

Supplementary Material to “Quantitative determination of Cd in single hair strands using laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS)”

Dataset S1 – Complete cadmium content data in hair of 25 participants.

Participant ID	Exposure Group	Age (Years)	Scalp Distance (cm)	Cadmium Concentration (µg/g)	Baseline Concentration (µg/g) (10th Percentile)	Number of Peaks (within this distance)	Peaks per 10cm	Peak-to-Baseline Ratio	Peak Full Width at Half Maximum (cm)	Peak Area (µg·cm/g)	Intra-Individual CV (%)
P001	High Exposure	45	2	22.0	18.0	1	3.3	1.22	0.30	4.86	7.9
P001	High Exposure	45	3	19.5	18.0	1	3.3	1.22	0.30	4.86	7.9
P002	Medium Exposure	39	1	0.19	0.18	0	0.0	-	0.25	0.04	6.2
P002	Medium Exposure	39	2	0.23	0.18	1	2.0	1.28	0.25	0.04	6.2
P002	Medium Exposure	39	3	0.24	0.18	1	2.0	1.28	0.25	0.04	6.2
P002	Medium Exposure	39	4	0.22	0.18	0	2.0	1.28	0.25	0.04	6.2

Participant ID	Exposure Group	Age (Years)	Scalp Distance (cm)	Cadmium Concentration (µg/g)	Baseline Concentration (µg/g) (10th Percentile)	Number of Peaks (within this distance)	Peaks per 10cm	Peak-to-Baseline Ratio	Peak Full Width at Half Maximum (cm)	Peak Area (µg·cm/g)	Intra-Individual CV (%)
P002	Medium Exposure	39	5	0.18	0.18	0	2.0	1.28	0.25	0.04	6.2
P003	High Exposure	41	2	7.0	5.0	1	2.0	1.40	0.35	1.75	8.5
P003	High Exposure	41	3	6.5	5.0	1	2.0	1.40	0.35	1.75	8.5
P003	High Exposure	41	5	5.0	5.0	0	2.0	1.40	0.35	1.75	8.5
P004	High Exposure	38	2	25.0	20.0	1	3.3	1.25	0.40	7.20	9.1
P004	High Exposure	38	3	23.0	20.0	1	3.3	1.25	0.40	7.20	9.1
P005	Medium Exposure	43	2	0.5	0.3	1	3.3	1.67	0.20	0.05	5.8
P005	Medium Exposure	43	3	0.4	0.3	0	3.3	1.67	0.20	0.05	5.8
P006	High Exposure	47	2	22.0	18.0	1	3.3	1.22	0.38	5.85	8.8
P006	High Exposure	47	3	20.0	18.0	1	3.3	1.22	0.38	5.85	8.8

Participant ID	Exposure Group	Age (Years)	Scalp Distance (cm)	Cadmium Concentration (µg/g)	Baseline Concentration (µg/g) (10th Percentile)	Number of Peaks (within this distance)	Peaks per 10cm	Peak-to-Baseline Ratio	Peak Full Width at Half Maximum (cm)	Peak Area (µg·cm/g)	Intra-Individual CV (%)
P007	Medium Exposure	35	2	5.0	3.0	1	3.3	1.67	0.22	0.44	7.3
P007	Medium Exposure	35	3	4.0	3.0	0	3.3	1.67	0.22	0.44	7.3
P008	Medium Exposure	32	2	4.5	3.5	1	2.5	1.29	0.26	0.80	6.9
P008	Medium Exposure	32	3	4.2	3.5	0	2.5	1.29	0.26	0.80	6.9
P008	Medium Exposure	32	5	3.8	3.5	0	2.5	1.29	0.26	0.80	6.9
P009	High Exposure	51	2	30.0	22.0	1	2.5	1.36	0.45	11.25	10.2
P009	High Exposure	51	3	28.0	22.0	1	2.5	1.36	0.45	11.25	10.2
P009	High Exposure	51	5	22.0	22.0	0	2.5	1.36	0.45	11.25	10.2
P010	Low Exposure	34	2	0.7	0.2	1	3.3	3.50	0.15	0.03	4.5
P010	Low Exposure	34	3	0.5	0.2	0	3.3	3.50	0.15	0.03	4.5

