

*Supporting information for*

**Revealing antiepileptic effect of  $\alpha$ -asaronol on pentylenetetrazole-induced seizure rat using  
NMR-based metabolomics**

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**Table S1.** OPLS-DA correlation coefficients for metabolites in control (Con), PTZ-induced group (M),  $\alpha$ -asaronol-treated group (NOL) and  $\alpha$ -asarone-treated group (ONE)

Metabolite	Plasma			Brain tissue extract		
	M / Con	NOL/M	ONE/M	M / Con	NOL/ M	ONE/M
3-Hydroxybutyrate	-0.64	—	0.90			
Threonine	0.55		-0.80	-0.56	0.58	0.59
Myo-inositol				-0.68	-0.94	0.95
GABA				-0.92	0.97	0.62
O-acetyl-glycoprotein	0.55	—	-0.77			
$\alpha$ -Glucose	0.57	-0.80	-0.74			
$\beta$ -Glucose	0.53	-0.69	-0.83			
Choline				0.95	-0.81	-0.95
Glycine	0.53	—	0.83	—	—	-0.74
Dimethylglycine	0.62	—	-0.89			
Leucine	—	0.77	—	—	—	—
Glycerol	—	—	0.55	-0.87	-0.95	0.86
Alanine	-0.63	0.65	0.83	0.80	-0.88	-0.95
Glutamate	—	0.69	0.67	0.82	-0.89	-0.96
Aspartate				0.93	-0.90	-0.91
Betaine	0.55	-0.60	-0.90			
Lactate	-0.50	0.58	—	0.85	-0.87	-0.91
Lysine				0.83	-0.82	0.94
Phosphorylcholine				-0.82	0.83	0.85
Glutamine				-0.92	0.93	0.91
N-acetyl-glycoprotein	—	—	-0.70			
Taurine	—	0.50	0.76	0.84	-0.94	-0.97
Succinate	—	0.73	—			
Lipid	—	0.59	0.65			
Isoleucine	—	—	-0.66			
Valine	—	0.76	—	0.75	-0.85	-0.92
Acetate	—	—	—	—	—	-0.96
Xanthosine				—	0.77	0.78
Inosine				0.89	-0.66	—

Positive and negative signs indicate positive and negative correlation in the concentrations of metabolites, respectively. The Correlation Coefficient  $|p(\text{corr})|$  of 0.50 was used as the cutoff value for the significant difference evaluation ( $p < 0.05$ ). A dash (—) indicates that metabolites did not exhibit significant changes.