

## Summary statistics - quantitative results

(Groups: measurement principle, manufacturer of kit)

Filter: Czech Republic, minimal size of the groups n = 5

## EQA round: E23/20 - Hormones 2

Deadline: 04.08.2020

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 <sub>AV</sub> = expanded uncertainty of the assigned value (k = 2)	

Test	[unit]	Comparability												
		RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub>
<b>(193) Ferritin</b>					27							25	24	96%
— Samples and groups	[µg/L]													
<b>Sample A</b>		152	28	18	27							25	24	96%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		178	17	9,4	7	0	CVPG	169	3,5	24%	128	210	7	
Other					20	0								18
														4x 4/12, 2x 4/29, 4x 4/60, 1x 4/149, 3x 4/179, 1x 6/1, 1x 6/12, 2x 6/58, 1x 6/60, 1x 6/179
<b>Sample B</b>		363	71	20	27							25	25	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		430	16	3,8	7	0	CVPG	420	10	24%	319	521	7	
Other					20	0								18
														4x 4/12, 2x 4/29, 4x 4/60, 1x 4/149, 3x 4/179, 1x 6/1, 1x 6/12, 2x 6/58, 1x 6/60, 1x 6/179
<b>(320) LH</b>					22							21	20	95%
— Samples and groups	[U/L]													
<b>Sample A</b>		9,60	1,6	16	22							21	21	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		8,70	0,44	5,1	6	0	CVPG	8,6	0,12	15%	7,31	9,89	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		8,39	0,17	2,0	5	0	CVPG	8,25	0,16	15%	7,01	9,49	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (179) Siemens		9,15	0,19	2,1	5	0	CVPG	9,08	0,14	15%	7,71	10,5	5	
Other					6	0								5
														1x 4/29, 4x 4/60, 1x 4/999
<b>Sample B</b>		13,3	2,3	18	22							21	20	95%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		12,2	0,74	6,1	6	0	CVPG	12,1	0,19	15%	10,2	14	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		10,9	1,4	12	5	0	CVPG	11,1	0,25	15%	9,43	12,8	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (179) Siemens		13,5	0,15	1,1	5	0	CVPG	13,2	0,22	15%	11,2	15,2	5	
Other					6	0								5
														1x 4/29, 4x 4/60, 1x 4/999
<b>(321) FSH</b>					22							21	21	100%
— Samples and groups	[U/L]													
<b>Sample A</b>		5,86	0,84	14	22							21	21	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		5,24	0,35	6,7	6	0	CVPG	5,12	0,092	15%	4,35	5,89	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		6,15	0,52	8,4	5	0	CVPG	6,14	0,12	15%	5,21	7,07	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (179) Siemens		6,90	0,30	4,3	5	0	CVPG	6,43	0,091	15%	5,46	7,4	5	
Other					6	0								5
														1x 4/29, 4x 4/60, 1x 4/999
<b>Sample B</b>		10,6	1,5	14	22							21	21	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		9,60	0,74	7,7	6	0	CVPG	9,36	0,16	15%	7,95	10,8	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		10,5	0,85	8,1	5	0	CVPG	10,4	0,18	15%	8,84	12	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (179) Siemens		13,1	0,15	1,1	5	0	CVPG	12,7	0,13	15%	10,7	14,7	5	
Other					6	0								5
														1x 4/29, 4x 4/60, 1x 4/999
<b>(322) Prolactin</b>					24							23	21	91%
— Samples and groups	[mU/L]													
<b>Sample A</b>		315	41	13	24							23	23	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		338	13	3,7	8	0	CVPG	336	5,2	16%	282	390	8	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		285	8,5	3,0	5	0	CVPG	297	5,1	16%	249	345	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (179) Siemens		269	5,2	1,9	5	0	CVPG	259	3,8	16%	217	301	5	
Other					6	0								5
														1x 4/29, 4x 4/60, 1x 4/999
<b>Sample B</b>		744	67	9,0	24							23	21	91%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		760	41	5,5	8	0	CVPG	767	12	16%	644	890	8	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		686	30	4,4	5	0	CVPG	677	12	16%	568	786	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (179) Siemens		704	24	3,5	5	0	CVPG	662	9,2	16%	556	768	5	
Other					6	0								5
														1x 4/29, 4x 4/60, 1x 4/999

