

EQA round: BM1/23 - Bone Markers

Deadline: 14.4.2023

Setup: groups - 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]				29							27	27	100	
Sample A		68,4	14	21	29							27	27	100	
(1) Abbott		54,7	1,9	3,5	6	0	CVPG	54,6	1,2	33%	36,5	72,7	6		
(60) Roche		70,1	10	15	17	0	CVPG	69,7	2,5	33%	46,6	92,8	17		
Other					6	0							4		
								2x 12, 1x 73, 2x 179, 1x 998							
Sample B		139	22	16	29							27	27	100	
(1) Abbott		121	9	7,5	6	0	CVPG	121	2,6	33%	81	161	6		
(60) Roche		139	16	11	17	0	CVPG	139	3,5	33%	93,1	185	17		
Other					6	0							4		
								2x 12, 1x 73, 2x 179, 1x 998							
(434) Osteocalcin	[µg/L]				19							17	14	82	
Sample A		17,8	1,6	9,1	19							17	14	82	
(60) Roche		17,8	1,2	6,6	17	0	CVPG	18,2	0,27	13%	15,8	20,6	17		
Other					2	0							0		
								1x 73, 1x 164							
Sample B		90,3	8,7	9,7	19							17	15	88	
(60) Roche		90,3	6,9	7,7	17	0	CVPG	92,1	1,5	13%	80,1	105	17		
Other					2	0							0		
								1x 73, 1x 164							
(433) P1NP	[µg/L]				14							13	13	100	
Sample A		25,3	2,2	8,5	14							13	13	100	
(60) Roche		25	2	7,8	13	0	CVPG	24,8	0,73	20%	19,8	29,8	13		
Other					1	0							0		
								1x 73							
Sample B		178	13	7,6	14							13	13	100	
(60) Roche		176	12	6,5	13	0	CVPG	176	4,2	20%	140	212	13		
Other					1	0							0		
								1x 73							
(431) Parathyrin intact (PTH)	[pmol/L]				29							26	25	96	
Sample A		6,92	1,7	24	29							26	25	96	
(1) Abbott		10,1	0,41	4	5	0	CVPG	11,4	1	23%	8,77	14,1	5		
(60) Roche		6,2	0,57	9,3	17	0	CVPG	6,35	0,17	23%	4,88	7,82	17		
Other					7	1							4		
								1x 9, 1x 12, 1x 29, 1x 73, 3x 179							
Sample B		23,1	5,8	25	29							26	26	100	
(1) Abbott		30,7	2,3	7,5	5	0	CVPG	34,8	3,3	23%	26,7	42,9	5		
(60) Roche		21	2	9,5	17	0	CVPG	21,4	0,54	23%	16,4	26,4	17		
Other					7	0							4		
								1x 9, 1x 12, 1x 29, 1x 73, 3x 179							
(432) Collagen telopeptide CTx-β	[ng/L]				20							19	17	89	
Sample A		291	31	11	20							19	17	89	
(60) Roche		295	28	9,4	19	0	CVPG	300	5,4	17%	249	351	19		
Other					1	0							0		
								1x 73							
Sample B		691	82	12	20							19	18	95	
(60) Roche		698	74	11	19	0	CVPG	712	15	17%	590	834	19		
Other					1	0							0		
								1x 73							