

EQA round: KM2/23 - Cardiac Markers

Deadline: 25.8.2023

Setup: Slovakia; minimal size of the groups n = 5

RoM = robust average

SD = standard deviation

CV = coefficient of variation

N_{tot} = total number of the resultsN_{out} = number of the results removed before calculation

AV = assigned value

CVPG = consensus of the participants' groups

U_{AV} = expanded uncertainty of the assigned value (k = 2)D_{max} = acceptable difference

LL = lower limit

UL = upper limit

N_{eva} = number of the results assessedN_{suc} = number of successful resultsS_{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			
Set 1														
(218) CK-MB mass	[µg/L]				7							6	6	100
Sample A1												6	6	100
Other					7	0						6		
							1x 1, 2x 12, 3x 60, 1x 179							
Sample B1												6	6	100
Other					7	0						6		
							1x 1, 2x 12, 3x 60, 1x 179							
(444) Homocysteine	[µmol/L]				23							18	16	89
Sample A1		20,5	1,6	7,8	23							18	16	89
(109) Axis-Shield		20,8	1,1	5,3	10	0	CVPG	21,4	0,77	20%	17,1	25,7	10	
Other					13	0							8	
							4x 1, 1x 58, 3x 60, 2x 75, 1x 179, 2x 999							
Sample B1		20,4	1,5	7,3	23							18	16	89
(109) Axis-Shield		20,4	1,1	5,2	10	0	CVPG	21,2	0,85	20%	16,9	25,5	10	
Other					13	0							8	
							4x 1, 1x 58, 3x 60, 2x 75, 1x 179, 2x 999							
(441) Myoglobin	[µg/L]				22							20	19	95
Sample A1		90,3	14	15	22							20	19	95
(60) Roche		98,8	3,4	3,5	13	0	CVPG	96,4	1,4	22%	75,1	118	13	
Other					9	0							7	
							3x 843, 2x 1, 1x 12, 2x 178, 1x 179							
Sample B1		208	22	11	22							20	19	95
(60) Roche		217	8,1	3,7	13	0	CVPG	215	2,9	22%	167	263	13	
Other					9	0							7	
							3x 843, 2x 1, 1x 12, 2x 178, 1x 179							
(447) NT-proBNP	[ng/L]				43							41	40	98
Sample A1		164	24	15	43							41	40	98
(1) Abbott		191	16	8,2	7	0	CVPG	194	6,5	27%	141	247	7	
(60) Roche		157	16	11	29	0	CVPG	151	4,1	27%	110	192	29	
Other					7	0							5	
							2x 15, 2x 54, 1x 61, 1x 73, 1x 179							
Sample B1		497	50	10	43							41	40	98
(1) Abbott		558	14	2,6	7	0	CVPG	560	11	27%	408	712	7	
(60) Roche		475	27	5,7	29	0	CVPG	464	7,8	27%	338	590	29	
Other					7	0							5	
							2x 15, 2x 54, 1x 61, 1x 73, 1x 179							
(442) Troponin I	[ng/L]				15							15	14	93
Sample A1		7,44	3,7	50	15							15	14	93
(1) Abbott		8,9	0,15	1,7	5	0	CVPG	9	0,26	±2,7	6,3	11,7	5	
(12) Beckman Coulter		4,28	1,1	25	7	0	CVPG	3,7	0,42	±2,7	1	6,4	7	
Other					3	0							3	
							1x 54, 2x 179							
Sample B1		19,3	11	59	15							15	15	100
(1) Abbott		27,3	0,44	1,6	5	0	CVPG	27,5	0,43	27%	20	35	5	
(12) Beckman Coulter		9,08	0,93	10	7	0	CVPG	8,59	0,54	±2,7	5,89	11,3	7	
Other					3	0							3	
							1x 54, 2x 179							
(443) Troponin T	[ng/L]				32							32	30	94
Sample A1												32	30	94
(2) Immunochemical methods (hs); (60) Roche		12,3	1,5	12	32	0	CVPG	11,7	0,36	22%	9,12	14,3	32	
Sample B1												32	30	94
(2) Immunochemical methods (hs); (60) Roche		19,6	1,4	7	32	0	CVPG	19,7	0,41	22%	15,3	24,1	32	
Set 2														
(449) BNP	[ng/L]				3							2	2	100
Sample A2												2	2	100
Other					3	0						2		
							2x 1, 1x 179							
Sample B2												2	2	100
Other					3	0						2		
							2x 1, 1x 179							