Table **S1** The correlations between the neurochemicals metabolism and behaviors after cerebral ischemia.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Brain areas | Neurochemicals(Fold of Cr) | Y maze | NOR for 1h | NOR for 24h |
| r | *P* | r | *P* | r | *P* |
| Right Hippocampus | NAA | 0.449282 | 0.002838 | 0.384716 | 0.011881 | 0.344169 | 0.025626 |
| mI | -0.324089 | 0.036275 | -0.364596 | 0.017601 | -0.267765 | 0.086453 |
| Cho | 0.251520 | 0.110346 | 0.135320 | 0.392857 | 0.116533 | 0.462376 |
| Glu | -0.510083 | 0.000559 | -0.486601 | 0.001085 | -0.343743 | 0.025821 |
| GABA | 0.321414 | 0.037934 | 0.22621 | 0.149721 | 0.050683 | 0.749909 |
| Left Hippocampus | NAA | 0.617441 | 0.000013 | 0.406073 | 0.007624 | 0.397746 | 0.009094 |
| mI | -0.355705 | 0.020786 | -0.237129 | 0.130520 | -0.070897 | 0.655483 |
| Cho | 0.329695 | 0.032990 | 0.188925 | 0.230820 | 0.352477 | 0.022056 |
| Glu | -0.362902 | 0.018174 | -0.628246 | 0.000008 | -0.466189 | 0.001860 |
| GABA | 0.201658 | 0.200313 | 0.310157 | 0.045610 | 0.173246 | 0.272553 |
| Right mPFC | NAA | 0.585635 | 0.000046 | 0.299800 | 0.053741 | 0.386798 | 0.011392 |
| mI | -0.281361 | 0.159605 | -0.239176 | 0.127135 | -0.192992 | 0.220749 |
| Cho | 0.255792 | 0.205635 | 0.038710 | 0.807705 | -0.010146 | 0.949152 |
| Glu | -0.418259 | 0.005843 | -0.370314 | 0.015778 | -0.405016 | 0.007798 |
| GABA | 0.386362 | 0.011493 | 0.469267 | 0.001718 | 0.465541 | 0.001891 |
| Mediodorsal Thalamus | NAA | 0.290112 | 0.062363 | 0.311044 | 0.044962 | 0.053972 | 0.734254 |
| mI | -0.246689 | 0.115272 | -0.240776 | 0.124535 | -0.260798 | 0.095283 |
| Cho | 0.268767 | 0.085237 | 0.128376 | 0.417810 | 0.031401 | 0.843509 |
| Glu | -0.331547 | 0.031961 | -0.545869 | 0.000185 | -0.499351 | 0.000761 |
| GABA | 0.373466 | 0.014844 | 0.365430 | 0.017325 | 0.270733 | 0.082891 |