

Summary statistics - quantitative results

(Groups: measurement principle, manufacturer of kit)

Filter: Slovakia, minimal size of groups n = 5

EQA round: E13/19 - Hormones 1

Dead line: 06.08.2019

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	3	100%						3	2	67%	
Samples and groups	[nmol/L]																							
Sample A		3,74	0,33	8,8	3								3	3	100%	CRV	4,396	0,044	20%	3,51	5,28	3	2	67%
Other					3	0							3										3	
Sample B		6,33	0,67	11	3								3	3	100%	CRV	6,4	0,085	20%	5,12	7,68	3	3	100%
Other					3	0							3										3	
(122) Total T4					3								3	3	100%							3	3	100%
Samples and groups	[nmol/L]																							
Sample A		160	5,7	3,5	3								3	3	100%	CRV	161,7	1,6	17%	134	190	3	3	100%
Other					3	0							3										3	
Sample B		205	8,3	4,0	3								3	3	100%	CRV	201,3	2,3	17%	167	236	3	3	100%
Other					3	0							3										3	
(123) TSH					18								18	17	94%							0		
Samples and groups	[mIU/L]																							
Sample A		8,98	0,80	8,9	18								18	17	94%							0		
(4) LIA (CLIA, CMIA, ECLIA); (1) Abbott		8,43	0,64	7,6	8	0	CVPG	8,46	0,068	14%	7,27	9,65	8											
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		9,85	0,24	2,4	5	0	CVPG	10,1	0,034	14%	8,68	11,6	5											
Other					5	0							5											
Sample B		5,91	0,59	9,9	18								18	17	94%							0		
(4) LIA (CLIA, CMIA, ECLIA); (1) Abbott		5,58	0,52	9,3	8	0	CVPG	5,61	0,047	14%	4,82	6,4	8											
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		6,63	0,31	4,7	5	0	CVPG	6,76	0,022	14%	5,81	7,71	5											
Other					5	0							5											
(124) Free T4					17								17	14	82%							0		
Samples and groups	[pmol/L]																							
Sample A		28,4	3,0	11	17								17	17	100%							0		
(4) LIA (CLIA, CMIA, ECLIA); (1) Abbott		26,0	1,6	6,1	7	0	CVPG	25,4	0,21	13%	22	28,8	7											
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		32,0	0,78	2,4	5	0	CVPG	33	0,18	13%	28,7	37,3	5											
Other					5	0							5											
Sample B		38,8	7,5	19	17								17	14	82%							0		
(4) LIA (CLIA, CMIA, ECLIA); (1) Abbott		32,2	3,0	9,2	7	0	CVPG	31,8	0,31	13%	27,6	36	7											

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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}	
(124) Free T4					17							17	14	82%									0
Samples and groups	[pmol/L]																						
Sample B		38,8	7,5	19	17							17	14	82%									0
(4) LIA (CLIA, CMIA, ECLIA); (60)		46,8	0,93	2,0	5	0	CVPG	47,5	0,28	13%	41,3	53,7											5
Roche																							
Other					5	0																	5
																							3x 4/12, 2x 4/149
(125) Free T3					14							14	10	71%									0
Samples and groups	[pmol/L]																						
Sample A		12,4	1,5	12	14							14	13	93%									0
(4) LIA (CLIA, CMIA, ECLIA); (1)		12,0	0,65	5,5	6	0	CVPG	11,7	0,20	15%	9,94	13,5											6
Abbott																							
Other					8	0																	8
																							3x 4/12, 3x 4/60, 2x 4/149
Sample B		24,4	4,3	18	14							14	11	79%									0
(4) LIA (CLIA, CMIA, ECLIA); (1)		22,9	3,9	17	6	0	CVPG	22	0,55	15%	18,7	25,3											6
Abbott																							
Other					8	0																	8
																							3x 4/12, 3x 4/60, 2x 4/149
(200) Ferritin					14							13	13	100%									0
Samples and groups	[µg/L]																						
Sample A		58,8	8,9	15	14							13	13	100%									0
(4) LIA (CLIA, CMIA, ECLIA); (1)		63,7	7,4	12	5	0	CVPG	66,9	1,5	24%	50,8	83											5
Abbott																							
Other					9	0																	8
																							1x 4/12, 2x 4/60, 2x 4/149, 2x 6/58, 1x 6/60, 1x 6/177
Sample B		110	15	13	14							13	13	100%									0
(4) LIA (CLIA, CMIA, ECLIA); (1)		122	9,2	7,5	5	0	CVPG	129	2,2	24%	98	160											5
Abbott																							
Other					9	0																	8
																							1x 4/12, 2x 4/60, 2x 4/149, 2x 6/58, 1x 6/60, 1x 6/177
(301) Cortisol					8							8	8	100%									8
Samples and groups	[nmol/L]																						7
Sample A		353	26	7,4	8							8	8	100%	CRV	397,1	4,8	22%	309	485			8
Other					8	0																	8
																							4x 4/1, 3x 4/12, 1x 4/29
Sample B		959	99	10	8							8	8	100%	CRV	1029	11	22%	802	1260			8
Other					8	0																	8
																							4x 4/1, 3x 4/12, 1x 4/29
(302) 17-beta-estradiol					10							10	10	100%									0
Samples and groups	[pmol/L]																						
Sample A		197	14	7,1	10							10	10	100%									0
Other					10	0																	10
																							3x 4/1, 3x 4/12, 2x 4/60, 2x 4/149
Sample B		661	33	5,0	10							10	10	100%									0
Other					10	0																	10
																							3x 4/1, 3x 4/12, 2x 4/60, 2x 4/149
(303) Aldosterone					5							5	3	60%									0
Samples and groups	[nmol/L]																						
Sample A		0,352	0,09	27	5							5	3	60%									0

