

Errataliste

Navn: Josephine Lumor

Oppgavetittel: How does exposure to valproic acid and lamotrigine during pregnancy affect foetal neuronal development?

A pharmacology study exploring effects in vivo and in vitro in chicken embryos and PC12 cells

Forkortelser for type rettelser:

Cor – korrektur

Celtf – endring av sidelayout eller tekstformat

Side	Linje	Originaltekst	Type rettelse	Korrigert tekst
IV	5	...human and neurodevelopment.	cor	...human neurodevelopment.
IV	18	...and Gerd.Wenche...	cor	...and Gerd.Wenche Brochman...
V	9	The chick embryo...	cor	The chicken embryo...
V	24	...unaffected by VPA and LTG...	cor	...unaffected by VPA, but affected by LTG...
V	25	The chick embryo...	cor	The chicken embryo...
V	28	...were affected by VPA more than LTG...	cor	...were more affected by VPA than LTG...
VI	29	...påvirket av VPA enn...	cor	...påvirket mer av VPA enn...
X	18	...chick embryo...	cor	...chicken embryo...
XII	2	...NR2B...	cor	...GRIN2B...
XII	6	...CGN...	cor	...CGNs...
XII	9	...NR2B...	cor	...GRIN2B...

2	1	... loss of consciousness, or convulsion...	cor	...loss of consciousness (or without), or convulsion...
2	3	...central nervous system...	cor	...CNS...
5	18	...deacetylases (HDAC)...	cor	...deacetylases (HDACs)...
8	2	...secondary tonic-clonic seizures...	cor	...secondary tonic-clonic seizures (former revised to generalised tonic-clonic, whilst latter to focal to bilateral tonic-clonic seizures)...
8	12	...find effect...	cor	...find an effect...
14	22	...embryos after injection into the brain.	cor	...embryos after injection.
21	15	...with the CGN...	cor	...with the CGNs...
21	21	...petri dish were...	cor	...petri dish where...
23	8	...preparation of chicken cerebellar granule neurons...	cor/celtf	...preparation of CGNs...
24	11	...for chicken cerebellar granule neurons...	cor/celtf	...for CGNs...
25	1	...for chicken cerebellar granule neuronal cells...	cor/celtf	...for CGNs...
25	21	Plating of CGN	cor	Plating of CGNs
27	21	...was used to analysed...	cor	...was used to analyse...
32	22	...25 V, 2.5 A...	cor	25 V and 2.5 A
36	11	... were 30 μ L...	cor	... where 30 μ L...
40	1	...of chicken cerebellar granule neurons...	cor/celtf	...of CGNs...

40	12	...of chicken cerebellar granule neurons...	cor/celtf	...of CGNs...
43	10	Reagent Components	cor	Reagent
43	18	Reagent Components	cor	Reagent
45	25	...were exposed with to VPA...	cor	...were exposed to VPA...
48	5	...LTG 4.2 μ M where done...	cor	...LTG 4.2 μ M were done...
60	2	...not affect <i>PCNA</i> , <i>BDNF</i> , <i>NR2B</i> , <i>SLC6A13</i> ...	cor	...not affect <i>PCNA</i> , <i>BDNF</i> , <i>GRIN2B</i> , <i>SLC6A13</i> ...
61	4	...group of samples where run...	cor	...group of samples were run...
62	2	...luciferase expression in CGN.	cor	...luciferase expression in CGNs.
63	1	CGNs was prepared from...	cor	CGNs were prepared from...
63	2	CGNs was co-transfected...	cor	CGNs were co-transfected...
67	2	...not affect <i>PCNA</i> , <i>BDNF</i> , <i>NR2B</i> , <i>SLC6A13</i> ...	cor	...not affect <i>PCNA</i> , <i>BDNF</i> , <i>GRIN2B</i> , <i>SLC6A13</i> ...
68	2	CGNs was co-transfected...	cor	CGNs were co-transfected...
69	2	CGNs was co-transfected...	cor	CGNs were co-transfected...
70	16	Firefly and <i>Renilla</i> luciferase can...	cor	Firefly and <i>Renilla</i> luciferase data can...
70	19	... <i>Renilla</i> results, were there...	cor	... <i>Renilla</i> results, where there...

