

## Summary statistics - quantitative results

(Groups: measurement principle, manufacturer of kit)

Filter: Slovakia, minimal size of groups n = 5

## EQA round: E22/19 - Hormones 2

Dead line: 07.05.2019

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

Test	[unit]	Comparability					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>					21							20	18	90%
Samples and groups	[µg/L]													
<b>Sample A</b>		113	18	16	21							20	20	100%
Other					21	0						20	20	100%
							4x 4/1, 4x 4/12, 4x 4/60, 2x 4/149, 3x 4/179, 1x 6/1, 1x 6/58, 1x 6/60, 1x 6/178					20	18	90%
<b>Sample B</b>		56,6	14	26	21							20	18	90%
Other					21	0						20	20	100%
							4x 4/1, 4x 4/12, 4x 4/60, 2x 4/149, 3x 4/179, 1x 6/1, 1x 6/58, 1x 6/60, 1x 6/178					20	18	90%
<b>(320) LH</b>					17							17	17	100%
Samples and groups	[U/L]													
<b>Sample A</b>		123	26	21	17							17	17	100%
(4) LIA (CLIA, CMIA, ECLIA); (12)		101	6,0	5,9	5	0	CVPG	101	2,2	15%	85,8	117	5	5
Beckman Coulter														
Other					12	0						12	12	100%
							1x 3/25, 2x 4/1, 1x 4/29, 4x 4/60, 2x 4/149, 2x 4/179					17	17	100%
<b>Sample B</b>		10,3	2,0	20	17							17	17	100%
(4) LIA (CLIA, CMIA, ECLIA); (12)		8,62	0,15	1,7	5	0	CVPG	8,66	0,17	15%	7,36	9,96	5	5
Beckman Coulter														
Other					12	0						12	12	100%
							1x 3/25, 2x 4/1, 1x 4/29, 4x 4/60, 2x 4/149, 2x 4/179					17	17	100%
<b>(321) FSH</b>					17							17	17	100%
Samples and groups	[U/L]													
<b>Sample A</b>		15,3	2,6	17	17							17	17	100%
(4) LIA (CLIA, CMIA, ECLIA); (12)		12,9	0,90	7,0	5	0	CVPG	13,7	0,26	15%	11,6	15,8	5	5
Beckman Coulter														
Other					12	0						12	12	100%
							1x 3/25, 2x 4/1, 1x 4/29, 4x 4/60, 2x 4/149, 2x 4/179					17	17	100%
<b>Sample B</b>		84,9	21	24	17							17	17	100%
(4) LIA (CLIA, CMIA, ECLIA); (12)		68,5	0,89	1,3	5	0	CVPG	68,8	1,3	15%	58,4	79,2	5	5
Beckman Coulter														
Other					12	0						12	12	100%
							1x 3/25, 2x 4/1, 1x 4/29, 4x 4/60, 2x 4/149, 2x 4/179					17	17	100%
<b>(322) Prolactin</b>					18							18	17	94%
Samples and groups	[mU/L]													
<b>Sample A</b>		376	37	9,8	18							18	18	100%
(4) LIA (CLIA, CMIA, ECLIA); (12)		363	22	6,1	6	0	CVPG	364	4,7	16%	305	423	6	6
Beckman Coulter														
Other					12	0						12	12	100%
							1x 1/36, 1x 3/25, 2x 4/29, 3x 4/60, 2x 4/149, 3x 4/179					18	17	94%
<b>Sample B</b>		225	29	13	18							18	17	94%
(4) LIA (CLIA, CMIA, ECLIA); (12)		219	9,8	4,5	6	0	CVPG	220	3,3	16%	184	256	6	6
Beckman Coulter														
Other					12	0						12	12	100%
							1x 1/36, 1x 3/25, 2x 4/29, 3x 4/60, 2x 4/149, 3x 4/179					18	17	94%
<b>(325) Insulin</b>					7							6	6	100%
Samples and groups	[mU/L]													
<b>Sample A</b>		77,6	14	18	7							6	6	100%
Other					7	0						6	6	100%
							1x 1/36, 2x 4/1, 2x 4/60, 2x 4/179					6	6	100%
<b>Sample B</b>		20,3	4,2	21	7							6	6	100%
Other					7	0						6	6	100%
							1x 1/36, 2x 4/1, 2x 4/60, 2x 4/179					6	6	100%
<b>(326) Folate</b>					20							20	19	95%
Samples and groups	[nmol/L]													
<b>Sample A</b>		7,67	1,9	24	20							20	20	100%
(4) LIA (CLIA, CMIA, ECLIA); (12)		8,31	0,90	11	5	0	CVPG	8,35	0,14	27%	6,09	10,7	5	5
Beckman Coulter														
(4) LIA (CLIA, CMIA, ECLIA); (60)		6,30	0,50	7,9	6	0	CVPG	6,86	0,14	27%	5	8,72	6	6
Roche														
Other					9	0						9	9	100%
							3x 4/1, 3x 4/149, 3x 4/179					20	19	95%
<b>Sample B</b>		45,0	11	25	20							20	19	95%
(4) LIA (CLIA, CMIA, ECLIA); (12)		47,7	2,5	5,1	5	0	CVPG	48	0,64	27%	35	61	5	5
Beckman Coulter														
(4) LIA (CLIA, CMIA, ECLIA); (60)		41,4	3,9	9,3	6	0	CVPG	43	0,41	27%	31,3	54,7	6	6
Roche														
Other					9	0						9	9	100%
							3x 4/1, 3x 4/149, 3x 4/179					20	19	95%
<b>(327) Vitamin B12</b>					21							21	18	86%
Samples and groups	[pmol/L]													
<b>Sample A</b>		344	56	16	21							21	18	86%

