

Supplemental Table 1. General Linear Model (GLM) Select results of natural log (ln)-transformed standard deviation of lateral position (SDLP) in 18 volunteer drivers after controlled vaporized cannabis with or without oral alcohol.

ln(SDLP)					
Parameter	DF	ln Estimate (b)	t	Standard Error	p-value
THC	1	0.008	3.79	0.002	0.0002
BrAC	1	0.014	3.30	0.004	0.0010
THC*BrAC					
Speed Limit	1	0.013	17	0.001	<0.0001
Inverse Curvature	1	15	10	1.4	<0.0001
Intercept	1	3.0	48	0.062	<0.0001
Subject	17				
<i>Model df:</i>	21				
<i>Model F-value</i>	26.02				
<i>Error df:</i>	1916				

Driving occurred 0.5h after drinking placebo or active alcohol (calculated to produce approximate peak 0.065% BrAC) and inhaling placebo, 2.9% THC, or 6.7% THC vaporized bulk cannabis (500 mg, Volcano[®] Medic vaporizer). Estimate represents parameter (coefficient) estimate for each factor (negative b indicates the parameter decreases the effect; positive b indicates the parameter increases the overall effect). The t-values estimate effect size. **Boldface** indicates parameter included in the final GLM Select model of ln(SDLP).

Abbreviations: DF, degrees of freedom; THC, blood Δ^9 -tetrahydrocannabinol concentration; BrAC, breath alcohol concentration

Supplemental Table 2. Standard deviation of lateral position (SDLP) associated with specific blood Δ^9 -tetrahydrocannabinol (THC) concentrations and breath alcohol concentrations (BrAC) during driving based on transformed ln(SDLP) GLM Select model.

During-Drive Concentration		Standard Deviation of Lateral Position (SDLP)		
THC ($\mu\text{g/L}$)	BrAC (g/210L)	Median [range] Predicted SDLP (cm)	Difference ^a (cm)	Percent Increase ^a (%)
0	0	26.5 [20.6-40.5]	--	--
1	0	26.8 [20.8-40.8]	0.2	0.8
2	0	27.0 [21.0-41.2]	0.4	1.6
5	0	27.6 [21.5-42.2]	1.1	4.2
7	0	28.1 [21.8-42.9]	1.6	5.9
10	0	28.8 [22.4-43.9]	2.3	8.5
20	0	31.2 [24.3-47.7]	4.7	18
0	0.01	26.9 [20.9-41.1]	0.4	1.4
0	0.02	27.3 [21.2-41.7]	0.8	2.9
0	0.05	28.5 [22.1-43.5]	2.0	7.4
0	0.08	29.7 [23.1-45.4]	3.2	12
0	0.10	30.6 [23.8-46.7]	4.1	15
2	0.05	29.0 [22.5-44.2]	2.4	9.1
5	0.05	29.7 [23.1-45.3]	3.1	12

Data generated from 18 healthy occasional cannabis smokers 0.5-1.3h after ingesting placebo or active oral alcohol and inhaling placebo or active vaporized bulk cannabis. Values obtained by assessing GLM Select results at specific THC concentrations and BrAC, speed limit 55 miles/h (89 km/h), straight road.

^aRelative to median.