80	5	...ANOVA Kruskal-Wallis Dunn's <i>post hoc</i> test...	cor	...ANOVA Brown-Forsythe and Welch Dunnett's T3 <i>post hoc</i> test
80	10	...ANOVA Kruskal-Wallis Dunn's <i>post hoc</i> test...	cor	...ANOVA Brown-Forsythe and Welch Dunnett's T3 <i>post hoc</i> test
81	3	...of CGN exposed...	cor	...of CGNs exposed...
83	10	...ANOVA Kruskal-Wallis Dunn's <i>post hoc</i> test...	cor	...ANOVA Brown-Forsythe and Welch Dunnett's T3 <i>post hoc</i> test
84	6	...ANOVA Kruskal-Wallis Dunn's <i>post hoc</i> test...	cor	...ANOVA Brown-Forsythe and Welch Dunnett's T3 <i>post hoc</i> test
85	1	CGN prepared from...	cor	CGNs prepared from...
90	29	...in chick embryo gene...	cor	...in chicken embryo gene...
92	16	... were no significant difference in neurite outgrowth.	cor	...were no significant difference in neurite outgrowth for VPA, but there was for LTG.
93	19	...for LTG, though the latter data from LTG cannot...	cor	...for LTG isethionate, though the latter data from LTG isethionate cannot...
95	7	...showed LTG to significantly induce,...	cor	...showed LTG induced,...
96	8	...were affected by VPA more than LTG...	cor	...were affected more by VPA than LTG...
99	24	Gene, N., <i>PCNA</i> <i>proliferating cell</i> <i>nuclear antigen</i> [<i>Homo sapiens</i>	cor	NCBI, <i>PCNA proliferating cell nuclear</i> <i>antigen [Homo sapiens (human)]</i> . [cited 07.04.2019]; Available from: https://www.ncbi.nlm.nih.gov/gene/5111

99	45	(<i>human</i>]). 07.04.2019. ...09.04.2019: NCBI Gene.	cor	[cited 09.04.2019]; Available from: https://www.ncbi.nlm.nih.gov/gene/4318
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Rettede tabeller og figurer:

For VPA figurer har ‘‘Saline 0.1%’’ blitt rettet til ‘‘Saline’’. Nevrittutvekst for LTG og VPA har blitt merket med signifikans ved signifikant forskjeller sammenlignet med DMSO 0,2% eller ubehandlet.

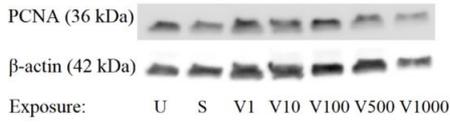
Table 3.1 Pharmacokinetic parameters for VPA E13

Parameter	VPA_{determined}	VPA_{generated}
C _{max} (µM)	28.67	28.82
T _{max} (hours)	4	4.38
AUC (µM×hour)		1230.23
K _a		0.809
K _{el}		0.027
T _{1/2} (hours)		21.25

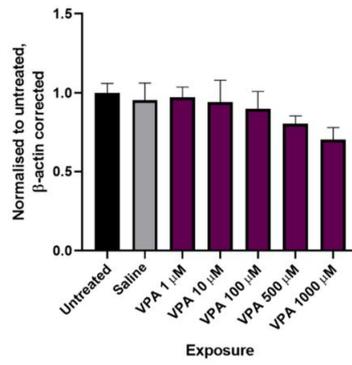
Table 3.4 Pharmacokinetic parameters for LTG and LTG isethionate E16