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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>(327) Vitamin B12</b>					21							21	18	86%	
Samples and groups	[pmol/L]														
<b>Sample A</b>		344	56	16	21							21	18	86%	
(4) LIA (CLIA, CMIA, ECLIA); (12) Beckman Coulter		269	30	11	5	0	CVPG	272	4,8	20%	217	327	5		
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		384	6,3	1,6	6	0	CVPG	359	2,2	20%	287	431	6		
Other					10	0							10		
								3x 4/1, 1x 4/29, 3x 4/149, 3x 4/179							
<b>Sample B</b>		224	44	19	21							21	18	86%	
(4) LIA (CLIA, CMIA, ECLIA); (12) Beckman Coulter		167	17	10	5	0	CVPG	167	3,7	20%	133	201	5		
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		256	2,7	1,1	6	0	CVPG	238	2,0	20%	190	286	6		
Other					10	0							10		
								3x 4/1, 1x 4/29, 3x 4/149, 3x 4/179							
<b>(328) hGH</b>					7							7	7	100%	
Samples and groups	[mU/L]														
<b>Sample A</b>		24,3	1,1	4,5	7							7	7	100%	
Other					7	0							7		
								1x 1/36, 2x 4/12, 3x 4/29, 1x 4/60							
<b>Sample B</b>		10,3	0,68	6,6	7							7	7	100%	
Other					7	0							7		
								1x 1/36, 2x 4/12, 3x 4/29, 1x 4/60							
<b>(329) IGF-1</b>					5							5	5	100%	
Samples and groups	[µg/L]														
<b>Sample A</b>		178	2,6	1,5	5							5	5	100%	
Other					5	0							5		
								1x 1/36, 4x 4/29							
<b>Sample B</b>		182	13	6,9	5							5	5	100%	
Other					5	0							5		
								1x 1/36, 4x 4/29							
<b>(390) Renin</b>					3							3	3	100%	
Samples and groups	[ng/L]														
<b>Sample A</b>		30,5	2,2	7,3	3							3	3	100%	
Other					3	0							3		
								1x 1/185, 1x 2/66, 1x 4/164							
<b>Sample B</b>		30,9	0,96	3,1	3							3	3	100%	
Other					3	0							3		
								1x 1/185, 1x 2/66, 1x 4/164							
<b>(392) IGF-BP3</b>					2							1	1	100%	
Samples and groups	[µg/L]														
<b>Sample A</b>		3250	630	19	2							1	1	100%	
Other					2	0							1		
								1x 1/183, 1x 4/29							
<b>Sample B</b>		3220	700	22	2							1	1	100%	
Other					2	0							1		
								1x 1/183, 1x 4/29							
<b>(393) C-peptide</b>					12							11	11	100%	
Samples and groups	[pmol/L]														
<b>Sample A</b>		256	52	20	12							11	11	100%	
Other					12	0							11		
								1x 1/36, 2x 4/1, 2x 4/29, 4x 4/60, 3x 4/179							
<b>Sample B</b>		257	53	21	12							11	11	100%	
Other					12	0							11		
								1x 1/36, 2x 4/1, 2x 4/29, 4x 4/60, 3x 4/179							
<b>(394) SHBG</b>					8							8	7	88%	
Samples and groups	[nmol/L]														
<b>Sample A</b>		30,3	3,2	11	8							8	7	88%	
Other					8	0							8		
								1x 4/1, 1x 4/12, 2x 4/29, 2x 4/60, 2x 4/179							
<b>Sample B</b>		30,7	4,2	14	8							8	7	88%	
Other					8	0							8		
								1x 4/1, 1x 4/12, 2x 4/29, 2x 4/60, 2x 4/179							
<b>(405) Parathyroid hormone (PTH)</b>					19							18	15	83%	
Samples and groups	[pmol/L]														
<b>Sample A</b>		5,72	0,69	12	19							18	17	94%	
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		5,57	0,48	8,7	11	0	CVPG	5,28	0,063	23%	4,06	6,5	11		
Other					8	0							7		
								1x 4/1, 4x 4/12, 1x 4/29, 1x 4/149, 1x 4/179							
<b>Sample B</b>		0,943	0,34	37	19							18	16	89%	
(4) LIA (CLIA, CMIA, ECLIA); (60) Roche		1,04	0,16	15	11	0	CVPG	0,991	0,019 ± 0,279	0,715	1,27		11		
Other					8	0							7		
								1x 4/1, 4x 4/12, 1x 4/29, 1x 4/149, 1x 4/179							