Summary statistics - quantitative results

(Groups: measurement principle)

Filter: Slovakia, minimal size of the groups n = 5

EQA round: AM2/22 - Basic Clinical Chemistry - Urine

Deadline: 14.10.2022

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 the 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]	RoM	SD	CV [%]	N_{tot}	N_{out}	Comparability	AV	U_{AV}	D_{max}	LL	UL	N_{eva}	N_{suc}	S_{rel}
(61) Sodium	[mmol/L]				50								50	49	98%
Samples and groups															
Sample A		170	2,2	1,3	50		CVP	170	0,46	11%	151	189	50	49	98%
(2) Indirect ISE		170	2,2	1,3	47	0							47		
Other					3	0	3x 3						3		
Sample B		67,2	1,3	1,9	50		CVP	67,6	0,23	11%	60,1	75,1	50	49	98%
(2) Indirect ISE		67,1	1,3	1,9	47	0							47		
Other					3	0	3x 3						3		
(62) Potassium	[mmol/L]				50								50	49	98%
Samples and groups															
Sample A		64,4	2,2	3,5	50		CVP	64,5	0,32	15%	54,8	74,2	50	49	98%
(2) Indirect ISE		64,4	2,2	3,5	47	0							47		
Other					3	0	3x 3						3		
Sample B		25,1	0,76	3,0	50		CVP	25,1	0,097	15%	21,3	28,9	50	49	98%
(2) Indirect ISE		25,1	0,79	3,1	47	0							47		
Other					3	0	3x 3						3		
(63) Chloride	[mmol/L]				50								50	49	98%
Samples and groups															
Sample A		196	4,3	2,2	50		CVP	195	0,69	14%	167	223	50	49	98%
(3) Indirect ISE		196	4,1	2,1	46	0							46		
Other					4	0	1x 2, 3x 4						4		
Sample B		67,5	2,8	4,1	50		CVP	67,2	0,54	14%	57,7	76,7	50	49	98%
(3) Indirect ISE		67,6	2,7	4,0	46	0							46		
Other					4	0	1x 2, 3x 4						4		
(64) Calcium	[mmol/L]				50								50	48	96%
Samples and groups															
Sample A		2,99	0,12	4,0	50		CVP	3	0,019	18%	2,46	3,54	50	48	96%
(2) Phot. with o-cresol.		3,05	0,084	2,7	10	0							10		
(3) Phot. with arsenazo		2,96	0,13	4,6	30	0							30		
(4) Photomet. with NM-BAPTA		3,02	0,11	3,6	10	0							10		
Sample B		1,96	0,089	4,5	50		CVP	1,99	0,014	18%	1,63	2,35	50	49	98%
(2) Phot. with o-cresol.		1,96	0,11	5,5	10	0							10		
(3) Phot. with arsenazo		1,95	0,074	3,8	30	0							30		
(4) Photomet. with NM-BAPTA		2,01	0,076	3,8	10	0							10		
(73) Magnesium	[mmol/L]				50								50	49	98%
Samples and groups															
Sample A		5,01	0,20	3,9	50		CVP	5,02	0,033	20%	4,01	6,03	50	49	98%
(2) Photometry with coloured dyes		5,00	0,21	4,2	39	0							39		
(4) Enzymatic UV method		5,03	0,18	3,5	11	0							11		
Sample B		2,69	0,12	4,5	50		CVP	2,69	0,019	20%	2,15	3,23	50	49	98%
(2) Photometry with coloured dyes		2,70	0,12	4,3	39	0							39		
(4) Enzymatic UV method		2,66	0,12	4,4	11	0							11		
(65) Inorganic phosphate	[mmol/L]				50								50	49	98%
Samples and groups															
Sample A		13,9	0,55	3,9	50		CVP	14,1	0,091	18%	11,5	16,7	50	49	98%
(1) UV-molybdate method		13,9	0,56	4,0	48	0							48		
Other					2	0	1x 2, 1x 3						2		
Sample B		7,00	0,38	5,4	50		CVP	7,07	0,056	18%	5,79	8,35	50	49	98%
(1) UV-molybdate method		7,01	0,39	5,6	48	0							48		
Other					2	0	1x 2, 1x 3						2		
(66) Osmolality	[mmol/kg]				21								21	19	90%
Samples and groups															
Sample A		801	7,80	0,97	21		CVP	798	1,4	4%	766	830	21	19	90%
(1) Osmometer		802	7,10	0,89	20	0							20		
Other					1	0	1x 99						1		
Sample B		340	2,80	0,84	21		CVP	339	0,69	4%	325	353	21	19	90%

Summary statistics - quantitative results

(Groups: measurement principle)

