

Summary statistics - quantitative results

(Groups: measurement principle)

Filter: minimal size of the groups n = 5

EQA round: TDM1/21 - Therapeutic Drugs

Deadline: 30.04.2021

RoM = robust average	AV = assigned value	Dmax = acceptable percent difference
SD = standard deviation	CRV = certified reference value	LL = lower limit
CV = coefficient of variation	RV = reference value	UL = upper limit
Ntot = total number of the participants	CVE = consensus value from experts	Neva = number of evaluated participants
Nout = number of results excluded before calculation	CVP = consensus value from all participants	Nsuc = number of successful participants
	CVPG = consensus value from participants groups	Srel = success (relative)
	U _{AV} = expanded uncertainty of the assigned value (k = 2)	

Test	[unit]	Comparability										Traceability											
		RoM	SD	CV [%]	N _{tot}	N _{out}	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					130							0									130	124	95%
Samples and groups		[µg/L]																					
Sample A1			1,45	0,21	14	130						0		CRV	1,4	0,014	36%	0,896	1,91	130	126	97%	
(2) EIA (EMIT, CEDIA)			1,42	0,19	14	11	0														11		
(4) LIA, ILMA			1,43	0,24	17	66	0														66		
(6) Immunoturbidimetry			1,49	0,16	11	47	0														47		
Other					6	0															6		
												3x 1, 3x 99											
Sample B1			2,68	0,32	12	130						0		CRV	2,57	0,026	36%	1,64	3,5	130	124	95%	
(2) EIA (EMIT, CEDIA)			2,65	0,32	12	11	0														11		
(4) LIA, ILMA			2,66	0,39	15	66	0														66		
(6) Immunoturbidimetry			2,71	0,20	7,4	47	0														47		
Other					6	0															6		
												3x 1, 3x 99											
(82) Theophylline					85							0									85	79	93%
Samples and groups		[mg/L]																					
Sample A1			9,28	0,59	6,3	85						0		CRV	9,363	0,094	24%	7,11	11,7	85	80	94%	
(1) FIA, FPIA, DELFIA			9,74	0,47	4,8	13	0														13		
(2) EIA (EMIT, CEDIA)			9,63	0,77	8,0	12	0														12		
(4) LIA, ILMA			9,03	0,61	6,8	29	0														29		
(6) Immunoturbidimetry			9,20	0,47	5,1	31	0														31		
Sample B1			16,3	1,1	6,5	85						0		CRV	16,51	0,17	24%	12,5	20,5	85	79	93%	
(1) FIA, FPIA, DELFIA			16,8	0,60	3,6	13	1														13		
(2) EIA (EMIT, CEDIA)			17,0	2,1	12	12	0														12		
(4) LIA, ILMA			16,3	1,4	8,6	29	0														29		
(6) Immunoturbidimetry			16,1	0,80	5,0	31	2														31		
(83) Primidone					9							9	9	100%								0	
Samples and groups		[mg/L]																					
Sample A1			6,34	0,36	5,6	9	CVP	6,34	0,44	24%	4,81	7,87	9	9	100%							0	
Other					9	0							9										
												1x 1, 4x 3, 4x 5											
Sample B1			14,9	0,19	1,3	9	CVP	14,9	0,24	24%	11,3	18,5	9	9	100%							0	
Other					9	0							9										
												1x 1, 4x 3, 4x 5											
(84) Phenobarbital					28							28	26	93%								0	
Samples and groups		[mg/L]																					
Sample A1			19,2	1,2	6,2	28	CVP	19,2	0,55	20%	15,3	23,1	28	26	93%							0	
(1) FIA, FPIA, DELFIA			18,8	0,52	2,8	6	0						6										
(4) LIA, ILMA			19,9	0,67	3,4	11	0						11										

Summary statistics - quantitative results

(Groups: measurement principle)

