

Erratum to Machine Learning Prediction of Cyanobacterial Toxin (Microcystin) Toxicodynamics in Humans

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In this manuscript, which appeared in ALTEX (2020), 37(1), 24-36, doi:10.14573/altex.1904031, there were errors in Tables 1 and 3.

Tab. 1: IC₅₀ values of the tested MC congeners on rPPP1, hPPP2A and hPPP5

IC₅₀ were calculated after 5PL-nonlinear regression of at least 3 (hPPP2A) or 5 (rPPP1 and hPPP5) individual replicates using technical duplicates or triplicates; n.d. not determined (PPP2A no longer available, discontinued by manufacturer).

Congener	rPPP1			hPPP2A			hPPP5		
	IC ₅₀ (nM)	CI ₉₅ (nM)	R ²	IC ₅₀ (nM)	CI ₉₅ (nM)	R ²	IC ₅₀ (nM)	CI ₉₅ (nM)	R ²
MC-RR	1.5	1.3 - 1.8	0.95	1.6	1.4 - 1.7	0.99	11.7	8.3 - 16.5	0.96
MC-LR	0.3	0.2 - 0.4	0.93	0.5	0.4 - 0.5	0.99	5.1	4.0 - 6.6	0.97
MC-WR	1.3	1.2 - 1.5	0.99	n.d.	n.d.	n.d.	5.1	4.3 - 6.1	0.99
MC-YR	1.2	1.0 - 1.5	0.94	1.0	0.8 - 1.1	0.97	5.6	4.2 - 7.6	0.97
MC-LW	1.9	1.4 - 2.7	0.86	0.7	0.5 - 0.9	0.93	6.1	4.3 - 8.7	0.96
MC-LY	0.8	0.7 - 0.9	0.99	n.d.	n.d.	n.d.	4.1	3.1 - 5.4	0.97
MC-LA	2.0	1.5 - 2.6	0.90	1.4	1.3 - 1.4	0.99	4.7	3.5 - 6.3	0.97
MC-LF	1.2	1.0 - 1.4	0.97	0.7	0.7 - 0.8	0.99	2.5	2.0 - 3.2	0.98
MC-HilR	0.6	0.5 - 0.8	0.99	n.d.	n.d.	n.d.	4.2	3.5 - 5.1	0.99
MC-HtyR	0.7	0.6 - 0.8	0.99	n.d.	n.d.	n.d.	4.7	3.6 - 6.0	0.96
(Asp3)MC-RR	45.0	39.3 - 51.6	0.99	n.d.	n.d.	n.d.	167.1	131.8 - 211.8	0.97
(Asp3)MC-LR	0.9	0.7 - 1.0	0.99	n.d.	n.d.	n.d.	10.2	8.3 - 12.5	0.99
(Asp3,Dhb7)MC-RR	62.0	51.7 - 74.3	0.96	84.3	80.7 - 87.8	0.99	877.1	692.6 - 1111	0.97
MC-LY(Prg)	1.7	1.3 - 2.2	0.95	0.4	0.2 - 0.3	0.99	1.7	1.2 - 2.6	0.95
(DhaSePhe7)MC-LY(Prg)	1.9	1.6 - 2.4	0.97	0.9	0.7 - 1.1	0.94	18.2	10.7 - 31.1	0.91
(Enantio-Adda5)MC-LF	–	–	–	–	–	–	–	–	–
(Amba5)MC-LY(Prg)	520,817	449,800 - 603,048	0.98	2,135	1,991 - 2,291	0.99	54,063	37,431 - 78,087	0.95
(Anda5)MC-LY(Prg)	1,724	1,434 - 2,072	0.98	n.d.	n.d.	n.d.	2,420	1,690 - 3,467	0.96

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Tab. 3: MC congener toxicity equivalency factors (TEF)

Congener	PPP1		PPP2A		PPP5	
	IC ₅₀ (nM)	TEF	IC ₅₀ (nM)	TEF	IC ₅₀ (nM)	TEF
MC-RR	1.48	0.20	1.55	0.31	11.72	0.44
MC-LR	0.29	1.00	0.48	1.00	5.10	1.00
MC-WR	1.33	0.22	n.d.	n.d.	5.09	1.00
MC-YR	1.23	0.24	0.97	0.50	5.60	0.91
MC-LW	1.95	0.15	0.67	0.71	6.07	0.84
MC-LY	0.80	0.36	n.d.	n.d.	4.12	1.24
MC-LA	2.00	0.15	1.35	0.36	4.69	1.09
MC-LF	1.19	0.24	0.73	0.66	2.53	2.02
MC-HiIR	0.60	0.49	n.d.	n.d.	4.24	1.20
MC-HtyR	0.65	0.45	n.d.	n.d.	4.67	1.09
(Asp3)MC-RR	45.03	0.01	n.d.	n.d.	167.10	0.03
(Asp3)MC-LR	0.85	0.34	n.d.	n.d.	10.19	0.50
(Asp3,Dhb7)MC-RR	61.95	0.01	84.16	0.01	877.10	0.01
MC-LY(Prg)	1.69	0.17	0.27	1.76	1.73	2.95
(DhaSePhe7)MC-LY(Prg)	1.94	0.15	0.89	0.54	18.23	0.28
Enantio-LF	–	–	–	–	–	–
Amba	520,817	0.000	2,135	0.000	54,063	0.00
Anda	1,724	0.000	n.d.	n.d.	2,420	0.00

n.d., not determined