

EQA round: TDM2/23 - Therapeutic Drugs

Setup: groups - measurement principle; minimal size of the groups n = 5

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

Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					Traceability												
							AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel} [%]	AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel} [%]		
Set 1																								
(81) Digoxin	[µg/L]				130												130	125	96					
Sample A1		1,01	0,17	17	130									CRV	0,979	0,013	36%	0,626	1,34	130	126	97		
(2) EIA (EMIT, CEDIA)		1,02	0,18	18	11	0																	11	
(4) LIA, ILMA		0,978	0,21	22	67	0																		67
(6) Immunoturbidimetry, KIMS		1,04	0,11	10	50	0																		50
Other					2	0																		2
														2x 99										
Sample B1		1,6	0,22	14	130									CRV	1,57	0,04	36%	1	2,14	130	128	98		
(2) EIA (EMIT, CEDIA)		1,56	0,24	15	11	0																		11
(4) LIA, ILMA		1,57	0,27	17	67	0																		67
(6) Immunoturbidimetry, KIMS		1,65	0,12	7,2	50	0																		50
Other					2	0																		2
														2x 99										
(87) Ethosuximide	[mg/L]				6																			0
Sample A1					6	0																		0
Other					6	0																		6
														2x 3, 4x 5										
Sample B1					6	0																		0
Other					6	0																		6
														2x 3, 4x 5										
(84) Phenobarbital	[mg/L]				23																			0
Sample A1		22,8	2	9	23		CVP	22,8	1	20%	18,2	27,4												0
(4) LIA, ILMA		24,8	1,1	4,5	8	0																		8
(6) Immunoturbidimetry, KIMS		22,3	1	4,7	8	0																		8
Other					7	0																		7
														1x 1, 1x 2, 2x 3, 3x 5										
Sample B1		12,1	1,3	11	23		CVP	12,1	0,66	20%	9,68	14,6												0
(4) LIA, ILMA		13,1	0,63	4,8	8	0																		8
(6) Immunoturbidimetry, KIMS		11,5	1,2	10	8	0																		8
Other					7	0																		7
														1x 1, 1x 2, 2x 3, 3x 5										
(85) Phenytoin	[mg/L]				37																			0
Sample A1		4,76	0,4	8,3	37		CVP	4,76	0,16	20%	3,8	5,72												0
(2) EIA (EMIT, CEDIA)		4,79	0,16	3,4	5	0																		5
(4) LIA, ILMA		4,73	0,3	6,4	13	0																		13
(6) Immunoturbidimetry, KIMS		4,68	0,53	11	13	0																		13
Other					6	0																		6
														1x 1, 3x 3, 2x 5										

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Deadline: 6.10.2023

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Test Sample Group	[unit]	RoM	SD	CV [%]	N _{tot}	N _{out}	Comparability					Traceability								
							AV	U _{AV}	D _{max}	LL	UL	N _{eva}	N _{suc}	S _{rel} [%]	AV	U _{AV}	D _{max}	LL	UL	N _{eva}
Other					3	0	2x 2, 1x 5					3								
Sample B2		3,29	0,26	7,8	13		CVP	3,29	0,17	30%	2,3	4,28	13	13	100	0				
(4) LIA, ILMA		3,26	0,3	9,3	10	0							10							
Other					3	0	2x 2, 1x 5					3								
(92) Vankomycin	[mg/L]				74								74	73	99	0				
Sample A2		35,1	3,2	9	74		CVP	35,1	0,9	28%	25,2	45	74	74	100	0				
(2) EIA (EMIT, CEDIA)		33,8	4,1	12	11	0							11							
(4) LIA, ILMA		37,3	2,6	7,1	27	0							27							
(6) Immunoturbidimetry, KIMS		34,1	1,8	5,3	31	0							31							
Other					5	0	4x 1, 1x 5					5								
Sample B2		14,3	1,3	8,9	74		CVP	14,3	0,36	28%	10,2	18,4	74	73	99	0				
(2) EIA (EMIT, CEDIA)		14	1,4	10	11	0							11							
(4) LIA, ILMA		15	1,1	7,3	27	0							27							
(6) Immunoturbidimetry, KIMS		13,9	0,84	6	31	0							31							
Other					5	0	4x 1, 1x 5					5								