

Summary statistics - quantitative results

(Groups: measurement principle)

Filter: minimal size of groups n = 1

EQA round: TE1/18 - Trace Elements

Dead line: 24.04.2018

RoM = robust average	AV = assigned value	Dmax = acceptable percent difference
SD = standard deviation	CRV = certified reference value	LL = lower limit
CV = coefficient of variation	RV = reference value	UL = upper limit
Ntot = total number of participants	CVE = consensus value from experts	Neva = number of evaluated participants
Nout = number of results excluded before calculation	CVP = consensus value from all participants	Nsuc = number of successful participants
	CVPG = consensus value from participants groups	Srel = success (relative)
	U _{AV} = expanded uncertainty of the assigned value (k = 2)	

Test	[unit]	Comparability					Comparability							
		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}
Set of samples 1 (plasma)														
(350) Zn - plasma														
Samples and groups		[µmol/L]				19						19	17	89%
Sample A1		29,4	2,4	8,1	19	CVE	30,5	1,2	25%	22,8	38,2	19	18	95%
(1) F-AAS		30,0	2,8	9,2	10	0						10		
(5) Spectrophotometry		29,1	2,5	8,4	8	0						8		
(7) ICP MS, ICP OES		18,1			1	0						1		
Sample B1		18,2	1,7	9,6	19	CVE	19,1	0,70	25%	14,3	23,9	19	17	89%
(1) F-AAS		18,7	1,8	9,6	10	0						10		
(5) Spectrophotometry		17,8	1,9	11	8	0						8		
(7) ICP MS, ICP OES		11,7			1	0						1		
(351) Cu - plasma														
Samples and groups		[µmol/L]				19						19	18	95%
Sample A1		23,1	2,0	8,7	19	CVE	23,6	1,1	25%	17,7	29,5	19	18	95%
(1) F-AAS		23,1	3,1	13	4	0						4		
(2) ET-AAS		23,0	1,7	7,4	6	0						6		
(5) Spectrophotometry		23,1	3,0	13	8	0						8		
(7) ICP MS, ICP OES		22,7			1	0						1		
Sample B1		16,8	1,7	9,9	19	CVE	17,3	0,88	25%	12,9	21,7	19	18	95%
(1) F-AAS		17,2	2,4	14	4	0						4		
(2) ET-AAS		16,3	1,4	8,7	6	0						6		
(5) Spectrophotometry		16,5	2,7	16	8	0						8		
(7) ICP MS, ICP OES		15,9			1	0						1		
(352) Mn - plasma														
Samples and groups		[nmol/L]				3						3	1	33%
Sample A1		522	43	8,3	3	CVE	481	25	25%	360	602	3	3	100%
(2) ET-AAS		512	50	9,8	2	0						2		
(7) ICP MS, ICP OES		542			1	0						1		
Sample B1		301	37	12	3	CVE	248	18	25%	186	310	3	1	33%
(2) ET-AAS		285	35	12	2	0						2		
(7) ICP MS, ICP OES		333			1	0						1		
(355) Se - plasma														
Samples and groups		[µmol/L]				6						6	5	83%
Sample A1		2,81	0,22	7,7	6	CVE	2,76	0,14	25%	2,07	3,45	6	5	83%
(2) ET-AAS		2,64	1,2	44	4	0						4		
(4) Hydride AAS		2,85			1	0						1		
(7) ICP MS, ICP OES		2,81			1	0						1		
Sample B1		1,39	0,19	13	6	CVE	1,46	0,092	25%	1,09	1,83	6	5	83%
(2) ET-AAS		1,28	0,44	34	4	0						4		
(4) Hydride AAS		1,51			1	0						1		
(7) ICP MS, ICP OES		1,49			1	0						1		
(357) Cr - plasma														
Samples and groups		[nmol/L]				2						2	1	50%
Sample A1		702	270	38	2	CVE	973	62	25%	729	1220	2	1	50%
(2) ET-AAS		969			1	0						1		
(7) ICP MS, ICP OES		434			1	0						1		
Sample B1		80,5	34	43	2	CVE	106	7,7	25%	79,5	133	2	1	50%
(2) ET-AAS		115			1	0						1		
(7) ICP MS, ICP OES		46,2			1	0						1		
(361) Al - plasma														
Samples and groups		[µmol/L]				3						3	2	67%
Sample A1		4,05	0,27	6,6	3	CVE	4,13	0,13	25%	3,09	5,17	3	3	100%
(2) ET-AAS		4,25	0,005	0,12	2	0						2		
(7) ICP MS, ICP OES		3,67			1	0						1		
Sample B1		3,98	1,3	32	3	CVE	2,95	0,16	25%	2,21	3,69	3	2	67%
(2) ET-AAS		3,08	0,075	2,4	2	0						2		
(7) ICP MS, ICP OES		5,79			1	0						1		

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Test	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability							
							AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}
Set of samples 2 (blood)														
(353) Cd - blood		[nmol/L]			2							2	1	50%
Samples and groups														
Sample A2		4,91	0,19	3,9	2		CVE	5,16	0,44	25%	3,87	6,45	2	2 100%
(2) ET-AAS		5,10			1	0							1	
(7) ICP MS, ICP OES		4,72			1	0							1	
Sample B2		34,4	7,0	20	2		CVE	40,9	2,7	25%	30,6	51,2	2	1 50%
(2) ET-AAS		41,4			1	0							1	
(7) ICP MS, ICP OES		27,4			1	0							1	
(354) Pb - blood		[nmol/L]			5								5	5 100%
Samples and groups														
Sample A2		142	8,2	5,8	5		CVE	148	7,4	25%	111	185	5	5 100%
(2) ET-AAS		148	9,8	6,6	3	0							3	
(3) Electrochemical m.		144			1	0							1	
(7) ICP MS, ICP OES		135			1	0							1	
Sample B2		387	11	2,9	5		CVE	397	17	25%	297	497	5	5 100%
(2) ET-AAS		398	16	3,9	3	0							3	
(3) Electrochemical m.		380			1	0							1	
(7) ICP MS, ICP OES		379			1	0							1	
(356) Hg - blood		[nmol/L]			3								3	2 67%
Samples and groups														
Sample A2		6,66	2,0	29	3		CVE	5,28	0,50	25%	3,96	6,6	3	2 67%
(0) Not specified		4,83			1	0							1	
(2) ET-AAS		5,78			1	0							1	
(7) ICP MS, ICP OES		9,38			1	0							1	
Sample B2		37,8	10	28	3		CVE	42,4	4,0	25%	31,8	53	3	2 67%
(0) Not specified		51,2			1	0							1	
(2) ET-AAS		36,6			1	0							1	
(7) ICP MS, ICP OES		25,6			1	0							1	

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End of report

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