Parameter	LTG	LTG isethionate_{determined}	LTG isethionate_{generated}
C _{max} (µM)	0.57	0.59	0.47
T _{max} (hours)	2	1	1.91
AUC (µM×hour)			46.02
K _a			2.97
K _{el}			0.010
T _{1/2} (hours)			73.17

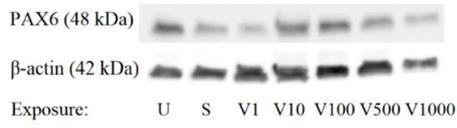
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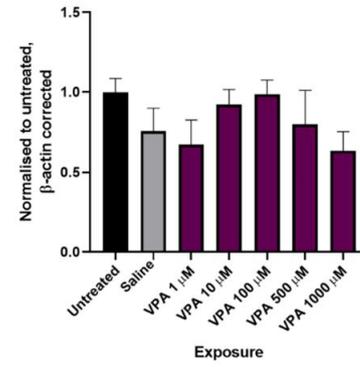
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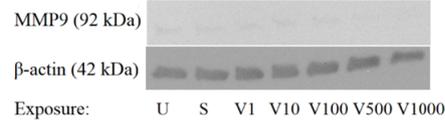
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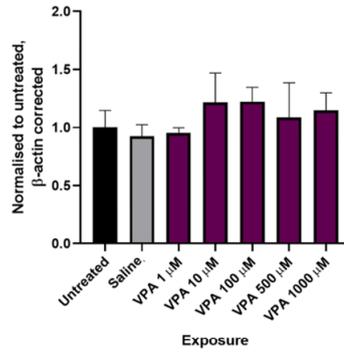
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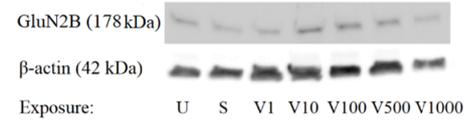
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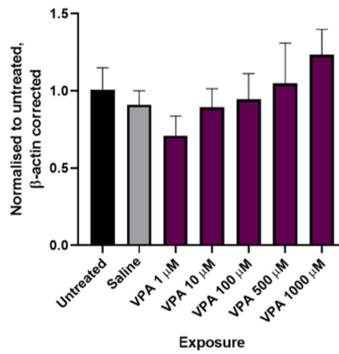
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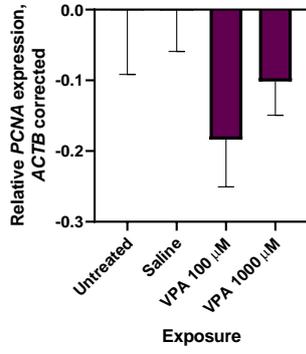
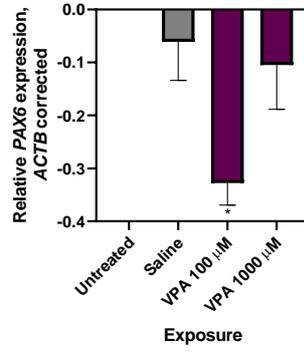
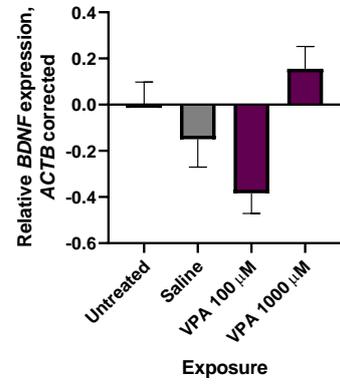
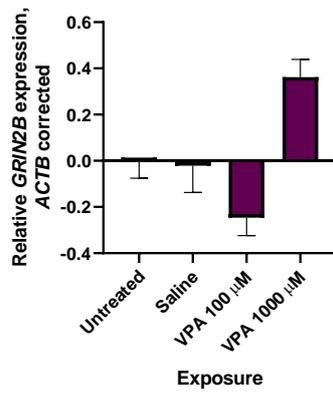
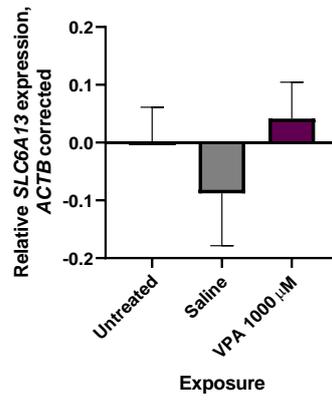
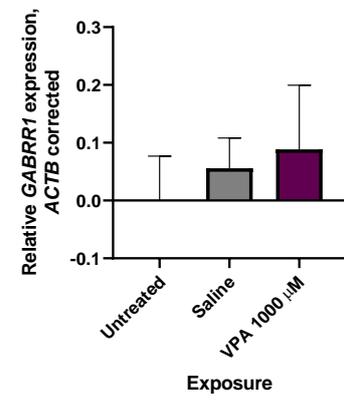


