

Table S1. Univariate and multivariate logistic regression analysis for the maintenance dosage and cumulative dose of tigecycline in the total population (N = 311)

| Variables | Univariate Logistic | | Multivariate Logistic | |
|--------------------------------------|---------------------|---------|-----------------------|---------|
| | OR | P-value | OR | P-value |
| Treatment Scheme of 100 mg every 12h | 1.00 (0.61–1.63) | 0.985 | 0.71 (0.41–1.22) | 0.218 |
| Cumulative Dose of Tigecycline (g) | 1.60 (1.32–2.90) | 0.001 | 1.70 (1.26–2.35) | 0.001 |

Table S2. Univariate and multivariate logistic regression analysis for the maintenance dosage and cumulative dose of tigecycline in the primary cohort (N = 217)

| Variables | Univariate Logistic | | Multivariate Logistic | |
|--------------------------------------|---------------------|---------|-----------------------|---------|
| | OR | P-value | OR | P-value |
| Treatment Scheme of 100 mg every 12h | 1.15 (0.63–2.09) | 0.653 | 0.82 (0.43–1.56) | 0.540 |
| Cumulative Dose of Tigecycline (g) | 1.96 (1.32–2.90) | 0.001 | 2.03 (1.37–3.13) | 0.001 |

Table S3. Univariate and multivariate logistic regression analysis for the maintenance dosage and cumulative dose of tigecycline in the validation cohort (N = 94)

| Variables | Univariate Logistic | | Multivariate Logistic | |
|--------------------------------------|---------------------|---------|-----------------------|---------|
| | OR | P-value | OR | P-value |
| Treatment Scheme of 100 mg every 12h | 0.74 (0.30–1.78) | 0.503 | 0.55 (0.19–1.47) | 0.238 |
| Cumulative Dose of Tigecycline (g) | 1.21 (0.79–1.91) | 0.382 | 1.38 (0.86–2.33) | 0.195 |

Table S4. Comparison of model 2 and model 1

| Comparison | Chang in AUROC | P_{AUC} | NRI (95% CI) | P_{NRI} |
|----------------------------|-----------------------|-----------------------------|-------------------------|-----------------------------|
| model 2 vs. model 1 | -0.011 | 0.309 | -0.225 (-0.487 – 0.037) | 0.092 |

Model 1 is a multivariate logistic regression model adjusted for medication time over 7 days, combined other antibiotics, initial PT, initial INR, initial fibrinogen and eGFR. Model 2 eliminates initial INR based on model 1.

Abbreviation: AUC: Area Under the Receiver Operating Characteristic Curve; NRI: Net Reclassification Improvement; PT, prothrombin time; INR, international normalized ratio; eGFR, estimated glomerular filtration rate.

Table S5. Univariate logistic regression analysis for the risk factors of in-hospital mortality of in the total population (N = 311)

| Variables | Univariate Logistic Regression | | |
|------------------------------------|--------------------------------|------------|---------|
| | OR | OR 95% CI | P-value |
| Age (years) | 1.03 | 1.01-1.05 | 0.01 |
| Gender (Male) | 1.26 | 0.70-2.29 | 0.44 |
| BMI (kg/m ²) | 0.85 | 0.75-0.96 | 0.01 |
| COPD | 3.80 | 1.12-12.90 | 0.03 |
| Hypertension | 1.06 | 0.57-1.96 | 0.86 |
| CHD | 3.67 | 1.68-8.02 | <0.01 |
| Heart Failure | 3.24 | 0.99-10.60 | 0.05 |
| Diabetes | 2.47 | 1.29-4.75 | 0.01 |
| Active Malignant Tumor | 1.05 | 0.59-1.86 | 0.87 |
| Abdominal Tumor | 1.21 | 0.66-2.21 | 0.54 |
| Medication Time (days) | 0.95 | 0.90-1.00 | 0.05 |
| Medication Time over 7 Days | 0.90 | 0.50-1.64 | 0.74 |
| Cumulative Dose of Tigecycline (g) | 0.83 | 0.58-1.19 | 0.32 |
| ALT (U/L) | 1.00 | 0.99-1.00 | 0.55 |
| AST (U/L) | 1.00 | 1.00-1.01 | 0.11 |
| Creatinine (μmol/L) | 1.00 | 1.00-1.01 | 0.05 |
| eGFR (ml/min/1.73m ²) | 0.99 | 0.98-1.00 | <0.01 |
| Tigecycline-related Coagulopathy | 2.51 | 1.37-4.60 | <0.01 |
| Bleeding Event | 1.50 | 0.57-3.96 | 0.42 |

Abbreviation: BMI, body mass index; COPD, chronic obstructive pulmonary disease; CHD, coronary heart disease; ALT, alanine aminotransferase; AST, aspartate aminotransferase; eGFR, estimated glomerular filtration rate.

