

Summary statistics - quantitative results

(Groups: measurement principle, manufacturer of kit)

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

EQA round: TM4/22 - Tumour Markers

Deadline: 10.10.2022

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]	Comparability											
		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}
(208) beta-2-microglobulin					14						12	12	100%
Samples and groups	[mg/L]												
Sample A		4,62	0,37	8,1	14						12	12	100%
Other					14	0					12	12	100%
							1x 1/36, 1x 4/164, 1x 6/1, 1x 6/5, 4x 6/58, 2x 6/60, 1x 6/91, 1x 6/162, 2x 6/179						
Sample B		1,23	0,19	16	14						12	12	100%
Other					14	0					12	12	100%
							1x 1/36, 1x 4/164, 1x 6/1, 1x 6/5, 4x 6/58, 2x 6/60, 1x 6/91, 1x 6/162, 2x 6/179						
(185) AFP					25						25	24	96%
Samples and groups	[µg/L]												
Sample A		31,9	3,8	12	25						25	25	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		29,3	4,5	15	6	0	CVPG	29,7	0,67	20%	23,7	35,7	6
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		34,1	2,1	6,1	14	0	CVPG	33,2	0,26	20%	26,5	39,9	14
Other					5	0							5
								1x 3/24, 2x 4/1, 1x 4/162, 1x 4/179					
Sample B		22,8	2,4	11	25						25	24	96%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		21,6	1,4	6,3	6	0	CVPG	21	0,44	20%	16,8	25,2	6
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		23,8	1,5	6,5	14	0	CVPG	23,1	0,17	20%	18,4	27,8	14
Other					5	0							5
								1x 3/24, 2x 4/1, 1x 4/162, 1x 4/179					
(181) CA 15-3					24						24	24	100%
Samples and groups	[kU/L]												
Sample A		13,3	1,6	12	24						24	24	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		14,2	0,94	6,6	14	0	CVPG	13,6	0,11	18%	11,1	16,1	14
Other					10	0							10
								1x 3/24, 3x 4/1, 4x 4/12, 1x 4/162, 1x 4/179					
Sample B		32,9	4,1	12	24						24	24	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		32,6	2,0	6,3	14	0	CVPG	31,4	0,21	18%	25,7	37,1	14
Other					10	0							10
								1x 3/24, 3x 4/1, 4x 4/12, 1x 4/162, 1x 4/179					
(182) CA 19-9					26						26	26	100%
Samples and groups	[kU/L]												
Sample A		54,4	11	20	26						26	26	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		60,3	0,59	0,98	6	0	CVPG	62,6	1,6	20%	50	75,2	6
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		47,9	4,1	8,6	16	0	CVPG	46,8	0,46	20%	37,4	56,2	16
Other					4	0							4
								2x 4/1, 1x 4/162, 1x 4/179					
Sample B		6,79	1,3	19	26						26	26	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		5,50	0,44	8,1	6	0	CVPG	5,42	0,15	±2,8	2,62	8,22	6
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		7,49	0,58	7,7	16	0	CVPG	7,32	0,10	±2,88	4,52	10,2	16
Other					4	0							4
								2x 4/1, 1x 4/162, 1x 4/179					
(183) CA 72-4					23						22	20	91%
Samples and groups	[kU/L]												
Sample A		10,2	1,2	12	23						22	22	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		10,1	1,1	10	22	0	CVPG	10,3	0,20	22%	8,03	12,6	22
Other					1	0							0
								1x 1/185					
Sample B		2,15	0,17	7,9	23						22	20	91%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		2,13	0,14	6,6	22	0	CVPG	2,14	0,032	22%	1,66	2,62	22
Other					1	0							0
								1x 1/185					
(180) CA 125					27						27	27	100%
Samples and groups	[kU/L]												
Sample A		10,2	1,1	11	27						27	27	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		10,4	0,65	6,2	16	0	CVPG	9,96	0,061	±2,04	7,96	12	16
Other					11	0							11
								1x 3/24, 1x 3/25, 4x 4/1, 3x 4/12, 1x 4/162, 1x 4/179					
Sample B		10,9	1,4	12	27						27	27	100%

