Table 1: Distribution of the top 200 positively COMT-correlated genes by Chromosome: Prefrontal Cortex

2 13 12.6 1.03 0 3 12 10.8 1.11 0 4 4 7.6 0.52 0 5 9 8.7 1.04 0 6 12 11.0 1.09 0 7 7 9.1 0.77 0 8 6 6.8 0.88 0 9 10 7.9 1.26 0 10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	value	chment P	d Enric	cy Expect	some Frequen	Chromos
3 12 10.8 1.11 0 4 4 7.6 0.52 0 5 9 8.7 1.04 0 6 12 11.0 1.09 0 7 7 9.1 0.77 0 8 6 6.8 0.88 0 9 10 7.9 1.26 0 10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.10	.34	1	20.9	28	1
4 4 7.6 0.52 0 5 9 8.7 1.04 0 6 12 11.0 1.09 0 7 7 9.1 0.77 0 8 6 6.8 0.88 0 9 10 7.9 1.26 0 10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.91	.03	1	12.6	13	2
5 9 8.7 1.04 0 6 12 11.0 1.09 0 7 7 9.1 0.77 0 8 6 6.8 0.88 0 9 10 7.9 1.26 0 10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.71	.11	1	10.8	12	3
6 12 11.0 1.09 0 7 7 9.1 0.77 0 8 6 6.8 0.88 0 9 10 7.9 1.26 0 10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.18	.52	0	7.6	4	4
7 7 9.1 0.77 0 8 6 6.8 0.88 0 9 10 7.9 1.26 0 10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.92	.04	1	8.7	9	5
8 6 6.8 0.88 0 9 10 7.9 1.26 0 10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.76	.09	1	11.0	12	6
9 10 7.9 1.26 0 10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.48	.77	0	9.1	7	7
10 1 7.5 0.13 0 11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.75	.88	0	6.8	6	8
11 12 13.2 0.91 0 12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.45	.26	1	7.9	10	9
12 8 10.8 0.74 0 13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.02	.13	0	7.5	1	10
13 5 3.3 1.51 0 14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.73	.91	0	13.2	12	11
14 2 6.2 0.32 0 15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.38	.74	0	10.8	8	12
15 12 5.7 2.09 0 16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.35	.51	1	3.3	5	13
16 6 8.3 0.72 0 17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.09	.32	0	6.2	2	14
17 12 11.7 1.03 0 18 2 2.8 0.71 0	0.01	.09	2	5.7	12	15
18 2 2.8 0.71	0.41	.72	0	8.3	6	16
	0.93	.03	1	11.7	12	17
19 15 13.6 1.11	0.63	.71	0	2.8	2	18
	0.69	.11	1	13.6	15	19
20 5 5.8 0.86	0.74	.86	0	5.8	5	20
21 5 2.6 1.91	0.14	.91	1	2.6	5	21
22 8 4.6 1.75	0.11	.75	1	4.6	8	22
X 6 7.9 0.75	0.49	.75	0	7.9	6	X

Table 1: (Top 200 positively correlated genes by chromosome continued)

Chromosome	Frequency	Expected	Enrichment	P value
Y**	0			

^{**}There were no genes on the Y chromosome that fell within the 200 most strongly positively *COMT*-correlated genes in Prefrontal Cortex

A chi-square test on the observed distribution of the 200 most strongly positively COMT – correlated genes in Prefrontal Cortex using the proportion of genes on each chromosome across the entire sample to derive the expected frequencies showed that this distribution did not differ significantly from the expected distribution, $\chi^2 = 28.874$, df = 22, p = 0.16.