Filter: minimal size of the groups n = 5

EQA round: TDM1/21 - Therapeutic Drugs

Deadline: 30.04.2021

Test	[unit]	Comparability										Traceability										
		RoM	SD	CV [%]	N _{tot}	N _{out}	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}
(84) Phenobarbital	[mg/L]				28							28	26	93%								0
Samples and groups																						
Sample A1		19,2	1,2	6,2	28	CVP	19,2	0,55	20%	15,3	23,1	28	26	93%								0
(6) Immunoturbidimetry		18,6	0,82	4,4	6	0						6										
Other					5	0						5										
						2x 3, 3x 5																
Sample B1		50,0	2,5	5,1	28	CVP	50	1,2	20%	40	60	28	27	96%								0
(1) FIA, FPIA, DELFIA		49,7	1,4	2,9	6	0						6										
(4) LIA, ILMA		52,4	2,6	4,9	11	0						11										
(6) Immunoturbidimetry		46,7	3,6	7,6	6	1						6										
Other					5	0						5										
						2x 3, 3x 5																
(85) Phenytoin	[mg/L]				42							42	36	86%								0
Samples and groups																						
Sample A1		13,3	1,0	7,7	42	CVP	13,3	0,39	20%	10,6	16	42	39	93%								0
(1) FIA, FPIA, DELFIA		13,2	0,39	3,0	8	0						8										
(4) LIA, ILMA		13,3	1,7	12	16	0						16										
(6) Immunoturbidimetry		13,5	1,3	9,4	11	0						11										
Other					7	0						7										
						2x 2, 3x 3, 2x 5																
Sample B1		19,7	1,4	6,9	42	CVP	19,7	0,53	20%	15,7	23,7	42	36	86%								0
(1) FIA, FPIA, DELFIA		19,9	0,64	3,2	8	0						8										
(4) LIA, ILMA		19,8	1,3	6,8	16	1						16										
(6) Immunoturbidimetry		19,6	1,8	9,2	11	1						11										
Other					7	0						7										
						2x 2, 3x 3, 2x 5																
(86) Carbamazepin	[mg/L]				64							64	60	94%								0
Samples and groups																						
Sample A1		5,87	0,52	8,9	64	CVP	5,87	0,16	20%	4,69	7,05	64	60	94%								0
(1) FIA, FPIA, DELFIA		6,13	0,53	8,6	8	0						8										
(2) EIA (EMIT, CEDIA)		5,70	0,75	13	8	0						8										
(4) LIA, ILMA		5,66	0,54	9,6	24	0						24										
(6) Immunoturbidimetry		5,82	0,35	6,1	18	1						18										
Other					6	0						6										
						3x 3, 3x 5																
Sample B1		6,67	0,50	7,5	64	CVP	6,67	0,15	20%	5,33	8,01	64	60	94%								0
(1) FIA, FPIA, DELFIA		6,93	0,30	4,4	8	0						8										
(2) EIA (EMIT, CEDIA)		6,64	0,56	8,5	8	0						8										
(4) LIA, ILMA		6,49	0,50	7,7	24	1						24										
(6) Immunoturbidimetry		6,57	0,43	6,5	18	1						18										
Other					6	0						6										
						3x 3, 3x 5																
(87) Ethosuximide	[mg/L]				7							7	6	86%								0
Samples and groups																						
Sample A1		67,5	4,2	6,3	7	CVP	67,5	5,9	24%	51,3	83,7	7	6	86%								0
Other					7	1						7										
						1x 0, 3x 3, 3x 5																
Sample B1		82,2	6,0	7,3	7	CVP	82,2	8,4	24%	62,4	102	7	6	86%								0

Summary statistics - quantitative results

(Groups: measurement principle)

