

EQA round: E22/23 - Hormones 2

Deadline: 2.5.2023

Setup: groups - measurement principle, manufacturer of kit; Slovakia; minimal size of the groups n = 5

RoM = robust average	AV = assigned value	D _{max} = acceptable difference
SD = standard deviation	CVPG = consensus of the participants' groups	LL = lower limit
CV = coefficient of variation	U _{AV} = expanded uncertainty of the assigned value (k = 2)	UL = upper limit
N _{tot} = total number of the results		N _{eva} = number of the results assessed
N _{out} = number of the results removed before calculation		N _{suc} = number of successful results
		S _{rel} = relative success

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]
							AV	U _{AV}	D _{max}	LL	UL			
(393) C-peptide	[pmol/L]				12							11	10	91
Sample A		375	72	19	12							11	10	91
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		415	22	5,4	6	0	CVPG	403	6,3	20%	322	484	6	
Other					6	0							5	
							1x 1/36, 4x 4/1, 1x 4/179							
Sample B		374	67	18	12							11	10	91
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		408	17	4,2	6	0	CVPG	403	6,2	20%	322	484	6	
Other					6	0							5	
							1x 1/36, 4x 4/1, 1x 4/179							
(193) Ferritin	[µg/L]				20							20	17	85
Sample A		317	65	20	20							20	17	85
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		342	30	8,9	7	0	CVPG	360	6,7	24%	273	447	7	
Other					13	0							13	
							4x 4/12, 4x 4/60, 1x 4/162, 1x 4/179, 1x 6/1, 2x 6/60							
Sample B		546	130	23	20							20	18	90
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		638	41	6,4	7	0	CVPG	692	13	24%	525	859	7	
Other					13	0							13	
							4x 4/12, 4x 4/60, 1x 4/162, 1x 4/179, 1x 6/1, 2x 6/60							
(321) FSH	[U/L]				18							18	18	100
Sample A		5	0,42	8,5	18							18	18	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		5,32	0,17	3,2	6	0	CVPG	5,46	0,11	15%	4,64	6,28	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		4,84	0,24	4,9	7	0	CVPG	4,72	0,024	15%	4,01	5,43	7	
Other					5	0							5	
							1x 3/25, 4x 4/1							
Sample B		22,9	1,5	6,7	18							18	18	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		23,6	2,2	9,5	6	0	CVPG	24	0,54	15%	20,4	27,6	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		22,4	1,1	4,9	7	0	CVPG	21,7	0,12	15%	18,4	25	7	
Other					5	0							5	
							1x 3/25, 4x 4/1							
(328) hGH	[mU/L]				7							7	6	86
Sample A					7							7	6	86
Other					7	0							7	
							1x 1/36, 3x 4/12, 2x 4/29, 1x 4/60							
Sample B					7							7	6	86
Other					7	0							7	
							1x 1/36, 3x 4/12, 2x 4/29, 1x 4/60							
(329) IGF-1	[µg/L]				5							5	4	80
Sample A					5							5	4	80
Other					5	0							5	
							1x 1/36, 3x 4/29, 1x 4/60							
Sample B					5							5	5	100
Other					5	0							5	
							1x 1/36, 3x 4/29, 1x 4/60							
(392) IGF-BP3	[µg/L]				2							1	1	100
Sample A					2							1	1	100
Other					2	0							1	
							1x 1/183, 1x 4/29							
Sample B					2							1	1	100
Other					2	0							1	
							1x 1/183, 1x 4/29							
(325) Insulin	[mU/L]				10							9	9	100
Sample A					10							9	9	100
Other					10	0							9	
							1x 1/36, 4x 4/1, 2x 4/12, 2x 4/60, 1x 4/179							
Sample B					10							9	9	100
Other					10	0							9	
							1x 1/36, 4x 4/1, 2x 4/12, 2x 4/60, 1x 4/179							
(326) Folate	[nmol/L]				18							18	15	83
Sample A		51,7	10	20	18							0		
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		64,1	28	44	6	0						0		
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		54	1,5	2,7	5	0						0		
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		45,4	0,059	0,13	6	0						0		

EQA round: E22/23 - Hormones 2

Deadline: 2.5.2023

Setup: groups - measurement principle, manufacturer of kit; Slovakia; minimal size of the groups n = 5

