

Figure S1. Bland-Altman plot of observed and predicted ceftazidime concentrations for the four regimens in the overall experiments: C_{ss} of 12 mg/L, C_{ss} of 18 mg/L, C_{ss} of 30 mg/L and C_{ss} of 48mg/L. C_{ss}, steady-state concentrations; SD, standard deviations.

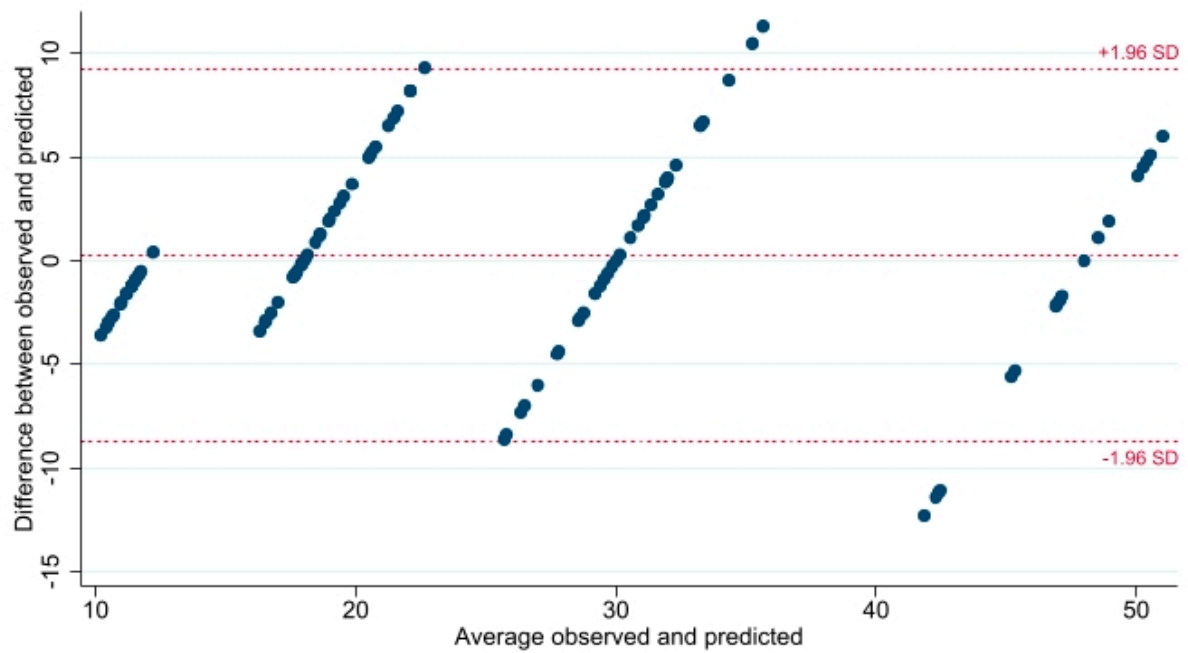


Table S1. Mean bacterial density (log₁₀ CFU/mL) during 7-day HFIM assays and the emergence of CAZ-AVI resistant subpopulation onto agar supplemented with CAZ-AVI at 2X, 4X and 8X baseline MIC. CFU, colony forming unit; HFIM, hollow fiber infection model; CAZ/AVI, ceftazidime/avibactam; MIC, minimum inhibitory concentration; C_{ss}, steady-state concentrations. Data are presented as the mean concentration ± standard deviation.

	0 h	8 h	24 h	48 h	72 h	96 h	144 h	168 h
Control	7.08±0.05	9.27±0.81	9.30±0.36	9.83±0.92	9.57±0.04	9.85±0.21	10.26±0.12	10.08±0.03
2XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ/AVI CI C_{ss} 12 mg/L (2XMIC)	7.08±0.05	9.11±0.31	7.65±0.88	9.70±0.09	9.60±0.24	7.48±0.15	7.81±0.06	8.65±0.52
2XMIC Drug Plates CAZ/AVI	0.00	0.00	2.40±0.05	4.70±0.2	4.70±0.08	4.70±0.12	4.70±0.3	4.70±0.03
4XMIC Drug Plates CAZ/AVI	0.00	0.00	1.30±0.2	4.70±0.18	4.70±0.03	4.70±0.12	4.70±0.18	4.70±0.4
8XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	1.00±0.16	3.48±0.03	4.70±0.21	4.70±0.35	4.70±0.12
CAZ/AVI CI C_{ss} 18 mg/L (3XMIC)	7.08±0.05	7.84±0.57	6.71±0.23	7.00±0.00	6.02±0.40	6.20±0.28	7.44±0.06	8.18±0.57
2XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	1.70±0.24	4.70±0.15	4.70±0.03	4.70±0.4	4.70±0.14
4XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	3.48±0.2	4.70±0.31	4.70±0.26	4.70±0.10
8XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	4.70±0.05	4.70±0.12	4.70±0.28
CAZ/AVI CI C_{ss} 30 mg/L (5XMIC)	7.08±0.05	6.93±0.21	5.25±0.42	5.33±0.21	3.78±0.17	3.88±0.41	3.48±0.37	2.92±0.11
2XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ/AVI CI C_{ss} 48 mg/L (8XMIC)	7.08±0.05	6.40±0.25	5.24±0.02	4.54±0.35	4.04±0.32	4.35±0.12	3.30±0.61	2.60±0.28
2XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8XMIC Drug Plates CAZ/AVI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00