



1 *Supplementary Materials*

2 **Lipid emulsion improves functional recovery in an**  
3 **animal model of stroke**

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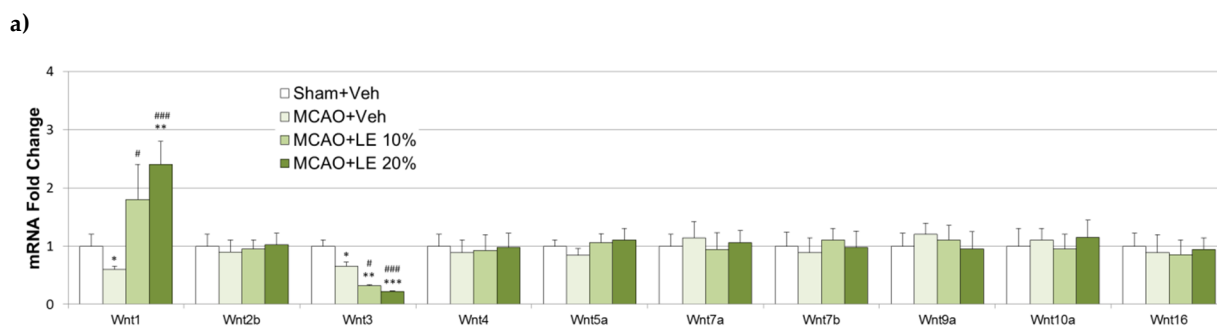
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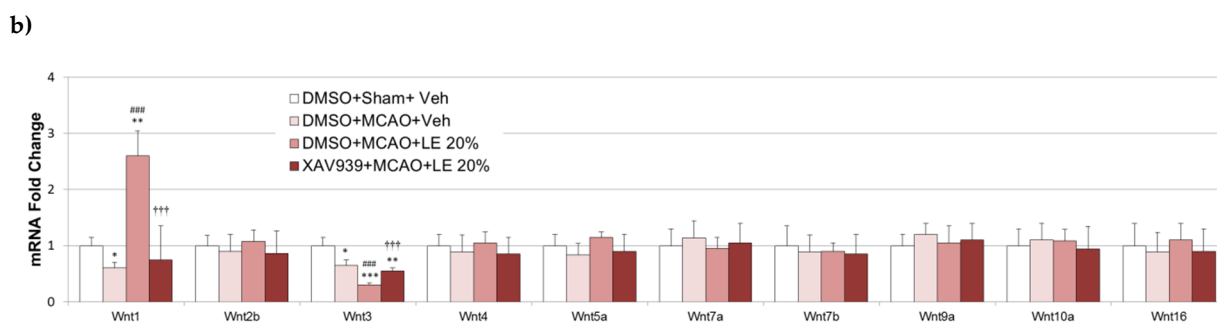
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**Supplementary Material S1. mRNA expression level of *Wnt* subfamilies.** (a) LE dosage-dependent mRNA expression level of *Wnt* subfamilies. The *Wnt1* mRNA expression of the MCAO+Veh group was significantly decreased compared to the Sham+Veh group. Significantly increased expression of *Wnt1* was expressed in the MCAO+LE 10% and MCAO+LE 20% groups compared to the MCAO+Veh group. *Wnt3* expressions were significantly lower in MCAO injury groups compared to the Sham+Veh group. Significantly decreased *Wnt3* expressions were observed in the MCAO+LE 10% and MCAO+LE 20% groups compared to the MCAO+Veh group. There was no significant difference in other *Wnt* subfamilies. Data are presented as mean  $\pm$  standard error of mean (SEM); n=8 for each group; \*P<0.05, \*\*P<0.01, \*\*\*P<0.001 vs Sham+Veh, #P<0.05, ###P<0.001 vs. MCAO+Veh, one-way analysis of variance (ANOVA) followed by Tukey's multiple comparison test. (b) mRNA expression level of DMSO or XAV939 treated experimental groups. The *Wnt1* mRNA expression of the DMSO+MCAO+Veh group was significantly decreased compared to the DMSO+Sham+Veh group. Significantly increased expression of *Wnt1* was expressed in the DMSO+MCAO+LE 20% group compared to the DMSO+MCAO+Veh group. There was no significant difference in *Wnt1* expression in the XAV939+MCAO+LE 20% group compared to the DMSO+MCAO+Veh group. *Wnt1* decreased significantly in the XAV939+MCAO+LE 20% group compared to the DMSO+MCAO+LE 20% group. *Wnt3* expressions were significantly lower in MCAO-injury groups compared to the DMSO+Sham+Veh group. Significantly decreased *Wnt3* expressions were observed in the DMSO+MCAO+LE 20% group compared to the DMSO+MCAO+Veh and XAV939+MCAO+LE 20% groups. There was no significant difference in other *Wnt* subfamilies. Data are presented as mean  $\pm$  standard error of mean (SEM); n=8 for each group; \*P<0.05, \*\*P<0.01, \*\*\*P<0.001 vs DMSO+Sham+Veh, ###P<0.001 vs. DMSO+MCAO+Veh, †††P<0.001 vs. DMSO+MCAO+LE 20%, one-way analysis of variance (ANOVA) followed by Tukey's multiple comparison test.



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