Filter: minimal size of the groups n = 5

EQA round: TDM1/21 - Therapeutic Drugs

Deadline: 30.04.2021

Test	[unit]	Comparability										Traceability											
		RoM	SD	CV [%]	N _{tot}	N _{out}	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}	
(87) Ethosuximide	[mg/L]				7							7	6	86%									0
Samples and groups																							
Sample B1		82,2	6,0	7,3	7	CVP	82,2	8,4	24%	62,4	102	7	6	86%									0
Other					7	1						7											
						1x 0, 3x 3, 3x 5																	
(88) Valproic acid	[mg/L]				86							86	79	92%									0
Samples and groups																							
Sample A1		78,3	5,4	6,9	86	CVP	78,3	1,5	20%	62,6	94	86	79	92%									0
(1) FIA, FPIA, DELFIA		77,6	2,0	2,5	15	0						15											
(2) EIA (EMIT, CEDIA)		80,4	6,2	7,8	18	0						18											
(4) LIA, ILMA		74,6	7,7	10	32	2						32											
(6) Immunoturbidimetry		81,4	5,8	7,1	21	1						21											
Sample B1		96,7	6,2	6,5	86	CVP	96,7	1,7	20%	77,3	117	86	81	94%									0
(1) FIA, FPIA, DELFIA		97,3	3,0	3,1	15	0						15											
(2) EIA (EMIT, CEDIA)		98,8	6,6	6,7	18	0						18											
(4) LIA, ILMA		92,8	7,6	8,2	32	2						32											
(6) Immunoturbidimetry		99,3	6,1	6,1	21	1						21											
Set 2																							
(89) Amicacin	[mg/L]				36							36	31	86%									0
Samples and groups																							
Sample A2		14,3	0,76	5,3	36	CVP	14,3	0,31	20%	11,4	17,2	36	33	92%									0
(1) FIA, FPIA, DELFIA		14,0	0,60	4,3	10	0						10											
(2) EIA (EMIT, CEDIA)		14,6	0,82	5,6	7	0						7											
(6) Immunoturbidimetry		14,6	0,99	6,8	18	0						18											
Other					1	0						1											
						1x 99																	
Sample B2		6,38	0,58	9,0	36	CVP	6,38	0,24	20%	5,1	7,66	36	31	86%									0
(1) FIA, FPIA, DELFIA		6,26	0,86	14	10	0						10											
(2) EIA (EMIT, CEDIA)		6,40	0,44	7,0	7	0						7											
(6) Immunoturbidimetry		6,38	0,63	9,8	18	0						18											
Other					1	0						1											
						1x 99																	
(90) Gentamicin	[mg/L]				66							66	55	83%									0
Samples and groups																							
Sample A2		4,72	0,64	13	66	CVP	4,72	0,19	31%	3,25	6,19	66	58	88%									0
(1) FIA, FPIA, DELFIA		4,46	0,26	5,9	14	0						14											
(2) EIA (EMIT, CEDIA)		4,81	0,28	5,9	9	0						9											
(4) LIA, ILMA		4,93	0,29	6,0	20	0						20											
(6) Immunoturbidimetry		4,71	1,3	27	22	0						22											
Other					1	0						1											
						1x 99																	
Sample B2		10,6	1,7	16	66	CVP	10,6	0,50	31%	7,31	13,9	66	58	88%									0
(1) FIA, FPIA, DELFIA		10,1	1,1	11	14	0						14											
(2) EIA (EMIT, CEDIA)		10,7	0,62	5,7	9	0						9											
(4) LIA, ILMA		11,0	0,78	7,1	20	0						20											
(6) Immunoturbidimetry		10,8	3,1	29	22	0						22											

Summary statistics - quantitative results

(Groups: measurement principle)

Filter: minimal size of the groups n = 5

EQA round: TDM1/21 - Therapeutic Drugs

Deadline: 30.04.2021

Test	[unit]	Comparability										Traceability											
		RoM	SD	CV [%]	N _{tot}	N _{out}	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}	
(90) Gentamicin	[mg/L]				66							66	55	83%									0
--- Samples and groups ---																							
Sample B2		10,6	1,7	16	66	CVP	10,6	0,50	31%	7,31	13,9	66	58	88%									0
Other					1	0						1											
						1x 99																	
(92) Vankomycin	[mg/L]				68							68	62	91%									0
--- Samples and groups ---																							
Sample A2		17,0	1,8	11	68	CVP	17	0,54	28%	12,2	21,8	68	64	94%									0
(1) FIA, FPIA, DELFIA		17,4	2,4	14	11	0						11											
(2) EIA (EMIT, CEDIA)		17,3	3,6	21	8	0						8											
(4) LIA, ILMA		17,8	1,1	6,0	27	0						27											
(6) Immunoturbidimetry		16,5	1,1	7,0	20	0						20											
Other					2	0						2											
						2x 99																	
Sample B2		26,2	2,9	11	68	CVP	26,2	0,85	28%	18,8	33,6	68	63	93%									0
(1) FIA, FPIA, DELFIA		27,6	4,1	15	11	0						11											
(2) EIA (EMIT, CEDIA)		23,6	2,8	12	8	0						8											
(4) LIA, ILMA		27,3	2,5	9,3	27	0						27											
(6) Immunoturbidimetry		25,2	2,2	8,6	20	0						20											
Other					2	0						2											
						2x 99																	
(93) Methotrexate	[µmol/L]				13							13	11	85%									0
--- Samples and groups ---																							
Sample A2		1,67	0,18	11	13	CVP	1,67	0,12	30%	1,16	2,18	13	11	85%									0
(4) LIA, ILMA		1,72	0,09	5,6	9	0						9											
Other					4	0						4											
						2x 2, 1x 5, 1x 6																	
Sample B2		4,67	0,37	7,8	13	CVP	4,67	0,25	30%	3,26	6,08	13	13	100%									0
(4) LIA, ILMA		4,70	0,32	6,9	9	0						9											
Other					4	0						4											
						2x 2, 1x 5, 1x 6																	

st_kn_np

End of report

Printed: 05.05.2021