Science Advances
AAAS

advances.sciencemag.org/cgi/content/full/5/10/eaax7031/DC1

Supplementary Materials for

Microglia morphology and proinflammatory signaling in the nucleus accumbens during nicotine withdrawal

Adewale Adeluyi, Lindsey Guerin, Miranda L. Fisher, Ashley Galloway, Robert D. Cole, Sherine S. L. Chan, Michael D. Wyatt, Shannon W. Davis, Linnea R. Freeman, Pavel I. Ortinski, Jill R. Turner*

*Corresponding author. Email: jill.turner@uky.edu

Published 9 October 2019, *Sci. Adv.* **5**, eaax7031 (2019)
DOI: 10.1126/sciadv.aax7031

This PDF file includes:

Table S1. Statistical tests used for each set of experiments and test results.

Figure	Figure Panel	Statistics
1	c, i	**Caudate Putamen:** F (2, 805) = 2.917, p = 0.0547, ANOVA **Nucleus Accumbens:** F (2, 590) = 18.24, p < 0.0001, ANOVA; Sal versus Nic mice: p < 0.0001, Sal versus WD mice: p = 0.0169, Post-hoc analyses
	c, ii	**Caudate Putamen:** F (2, 805) = 1.121, p = 0.3264, ANOVA **Nucleus Accumbens:** F (2, 590) = 6.390, p = 0.0018, ANOVA; Sal versus Nic mice: p = 0.0026, Sal versus WD mice: p = 0.0254, Post-hoc analyses
	c, iii	**Caudate Putamen:** F (2, 422) = 3.697, p = 0.0256, ANOVA; Nic versus WD mice: p = 0.0292, Post-hoc analyses **Nucleus Accumbens:** F(2, 429) = 1.331, p = 0.2654, ANOVA
	d	**Caudate Putamen:** F (2, 41) = 3.140, p = 0.0538, ANOVA **Nucleus Accumbens:** F (2, 41) = 8.429, p = 0.0009, ANOVA; Sal versus WD mice: p = 0.0032, Nic versus WD mice: p = 0.0015, Post-hoc analyses
	e	**Caudate Putamen:** F (2, 48) = 3.903, p = 0.0269, ANOVA; Sal versus WD mice: p = 0.0361, Nic versus WD mice: p = 0.0415, Post-hoc analyses **Nucleus Accumbens:** F (2, 48) = 6.698, p = 0.0027, ANOVA; Sal versus WD mice: p = 0.0179, Nic versus WD mice: p = 0.0023, Post-hoc analyses
	h	**Caudate Putamen:** F (2, 15) = 0.3290, p = 0.7247, ANOVA **Nucleus Accumbens:** F (2, 48) = 9.125, p = 0.0004, ANOVA; Sal versus WD mice: p = 0.0012, Nic versus WD mice: p = 0.0019, Post-hoc analyses
2	a	F (2, 49) = 5.586, p = 0.0065, ANOVA; Sal versus WD mice: q = 0.0051, Nic versus WD mice: q = 0.0020, Post-hoc analyses
	b	F (2, 49) = 4.681, p = 0.0138, ANOVA; Sal versus WD mice: q = 0.0061, Nic versus WD mice: q = 0.0061, Post-hoc analyses
	c	F (2, 50) = 3.090, p = 0.0543, ANOVA
3	a, i	F (2, 51) = 1.352, p = 0.2678, ANOVA
	a, ii	F (2, 49) = 9.569, p = 0.0003, ANOVA; Sal versus WD mice: p = 0.0013, Nic versus WD mice: p = 0.0005, Post-hoc analyses
	a, iii	F (2, 51) = 0.3495, p = 0.7067, ANOVA
	b	F (2, 48) = 1.093, p = 0.3433, ANOVA
4	a,i	F (4, 17) = 344.1, p < 0.0001, ANOVA; Total Homogenate versus $CD11b^+$ microglia: p < 0.0001, Post-hoc analysis
	a, ii	F (4, 17) = 120.2, p < 0.0001, ANOVA; Total Homogenate versus $CD11b^+$ microglia: p < 0.0001, Post-hoc analysis

