Summary statistics - quantitative results

(Groups: measurement principle, manufacturer of kit)

Filter: Slovakia, minimal size of groups n = 5

EQA round: E12/19 - Hormones 1

Dead line: 07.05.2019

RoM = robust average
SD = standard deviation
CV = coefficient of variation
Ntot = total number of participants
Nout = number of results excluded before calculation

AV = assigned value
CRV = certified reference value
RV = reference value
CVE = consensus value from experts
CVP = consensus value from all participants
CVPG = consensus value from participants groups
U_{AV} = expanded uncertainty of the assigned value (k = 2)

Dmax = acceptable percent difference
LL = lower limit
UL = upper limit
Neva = number of evaluated participants
Nsuc = number of successful participants
Srel = success (relative)

Test / Samples and groups	[unit]	RoM	SD	CV [%]	N_{tot}	N_{out}	Comparability: AV	U_{AV}	D_{max}	LL	UL	N_{eva}	N_{suc}	S_{rel}	Traceability: AV	U_{AV}	D_{max}	LL	UL	N_{eva}	N_{suc}	S_{rel}
(121) Total T3	[nmol/L]				1							1	0	0,00						1	0	0,00
Sample A		1,13			1							1	0	0,00	CRV	2,049	0,020	20%	1,63	2,46	1	0	0,00
Other					1	0						1									1		
						1x 4/29																	
Sample B		4,26			1							1	0	0,00	CRV	5,995	0,079	20%	4,79	7,2	1	0	0,00
Other					1	0						1									1		
						1x 4/29																	
(122) Total T4	[nmol/L]				1							1	0	0,00						1	0	0,00
Sample A		221			1							1	0	0,00	CRV	261,2	2,9	17%	216	306	1	1	100%
Other					1	0						1									1		
						1x 4/29																	
Sample B		124			1							1	0	0,00	CRV	174,8	2,1	17%	145	205	1	0	0,00
Other					1	0						1									1		
						1x 4/29																	
(123) TSH	[mU/L]				24							24	24	100%						0		
Sample A		5,24	0,49	9,4	24							24	24	100%						0		
(4) LIA (CLIA, CMIA, ECLIA); (12) Beckman Coulter		4,85	0,37	7,7	6	0	CVPG 4,84	0,055	14%	4,16	5,52	6											
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		5,62	0,09	1,6	12	0	CVPG 5,56	0,017	14%	4,78	6,34	12											
Other					6	0						6											
						1x 3/25, 1x 4/1, 1x 4/29, 1x 4/149, 2x 4/179																	
Sample B		19,4	1,8	9,3	24							24	24	100%						0		
(4) LIA (CLIA, CMIA, ECLIA); (12) Beckman Coulter		18,2	1,6	9,0	6	0	CVPG 18,2	0,18	14%	15,6	20,8	6											
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		20,8	0,30	1,4	12	0	CVPG 20,6	0,062	14%	17,7	23,5	12											
Other					6	0						6											
						1x 3/25, 1x 4/1, 1x 4/29, 1x 4/149, 2x 4/179																	
(124) Free T4	[pmol/L]				23							23	18	78%						0		
Sample A		59,2	9,4	16	23							23	18	78%						0		
(4) LIA (CLIA, CMIA, ECLIA); (12) Beckman Coulter		54,0	4,4	8,1	5	0	CVPG 49,6	0,68	13%	43,1	56,1	5											
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		65,5	4,8	7,4	12	0	CVPG 64,7	0,40	13%	56,2	73,2	12											
Other					6	0						6											
						1x 1/36, 1x 3/25, 1x 4/1, 1x 4/149, 2x 4/179																	
Sample B		37,5	5,1	14	23							23	22	96%						0		
(4) LIA (CLIA, CMIA, ECLIA); (12) Beckman Coulter		34,8	1,4	4,1	5	0	CVPG 32,7	0,37	13%	28,4	37	5											

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EQA round: E12/19 - Hormones 1