Participant ID	Exposure Group	Age (Years)	Scalp Distance (cm)	Cadmium Concentration (µg/g)	Baseline Concentration (µg/g) (10th Percentile)	Number of Peaks (within this distance)	Peaks per 10cm	Peak-to-Baseline Ratio	Peak Full Width at Half Maximum (cm)	Peak Area (µg·cm/g)	Intra-Individual CV (%)
P011	Medium Exposure	40	1	4.5	2.5	1	3.3	1.80	0.30	1.50	8.2
P011	Medium Exposure	40	2	3.0	2.5	0	3.3	1.80	0.30	1.50	8.2
P011	Medium Exposure	40	3	2.5	2.5	0	3.3	1.80	0.30	1.50	8.2
P012	Medium Exposure	37	1	4.0	2.5	1	3.3	1.60	0.28	1.40	7.7
P012	Medium Exposure	37	2	3.0	2.5	0	3.3	1.60	0.28	1.40	7.7
P012	Medium Exposure	37	3	2.5	2.5	0	3.3	1.60	0.28	1.40	7.7
P013	High Exposure	44	2	25.0	18.0	1	2.0	1.39	0.42	8.40	9.4
P013	High Exposure	44	3	22.0	18.0	1	2.0	1.39	0.42	8.40	9.4
P013	High Exposure	44	4	18.0	18.0	0	2.0	1.39	0.42	8.40	9.4
P014	Low Exposure	32	3	0.20	0.17	0	0.0	-	0.14	0.02	4.2

Participant ID	Exposure Group	Age (Years)	Scalp Distance (cm)	Cadmium Concentration (µg/g)	Baseline Concentration (µg/g) (10th Percentile)	Number of Peaks (within this distance)	Peaks per 10cm	Peak-to-Baseline Ratio	Peak Full Width at Half Maximum (cm)	Peak Area (µg·cm/g)	Intra-Individual CV (%)
P014	Low Exposure	32	4	0.19	0.17	0	0.0	-	0.14	0.02	4.2
P015	Medium Exposure	42	3	0.23	0.18	1	2.5	1.28	0.18	0.03	5.1
P015	Medium Exposure	42	4	0.22	0.18	0	2.5	1.28	0.18	0.03	5.1
P016	High Exposure	49	2	25.0	20.0	1	3.3	1.25	0.40	8.00	8.6
P016	High Exposure	49	3	22.0	20.0	1	3.3	1.25	0.40	8.00	8.6
P017	Medium Exposure	36	3	0.24	0.18	1	3.3	1.33	0.20	0.04	5.5
P018	Low Exposure	33	3	0.22	0.18	0	0.0	-	0.19	0.03	5.3
P018	Low Exposure	33	5	0.18	0.18	0	0.0	-	0.19	0.03	5.3
P019	High Exposure	46	2	6.0	4.5	1	3.3	1.33	0.32	1.00	7.9
P019	High Exposure	46	3	5.5	4.5	0	3.3	1.33	0.32	1.00	7.9

Participant ID	Exposure Group	Age (Years)	Scalp Distance (cm)	Cadmium Concentration (µg/g)	Baseline Concentration (µg/g) (10th Percentile)	Number of Peaks (within this distance)	Peaks per 10cm	Peak-to-Baseline Ratio	Peak Full Width at Half Maximum (cm)	Peak Area (µg·cm/g)	Intra-Individual CV (%)
P020	High Exposure	53	3	28.0	22.0	1	2.0	1.27	0.48	10.50	10.8
P020	High Exposure	53	6	25.0	22.0	1	2.0	1.27	0.48	10.50	10.8
P021	Medium Exposure	34	1	4.0	2.5	1	3.3	1.60	0.29	1.45	8.1
P021	Medium Exposure	34	3	2.5	2.5	0	3.3	1.60	0.29	1.45	8.1
P022	Medium Exposure	39	2	4.0	2.5	1	3.3	1.60	0.31	1.55	7.8
P022	Medium Exposure	39	3	3.0	2.5	0	3.3	1.60	0.31	1.55	7.8
P023	Low Exposure	36	2	1.0	0.3	1	3.3	3.33	0.16	0.03	4.9
P023	Low Exposure	36	3	0.6	0.3	0	3.3	3.33	0.16	0.03	4.9
P024	High Exposure	48	2	22.0	18.0	1	3.3	1.22	0.41	7.75	9.3
P024	High Exposure	48	3	20.0	18.0	1	3.3	1.22	0.41	7.75	9.3

Participant ID	Exposure Group	Age (Years)	Scalp Distance (cm)	Cadmium Concentration (µg/g)	Baseline Concentration (µg/g) (10th Percentile)	Number of Peaks (within this distance)	Peaks per 10cm	Peak-to-Baseline Ratio	Peak Full Width at Half Maximum (cm)	Peak Area (µg·cm/g)	Intra-Individual CV (%)
P025	Low Exposure	37	2	5.0	1.5	1	3.3	3.33	0.23	0.69	6.5
P025	Low Exposure	37	3	4.0	1.5	0	3.3	3.33	0.23	0.69	6.5