Table S6. Comparison of baseline between the tigecycline-related coagulopathy group and non-coagulopathy group

| Variables | Tigecycline-related coagulopathy group N = 161 | Non-coagulopathy group N = 150 | P-value |
|------------------------------------|---|---|----------------|
| Age (years) | 60.63 ± 15.84 | 56.71 ± 15.53 | 0.028 |
| Gender (Male) | 105 (65.2%) | 87 (58.0%) | 0.233 |
| BMI (kg/m ²) | 22.13 [19.36, 24.15] | 22.49 [20.11, 24.68] | 0.126 |
| COPD | 7 (4.3%) | 4 (2.7%) | 0.621 |
| Hypertension | 53 (32.9%) | 39 (26.0%) | 0.226 |
| CHD | 22 (13.7%) | 9 (6.0%) | 0.039 |
| Heart Failure | 7 (4.3%) | 5 (3.3%) | 0.865 |
| Diabetes | 36 (22.4%) | 20 (13.3%) | 0.055 |
| Active Malignant Tumor | 78 (49.7%) | 81 (55.5%) | 0.371 |
| Abdominal Tumor | 52 (32.3%) | 43 (28.7%) | 0.568 |
| Medication Time (days) | 11.00 [8.00, 15.00] | 8.00 [5.00, 12.00] | <0.001 |
| Medication Time over 7 Days | 123 (76.4%) | 83 (55.3%) | <0.001 |
| Cumulative Dose of Tigecycline (g) | 1.30 [1.00, 1.90] | 1.02 [0.60, 1.64] | <0.001 |
| ALT (U/L) | 49.96 ± 71.59 | 43.72 ± 47.73 | 0.396 |
| AST (U/L) | 61.26 ± 95.93 | 44.01 ± 55.92 | 0.07 |
| Creatinine (µmol/L) | 93.50 [66.25, 125.00] | 74.50 [58.00, 97.75] | 0.004 |
| eGFR (ml/min/1.73m ²) | 80.63 [49.46, 114.48] | 104.81 [71.76, 122.36] | <0.001 |
| Bleeding Event | 18 (11.5%) | 6 (4.1%) | 0.027 |

Abbreviation: BMI, body mass index; COPD, chronic obstructive pulmonary disease; CHD, coronary heart disease; ALT, alanine aminotransferase; AST, aspartate aminotransferase; eGFR, estimated glomerular filtration rate.

Figure S1. The proportion of prescription department of patients received tigecycline combination therapy. Others mainly include Department of Stomatology, Department of Urology, Endocrinology Department, Nephrology Department, Department of Thoracic Surgery and Department of Cardiovascular Surgery.