	a, iii	F (4, 18) = 75.70, p < 0.0001, ANOVA; Total Homogenate versus $CD11b^+$ microglia: p < 0.0001, Post-hoc analysis
	b, i	F (4, 15) = 6.452, p = 0.0032, ANOVA; Total Homogenate versus Liver: p = 0.0034, Post-hoc analysis
	b, ii	F (4, 13) = 10.31, p = 0.0006, ANOVA; Total Homogenate versus Liver: p = 0.0021, Post-hoc analysis
	b, iii	F (4, 18) = 9.995, p = 0.0002, ANOVA; **Microglia:** Total Homogenate versus $CD11b^+$ microglia: p = 0.0005, Post-hoc analysis **Liver:** Total Homogenate versus Liver: p = 0.0305, Post-hoc analysis

5	b, ii	Treatment effect: F(1, 17) = 0.02218, p = 0.8834, ANOVA; Chow effect: F(1, 17) = 54.39, p < 0.0001, ANOVA; Interaction: F(1, 17) = 4.705, p = 0.0445, ANOVA Sal Control-chow versus Sal PLX5622-chow: p <0.0001; WD Control-chow versus WD PLX5622-chow: p = 0.0107, Post-hoc analyses
	c, i	Treatment effect: F(1, 34) = 0.06459, p = 0.8009, ANOVA; Chow effect: F(1, 34) = 917.4, p < 0.0001, ANOVA; Interaction: F(1, 34) = 1.632, p = 0.2101, ANOVA Sal Control-chow versus Sal PLX5622-chow: p <0.0001; WD Control-chow versus WD PLX5622-chow: p <0.0001, Post-hoc analyses
	c, ii	Treatment effect: F(1, 34) = 0.03939, p = 0.8439, ANOVA; Chow effect: F(1, 34) = 461.5, p < 0.0001, ANOVA; Interaction: F(1, 34) = 0.2781, p = 0.6014, ANOVA Sal Control-chow versus Sal PLX5622-chow: p <0.0001; WD Control-chow versus WD PLX5622-chow: p <0.0001, Post-hoc analyses

6	a	Treatment effect: F(1, 32) = 4.077, p = 0.0519, ANOVA; Chow effect: F(1, 32) = 20.10, p < 0.0001, ANOVA; Interaction: F(1, 32) = 3.29, p = 0.0791, ANOVA Sal Control-chow versus WD Control-chow: p = 0.0417; WD Control-chow versus WD PLX5622-chow: p = 0.0006, Post-hoc analyses
	b, ii	Treatment effect: F(1, 31) = 1.661, p = 0.2070, ANOVA; Chow effect: F(1, 31) = 2.371, p = 0.1337, ANOVA; Interaction: F(1, 31) = 4.447, p = 0.0431, ANOVA Sal Control-chow versus WD Control-chow: p = 0.0412; WD Control-chow versus WD PLX5622-chow: p = 0.0270, Post-hoc analyses

	c	Treatment effect: F(1, 35) = 4.637, p = 0.0383, ANOVA; Chow effect: F(1, 35) = 1.733, p = 0.1966, ANOVA; Interaction: F(1, 35) = 1.937, p = 0.1728, ANOVA Sal Control-chow versus WD Control-chow: q = 0.0187, Post-hoc analysis
	d	Treatment effect: F(1, 35) = 19.18, p = 0.0001, ANOVA; Chow effect: F(1, 35) = 5.736, p = 0.0221, ANOVA; Interaction: F(1, 35) = 0.08795, p = 0.7685, ANOVA Sal Control-chow versus WD Control-chow: q = 0.0487; WD Control-chow versus WD PLX5622-chow: q = 0.0031, Post-hoc analyses
	e	Treatment effect: F(1, 35) = 7.871, p = 0.0081, ANOVA; Chow effect: F(1, 35) = 0.03390, p = 0.8550, ANOVA; Interaction: F(1, 35) = 0.2401, p = 0.6272, ANOVA Sal Control-chow versus WD Control-chow: q = 0.1667; WD Control-chow versus WD PLX5622-chow: q = 0.8691, Sal Control-chow versus Sal PLX5622-chow: q = 0.8077, Sal PLX5622-chow versus WD Control-chow: q = 0.1397, Sal PLX5622-chow versus WD PLX5622-chow: q = 0.1397, Sal Control-chow versus WD PLX5622-chow: q = 0.1440, Post-hoc analyses