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]
							AV	U _{AV}	D _{max}	LL	UL			
Other					1	0	1x 4/179					0		
Sample B		7,22	1,7	24	18							18	15	83
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		9,94	2,3	23	6	0	CVPG	7,77	0,2	27%	5,67	9,87	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		7,08	0,11	1,6	5	0	CVPG	6,92	0,21	27%	5,05	8,79	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		5,83	0,56	9,5	6	0	CVPG	5,69	0,12	27%	4,15	7,23	6	
Other					1	0	1x 4/179					1		
(320) LH	[U/L]				18							18	17	94
Sample A		21,6	4,3	20	18							18	17	94
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		17,9	1,1	6,3	6	0	CVPG	18	0,31	15%	15,3	20,7	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		25,3	1,2	4,6	7	0	CVPG	25,6	0,15	15%	21,7	29,5	7	
Other					5	0	1x 3/25, 4x 4/1					5		
Sample B		52	8,8	17	18							18	17	94
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		45,5	3,9	8,6	6	0	CVPG	44,5	0,74	15%	37,8	51,2	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		58,5	3	5,1	7	0	CVPG	59,6	0,35	15%	50,6	68,6	7	
Other					5	0	1x 3/25, 4x 4/1					5		
(405) Parathyrin intact (PTH)	[pmol/L]				19							19	19	100
Sample A		6,44	1,4	22	19							19	19	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		6,61	0,13	2	5	0	CVPG	6,92	0,24	23%	5,32	8,52	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		5,39	0,15	2,7	9	0	CVPG	5,42	0,046	23%	4,17	6,67	9	
Other					5	0	3x 4/1, 1x 4/29, 1x 4/179					5		
Sample B		38,5	8,6	22	19							19	19	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		41,4	0,12	0,29	5	0	CVPG	41,6	1,6	23%	32	51,2	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		31,4	1,4	4,4	9	0	CVPG	31,1	0,26	23%	23,9	38,3	9	
Other					5	0	3x 4/1, 1x 4/29, 1x 4/179					5		
(322) Prolactin	[mU/L]				18							17	14	82
Sample A		487	89	18	18							17	14	82
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		444	33	7,4	7	0	CVPG	458	9,6	16%	384	532	7	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		562	23	4	6	1	CVPG	543	3,8	16%	456	630	6	
Other					5	0	1x 1/36, 1x 3/25, 2x 4/1, 1x 4/179					4		
Sample B		239	43	18	18							17	15	88
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		221	28	13	7	0	CVPG	221	4,5	16%	185	257	7	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		273	17	6,2	6	1	CVPG	267	1,9	16%	224	310	6	
Other					5	0	1x 1/36, 1x 3/25, 2x 4/1, 1x 4/179					4		
(390) Renin	[ng/L]				3							1	1	100
Sample A												1	1	100
Other					3	0	1x 1/185, 1x 2/66, 1x 4/164					1		
Sample B												1	1	100
Other					3	0	1x 1/185, 1x 2/66, 1x 4/164					1		
(394) SHBG	[nmol/L]				7							7	7	100
Sample A												7	7	100
Other					7	0	2x 4/1, 1x 4/12, 4x 4/60					7		
Sample B												7	7	100
Other					7	0	2x 4/1, 1x 4/12, 4x 4/60					7		
(327) Vitamin B₁₂	[pmol/L]				18							18	17	94
Sample A		321	60	19	18							18	17	94
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		328	7,3	2,2	6	0	CVPG	334	5,7	20%	267	401	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		258	13	5	5	0	CVPG	250	6,1	20%	200	300	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		369	7,6	2	6	0	CVPG	369	2,8	20%	295	443	6	
Other					1	0	1x 4/179					1		

EQA round: E22/23 - Hormones 2

Deadline: 2.5.2023

Setup: groups - measurement principle, manufacturer of kit; Slovakia; minimal size of the groups n = 5

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					N _{eva}	N _{suc}	S _{rel} [%]
							AV	U _{AV}	D _{max}	LL	UL			
Sample B		280	55	20	18							18	18	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (1) Abbott		285	9,5	3,3	6	0	CVPG	286	4,7	20%	228	344	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		214	5,9	2,8	5	0	CVPG	206	5,1	20%	164	248	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche Other		324	16	4,9	6	0	CVPG	319	2,5	20%	255	383	6	
					1	0							1	
							1x 4/179							
(319) Vitamin B₁₂ (active)	[pmol/L]				6							6	5	83
Sample A												6	5	83
Other					6	0						6		
							4x 4/1, 2x 4/60							
Sample B												6	5	83
Other					6	0						6		
							4x 4/1, 2x 4/60							