Filter: Slovakia, minimal size of the groups n = 5

EQA round: AM2/22 - Basic Clinical Chemistry - Urine

Deadline: 14.10.2022

Test	[unit]	RoM	SD	CV [%]	N_{tot}	N_{out}	Comparability	AV	U_{AV}	D_{max}	LL	UL	N_{eva}	N_{suc}	S_{rel}
(66) Osmolality	[mmol/kg]				21								21	19	90%
Samples and groups															
Sample B		340	2,8	0,84	21		CVP	339	0,69	4%	325	353	21	19	90%
(1) Osmometer		340	2,5	0,74	20	0							20		
Other					1	0	1x 99						1		
(67) Urea	[mmol/L]				50								50	48	96%
Samples and groups															
Sample A		307	13	4,2	50		CVP	308	2,1	17%	255	361	50	48	96%
(1) UV enzymatic m.(GMD)		307	13	4,3	49	0							49		
Other					1	0	1x 2						1		
Sample B		147	7,0	4,7	50		CVP	147	1,1	17%	122	172	50	48	96%
(1) UV enzymatic m.(GMD)		147	7,1	4,8	49	0							49		
Other					1	0	1x 2						1		
(68) Creatinine	[mmol/L]				50								50	49	98%
Samples and groups															
Sample A		12,5	0,44	3,5	50		CVP	12,5	0,077	16%	10,5	14,5	50	49	98%
(1) Jaffe		12,5	0,59	4,8	25	0							25		
(3) Enzyme		12,5	0,35	2,8	25	0							25		
Sample B		5,79	0,22	3,8	50		CVP	5,82	0,037	16%	4,88	6,76	50	49	98%
(1) Jaffe		5,67	0,35	6,2	25	0							25		
(3) Enzyme		5,85	0,17	2,8	25	0							25		
(69) Uric acid	[mmol/L]				50								50	49	98%
Samples and groups															
Sample A		0,697	0,036	5,1	50		CVP	0,696	,0055	23%	0,535	0,857	50	49	98%
(2) Enzyme-photomet. m.		0,697	0,036	5,1	50	0							50		
Sample B		0,320	0,021	6,6	50		CVP	0,314	,0039	23%	0,241	0,387	50	49	98%
(2) Enzyme-photomet. m.		0,320	0,021	6,6	50	0							50		
(70) Glucose	[mmol/L]				48								48	47	98%
Samples and groups															
Sample A		16,2	0,41	2,5	48		CVP	16,4	0,066	22%	12,7	20,1	48	47	98%
(1) GOD photometry		16,2	0,78	4,8	8	0							8		
(3) Method with hexokinase		16,3	0,38	2,3	38	0							38		
Other					2	0	2x 2						2		
Sample B		1,49	0,061	4,1	48		CVP	1,5	,0086	22%	1,17	1,83	48	47	98%
(1) GOD photometry		1,57	0,19	12	8	0							8		
(3) Method with hexokinase		1,49	0,057	3,8	38	0							38		
Other					2	0	2x 2						2		
(71) Total protein	[g/L]				50								43	42	98%
Samples and groups															
Sample A		0,762	0,15	20	50								43	42	98%
(2) Pyrogallol red; (58) Beckman Coulter (AU)		0,850	0,02	2,4	13	0	CVPG	0,852	0,012	30%	0,596	1,11	13		
(4) Turbidimetry; (1) Abbott		0,892	0,042	4,7	8	0	CVPG	0,904	0,011	30%	0,632	1,18	8		
(4) Turbidimetry; (60) Roche		0,582	0,031	5,3	12	0	CVPG	0,6	0,011	30%	0,42	0,78	12		
Other					17	0	2x 1/1, 1x 1/12, 2x 1/58, 1x 1/60, 1x 1/162, 1x 1/178, 2x 2/12, 2x 2/60, 3x 2/75, 1x 2/179, 1x 4/77						10		
Sample B		0,226	0,088	39	50								43	42	98%
(2) Pyrogallol red; (58) Beckman Coulter (AU)		0,282	0,009	3,3	13	0	CVPG	0,285	,0047	30%	0,199	0,371	13		
(4) Turbidimetry; (1) Abbott		0,278	0,019	6,7	8	0	CVPG	0,278	,0047	30%	0,194	0,362	8		
(4) Turbidimetry; (60) Roche		0,113	0,014	13	12	0	CVPG	0,123	,0035	30%	0,086	0,16	12		
Other					17	0	2x 1/1, 1x 1/12, 2x 1/58, 1x 1/60, 1x 1/162, 1x 1/178, 2x 2/12, 2x 2/60, 3x 2/75, 1x 2/179, 1x 4/77						10		
(72) pH	[-]				8								8	8	100%
Samples and groups															
Sample A		6,75	0,15	2,2	8		CVP	6,71	0,053	5%	6,37	7,05	8	8	100%
(1) Glass electrode		6,75	0,15	2,2	8	0							8		
Sample B		6,71	0,14	2,1	8		CVP	6,7	0,068	5%	6,36	7,04	8	8	100%
(1) Glass electrode		6,71	0,14	2,1	8	0							8		