

Summary statistics - quantitative results

(Groups: measurement principle, manufacturer of kit)

Filter: Slovakia, minimal size of groups n = 5

Dead line: 13.02.2018

EQA round: E11/18 - Hormones 1

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						Traceability															
		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}	
(121) Total T3					3							3	2	67%							3	1	33%
Samples and groups	[nmol/L]																						
Sample A		5,74	0,50	8,7	3							3	3	100%	CRV	6,227	0,062	20%	4,98	7,48	3	3	100%
Other					3	0						3									3		
							1x 4/1, 1x 4/12, 1x 4/60								1x 4/1, 1x 4/12, 1x 4/60								
Sample B		2,83	1,7	60	3							3	2	67%	CRV	1,53	0,015	20%	1,22	1,84	3	1	33%
Other					3	0						3									3		
							1x 4/1, 1x 4/12, 1x 4/60								1x 4/1, 1x 4/12, 1x 4/60								
(122) Total T4					3							3	2	67%							3	1	33%
Samples and groups	[nmol/L]																						
Sample A		203	8,6	4,2	3							3	3	100%	CRV	238,9	2,4	17%	198	280	3	1	33%
Other					3	0						3									3		
							1x 4/1, 2x 4/12								1x 4/1, 2x 4/12								
Sample B		123	62	51	3							3	2	67%	CRV	84,76	0,85	17%	70,3	99,2	3	2	67%
Other					3	0						3									3		
							1x 4/1, 2x 4/12								1x 4/1, 2x 4/12								
(123) TSH					19							19	19	100%							0		
Samples and groups	[mU/L]																						
Sample A		6,06	0,68	11	19							19	19	100%							0		
(4) LIA (CLIA, CMIA, ILMA); (1) Abbott		5,10	0,51	10	5	0	CVPG	5,06	0,044	14%	4,35	5,77			5								
(4) LIA (CLIA, CMIA, ILMA); (60) Roche		6,53	0,16	2,4	9	0	CVPG	6,46	0,019	14%	5,55	7,37			9								
Other					5	0									5								
							3x 4/12, 1x 4/149, 1x 4/179																
Sample B		20,2	2,9	14	19							19	19	100%							0		
(4) LIA (CLIA, CMIA, ILMA); (1) Abbott		16,2	1,1	6,7	5	0	CVPG	16,6	0,13	14%	14,2	19			5								
(4) LIA (CLIA, CMIA, ILMA); (60) Roche		22,2	0,66	3,0	9	0	CVPG	22	0,064	14%	18,9	25,1			9								
Other					5	0									5								
							3x 4/12, 1x 4/149, 1x 4/179																
(124) Free T4					19							19	19	100%							0		
Samples and groups	[pmol/L]																						
Sample A		46,9	11	23	19							19	19	100%							0		
(4) LIA (CLIA, CMIA, ILMA); (1) Abbott		34,6	1,6	4,8	5	0	CVPG	34	0,33	13%	29,5	38,5			5								
(4) LIA (CLIA, CMIA, ILMA); (60) Roche		54,3	4,8	8,9	8	0	CVPG	54,2	0,27	13%	47,1	61,3			8								
Other					6	0									6								
							3x 4/12, 1x 4/40, 1x 4/149, 1x 4/179																
Sample B		15,2	2,4	16	19							19	19	100%							0		
(4) LIA (CLIA, CMIA, ILMA); (1) Abbott		13,2	0,31	2,4	5	0	CVPG	13	0,090	13%	11,3	14,7			5								