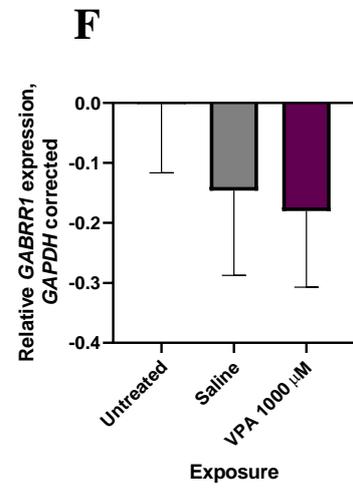
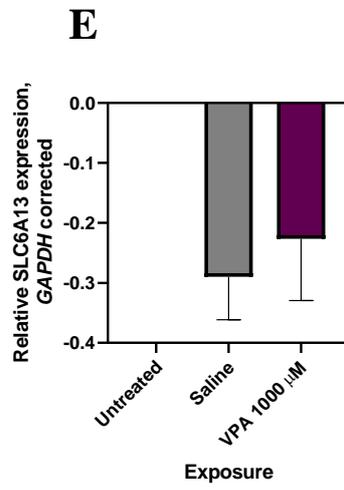
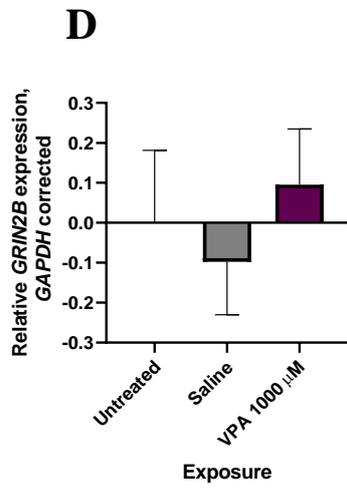
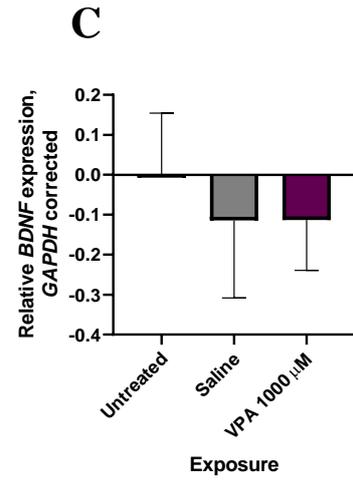
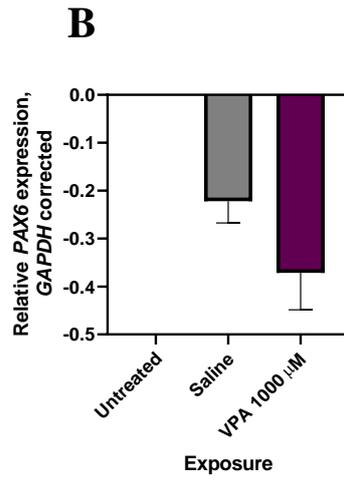
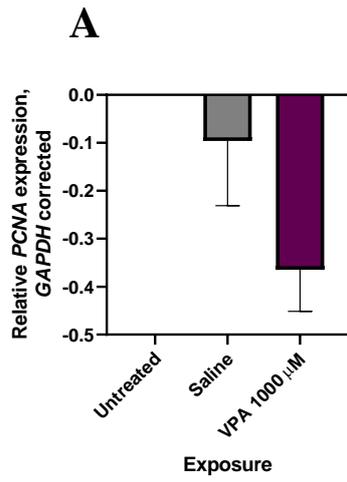
G