Dead line: 07.05.2019

Test [unit]	RoM	SD	CV [%]	N_{tot}	N_{out}	Comparability: AV	U_{AV}	D_{max}	LL	UL	N_{eva}	N_{suc}	S_{rel}	Traceability: AV	U_{AV}	D_{max}	LL	UL	N_{eva}	N_{suc}	S_{rel}
(124) Free T4 [pmol/L]				23							23	18	78%						0		
Samples and groups																					
Sample B	37,5	5,1	14	23							23	22	96%						0		
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche	41,0	2,3	5,7	12	0	CVPG 40,6	0,21	13%	35,3	45,9	12										
Other				6	0	1x 1/36, 1x 3/25, 1x 4/1, 1x 4/149, 2x 4/179					6										
(125) Free T3 [pmol/L]				17							17	16	94%						0		
Samples and groups																					
Sample A	7,37	0,99	13	17							17	17	100%						0		
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche	7,71	0,39	5,0	9	0	CVPG 7,64	0,033	15%	6,49	8,79	9										
Other				8	0	1x 1/36, 1x 4/1, 4x 4/12, 2x 4/179					8										
Sample B	24,3	4,9	20	17							17	16	94%						0		
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche	28,2	0,90	3,2	9	0	CVPG 28,3	0,094	15%	24	32,6	9										
Other				8	0	1x 1/36, 1x 4/1, 4x 4/12, 2x 4/179					8										
(200) Ferritin [µg/L]				18							17	13	76%						0		
Samples and groups																					
Sample A	16,5	3,4	21	18							17	13	76%						0		
Other				18	0	2x 4/1, 4x 4/12, 4x 4/60, 4x 4/179, 2x 6/60, 1x 6/149, 1x 6/178					17										
Sample B	115	21	18	18							17	17	100%						0		
Other				18	0	2x 4/1, 4x 4/12, 4x 4/60, 4x 4/179, 2x 6/60, 1x 6/149, 1x 6/178					17										
(301) Cortisol [nmol/L]				11							11	11	100%						11	10	91%
Samples and groups																					
Sample A	286	30	11	11							11	11	100%	CRV 305,9	3,7	22%	238	374	11	10	91%
Other				11	0	1x 1/36, 4x 4/12, 1x 4/29, 1x 4/60, 4x 4/179					11			1x 1/36, 4x 4/12, 1x 4/29, 1x 4/60, 4x 4/179					11		
Sample B	583	51	8,8	11							11	11	100%	CRV 563	5,6	22%	439	687	11	11	100%
Other				11	0	1x 1/36, 4x 4/12, 1x 4/29, 1x 4/60, 4x 4/179					11			1x 1/36, 4x 4/12, 1x 4/29, 1x 4/60, 4x 4/179					11		
(302) 17-beta-estradiol [pmol/L]				15							15	15	100%						15	15	100%
Samples and groups																					
Sample A	1440	130	9,2	15							15	15	100%	CRV 1304	15	30%	912	1700	15	15	100%
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche	1520	56	3,7	6	0	CVPG 1490	9,1	22%	1160	1820	6								6		
Other				9	0	1x 3/25, 1x 4/1, 4x 4/12, 1x 4/29, 2x 4/179					9			1x 3/25, 1x 4/1, 4x 4/12, 1x 4/29, 2x 4/179					9		
Sample B	292	27	9,1	15							15	15	100%	CRV 280,5	3,4	30%	196	365	15	15	100%
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche	298	22	7,3	6	0	CVPG 293	2,7	22%	228	358	6								6		
Other				9	0	1x 3/25, 1x 4/1, 4x 4/12, 1x 4/29, 2x 4/179					9			1x 3/25, 1x 4/1, 4x 4/12, 1x 4/29, 2x 4/179					9		
(303) Aldosterone [nmol/L]				3							3	3	100%						3	3	100%
Samples and groups																					
Sample A	1,59	0,34	22	3							3	3	100%	CRV 1,697	0,017	44%	0,95	2,45	3	3	100%

