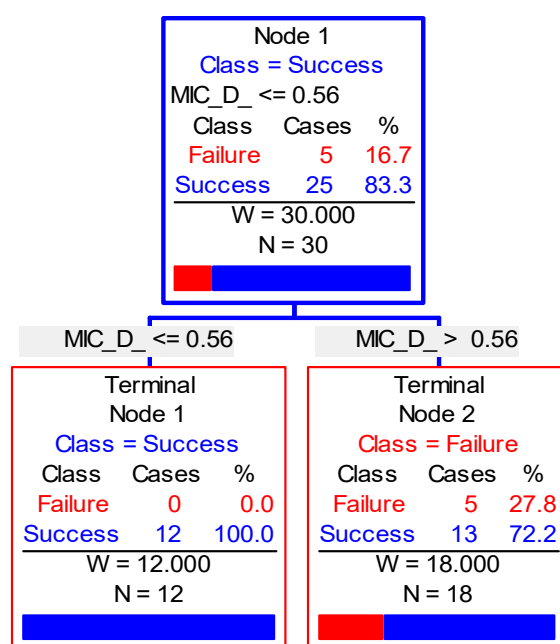


Figure S8. CART tree showing values of clinical outcome.

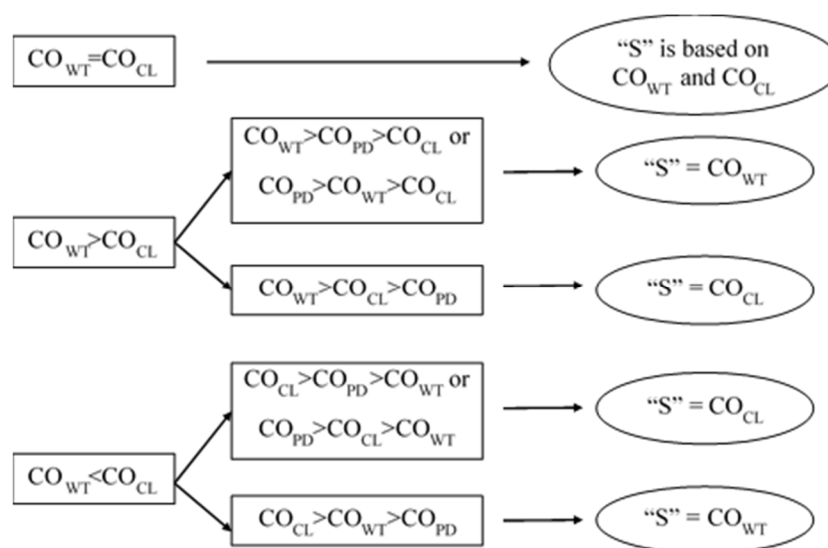


Figure S9. Susceptibility breakpoint decision tree.

Table S1. Epidemiological MIC for danofloxacin against *G. parasuis*.

| Parameters                     | Value                |
|--------------------------------|----------------------|
| MIC range                      | 0.015 µg/mL–32 µg/mL |
| MIC <sub>50</sub>              | 2 µg/mL              |
| MIC <sub>90</sub>              | 8 µg/mL              |
| Selected Subset                | ≤64 µg/mL            |
| Modal MIC                      | 2 µg/mL              |
| Log <sub>2</sub> MIC Mode      | 1                    |
| Max Log <sub>2</sub> MIC       | 6                    |
| Selected Log <sub>2</sub> Mean | 1                    |
| Selected Log <sub>2</sub> SD   | 1                    |
| 95.0% Subset ECOFFs            | 8 µg/mL              |

|                     |          |
|---------------------|----------|
| 97.5% Subset ECOFFs | 8 µg/mL  |
| 99.0% Subset ECOFFs | 16 µg/mL |
| 99.5% Subset ECOFFs | 16 µg/mL |
| 99.9% Subset ECOFFs | 32 µg/mL |

Selected Subset was the optimal fitting range by nonlinear regression; Modal MIC was the highest MIC distribution.

**Table S2.** Concentrations of danfloxacin in plasma and PELF at various time points ( $n = 6$ ).

| Time Points (h) | Plasma    | PELF      |
|-----------------|-----------|-----------|
| 0.08            | 0.59±0.04 |           |
| 0.167           | 0.62±0.02 |           |
| 0.25            | 0.67±0.02 |           |
| 0.5             | 0.64±0.02 | 2.11±0.37 |
| 0.75            | 0.59±0.02 |           |
| 1               | 0.52±0.04 | 3.13±0.35 |
| 1.5             | 0.47±0.05 | 3.89±0.11 |
| 2               | 0.41±0.04 | 3.51±0.33 |
| 3               | 0.35±0.04 | 3.02±0.21 |
| 4               | 0.30±0.05 | 2.23±0.25 |
| 6               | 0.24±0.05 | 1.56±0.45 |
| 8               | 0.17±0.03 | 1.02±0.23 |
| 10              | 0.12±0.02 | 0.69±0.19 |
| 12              | 0.09±0.01 | 0.38±0.16 |
| 24              | 0.07±0.02 | 0.27±0.03 |
| 36              | ND        | ND        |
| 48              | ND        | ND        |

“ND”: not detected.