

EQA round: BM1/24 - Bone Markers

Deadline: 12.4.2024

Setup: groups - R (manufacturer of kit); 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			
(435) 25-hydroxyvitamin D	[nmol/L]				27							26	25	96
Sample A		82,4	15	19	27							26	25	96
(1) Abbott		68,4	3,5	5,2	6	0	CVPG	68,2	1,5	33%	45,6	90,8	6	
(60) Roche		83,4	9,1	11	16	0	CVPG	82,4	2,4	33%	55,2	110	16	
Other					5	0							4	
								3x 12, 1x 179, 1x 998						
Sample B		144	22	15	27							26	25	96
(1) Abbott		129	3,7	2,9	6	0	CVPG	130	2,7	33%	87,1	173	6	
(60) Roche		146	16	11	16	0	CVPG	146	3,2	33%	97,8	195	16	
Other					5	0							4	
								3x 12, 1x 179, 1x 998						
(434) Osteocalcin	[µg/L]				18							16	14	88
Sample A		17,8	1	5,8	18							16	14	88
(60) Roche		18	0,69	3,8	16	0	CVPG	18	0,19	13%	15,6	20,4	16	
Other					2	0							0	
								1x 73, 1x 164						
Sample B		90,2	5,9	6,6	18							16	14	88
(60) Roche		90,2	4,6	5,1	16	0	CVPG	90,7	1,3	13%	78,9	103	16	
Other					2	0							0	
								1x 73, 1x 164						
(433) P1NP	[µg/L]				13							13	13	100
Sample A					13							13	13	100
(60) Roche		27,2	2,6	9,4	13	0	CVPG	27,1	0,71	20%	21,6	32,6	13	
Sample B												13	13	100
(60) Roche		167	17	10	13	0	CVPG	168	3,6	20%	134	202	13	
(436) Parathyrin biointact (PTH 1-84)	[pmol/L]				1							1	0	0
Sample A												1	1	100
Other					1	0						1		
								1x 164						
Sample B												1	0	0
Other					1	0						1		
								1x 164						
(431) Parathyrin intact (PTH)	[pmol/L]				25							23	20	87
Sample A		6,44	2,1	32	25							23	21	91
(60) Roche		5,75	0,56	9,7	13	0	CVPG	5,76	0,12	23%	4,43	7,09	13	
Other					12	1							10	
								4x 1, 1x 9, 3x 12, 1x 29, 3x 179						
Sample B		20	7,2	36	25							23	20	87
(60) Roche		18,9	1,2	6,6	13	0	CVPG	19,2	0,5	23%	14,7	23,7	13	
Other					12	1							10	
								4x 1, 1x 9, 3x 12, 1x 29, 3x 179						
(432) Collagen telopeptide CTx-β	[ng/L]				18							18	17	94
Sample A												18	17	94
(60) Roche		285	14	5	18	0	CVPG	289	4,5	17%	239	339	18	
Sample B												18	17	94
(60) Roche		661	40	6,1	18	0	CVPG	682	16	17%	566	798	18	