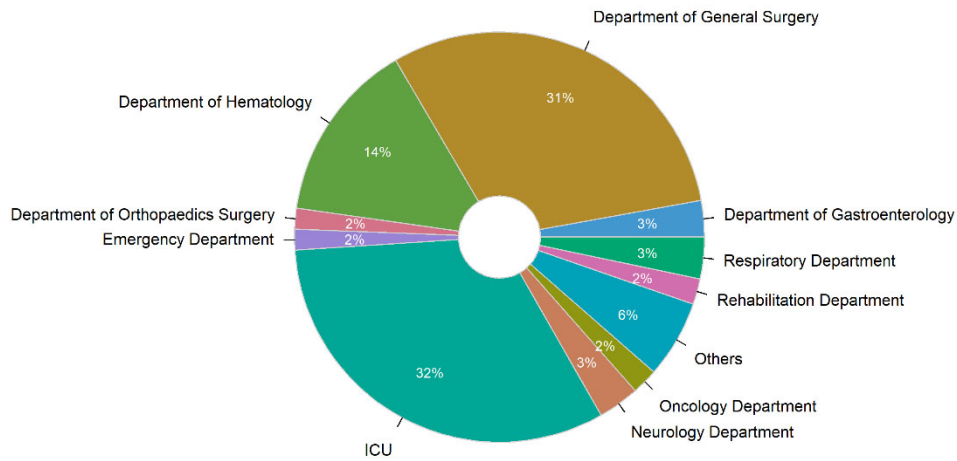


Figure S2. The proportion of pathogen of patients received tigecycline combination therapy. Others are bacteria accounting for less than 1% mainly including: Neisseria, Aeromonas, Vibrio fluvialis, Bacteroides fragilis and Bacillus firmus.

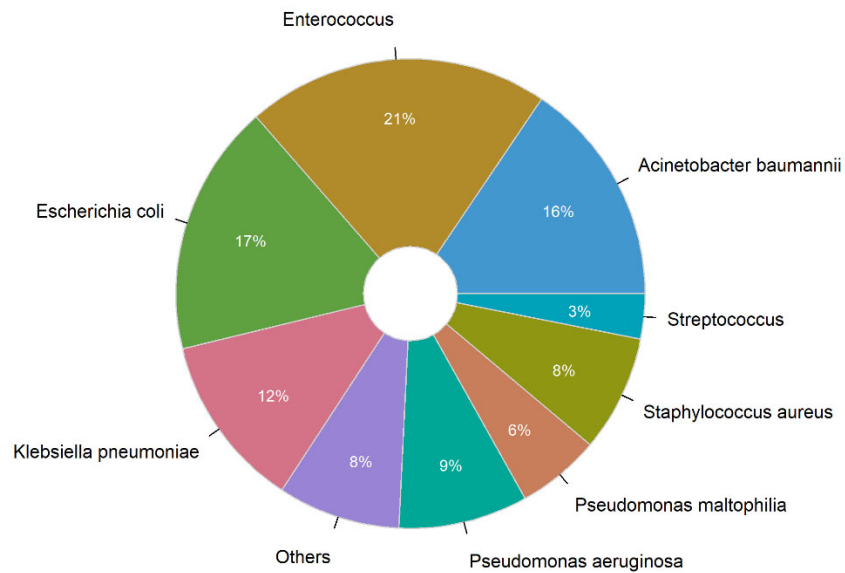


Figure S3. The proportion of type of infection of patients received tigecycline combination therapy. Abbreviation: cIAI, complicated intra-abdominal infection; SSSI, skin soft tissue infection; CAP: community acquired pneumonia; HAP: hospital acquired pneumonia; VAP: ventilator-associated pneumonia.

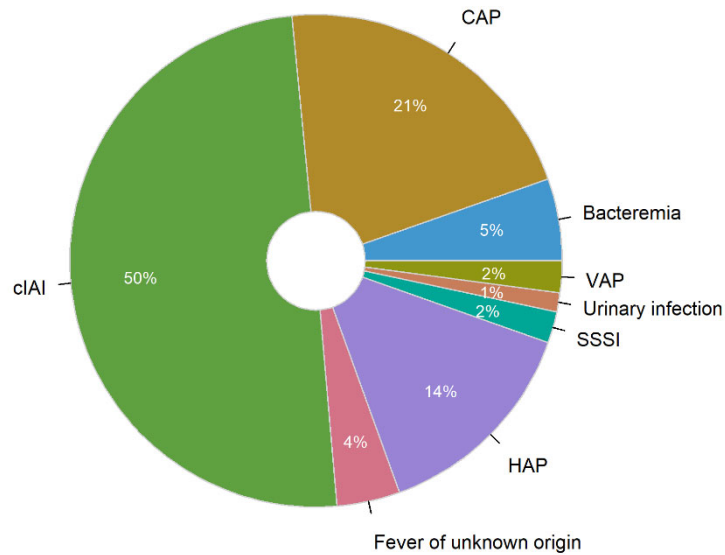


Figure S4. The proportion of antibiotics used in combination of patients received tigecycline combination therapy. Others are antibiotics accounting for less than 3% mainly including: Polymyxin, linezolid, teicoplanin, ciprofloxacin, ceftazidime and ceftriaxone.

