Supplementary material

Quality measures of imaging mass spectrometry aids in revealing long-term striatal protein changes induced by neonatal exposure to the cyanobacterial toxin β-N-methylamino-L-alanine (BMAA)

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	Control	150 mg/kg		460 mg/kg	
m/z	**Intensity**	**Intensity**	**p-value**	**Intensity**	**p-value**
Nucleus accumbens					
5433	698±76	605±34	0.48	514±23	**0.027**
8723	847±80	693±46	0.14	610±35	**0.012**
15808[1]	349±22	298±20	0.10	267±10	**0.003**
15890[1]	288±6	251±22	**0.02**	277±16	0.056
Caudate putamen					
8723	729±36	657±26	0.22	591±12	**0.008**
13935	317±13	273±10	**0.03**	287±5	0.054
13952	399±19	335±16	**0.02**	350±13	0.054

Table 1. Affected ion peaks from nucleus accumbens and caudate putamen that could not be conclusively identified. Intergroup comparisons were tested using non-parametric Kruskal-Wallis ANOVA followed by post hoc analysis using the Mann-Whitney U-test. All ion peaks were significant ($p<0.05$) in the Kruskal-Wallis ANOVA. The table show peak intensity ±SEM and post hoc p-values when compared to vehicle control animals. Vehicle control: n = 6 animals; BMAA (150 mg/kg): n = 8 animals; BMAA (460 mg/kg): n = 7 animals

[1]Putative hemoglobin peaks.

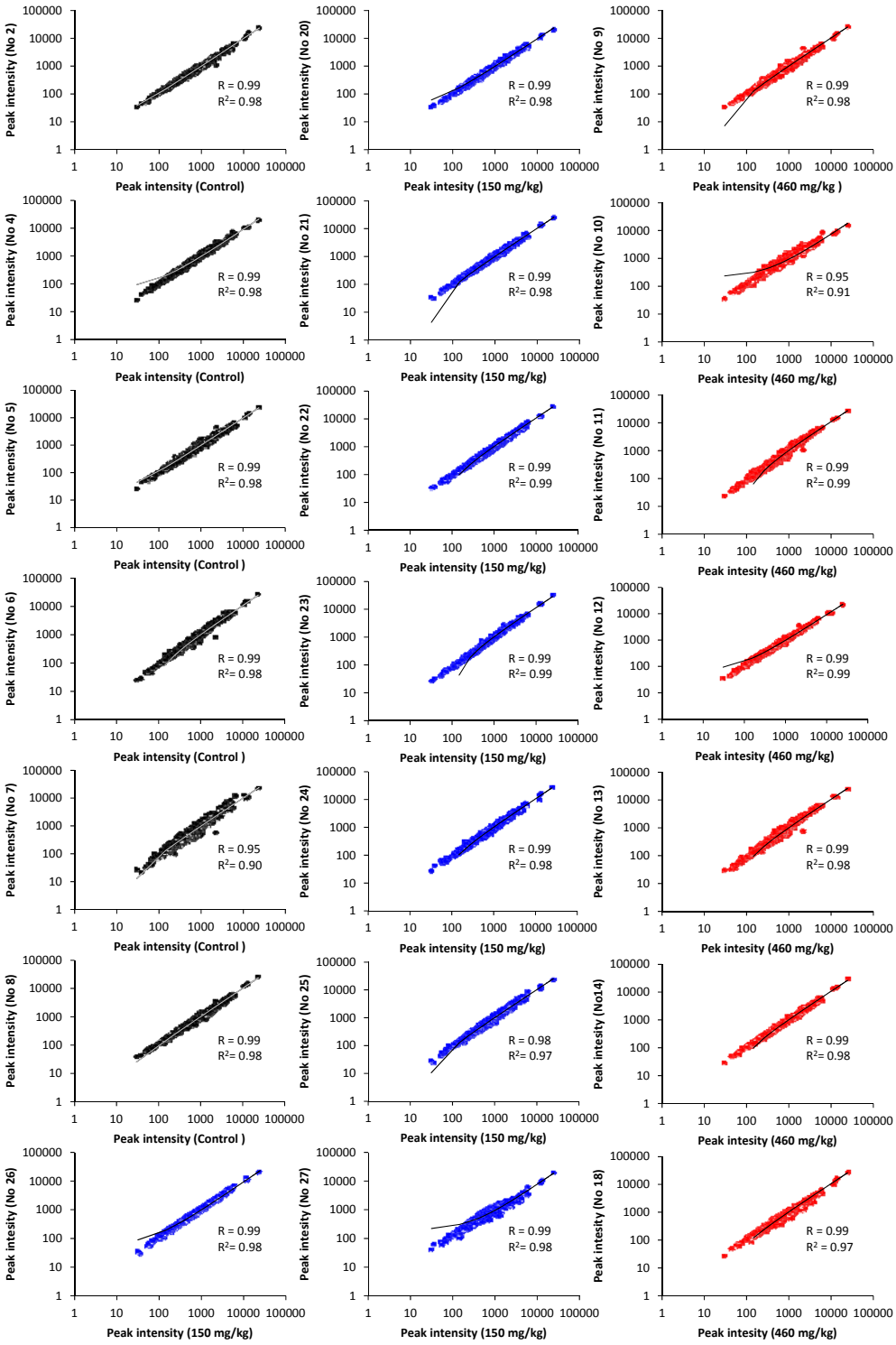

Figure 1. Intensity-intensity plots of peak intensities in the striatum of each animal vs their respective group average. Each dot represents one peak. Pearson's R coefficient was calculated for each animal and ranged from 0.95 to 0.99 (mean = 0.986). Vehicle control (black); 150 mg/kg BMAA (blue); 460 mg/kg BMAA (red).