Table 1: Chi-squared tests of distribution within each brain area (Rows 1:4), and Chi-squared test of independence Chromosome gene counts x brain area. For the distribution tests, the distributions of gene counts across chromosomes for the 500 genes with the lowest p-values for their expression correlations with COMT are compared to the distribution of gene counts across chromosomes for all genes in the data set. For the test of independence, the distributions of gene counts across chromosomes for the 500 genes with the lowest p-values for their expression correlations with COMT are compared to each other. Rejection of independence would mean that the distribution across chromosomes of the 500 genes with the lowest p-values differed across brain areas.

	Chi-squared	**df**	**p-value**
Distribution tests			
Prefrontal	40.97	22	0.00832[1]
Cerebellum	22.36	22	0.43841
Temporal	30.16	22	0.11469
Pons	19.93	22	0.58726
Independence test			
chromosome x brain area	42.25	66	0.98997

[1] Significant adjusted for multiple (4) Chi-squared tests.