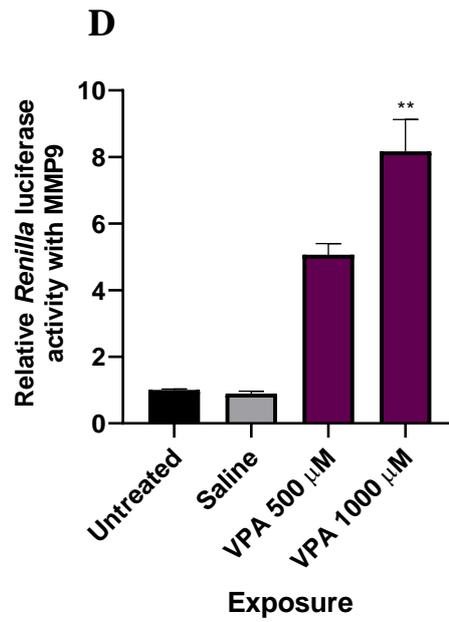
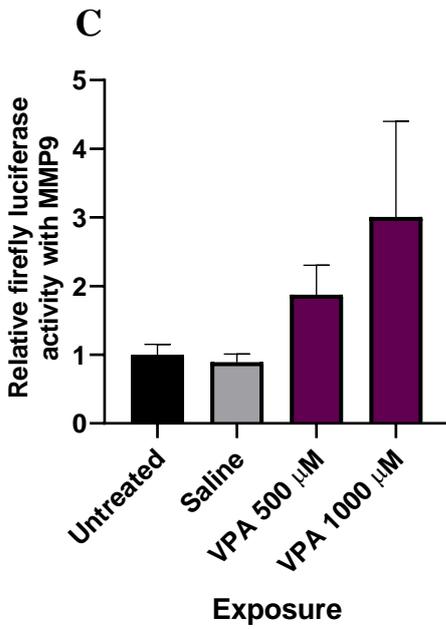
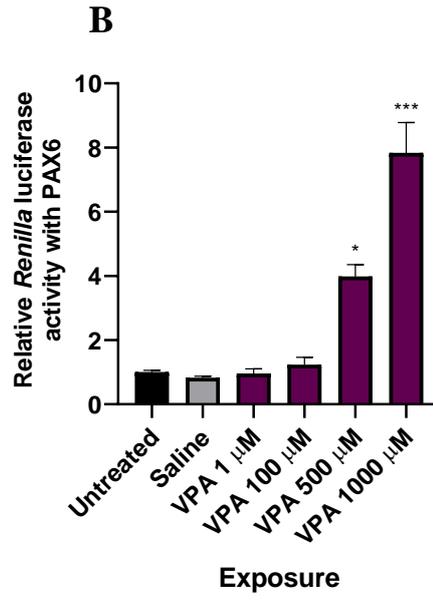
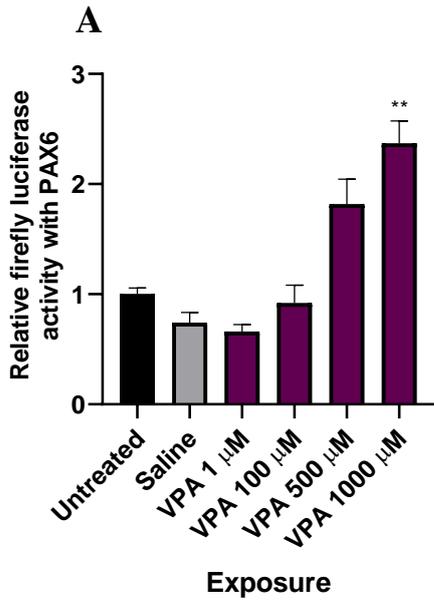


