

Table S6. Predicted minimum inhibitory concentration (MIC) to all drugs evaluated using Accelerated Failure Time models for exposed, unexposed and the estimated difference between them (exposed-unexposed) for *E. coli* from individual-housed calves where enrofloxacin was the antimicrobial drug (AMD) of exposure. Minimum inhibitory concentration (MIC) predictions were calculated using the exponentiated coefficients from the model results.

Drug	Variable Level	Exposed		Unexposed		Exposed-Unexposed	
		MIC (95% CI)	p	MIC (95% CI)	p	MIC Difference (95% CI)	p
Enrofloxacin	Pre-Exposure	0.79 (-0.098 1.669)	0.081	0.90 (-0.820 2.627)	0.304	-0.12 (-1.669 1.433)	0.881
	1-3 DPE	3.69 (-3.341 10.724)	0.304	4.25 (-0.329 8.824)	0.069	-0.56 (-7.070 5.959)	0.867
	4-11 DPE	4.05 (-1.172 9.275)	0.128	4.66 (-1.658 10.981)	0.148	-0.61 (-8.220 7.000)	0.875
Ceftiofur	Pre-Exposure	2.31 (-0.598 5.225)	0.119	0.90 (-0.075 1.869)	0.071	1.42 (-1.631 4.465)	0.362
	1-3 DPE	1.39 (-0.227 3.006)	0.092	2.17 (0.585 3.759)	0.007	-0.78 (-3.012 1.447)	0.492
	4-7 DPE	9.65 (-5.062 24.359)	0.199	4.28 (-6.892 15.449)	0.453	5.37 (-12.870 23.611)	0.564
	8-11 DPE	1.27 (-0.749 3.285)	0.218	42.52 (-33.863 118.910)	0.275	-41.26 (-117.594 35.083)	0.289
Danofloxacin	Pre-Exposure	0.89 (-0.21, 1.98)	0.11	0.17 (-0.02, 0.36)	0.08	0.72 (-0.39, 1.83)	0.21
	1-5 DPE	1.48 (-0.16, 3.13)	0.07	11.06 (-9.70, 31.82)	0.29	-9.58 (-30.40, 11.25)	0.37
	6-11 DPE	0.39 (-0.79, 1.57)	0.52	2.87 (-3.47, 9.21)	0.37	-1.60 (-8.02, 4.82)	0.66
Neomycin	Pre-Exposure	57.50 (-37.097 152.105)	0.234	77.65 (-24.651 179.957)	0.137	-20.15 (-91.385 51.088)	0.579
	Post-Exposure	247.10 (20.438 473.756)	0.033	333.68 (-13.594 680.945)	0.060	-86.58 (-425.320 252.164)	0.616
Ampicillin	Pre-Exposure	19.51 (-3.627 42.650)	0.098	12.05 (-3.064 27.159)	0.118	7.46 (-12.062 26.990)	0.454
	Post-Exposure	177.03 (-14.537 368.588)	0.070	109.31 (10.157 208.455)	0.031	67.72 (-116.992 252.430)	0.472
Gentamicin	Pre-Exposure	21.83 (-0.101 43.760)	0.051	0.56 (0.058 1.059)	0.029	21.27 (-0.665 43.208)	0.057
	1-3 DPE	21.83 (-15.085 58.744)	0.246	49.00 (-62.541 160.538)	0.389	-27.17 (-144.658 90.320)	0.650
	4-11 DPE	289.50 (-260.856 839.856)	0.303	43.50 (-34.661 121.657)	0.275	246.00 (-309.877 801.880)	0.386
Tetracycline	Pre-Exposure	15.26 (-8.256 38.769)	0.203	20.10 (-5.848 46.057)	0.129	-4.85 (-23.115 13.419)	0.603
	Post-Exposure	63.06 (5.656 120.464)	0.031	83.10 (0.140 166.055)	0.050	-20.04 (-100.904 60.830)	0.627
Spectinomycin	Pre-Exposure	26.45 (0.093 52.801)	0.049	21.36 (-6.495 49.223)	0.133	5.08 (-19.169 29.337)	0.681
	1-3 DPE	105.67 (-60.768 272.111)	0.213	85.36 (-44.161 214.880)	0.196	20.31 (-87.114 127.738)	0.711
	4-7 DPE	64.76 (7.321 122.194)	0.027	52.31 (-0.505 105.124)	0.052	12.45 (-49.226 74.122)	0.692
	8-11 DPE	73.33 (20.612 126.044)	0.006	59.23 (-20.539 139.005)	0.146	21.02 (-56.647 98.684)	0.596
Florfenicol	Pre-Exposure	22.99 (0.453 45.518)	0.046	5.28 (-0.146 10.700)	0.056	17.71 (-5.467 40.884)	0.134
	1-5 DPE	10.97 (-0.024 21.963)	0.051	44.48 (-9.109 98.071)	0.104	-33.51 (-88.218 21.194)	0.230
	6-11 DPE	50.25 (-9.982 110.474)	0.102	21.50 (0.529 42.463)	0.044	28.75 (-35.024 92.523)	0.377