

## Supplementary Table

**Supplementary Table S1.** The validity and reliability of urinary arsenic species, plasma selenium, and red blood cell lead and cadmium.

Metals or metalloids	Method	Detection limit ( $\mu\text{g/L}$ )	Recovery rate	SRM	CV%
Plasma selenium	Inductively coupled plasma mass spectrometry	0.193		SRMs (Seronorm Trace Elements Whole Blood Label II (SERO AS, Norway) contained $112 \pm 46$ mg/L of selenium, in our system $118.7 \pm 11.1$ mg/L ( $n = 7$ ))	9.8%
Red blood cell lead	Inductively coupled plasma mass spectrometry	0.32		SRMs (Seronorm Trace Elements Whole Blood L-2 (Lot 1103129)) certificate value $310.0$ $\mu\text{g/L}$ (range $186.0$ – $434.0$ $\mu\text{g/L}$ ), in our system $329.0 \pm 17.0$ $\mu\text{g/L}$	<10%
Red blood cell cadmium	Inductively coupled plasma mass spectrometry	0.07		SRMs (Seronorm Trace Elements Whole Blood L-2 (Lot 1103129) certificate value $5.8$ $\mu\text{g/L}$ (range: $5.4$ – $6.2$ $\mu\text{g/L}$ ), in our system $6.1 \pm 0.5$ $\mu\text{g/L}$	<10%
Arsenite ( $\text{As}^{\text{III}}$ )	High-performance liquid chromatography-hydride generator-atomic absorption spectrometry	0.02	93.8–102.2%	SRM (National Institute of Standards and Technology (NIST, Gaithersburg, MD) 2670 certificate value $480 \pm 100$ $\mu\text{g/L}$ inorganic arsenic, in our system $507 \pm 17$ $\mu\text{g/L}$ ( $n = 4$ ))	<10%
Arsenate ( $\text{As}^{\text{V}}$ )		0.10			
Monomethylarsonic acid ( $\text{MMA}^{\text{V}}$ )		0.07			
Dimethylarsinic acid ( $\text{DMA}^{\text{V}}$ )		0.06			