Supplementary Materials for

Prevalence of Antibiotic Resistance Genes and their Association with Antibiotics in a Wastewater Treatment Plant: Huaguang Liu [1], Xingyu Zhou [2, 3,*], Hexun Huang [2] and Jinsong Zhang [1, 2, 3]

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Received: 23 October 2019; Accepted: 21 November 2019; Published: date

Table S1. Correlation analysis of ARG/16S rRNA gene and corresponding antibiotic residue concentration in collected samples.

	TC	**OTC**	**∑TCs**	**ROX**	**CLA**	**∑MLs**	**NOR**	**OFX**	**∑QNs**	**SMZ**	**SMX**	**∑SAs**	***tet*A**	***tet*C**	***tet*Q**	***tet*X**	***tet***	***sul* I**	***sul* II**	***sul* III**	***sul***	***int*I1**
TC	1	0.502	.951**	0.621	0.475	0.559	−0.009	0.501	0.503	−0.193	−0.189	−0.191	−0.053	0.138	−0.422	0.54	0.243	0.626	−0.171	−0.138	0.566	−0.022
OTC	0.502	1	0.744	0.722	0.689	0.718	0.569	0.47	0.483	−0.033	−0.129	−0.101	−0.518	.842*	−0.317	0.595	0.7	−0.106	0.212	0.033	−0.088	0.554
∑TCs	.951**	0.744	1	0.737	0.612	0.688	0.195	0.554	0.561	−0.161	−0.192	−0.184	−0.226	0.406	−0.439	0.629	0.437	0.446	−0.057	−0.095	0.406	0.18
ROX	0.621	0.722	0.737	1	.934**	.984**	0.405	0.714	0.724	0.102	0.174	0.154	−0.082	0.685	−0.027	0.687	.891**	0.503	0.422	0.319	0.56	0.399
CLA	0.475	0.689	0.612	.934**	1	.982**	0.369	0.624	0.634	−0.077	0.007	−0.018	0.006	0.705	−0.153	.779*	.943**	0.358	0.269	0.274	0.406	0.36
∑MLs	0.559	0.718	0.688	.984**	.982**	1	0.394	0.681	0.692	0.015	0.095	0.072	−0.04	0.706	−0.09	0.744	.932**	0.44	0.354	0.302	0.493	0.386
NOR	−0.009	0.569	0.195	0.405	0.369	0.394	1	−0.23	−0.212	−0.231	−0.248	−0.245	0.064	.862*	−0.248	−0.178	0.486	−0.113	0.513	0.271	−0.035	1.000**
OFX	0.501	0.47	0.554	0.714	0.624	0.681	−0.23	1	1.000**	0.572	0.59	0.588	−0.486	0.203	0.369	.809*	0.605	0.347	0.263	0.16	0.373	−0.234
∑QNs	0.503	0.483	0.561	0.724	0.634	0.692	−0.212	1.000**	1	0.57	0.587	0.586	−0.487	0.221	0.366	.809*	0.617	0.347	0.274	0.166	0.374	−0.216
SMZ	−0.193	−0.033	−0.161	0.102	−0.077	0.015	−0.231	0.572	0.57	1	.968**	.984**	−0.579	−0.08	.892**	0.058	0.113	−0.005	0.606	0.19	0.056	−0.218
SMX	−0.189	−0.129	−0.192	0.174	0.007	0.095	−0.248	0.59	0.587	.968**	1	.997**	−0.378	−0.109	.946**	0.066	0.185	0.152	0.627	0.334	0.236	−0.233
∑SAs	−0.191	−0.101	−0.184	0.154	−0.018	0.072	−0.245	0.588	0.586	.984**	.997**	1	−0.441	−0.101	.936**	0.064	0.164	0.106	0.625	0.293	0.183	−0.23
*tet*A	−0.053	−0.518	−0.226	−0.082	0.006	−0.04	0.064	−0.486	−0.487	−0.579	−0.378	−0.441	1	−0.213	−0.225	−0.34	−0.108	0.474	−0.175	0.261	0.497	0.073
*tet*C	0.138	.842*	0.406	0.685	0.705	0.706	.862*	0.203	0.221	−0.08	−0.109	−0.101	−0.213	1	−0.195	0.316	.808*	−0.14	0.488	0.268	−0.064	.855*
*tet*Q	−0.422	−0.317	−0.439	−0.027	−0.153	−0.09	−0.248	0.369	0.366	.892**	.946**	.936**	−0.225	−0.195	1	−0.138	0.072	0.007	0.539	0.487	0.121	−0.227
*tet*X	0.54	0.595	0.629	0.687	.779*	0.744	−0.178	.809*	.809*	0.058	0.066	0.064	−0.34	0.316	−0.138	1	0.661	0.187	−0.115	−0.049	0.164	−0.193
tet	0.243	0.7	0.437	.891**	.943**	.932**	0.486	0.605	0.617	0.113	0.185	0.164	−0.108	.808*	0.072	0.661	1	0.165	0.453	0.451	0.262	0.483
sul I	0.626	−0.106	0.446	0.503	0.358	0.44	−0.113	0.347	0.347	−0.005	0.152	0.106	0.474	−0.14	0.007	0.187	0.165	1	0.192	0.062	.980**	−0.109
sul II	−0.171	0.212	−0.057	0.422	0.269	0.354	0.513	0.263	0.274	0.606	0.627	0.625	−0.175	0.488	0.539	−0.115	0.453	0.192	1	0.241	0.274	0.524
sul III	−0.138	0.033	−0.095	0.319	0.274	0.302	0.271	0.16	0.166	0.19	0.334	0.293	0.261	0.268	0.487	−0.049	0.451	0.062	0.241	1	0.255	0.287
sul	0.566	−0.088	0.406	0.56	0.406	0.493	−0.035	0.373	0.374	0.056	0.236	0.183	0.497	−0.064	0.121	0.164	0.262	.980**	0.274	0.255	1	−0.028
*int*I1	−0.022	0.554	0.18	0.399	0.36	0.386	.988**	−0.234	−0.216	−0.218	−0.233	−0.23	0.073	.855*	−0.227	−0.193	0.483	−0.109	0.524	0.287	−0.028	1

* Significant at the 0.05 level in a two-tailed test.* * Significant at the 0.01 level in a two-tailed test.