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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	[nmol/L]				5							5	3	60%									0		
Samples and groups																									
Sample A		0,352	0,09	27	5							5	3	60%									0		
Other					5	0						5													
Sample B		1,12	0,03	3,3	5							5	4	80%									0		
Other					5	0						5													
(304) Progesterone	[nmol/L]				12							10	10	100%								12	11	92%	
Samples and groups																									
Sample A		8,40	1,4	16	12							10	10	100%	CRV	8,52	0,100	26%	6,3	10,8		12	12	100%	
(4) LIA (CLIA, CMIA, ECLIA); (12)		7,29	0,27	3,8	5	0	CVPG	7,21	0,22	20%	5,76	8,66										5			
Beckman Coulter																									
Other					7	0																	7		
Sample B		25,8	3,0	12	12							10	10	100%	CRV	26,35	0,26	26%	19,4	33,3		12	11	92%	
(4) LIA (CLIA, CMIA, ECLIA); (12)		23,4	0,19	0,82	5	0	CVPG	22	0,60	20%	17,6	26,4										5			
Beckman Coulter																									
Other					7	0																	7		
(305) Testosterone	[nmol/L]				10							10	10	100%								10	10	100%	
Samples and groups																									
Sample A		22,0	3,8	17	10							10	10	100%	CRV	23,22	0,28	30%	16,2	30,2		10	10	100%	
(4) LIA (CLIA, CMIA, ECLIA); (12)		19,4	1,3	6,9	5	0	CVPG	19,5	0,46	22%	15,2	23,8										5			
Beckman Coulter																									
Other					5	0																	5		
Sample B		5,61	0,25	4,4	10							10	10	100%	CRV	5,433	0,077	30%	3,8	7,07		10	10	100%	
(4) LIA (CLIA, CMIA, ECLIA); (12)		5,75	0,10	1,8	5	0	CVPG	5,59	0,11	22%	4,36	6,82										5			
Beckman Coulter																									
Other					5	0																	5		
(306) 17-OH-progesterone	[nmol/L]				3							2	2	100%								3	3	100%	
Samples and groups																									
Sample A		11,6	0,86	7,4	3							2	2	100%	CRV	13,61	0,14	44%	7,62	19,6		3	3	100%	
Other					3	0																	3		
Sample B		7,42	0,89	12	3							2	2	100%	CRV	7,113	0,071	44%	3,98	10,3		3	3	100%	
Other					3	0																	3		
(307) DHEA-S	[µmol/L]				6							6	5	83%										0	
Samples and groups																									
Sample A		5,97	0,20	3,4	6							6	5	83%										0	
Other					6	0																			
Sample B		12,0	1,4	12	6							6	5	83%										0	
Other					6	0																			