

Table S1 Concentrations (ng L⁻¹) of the pharmaceuticals, steroid hormones and hormone-like personal care products in the wastewater from two treatment systems of a sewage treatment plant in Guangzhou, South China^a

	IPM	MPL	PPL	CBZ	E1	E2	αE2	MedP	MP	EP	PP	BP	PHP	TCC	TCS	BPA
1# treatment system																
IN	10375	121.0	9.7	51.6	65.2	9.4	7.9	5.0	1193.9	166.2	499.7	26.8	183.8	2353.9	2301.0	1188.0
ANE	7107	79.2	5.1	48.2	131.6	4.5	4.1	<0.4	27.8	13.7	93.3	5.5	61.8	272.5	250.7	265.1
SE	104	85.7	3.9	52.8	<0.2	<0.3	<0.2	<0.4	4.3	0.7	5.0	<0.3	13.9	240.4	117.8	72.6
FE	124	88.3	4.3	50.7	<0.2	<0.3	<0.2	<0.4	5.1	1.0	7.2	0.3	19.4	202.4	111.8	46.9
3# treatment system																
IN	206	54.3	4.6	45.8	66.8	<0.3	20.2	18.0	1002.2	156.2	579.8	14.9	190.5	1217.4	711.5	13808.0
FE	17	59.5	2.7	54.2	<0.2	<0.3	<0.2	<0.4	7.6	0.9	10.6	0.3	25.8	129.5	80.7	132.4

^a Chemicals not quantitatively detected in any sample are not included in this table. Concentration in the wastewater sample is sum of the dissolved and particulate fractions, which was calculated as: $C_{\text{sum}} = C_{\text{D}} + C_{\text{SPM}} \times C_{\text{S}}$, where C_{D} is the dissolved concentration measured in the filtrate, C_{S} is the sorbed concentration measured in the suspended particulate matter and C_{SPM} is the content of the suspended

particulate matter in the wastewater sample.

IN = influent; ANE = effluent from the anaerobic tank; SE = effluent from the secondary clarifier; FE = final effluent; IPM = iopromide;

MPL = metoprolol; PPL = propranolol; CBZ = carbamazepine; E1 = estrone; E2 = 17 β -estradiol; α E2 = 17 α -estradiol; MedP =

medroxyprogesterone; MP = methylparaben; EP = ethylparaben; PP = propylparaben; BP = butylparaben; PHP = 2-phenylphenol; TCC =

triclocarban; TCS = triclosan; BPA = bisphenol A.

Table S2 Concentrations (ng L⁻¹) of the pharmaceuticals, steroid hormones and hormone-like personal care products in the Pearl River at Guangzhou^a

Site	IPM	MPL	CBZ	E1	E2	αE2	MP	EP	PP	BP	PHP	TCC	TCS	BPA
March, 2008														
R01	46.5	22.3	6.4	<0.1	<0.1	<0.1	3.2	0.7	30.3	<0.1	48.1	15.3	16.2	1415.3
R02	89.4	50.1	12.9	<0.1	<0.1	<0.1	2.7	0.5	26.6	<0.1	56.5	12.1	18.9	1035.4
R03	45.2	29.5	5.5	<0.1	<0.1	<0.1	4.4	1.1	34.5	<0.1	61.9	26.5	25.3	1262.5
R04	25.1	11.3	0.3	<0.1	<0.1	<0.1	6.5	0.9	26.5	<0.1	67.3	7.1	7.7	501.0
R05	50.6	17.2	0.5	<0.1	<0.1	<0.1	4.0	2.1	45.3	<0.1	68.0	23.3	43.6	1007.8
R06	41.6	21.7	4.3	<0.1	<0.1	<0.1	5.1	0.6	40.7	<0.1	71.9	10.6	11.7	1258.5
R07	206.9	32.5	10.1	7.0	<0.1	1.1	1.6	0.6	35.5	1.7	74.5	57.5	33.4	455.1
R08	286.6	36.6	13.9	9.8	<0.1	<0.1	1.9	0.6	42.4	2.6	101.7	89.4	65.8	525.0
R09	469.9	45.5	28.9	10.5	<0.1	<0.1	2.0	1.0	47.8	1.5	114.3	59.7	47.0	393.8

R10	391.7	44.0	25.6	5.6	<0.1	<0.1	1.1	0.5	31.8	1.8	64.7	70.9	57.2	364.8
R11	388.3	50.3	23.8	8.3	<0.1	<0.1	0.9	0.3	27.2	1.6	46.2	80.6	73.2	497.2
R12	1439.3	105.5	94.1	21.3	<0.1	6.5	22.7	23.1	86.0	5.3	74.1	155.1	217.5	287.6
R13	548.4	55.8	42.8	11.5	<0.1	<0.1	1.9	1.1	44.8	2.8	66.6	76.5	75.2	618.8
May, 2008														
R01	22.5	17.8	0.3	<0.1	<0.1	<0.1	1.4	0.2	1.2	<0.1	7.0	24.2	20.1	541.8
R02	27.1	100.4	29.4	<0.1	<0.1	<0.1	25.7	0.6	14.3	<0.1	35.0	34.9	48.8	334.5
R03	21.6	25.0	10.4	<0.1	<0.1	<0.1	10.7	1.0	13.8	<0.1	43.1	31.3	41.7	591.6
R04	21.4	13.2	7.8	<0.1	<0.1	<0.1	4.6	0.7	10.6	<0.1	44.8	7.8	25.5	872.9
R05	21.4	14.1	5.0	<0.1	<0.1	<0.1	9.7	0.8	15.4	<0.1	42.2	9.3	56.5	767.3
R06	26.5	11.8	2.8	<0.1	<0.1	<0.1	3.4	0.4	5.3	<0.1	40.4	7.9	24.7	593.3
R07	90.1	15.5	8.3	7.2	<0.1	<0.1	7.4	1.6	16.8	<0.1	74.7	36.1	35.4	505.8
R08	52.0	17.8	5.8	11.8	1.0	0.8	9.8	2.0	13.3	<0.1	32.2	61.8	61.7	516.7

R09	168.7	22.8	9.1	6.3	0.3	1.0	12.5	2.4	22.6	<0.1	62.6	34.8	54.7	553.3
R10	148.4	23.8	6.9	17.9	4.8	4.3	66.1	8.2	45.3	2.2	41.9	129.0	152.6	692.2
R11	138.5	24.8	9.8	15.2	<0.1	<0.1	20.9	4.5	27.9	1.4	57.3	88.6	101.8	721.8
R12	- ^b	-	-	-	-	-	-	-	-	-	-	-	-	-
R13	307.5	24.9	10.9	9.1	<0.1	<0.1	12.6	3.4	23.0	1.7	51.5	4.9	62.2	478.8
Min	21.4	11.3	0.3	<0.1	<0.1	<0.1	0.9	0.2	1.2	<0.1	7.0	4.9	7.7	278.6
Max	1439.3	105.5	94.1	21.3	4.8	6.5	66.1	23.1	86.0	5.3	114.3	155.1	217.5	1415.3
Median	89.7	24.8	9.1	5.6	<0.1	<0.1	4.6	0.9	27.2	<0.1	57.3	34.8	47.0	553.3
Mean	210.5	33.4	15.0	5.7	0.2	0.6	9.7	2.4	29.2	0.9	57.9	46.2	55.1	671.7

^a Chemicals not quantitatively detected in any sample are not included in this table.

^b not analyzed.

See the footnote of Table S1 for full names of the abbreviated compounds.