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Test	[unit]						Comparability							
		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}
(180) CA 125					27							27	27	100%
Samples and groups	[kU/L]													
Sample B		10,9	1,4	12	27							27	27	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		11,0	0,65	5,9	16	0	CVPG	10,6	0,070	20%	8,48	12,8	16	
Other					11	0							11	
								1x 3/24, 1x 3/25, 4x 4/1, 3x 4/12, 1x 4/162, 1x 4/179						
(189) CEA					27							27	26	96%
Samples and groups	[µg/L]													
Sample A		17,5	2,2	12	27							27	26	96%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		19,0	0,46	2,4	5	0	CVPG	19,7	0,40	16%	16,5	22,9	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		16,2	0,94	5,8	15	0	CVPG	15,9	0,084	16%	13,3	18,5	15	
Other					7	0							7	
								3x 4/1, 1x 4/162, 3x 4/179						
Sample B		11,4	1,5	13	27							27	27	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		12,8	0,37	2,9	5	0	CVPG	13,2	0,30	16%	11	15,4	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		10,5	0,41	3,9	15	0	CVPG	10,2	0,053	16%	8,56	11,9	15	
Other					7	0							7	
								3x 4/1, 1x 4/162, 3x 4/179						
(184) CYFRA 21-1					22							22	22	100%
Samples and groups	[µg/L]													
Sample A		15,2	0,90	5,9	22							22	22	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		15,3	0,70	4,6	17	0	CVPG	15,2	0,14	18%	12,4	18	17	
Other					5	0							5	
								1x 3/24, 4x 4/1						
Sample B		1,02	0,25	24	22							22	22	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		1,14	0,076	6,7	17	0	CVPG	1,08	0,021 ± 0,24	0,846	1,32	17	17	
Other					5	0							5	
								1x 3/24, 4x 4/1						
(186) hCG					29							29	29	100%
Samples and groups	[U/L]													
Sample A		1,07	0,35	33	29							29	29	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		1,35	0,082	6,1	8	0	CVPG	1,4	0,044 ± 1,44	0	2,84	8	8	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		0,724	0,13	18	8	0	CVPG	0,742	0,020 ± 1,448	0	2,19	8	8	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (210) Roche HCG STAT		1,06	0,089	8,4	8	1	CVPG	1,04	0,060 ± 1,44	0	2,48	8	8	
Other					5	0							5	
								1x 3/25, 2x 4/1, 1x 4/162, 1x 4/179						
Sample B		105	13	12	29							29	29	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		98,5	4,2	4,2	8	0	CVPG	102	1,6	18%	83,6	121	8	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		125	14	11	8	0	CVPG	125	0,79	18%	102	148	8	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (210) Roche HCG STAT		100	9,6	9,6	8	0	CVPG	99,3	4,1	18%	81,4	118	8	
Other					5	0							5	
								1x 3/25, 2x 4/1, 1x 4/162, 1x 4/179						
(206) Calcitonin					8							7	6	86%
Samples and groups	[ng/L]													
Sample A		25,1	2,5	10	8							7	6	86%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		25,0	2,3	9,2	7	0	CVPG	24,5	0,48	27%	17,8	31,2	7	
Other					1	0							0	
								1x 1/36						
Sample B		30,4	2,4	7,8	8							7	6	86%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		29,8	1,5	4,9	7	0	CVPG	29,5	0,48	27%	21,5	37,5	7	
Other					1	0							0	
								1x 1/36						
(194) NSE					22							22	22	100%
Samples and groups	[µg/L]													
Sample A		5,98	0,78	13	22							22	22	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		5,89	0,69	12	19	0	CVPG	5,63	0,10	30%	3,94	7,32	19	
Other					3	0							3	
								2x 3/24, 1x 4/1						
Sample B		67,8	6,7	9,9	22							22	22	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		68,2	6,7	9,8	19	0	CVPG	69,1	0,90	30%	48,3	89,9	19	
Other					3	0							3	
								2x 3/24, 1x 4/1						

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		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}
(191) PSA					30							30	29	97%
Samples and groups	[µg/L]													
Sample A		3,58	0,30	8,4	30							30	29	97%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		3,84	0,16	4,2	5	0	CVPG	3,93	0,067	15%	3,34	4,52		5
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		3,70	0,17	4,5	14	0	CVPG	3,63	0,017	15%	3,08	4,18		14
Other					11	0								11
								4x 4/1, 1x 4/162, 4x 4/179, 2x 4/195						
Sample B		11,5	1,1	9,5	30							30	30	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		12,7	0,96	7,6	5	0	CVPG	12,8	0,23	15%	10,8	14,8		5
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		11,8	0,60	5,1	14	0	CVPG	11,6	0,056	15%	9,86	13,4		14
Other					11	0								11
								4x 4/1, 1x 4/162, 4x 4/179, 2x 4/195						
(198) free-PSA					24							24	24	100%
Samples and groups	[µg/L]													
Sample A		2,28	0,28	12	24							24	24	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		2,10	0,11	5,4	11	0	CVPG	2,09	0,014	16%	1,75	2,43		11
Other					13	0								13
								4x 4/1, 3x 4/12, 4x 4/179, 2x 4/195						
Sample B		8,07	1,1	14	24							24	24	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		7,30	0,39	5,4	11	0	CVPG	7,18	0,050	16%	6,03	8,33		11
Other					13	0								13
								4x 4/1, 3x 4/12, 4x 4/179, 2x 4/195						
(201) S-100					6							5	5	100%
Samples and groups	[µg/L]													
Sample A		0,040	0,003	7,5	6							5	5	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		0,039	0,001	3,8	5	0	CVPG	0,041		32%	0,027	0,055		5
Other					1	0								0
								1x 2/98						
Sample B		0,467	0,043	9,2	6							5	5	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		0,483	0,019	4,0	5	0	CVPG	0,469	,0076	32%	0,318	0,62		5
Other					1	0								0
								1x 2/98						
(195) SCCA					12							12	9	75%
Samples and groups	[µg/L]													
Sample A		2,31	0,38	16	12							12	10	83%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		2,40	0,30	12	6	0	CVPG	2,23	0,064	±0,7	1,53	2,93		6
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		2,12	0,12	5,6	6	0	CVPG	2,18	0,062	±0,7	1,48	2,88		6
Sample B		4,72	0,54	12	12							12	10	83%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		4,90	0,30	6,1	6	0	CVPG	4,53	0,11	23%	3,48	5,58		6
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		4,48	0,81	18	6	0	CVPG	4,22	0,085	23%	3,24	5,2		6
(207) Thyreoglobulin					12							12	12	100%
Samples and groups	[µg/L]													
Sample A		41,1	8,9	22	12							12	12	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		48,4	1,1	2,3	5	0	CVPG	48,1	0,46	30%	33,6	62,6		5
Other					7	0								7
								2x 3/24, 3x 4/12, 1x 4/29, 1x 4/164						
Sample B		93,3	11	12	12							12	12	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		97,5	2,8	2,9	5	0	CVPG	97	1,0	30%	67,9	127		5
Other					7	0								7
								2x 3/24, 3x 4/12, 1x 4/29, 1x 4/164						

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End of report

Printed: 22.10.2022