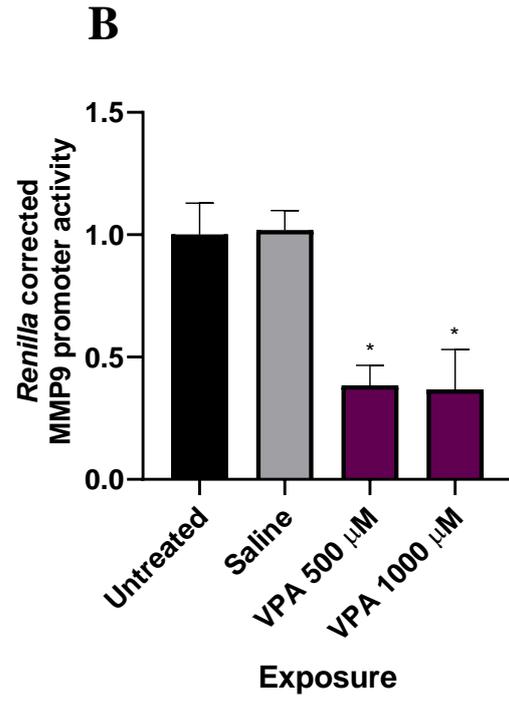
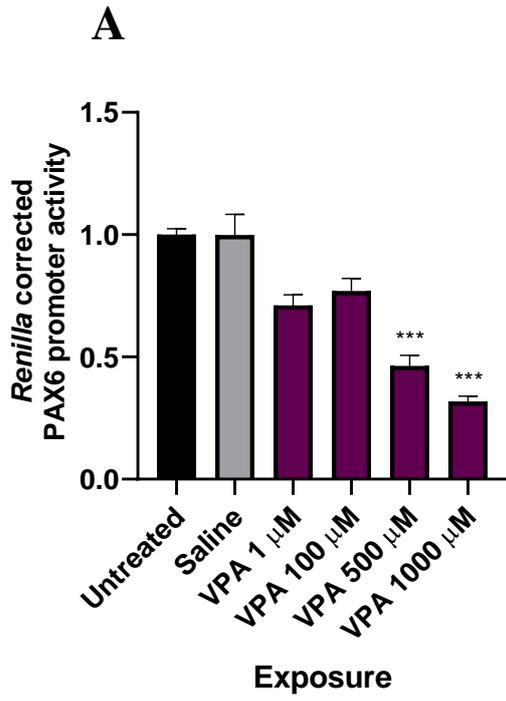
H



A**B****C****D****E****F**







3.2.7 LTG does not significantly affect gene expression when corrected with *GAPDH*

The exposure from one group of samples were, as mentioned earlier, affecting *ACTB*. Therefore, *GAPDH* was employed. A general difference exhibited is an increase in SEM compared to the results corrected with *ACTB*. Figure 3.12D-F (*GRIN2B*, *SLC6A13* and *GABRR1*) experienced the opposite result. *GAPDH* data can be found in Appendix III.

