

Supplementary Table 1. Annual consumption of antimicrobial agents for systemic use at intensive care units (unit: DDD/1,000 patient-days)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total	Coefficient for time	p value
Broad-spectrum antibiotics													
3rd CEPs	363.45	375.46	435.88	521.59	462.94	345.24	320.27	199.90	167.89	154.35	336.10	-2.644	< 0.001
4th CEPs	19.04	38.98	17.55	19.38	51.45	40.91	69.48	90.56	87.46	76.89	50.76	0.670	< 0.001
BL/BLIs	157.49	202.47	198.77	81.42	71.97	97.91	69.18	202.35	261.71	386.28	172.71	1.257	< 0.001
FQs	194.62	186.04	177.27	181.49	191.01	245.03	213.68	211.27	223.33	281.34	210.26	0.692	< 0.001
Subtotal	734.59	802.95	829.46	803.88	777.38	729.10	672.61	704.07	740.39	898.86	769.84	-0.024	0.941
Antibiotics against MDR pathogens													
Carbapenems	8.45	47.00	172.99	125.71	75.04	93.05	85.91	81.88	69.21	67.72	82.11	0.076	0.650
Glycopeptides	117.46	106.06	124.02	102.35	96.31	90.69	82.68	86.93	94.11	87.65	99.00	-0.292	0.001
Oxazolidinone	2.15	3.20	9.08	9.31	10.51	6.64	6.52	21.18	13.55	7.20	8.80	0.081	0.011
Polymyxin	0.20	0	4.73	44.51	43.01	27.24	21.19	87.21	53.90	52.86	32.88	0.582	< 0.001
Tigecycline	0	0	0	0	0	10.91	34.27	3.00	9.89	24.95	8.21	0.208	< 0.001
Subtotal	128.25	156.26	310.82	281.88	224.87	228.53	230.57	280.20	240.66	240.39	231.00	0.655	0.011
Nonbroad-spectrum antibiotics													
1st CEPs	25.67	20.55	23.79	19.26	19.19	49.61	72.37	78.27	74.27	76.67	45.46	0.649	< 0.001
2nd CEPs	40.43	44.59	48.51	41.77	48.01	64.97	47.85	66.35	58.42	76.44	53.53	0.281	< 0.001
AGs	360.45	374.30	416.66	383.19	226.81	159.62	115.56	48.89	31.19	58.97	219.88	-3.953	< 0.001
Lincosamides	55.28	74.34	110.28	88.21	103.44	93.66	88.40	77.96	82.18	47.68	82.09	-0.104	0.312
Macrolides	46.18	14.97	23.70	30.71	7.53	13.48	6.61	5.98	24.90	15.66	19.14	-0.176	0.005
Metronidazole	75.13	83.73	94.12	65.64	70.67	69.39	70.37	71.93	53.38	59.36	71.39	-0.204	0.011
Monobactam	6.70	7.41	16.93	7.24	1.43	4.60	0	0	0	0	4.47	-0.106	< 0.001
Penicillins	11.44	33.63	3.38	29.47	7.62	1.79	14.79	53.61	22.04	54.32	22.96	0.269	0.026
Tetracyclines	39.90	16.19	12.67	2.99	4.42	0.00	0.00	0.84	9.75	8.15	9.69	-0.187	0.002
SXT	2.77	32.01	39.04	51.74	23.90	32.65	66.75	51.46	53.21	36.59	38.71	0.271	0.044
Subtotal	663.94	701.74	789.10	720.22	513.02	489.77	482.71	455.28	409.34	433.85	567.32	-3.259	< 0.001
Total	1,526.78	1,660.95	1,929.38	1,805.98	1,515.27	1,447.40	1,385.89	1,439.56	1,390.39	1,573.10	1,568.16	-2.629	< 0.001

Coefficient for time and p value were extracted from a linear regression model using measures on a monthly basis.

DDD, defined daily dose; CEP, cephalosporin; BL, β-lactam; BLI, β-lactamase inhibitor; FQ, fluoroquinolone; MDR, multidrug-resistant; AG, aminoglycoside; SXT, trimethoprim/sulfamethoxazole.