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Test	[unit]	Comparability					Traceability																	
		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}		
(124) Free T4	[pmol/L]				19							19	19	100%									0	
--- Samples and groups ---																								
Sample B		15,2	2,4	16	19							19	19	100%									0	
(4) LIA (CLIA, CMIA, ILMA); (60)		17,0	0,67	4,0	8	0	CVPG	16,8	0,076	13%	14,6	19	8											
Roche																								
Other					6	0							6											
								3x 4/12, 1x 4/40, 1x 4/149, 1x 4/179																
(125) Free T3	[pmol/L]				15							15	13	87%									0	
--- Samples and groups ---																								
Sample A		22,7	4,8	21	15							15	15	100%									0	
(4) LIA (CLIA, CMIA, ILMA); (60)		27,1	1,2	4,4	6	0	CVPG	27,3	0,083	15%	23,2	31,4	6											
Roche																								
Other					9	0							9											
								4x 4/1, 3x 4/12, 1x 4/149, 1x 4/179																
Sample B		5,02	0,99	20	15							15	13	87%									0	
(4) LIA (CLIA, CMIA, ILMA); (60)		5,60	0,45	8,1	6	0	CVPG	5,34	0,024	15%	4,53	6,15	6											
Roche																								
Other					9	0							9											
								4x 4/1, 3x 4/12, 1x 4/149, 1x 4/179																
(200) Ferritin	[µg/L]				16							16	15	94%									0	
--- Samples and groups ---																								
Sample A		203	38	19	16							16	16	100%									0	
Other					16	0						16												
								4x 4/1, 1x 4/12, 4x 4/60, 1x 4/149, 1x 4/179, 1x 6/1, 3x 6/58, 1x 6/60																
Sample B		128	14	11	16							16	15	94%									0	
Other					16	0						16												
								4x 4/1, 1x 4/12, 4x 4/60, 1x 4/149, 1x 4/179, 1x 6/1, 3x 6/58, 1x 6/60																
(301) Cortisol	[nmol/L]				10							10	10	100%								10	10	100%
--- Samples and groups ---																								
Sample A		302	37	12	10							10	10	100%	CRV	333,5	3,3	22%	260	407		10	10	100%
Other					10	0						10										10		
								3x 4/1, 3x 4/12, 2x 4/29, 2x 4/60								3x 4/1, 3x 4/12, 2x 4/29, 2x 4/60								
Sample B		505	46	9,2	10							10	10	100%	CRV	522,9	6,5	22%	407	638		10	10	100%
Other					10	0						10										10		
								3x 4/1, 3x 4/12, 2x 4/29, 2x 4/60								3x 4/1, 3x 4/12, 2x 4/29, 2x 4/60								
(302) 17-beta-estradiol	[pmol/L]				11							11	11	100%								11	10	91%
--- Samples and groups ---																								
Sample A		754	91	12	11							11	11	100%	CRV	757	7,6	30%	529	985		11	11	100%
Other					11	0						11										11		
								2x 4/1, 3x 4/12, 1x 4/29, 3x 4/60, 1x 4/149, 1x 4/179								2x 4/1, 3x 4/12, 1x 4/29, 3x 4/60, 1x 4/149, 1x 4/179								
Sample B		239	41	17	11							11	11	100%	CRV	234,6	2,3	30%	164	305		11	10	91%
Other					11	0						11										11		
								2x 4/1, 3x 4/12, 1x 4/29, 3x 4/60, 1x 4/149, 1x 4/179								2x 4/1, 3x 4/12, 1x 4/29, 3x 4/60, 1x 4/149, 1x 4/179								
(303) Aldosterone	[nmol/L]				4							3	3	100%								4	3	75%
--- Samples and groups ---																								
Sample A		0,882	0,78	89	4							3	3	100%	CRV	1,332	0,013	44%	0,745	1,92		4	3	75%
Other					4	0						3										4		
								1x 1/36, 2x 2/66, 1x 2/999								1x 1/36, 2x 2/66, 1x 2/999								
Sample B		0,617	0,49	79	4							3	3	100%	CRV	0,729	,0073	44%	0,408	1,05		4	3	75%

