

Electronic Supplementary Material

**Sex-specific disruption of murine midbrain astrocytic and dopaminergic developmental trajectories following antenatal GC treatment**

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**Supplemental Table 1:** Results of global 3-way ANOVA for various parameters in the SNc

	Parameter measured	Source of variation	F	p
SNc	Nucleus volume	Sex	$F_{1,80}=14.39$	<0.001
		Level	$F_{3,80}=388.28$	<0.001
		Treatment	$F_{2,80}=0.38$	0.69
		Sex x Level	$F_{3,80}=14.79$	<0.001
		Sex x Treatment	$F_{2,80}=9.79$	0.002
		Treatment x Level	$F_{6,80}=17.11$	<0.001
		Sex x Level x Treatment	$F_{6,80}=5.85$	<0.001
	GS-IR cell number	Sex	$F_{1,80}=2.71$	0.106
		Level	$F_{3,80}=103.51$	<0.001
		Treatment	$F_{2,80}=43.78$	<0.001
		Sex x Level	$F_{3,80}=6.14$	0.001
		Sex x Treatment	$F_{2,80}=7.25$	0.002
		Treatment x Level	$F_{6,80}=8.42$	<0.001
		Sex x Level x Treatment	$F_{6,80}=3.72$	0.004
	TH-IR cell number	Sex	$F_{1,80}=7.19$	0.009
		Level	$F_{3,80}=304.00$	<0.001
		Treatment	$F_{2,80}=1.39$	0.257
		Sex x Level	$F_{3,80}=13.42$	<0.001
		Sex x Treatment	$F_{2,80}=13.54$	<0.001
		Treatment x Level	$F_{6,80}=14.32$	<0.001
		Sex x Level x Treatment	$F_{6,80}=4.83$	<0.001
	TH-IR cell density	Sex	$F_{1,80}=0.24$	0.628
		Level	$F_{3,80}=0.92$	0.439
		Treatment	$F_{2,80}=0.71$	0.494
		Sex x Level	$F_{3,80}=0.06$	0.980
		Sex x Treatment	$F_{2,80}=1.03$	0.362
		Treatment x Level	$F_{6,80}=0.92$	0.483
		Sex x Level x Treatment	$F_{6,80}=0.21$	0.972
	GS-IR cell density	Sex	$F_{1,80}=1.27$	0.264
		Level	$F_{3,80}=1.77$	0.165
Treatment		$F_{2,80}=30.81$	<0.001	
Sex x Level		$F_{3,80}=0.53$	0.665	
Sex x Treatment		$F_{2,80}=0.50$	0.611	
Treatment x Level		$F_{6,80}=0.93$	0.482	
Sex x Level x Treatment		$F_{6,80}=0.74$	0.622	

Global three-way ANOVAs were performed for the substantia nigra pars compacta (SNc) to investigate the effects of antenatal glucocorticoid treatment compared with controls on the counts of cells immunoreactive for tyrosine hydroxylase (TH-IR) and glutamine synthetase (GS-IR), nucleus volumes, TH-IR and GS-IR cell distribution, and the TH-IR and GS-IR cell density.

**Supplemental Table 2:** Results of global 3-way ANOVA for various parameters in the VTA

	Parameter measured	Source of variation	F	p
VTA	Nucleus volume	Sex	$F_{1,60}=2.96$	0.092
		Level	$F_{2,60}=97.27$	<0.001
		Treatment	$F_{2,60}=31.25$	<0.001
		Sex x Level	$F_{2,60}=27.97$	<0.001
		Sex x Treatment	$F_{2,60}=13.39$	<0.001
		Treatment x Level	$F_{4,60}=9.63$	<0.001
		Sex x Level x Treatment	$F_{4,60}=20.20$	<0.001
	GS-IR cell number	Sex	$F_{1,60}=0.12$	0.726
		Level	$F_{2,60}=11.84$	<0.001
		Treatment	$F_{2,60}=51.18$	<0.001
		Sex x Level	$F_{2,60}=10.27$	<0.001
		Sex x Treatment	$F_{2,60}=5.80$	0.006
		Treatment x Level	$F_{4,60}=6.07$	0.001
	TH-IR cell number	Sex	$F_{1,60}=2.33$	0.134
		Level	$F_{2,60}=41.62$	<0.001
		Treatment	$F_{2,60}=13.85$	<0.001
		Sex x Level	$F_{2,60}=23.93$	<0.001
		Sex x Treatment	$F_{2,60}=11.60$	<0.001
		Treatment x Level	$F_{4,60}=11.53$	<0.001
		Sex x Level x Treatment	$F_{4,60}=9.10$	<0.001
	TH-IR cell density	Sex	$F_{1,60}=0.005$	0.945
		Level	$F_{2,60}=0.151$	0.860
		Treatment	$F_{2,60}=8.48$	0.001
		Sex x Level	$F_{2,60}=3.06$	0.057
		Sex x Treatment	$F_{2,60}=6.78$	0.003
		Treatment x Level	$F_{4,60}=3.08$	0.025
		Sex x Level x Treatment	$F_{4,60}=4.86$	0.002
	GS-IR cell density	Sex	$F_{1,60}=6.46$	0.015
Level		$F_{2,60}=0.94$	0.401	
Treatment		$F_{2,60}=72.70$	<0.001	
Sex x Level		$F_{2,60}=6.92$	0.003	
Sex x Treatment		$F_{2,60}=0.22$	0.803	
Treatment x Level		$F_{4,60}=0.48$	0.753	
Sex x Level x Treatment		$F_{4,60}=1.42$	0.246	

Global three-way ANOVAs were performed for the ventral tegmental area (VTA) to investigate the effects of antenatal glucocorticoid treatment compared with controls on the counts of cells immunoreactive for tyrosine hydroxylase (TH-IR) and glutamine synthetase (GS-H), nucleus volumes, TH-IR and GS-IR cell distribution, and the TH-IR and GS-IR cell density.