

Supplemental Information

S1_Table: Three-way ANOVA showing the effect of chronic CBD on behavior in Tat tg mice.

Behavior	Sex effect <i>F, p</i>	Genotype effect <i>F, p</i>	Treatment effect <i>F, p</i>	Sex x Genotype <i>F, p</i>	Sex x Treatment <i>F, p</i>	Genotype x Treatment <i>F, p</i>	Sex x Genotype x Treatment <i>F, p</i> (post-hoc power analysis)
Body mass (g) [Before CBD treatment]	$F(1,54) = 0.38$ $p = 0.53$	$F(1,54) = 2.90$ $p = 0.09$	NA	$F(1,54) = 1.87$ $p = 0.17$	NA	NA	NA
Body mass (g) [After first CBD treatment]	$F(1,54) = 1.14$ $p = 0.28$	$F(1,54) = 3.30$ $p = 0.07$	$F(1,54) = 0.82$ $p = 0.36$	$F(1,54) = 1.16$ $p = 0.28$	$F(1,54) = 4.22$ $p = 0.04$	$F(1,54) = 0.008$ $p = 0.92$	$F(1,54) = 1.91$ $p = 0.17$ (30%)
Body mass (g) [After last CBD treatment]	$F(1,54) = 4.55$ $p = 0.03$ F < M	$F(1,54) = 1.90$ $p = 0.17$	$F(1,54) = 0.63$ $p = 0.17$	$F(1,54) = 1.90$ $p = 0.17$	$F(1,54) = 1.61$ $p = 0.21$	$F(1,54) = 1.31$ $p = 0.25$	$F(1,54) = 1.72$ $p = 0.19$ (39%)
Body temperature (°C)	$F(1,54) = 1.55$ $p = 0.21$	$F(1,54) = 2.79$ $p = 0.10$	$F(1,54) = 8.68$ $p = 0.005$ Vehicle < CBD	$F(1,54) = 0.48$ $p = 0.49$	$F(1,54) = 0.33$ $p = 0.56$	$F(1,54) = 1.00$ $p = 0.32$	$F(1,54) = 0.001$ $p = 0.97$ (5%)
Tail withdrawal latency (s)	$F(1,54) = 13.12$ $p < 0.001$ F < M	$F(1,54) = 7.42$ $p = 0.009$ Tat(-) < Tat(+)	$F(1,54) = 0.13$ $p = 0.71$	$F(1,54) = 6.32$ $p = 0.01$	$F(1,54) = 1.17$ $p = 0.28$	$F(1,54) = 0.10$ $p = 0.74$	$F(1,54) = 0.04$ $p = 0.82$ (5%)
Hot plate latency (s)	$F(1,54) = 0.02$ $p = 0.86$	$F(1,54) = 7.37$ $p = 0.009$ Tat(-) < Tat(+)	$F(1,54) = 5.36$ $p = 0.02$ Vehicle > CBD	$F(1,54) = 0.26$ $p = 0.60$	$F(1,54) = 0.75$ $p = 0.38$	$F(1,54) = 2.27$ $p = 0.13$	$F(1,54) = 0.29$ $p = 0.58$ (8%)
LA: Total activity	$F(1,54) = 9.87$ $p = 0.003$ F < M	$F(1,54) = 4.45$ $p = 0.03$ Tat(-) < Tat(+)	$F(1,54) = 0.54$ $p = 0.46$	$F(1,54) = 0.22$ $p = 0.63$	$F(1,54) = 0.19$ $p = 0.66$	$F(1,54) = 0.01$ $p = 0.91$	$F(1,54) = 0.001$ $p = 0.97$ (5%)
LA: Rearing	$F(1,54) = 5.84$ $p = 0.01$ F < M	$F(1,54) = 1.51$ $p = 0.22$ Tat(-) < Tat(+)	$F(1,54) = 0.21$ $p = 0.64$	$F(1,54) = 1.31$ $p = 0.25$	$F(1,54) = 0.37$ $p = 0.54$	$F(1,54) = 1.83$ $p = 0.18$	$F(1,54) = 0.03$ $p = 0.85$ (5%)

NOR: Total object exploration time (s)	$F(1,54) = 0.12$ $p = 0.72$	$F(1,54) = 1.19$ $p = 0.27$	$F(1,54) = 0.53$ $p = 0.46$	$F(1,54) = 0.41$ $p = 0.52$	$F(1,54) = 0.38$ $p = 0.53$	$F(1,54) = 6.94$ $p = 0.01$	$F(1,54) = 2.70$ $p = 0.10$ (41%)
NOR: Discrimination index	$F(1,54) = 3.82$ $p = 0.06$	$F(1,54) = 16.15$ $p < 0.001$ Tat(-) > Tat(+)	$F(1,54) = 10.83$ $p = 0.002$ Vehicle < CBD	$F(1,54) = 0.07$ $p = 0.79$	$F(1,54) = 8.00$ $p = 0.007$	$F(1,54) = 0.02$ $p = 0.87$	$F(1,54) = 0.08$ $p = 0.77$ (6%)
EPM: Total distance (m)	$F(1,54) = 4.24$ $p = 0.04$ F < M	$F(1,54) = 3.91$ $p = 0.05$ Tat(-) < Tat(+)	$F(1,54) = 0.01$ $p = 0.92$	$F(1,54) = 0.17$ $p = 0.67$	$F(1,54) = 0.13$ $p = 0.71$	$F(1,54) = 0.42$ $p = 0.51$	$F(1,54) = 0.72$ $p = 0.39$ (14%)
EPM: Average speed (m/s)	$F(1,54) = 4.33$ $p = 0.04$ F < M	$F(1,54) = 3.96$ $p = 0.05$ Tat(-) < Tat(+)	$F(1,54) = 0.05$ $p = 0.80$	$F(1,54) = 0.24$ $p = 0.62$	$F(1,54) = 0.16$ $p = 0.68$	$F(1,54) = 0.44$ $p = 0.51$	$F(1,54) = 0.75$ $p = 0.38$ (15%)
EPM: Open arm entries	$F(1,54) = 0.59$ $p = 0.44$	$F(1,54) = 7.97$ $p = 0.007$ Tat(-) < Tat(+)	$F(1,54) = 0.06$ $p = 0.80$	$F(1,54) = 1.13$ $p = 0.29$	$F(1,54) = 2.02$ $p = 0.16$	$F(1,54) = 0.59$ $p = 0.44$	$F(1,54) = 0.11$ $p = 0.73$ (6%)
EPM: Open arm distance (m)	$F(1,54) = 0.08$ $p = 0.77$	$F(1,54) = 0.01$ $p = 0.92$	$F(1,54) = 0.29$ $p = 0.59$	$F(1,54) = 4.03$ $p = 0.04$	$F(1,54) = 2.82$ $p = 0.09$	$F(1,54) = 1.6$ $p = 0.20$	$F(1,54) = 0.08$ $p = 0.77$ (5%)

LA, locomotor activity; NOR, novel object recognition; EPM, elevated plus maze.