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		RoM	SD	CV [%]	N _{tot}	N _{out}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel}	
(303) Aldosterone					4							3	3	100%							4	3	75%
Samples and groups	[nmol/L]																						
Sample A		0,617	0,49	79	4							3	3	100%	CRV	0,729	0,073	44%	0,408	1,05	4	3	75%
Other					4	0						3									4		
							1x 1/36, 2x 2/66, 1x 2/999									1x 1/36, 2x 2/66, 1x 2/999							
(304) Progesterone					12							11	9	82%							12	9	75%
Samples and groups	[nmol/L]																						
Sample A		50,4	7,5	15	12							11	10	91%	CRV	56,78	0,57	26%	42	71,6	12	10	83%
(4) LIA (CLIA, CMIA, ILMA); (12)		45,4	5,6	12	5	0	CVPG	48	1,6	20%	38,4	57,6								5			
Beckman Coulter																							
Other					7	0						6									7		
							2x 4/1, 1x 4/29, 2x 4/60, 1x 4/149, 1x 4/179									2x 4/1, 1x 4/29, 2x 4/60, 1x 4/149, 1x 4/179							
Sample B		14,4	2,1	15	12							11	9	82%	CRV	14,52	0,18	26%	10,7	18,3	12	10	83%
(4) LIA (CLIA, CMIA, ILMA); (12)		12,9	0,63	4,9	5	0	CVPG	12,8	0,50	20%	10,2	15,4								5			
Beckman Coulter																							
Other					7	0						6									7		
							2x 4/1, 1x 4/29, 2x 4/60, 1x 4/149, 1x 4/179									2x 4/1, 1x 4/29, 2x 4/60, 1x 4/149, 1x 4/179							
(305) Testosterone					13							13	11	85%							13	13	100%
Samples and groups	[nmol/L]																						
Sample A		4,44	0,58	13	13							13	12	92%	CRV	4,683	0,047	30%	3,27	6,09	13	13	100%
(4) LIA (CLIA, CMIA, ILMA); (12)		4,73	0,32	6,7	5	0	CVPG	4,59	0,10	22%	3,58	5,6								5			
Beckman Coulter																							
Other					8	0						8									8		
							1x 4/1, 2x 4/29, 4x 4/60, 1x 4/179									1x 4/1, 2x 4/29, 4x 4/60, 1x 4/179							
Sample B		38,6	5,6	15	13							13	12	92%	CRV	40,8	0,41	30%	28,5	53,1	13	13	100%
(4) LIA (CLIA, CMIA, ILMA); (12)		36,2	1,1	3,1	5	0	CVPG	36	0,94	22%	28	44								5			
Beckman Coulter																							
Other					8	0						8									8		
							1x 4/1, 2x 4/29, 4x 4/60, 1x 4/179									1x 4/1, 2x 4/29, 4x 4/60, 1x 4/179							
(306) 17-OH-progesterone					4							3	3	100%							4	3	75%
Samples and groups	[nmol/L]																						
Sample A		4,43	1,1	25	4							3	3	100%	CRV	2,911	0,029 ± 2,649	0,271	5,56		4	4	100%
Other					4	0						3									4		
							1x 1/36, 2x 2/66, 1x 2/999									1x 1/36, 2x 2/66, 1x 2/999							
Sample B		4,61	1,4	31	4							3	3	100%	CRV	2,409	0,024 ± 2,641	0	5,05		4	3	75%
Other					4	0						3									4		
							1x 1/36, 2x 2/66, 1x 2/999									1x 1/36, 2x 2/66, 1x 2/999							
(307) DHEA-S					8							8	6	75%							0		
Samples and groups	[µmol/L]																						
Sample A		12,6	2,3	18	8							8	7	88%							0		
Other					8	0						8											
							1x 4/1, 3x 4/12, 1x 4/29, 2x 4/60, 1x 4/179																
Sample B		8,95	1,8	20	8							8	6	75%							0		
Other					8	0						8											
							1x 4/1, 3x 4/12, 1x 4/29, 2x 4/60, 1x 4/179																