

EQA round: E12/24 - Hormones 1

Deadline: 26.4.2024

Setup: groups - M (measurement principle), R (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			
(306) 17-OH-progesterone	[nmol/L]				3							2	2	100
Sample A												2	2	100
Other					3	0	1x 1/999, 1x 2/66, 1x 4/183					2		
Sample B												2	2	100
Other					3	0	1x 1/999, 1x 2/66, 1x 4/183					2		
(303) Aldosterone	[nmol/L]				4							4	4	100
Sample A												4	4	100
Other					4	0	2x 1/36, 2x 4/164					4		
Sample B												4	4	100
Other					4	0	2x 1/36, 2x 4/164					4		
(307) DHEA-S	[µmol/L]				8							8	7	88
Sample A												8	8	100
Other					8	0	2x 4/1, 1x 4/12, 4x 4/60, 1x 4/179					8		
Sample B												8	7	88
Other					8	0	2x 4/1, 1x 4/12, 4x 4/60, 1x 4/179					8		
(302) 17-beta-estradiol	[pmol/L]				16							16	15	94
Sample A												16	15	94
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		354	33	9,3	16		CVPG	352	6,9	22%	274	430	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		348	11	3	5	0								
Other					5	0	1x 3/25, 3x 4/1, 1x 4/179					5		
Sample B												16	15	94
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		461	23	4,9	16		CVPG	455	8,7	22%	354	556	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		453	8,6	1,9	5	0								
Other					5	0	1x 3/25, 3x 4/1, 1x 4/179					5		
(200) Ferritin	[µg/L]				19							18	18	100
Sample A												18	18	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		220	38	17	19		CVPG	241	2,2	24%	183	299	5	
Other		230	12	5,2	5	0								
					14	0	4x 4/1, 2x 4/12, 3x 4/179, 1x 6/58, 3x 6/60, 1x 6/178					13		
Sample B												18	18	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		209	41	19	19		CVPG	228	2,1	24%	173	283	5	
Other		226	19	8,3	5	0								
					14	0	4x 4/1, 2x 4/12, 3x 4/179, 1x 6/58, 3x 6/60, 1x 6/178					13		
(301) Cortisol	[nmol/L]				14							14	12	86
Sample A												14	13	93
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		383	50	13	14		CVPG	338	13	16%	283	393	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		355	35	9,7	5	0								
Other					9	0	1x 1/36, 2x 4/1, 4x 4/60, 2x 4/179					9		
Sample B												14	12	86
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		259	25	9,6	14		CVPG	238	7,8	16%	199	277	5	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		244	19	8	5	0								
Other					9	0	1x 1/36, 2x 4/1, 4x 4/60, 2x 4/179					9		
(304) Progesterone	[nmol/L]				17							17	17	100
Sample A												17	17	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		31,4	7,6	24	17		CVPG	36,7	0,22	20%	29,3	44,1	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		37,7	0,74	2	6	0								
Other					11	0	1x 3/25, 4x 4/1, 4x 4/12, 2x 4/179					11		
Sample B												17	17	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		4,59	0,82	18	17		CVPG	4,87	0,05	20%	3,89	5,85	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		5,28	0,27	5,1	6	0								
Other					11	0	1x 3/25, 4x 4/1, 4x 4/12, 2x 4/179					11		

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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			
(125) Free T3	[pmol/L]				18							18	17	94
Sample A		4,44	0,52	12	18							18	17	94
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		4,78	0,3	6,2	7	0	CVPG	4,79	0,023	15%	4,07	5,51	7	
Other					11	0							11	
								1x 1/36, 4x 4/1, 4x 4/12, 2x 4/179						
Sample B		32,3	7,3	22	18							18	18	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		39,9	1,4	3,5	7	0	CVPG	39,7	0,12	15%	33,7	45,7	7	
Other					11	0							11	
								1x 1/36, 4x 4/1, 4x 4/12, 2x 4/179						
(124) Free T4	[pmol/L]				25							25	24	96
Sample A		14,2	2,5	17	25							25	24	96
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		11,6	0,73	6,3	6	0	CVPG	12,2	0,19	13%	10,6	13,8	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		16,3	0,43	2,7	11	0	CVPG	16,4	0,061	13%	14,2	18,6	11	
Other					8	0							8	
								1x 1/36, 1x 3/25, 4x 4/1, 2x 4/179						
Sample B		16,8	3,4	20	25							25	24	96
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		14,2	0,82	5,7	6	0	CVPG	14,6	0,22	13%	12,7	16,5	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		19,7	0,6	3,1	11	0	CVPG	19,8	0,07	13%	17,2	22,4	11	
Other					8	0							8	
								1x 1/36, 1x 3/25, 4x 4/1, 2x 4/179						
(305) Testosterone	[nmol/L]				17							17	15	88
Sample A		6,36	0,53	8,3	17							17	17	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		5,9	0,15	2,5	6	0	CVPG	5,79	0,15	22%	4,51	7,07	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		6,71	0,26	3,9	7	0	CVPG	6,39	0,05	22%	4,98	7,8	7	
Other					4	0							4	
								1x 3/25, 2x 4/1, 1x 4/179						
Sample B		33,9	3,4	10	17							17	15	88
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		30,6	2,5	8,2	6	2	CVPG	29,7	0,85	22%	23,1	36,3	6	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		34,2	2,2	6,3	7	0	CVPG	33,3	0,22	22%	25,9	40,7	7	
Other					4	0							4	
								1x 3/25, 2x 4/1, 1x 4/179						
(123) TSH	[mU/L]				25							25	25	100
Sample A		19,5	2,2	11	25							25	25	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		19,3	0,75	3,9	7	0	CVPG	19,5	0,24	14%	16,7	22,3	7	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		21,2	0,93	4,4	11	0	CVPG	20,9	0,089	14%	17,9	23,9	11	
Other					7	0							7	
								1x 3/25, 4x 4/1, 2x 4/179						
Sample B		6,88	0,84	12	25							25	25	100
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (12) Beckman Coulter		6,69	0,46	6,9	7	0	CVPG	6,7	0,074	14%	5,76	7,64	7	
(4) LIA (CLIA, CMIA, ECLIA, LOCI); (60) Roche		7,55	0,3	3,9	11	0	CVPG	7,4	0,031	14%	6,36	8,44	11	
Other					7	0							7	
								1x 3/25, 4x 4/1, 2x 4/179						