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Dead line: 07.05.2019

Test	[unit]	RoM	SD	CV [%]	N_{tot}	N_{out}	Comparability								Traceability							
								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]				3								3	3	100%							3	3	100%
Samples and groups																								
Sample A		1,59	0,34	22	3								3	3	100%	CRV	1,697	0,017	44%	0,95	2,45	3	3	100%
Other					3	0	2x 1/218, 1x 2/66						3			2x 1/218, 1x 2/66						3		
Sample B		1,29	0,31	24	3								3	3	100%	CRV	1,305	0,013	44%	0,73	1,88	3	3	100%
Other					3	0	2x 1/218, 1x 2/66						3			2x 1/218, 1x 2/66						3		
(304) Progesterone	[nmol/L]				15								15	15	100%							15	10	67%
Samples and groups																								
Sample A		12,8	2,0	15	15								15	15	100%	CRV	12,23	0,13	26%	9,05	15,5	15	14	93%
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		14,0	1,0	7,4	6	0	CVPG	13,5	0,16	20%	10,8	16,2	6									6		
Other					9	0	1x 3/25, 1x 4/1, 4x 4/12, 1x 4/29, 2x 4/179						9			1x 3/25, 1x 4/1, 4x 4/12, 1x 4/29, 2x 4/179						9		
Sample B		38,4	9,3	24	15								15	15	100%	CRV	36,8	0,37	26%	27,2	46,4	15	10	67%
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		45,1	2,3	5,2	6	0	CVPG	43,3	0,40	20%	34,6	52	6									6		
Other					9	0	1x 3/25, 1x 4/1, 4x 4/12, 1x 4/29, 2x 4/179						9			1x 3/25, 1x 4/1, 4x 4/12, 1x 4/29, 2x 4/179						9		
(305) Testosterone	[nmol/L]				17								16	15	94%							17	16	94%
Samples and groups																								
Sample A		4,52	0,32	7,2	17								16	15	94%	CRV	4,615	0,054	30%	3,23	6	17	17	100%
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		4,68	0,27	5,9	8	0	CVPG	4,38	0,035	22%	3,41	5,35	8									8		
Other					9	0	1x 3/25, 4x 4/12, 1x 4/29, 1x 4/149, 2x 4/179						8			1x 3/25, 4x 4/12, 1x 4/29, 1x 4/149, 2x 4/179						9		
Sample B		40,7	5,3	13	17								16	15	94%	CRV	37,58	0,38	30%	26,3	48,9	17	16	94%
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		43,3	2,8	6,4	8	0	CVPG	40,4	0,31	22%	31,5	49,3	8									8		
Other					9	0	1x 3/25, 4x 4/12, 1x 4/29, 1x 4/149, 2x 4/179						8			1x 3/25, 4x 4/12, 1x 4/29, 1x 4/149, 2x 4/179						9		
(306) 17-OH-progesterone	[nmol/L]				3								2	2	100%							3	2	67%
Samples and groups																								
Sample A		5,11	1,2	23	3								2	2	100%	CRV	3,219	0,032	±2,641	0,579	5,86	3	2	67%
Other					3	0	1x 1/999, 1x 2/66, 1x 4/183						2			1x 1/999, 1x 2/66, 1x 4/183						3		
Sample B		12,0	3,1	26	3								2	2	100%	CRV	11,91	0,14	44%	6,66	17,2	3	3	100%
Other					3	0	1x 1/999, 1x 2/66, 1x 4/183						2			1x 1/999, 1x 2/66, 1x 4/183						3		
(307) DHEA-S	[µmol/L]				9								9	9	100%							0		
Samples and groups																								
Sample A		6,40	0,73	11	9								9	9	100%							0		
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		6,91	0,22	3,1	6	0	CVPG	6,45	0,078	21%	5,09	7,81	6											
Other					3	0	1x 4/1, 1x 4/29, 1x 4/179						3											
Sample B		14,6	1,1	7,6	9								9	9	100%							0		
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		15,3	0,15	0,97	6	0	CVPG	14,5	0,16	21%	11,4	17,6	6											
Other					3	0	1x 4/1, 1x 4/29, 1x 4/179						3											

End of report