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Test	[unit]						Comparability							
		RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub>
<b>(325) Insulin</b>					4							4	4	100%
Samples and groups	[mU/L]													
<b>Sample A</b>		37,5	8,8	23	4							4	4	100%
Other					4	0						4		
							2x 4/1, 1x 4/60, 1x 4/179							
<b>Sample B</b>		96,3	24	25	4							4	4	100%
Other					4	0						4		
							2x 4/1, 1x 4/60, 1x 4/179							
<b>(326) Folate</b>					27							27	24	89%
Samples and groups	[nmol/L]													
<b>Sample A</b>		9,78	1,8	19	27							27	25	93%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		10,8	0,67	6,2	9	0	CVPG	11,1	0,27	27%	8,1	14,1	9	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		10,8	0,93	8,6	7	0	CVPG	10,8	0,23	27%	7,88	13,8	7	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		6,80	1,2	18	5	0	CVPG	7,73	0,16	27%	5,64	9,82	5	
Other					6	0						6		
							1x 4/29, 1x 4/149, 4x 4/179							
<b>Sample B</b>		29,2	4,7	16	27							27	25	93%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		31,6	1,7	5,4	9	0	CVPG	31,9	0,58	27%	23,2	40,6	9	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		31,5	2,8	8,7	7	0	CVPG	31,3	0,58	27%	22,8	39,8	7	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		24,5	3,2	13	5	0	CVPG	24,1	0,29	27%	17,5	30,7	5	
Other					6	0						6		
							1x 4/29, 1x 4/149, 4x 4/179							
<b>(327) Vitamin B12</b>					23							23	18	78%
Samples and groups	[pmol/L]													
<b>Sample A</b>		248	61	25	23							23	19	83%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		267	15	5,6	7	0	CVPG	249	4,6	20%	199	299	7	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		178	17	9,6	7	0	CVPG	174	4,7	20%	139	209	7	
Other					9	0						9		
							1x 4/29, 4x 4/60, 1x 4/149, 3x 4/179							
<b>Sample B</b>		638	120	19	23							23	21	91%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		686	47	6,8	7	0	CVPG	646	11	20%	516	776	7	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		493	47	9,5	7	0	CVPG	514	12	20%	411	617	7	
Other					9	0						9		
							1x 4/29, 4x 4/60, 1x 4/149, 3x 4/179							
<b>(328) hGH</b>					5							5	5	100%
Samples and groups	[mU/L]													
<b>Sample A</b>		14,2	0,67	4,7	5							5	5	100%
Other					5	0						5		
							1x 4/12, 4x 4/29							
<b>Sample B</b>		28,5	0,074	0,26	5							5	5	100%
Other					5	0						5		
							1x 4/12, 4x 4/29							
<b>(329) IGF-1</b>					7							7	6	86%
Samples and groups	[µg/L]													
<b>Sample A</b>		596	310	51	7							7	6	86%
Other					7	0						7		
							4x 4/29, 1x 4/60, 2x 4/164							
<b>Sample B</b>		381	85	22	7							7	7	100%
Other					7	0						7		
							4x 4/29, 1x 4/60, 2x 4/164							
<b>(390) Renin</b>					5							5	4	80%
Samples and groups	[ng/L]													
<b>Sample A</b>		38,1	3,6	9,3	5							5	5	100%
Other					5	0						5		
							1x 1/36, 3x 4/164, 1x 4/183							
<b>Sample B</b>		38,9	4,2	11	5							5	4	80%
Other					5	0						5		
							1x 1/36, 3x 4/164, 1x 4/183							
<b>(392) IGF-BP3</b>					3							3	3	100%
Samples and groups	[µg/L]													
<b>Sample A</b>		4190	49	1,2	3							3	3	100%
Other					3	0						3		
							3x 4/29							
<b>Sample B</b>		4170	360	85	3							3	3	100%
Other					3	0						3		
							3x 4/29							

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Test	[unit]						Comparability						N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub>
		RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL				
<b>(393) C-peptide</b>					20								16	16	100%
Samples and groups	[pmol/L]														
<b>Sample A</b>		247	63	25	20								16	16	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		246	9,8	4,0	8	0	CVPG	244	7,4	20%	195	293	8		
Other					12	0							8		
								1x 4/12, 2x 4/29, 4x 4/60, 1x 4/164, 4x 4/179							
<b>Sample B</b>		246	63	26	20								16	16	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		245	9,6	3,9	8	0	CVPG	245	7,1	20%	196	294	8		
Other					12	0							8		
								1x 4/12, 2x 4/29, 4x 4/60, 1x 4/164, 4x 4/179							
<b>(394) SHBG</b>					14								13	13	100%
Samples and groups	[nmol/L]														
<b>Sample A</b>		30,7	2,1	7,0	14								13	13	100%
Other					14	0							13		
								1x 3/25, 4x 4/1, 3x 4/12, 3x 4/29, 2x 4/60, 1x 4/179							
<b>Sample B</b>		30,5	1,7	5,7	14								13	13	100%
Other					14	0							13		
								1x 3/25, 4x 4/1, 3x 4/12, 3x 4/29, 2x 4/60, 1x 4/179							
<b>(405) Parathyroid hormone (PTH)</b>					16								16	16	100%
Samples and groups	[pmol/L]														
<b>Sample A</b>		27,1	6,7	25	16								16	16	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		33,6	2,4	7,0	5	0	CVPG	32,5	0,82	23%	25	40	5		
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		23,5	0,82	3,5	5	0	CVPG	24,9	1,3	23%	19,1	30,7	5		
Other					6	0							6		
								1x 4/29, 2x 4/60, 3x 4/179							
<b>Sample B</b>		14,4	3,4	24	16								16	16	100%
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		17,8	0,12	0,67	5	0	CVPG	17,6	0,41	23%	13,5	21,7	5		
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		12,0	0,44	3,7	5	0	CVPG	13,2	0,66	23%	10,1	16,3	5		
Other					6	0							6		
								1x 4/29, 2x 4/60, 3x 4/179							
<b>(407) Parathyroid hormone (PTH 1-84)</b>					5								2	2	100%
Samples and groups	[pmol/L]														
<b>Sample A</b>		16,5	5,5	33	5								2	2	100%
Other					5	0							2		
								3x 4/60, 2x 4/164							
<b>Sample B</b>		8,76	4,2	48	5								2	2	100%
Other					5	0							2		
								3x 4/60, 2x 4/164							

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End of report

Printed: 17.08.2020