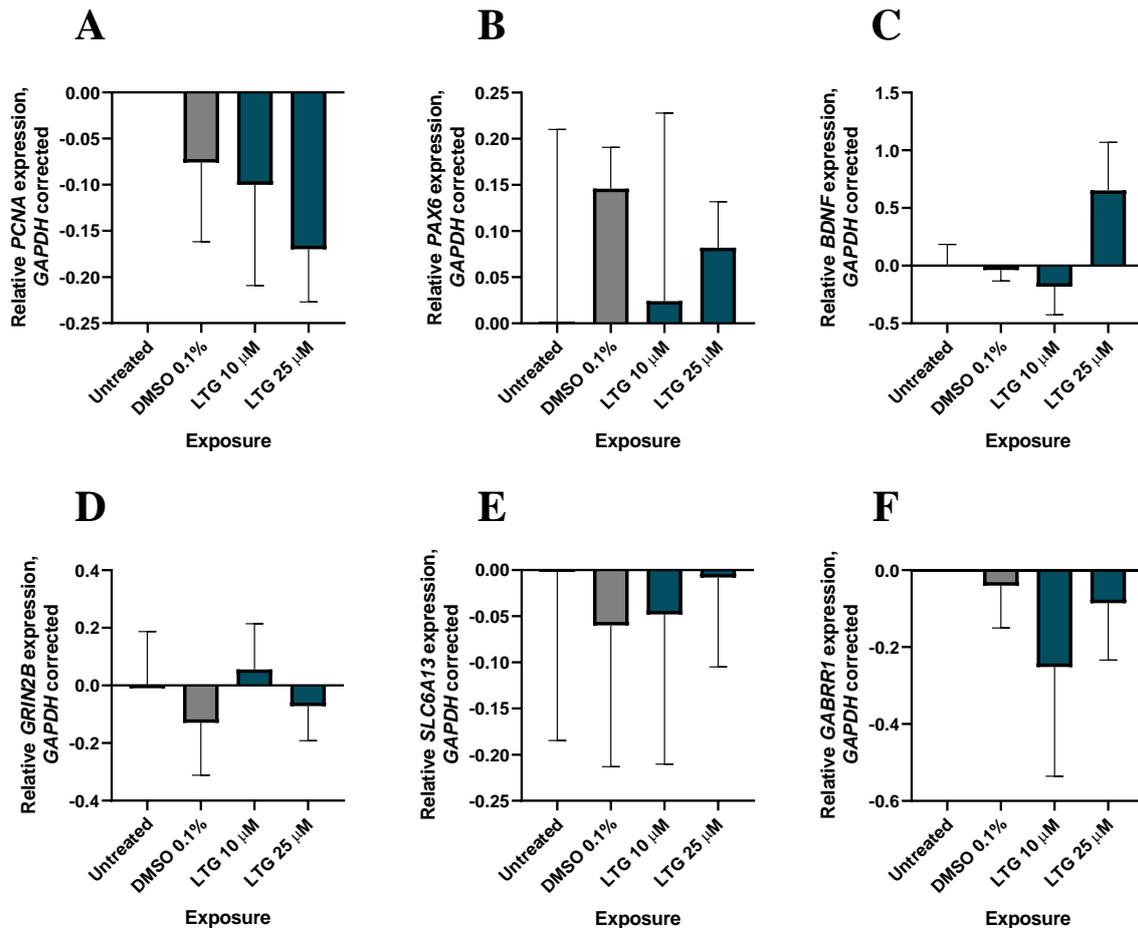


Figure 3.12 LTG does not significantly affect gene expression corrected with *GAPDH*. Chicken embryos were exposed to LTG 10 μ M, LTG 25 μ M or DMSO 0.1% on E16. The cerebellum was harvested on E17 and studied through RT-qPCR. Eggs from 1 experiment was used, with 5 chicken embryos per group. The data is displayed as *GAPDH* corrected values normalised with cerebella from untreated chicken embryos + SEM. **A)** *PCNA* expression from chicken embryo cerebella. **B)** *PAX6* expression from chicken embryo cerebella. **C)** *BDNF* expression from chicken embryo cerebella. **D)** *GRIN2B* expression from chicken embryo cerebella. **E)** *SLC6A13* expression from chicken embryo cerebella. **F)** *GABRR1* expression from chicken embryo cerebella. Statistical analysis was performed with One Way ANOVA Kruskal-Wallis post hoc test. N = 5. Note the values on the y-axis differ between graphs.

