

Supplemental Information

**Supplemental Table S1.** LC<sub>10</sub> and LC<sub>50</sub> molarity values to determine finalized dosing averages for Manganese Chloride, Zinc Chloride, and Copper Chloride after 24 h exposure on SH-SY5Y cells.

	MnCl <sub>2</sub> (μM)		ZnCl <sub>2</sub> (μM)		CuCl <sub>2</sub> (μM)	
	LC <sub>10</sub>	LC <sub>50</sub>	LC <sub>10</sub>	LC <sub>50</sub>	LC <sub>10</sub>	LC <sub>50</sub>
1	12.32	142.96	323.16	338.15	13.75	758.34
2	10.82	137.77	302.48	318.82	13.33	692.85
3	13.55	148.80	293.86	313.74	10.43	716.81
AVG ± STDEV	12.23 ± 1.37	143.18 ± 5.52	306.50 ± 15.06	323.60 ± 12.88	13.17 ± 2.66	722.67 ± 33.14

**Supplemental Figure S1.** Live metabolic oxygen consumption rate and extracellular acidification rate after 24 h treatments

