

## EQA round: RET1/24 - Reticulocytes

Deadline: 19.4.2024

Setup: groups - P (manufacturer of instrument); Slovakia; minimal size of the groups n = 5

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

Test Sample Group	[unit]	RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	Comparability					N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	
							AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL				
<b>(120) Reticulocyte count (analyser)</b>	[·10 <sup>9</sup> /L]				46							46	41	89	
<b>Sample A</b>		52,2	9,8	19	46		CVP	58	1,9	40%	34,8	81,2	46	41	89
(12) Beckman Coulter		41,3	9,9	24	6	0							6		
(63) Sysmex		58,7	13	22	13	0							13		
(177) Mindray		51,1	4,3	8,5	24	0							24		
Other					3	0							3		
							1x 1, 1x 9, 1x 176								
<b>Sample B</b>		54,6	10	19	46		CVP	55,4	1,8	40%	33,2	77,6	46	42	91
(12) Beckman Coulter		43,5	4,7	11	6	0							6		
(63) Sysmex		51,8	14	27	13	0							13		
(177) Mindray		58,7	7,8	13	24	0							24		
Other					3	0							3		
							1x 1, 1x 9, 1x 176								
<b>(138) Reticulocyte count (microscope)</b>	[·10 <sup>9</sup> /L]				2							2	1	50	
<b>Sample A</b>												2	2	100	
Other					2	0						2			
							2x 0								
<b>Sample B</b>												2	1	50	
Other					2	0						2			
							2x 0								
<b>(126) Immature reticulocyte fraction</b>	[%]				28							27	23	85	
<b>Sample A</b>		8,29	2,5	30	28							27	23	85	
(12) Beckman Coulter		30	7,4	25	5	1	CVPG	28,5	5	45%	15,6	41,4	5		
(63) Sysmex		8	1,5	19	8	0	CVPG	7,36	0,39	45%	4,04	10,7	8		
(177) Mindray		7,61	1,8	23	14	2	CVPG	8,43	1,1	45%	4,63	12,3	14		
Other					1	0							0		
							1x 176								
<b>Sample B</b>		6,4	1,9	30	28							27	24	89	
(12) Beckman Coulter		27,5	6,7	24	5	1	CVPG	27,4	3,4	45%	15	39,8	5		
(63) Sysmex		6,55	0,82	12	8	0	CVPG	6,59	0,32	45%	3,62	9,56	8		
(177) Mindray		5,46	1,4	25	14	0	CVPG	6,03	0,83	45%	3,31	8,75	14		
Other					1	0							0		
							1x 176								
<b>(128) Mean amount of hemoglobin in reticulocytes</b>	[pg]				22							21	19	90	
<b>Sample A</b>		31	3,5	11	22							21	19	90	
(63) Sysmex		34,3	1,4	4	8	0	CVPG	33,9	0,22	10%	30,5	37,3	8		
(177) Mindray		29,2	2,7	9,3	13	0	CVPG	28,6	1,2	10%	25,7	31,5	13		
Other					1	0							0		
							1x 176								
<b>Sample B</b>		29,4	3,7	13	22							21	19	90	
(63) Sysmex		33	1	3,1	8	0	CVPG	32,7	0,22	10%	29,4	36	8		
(177) Mindray		27,3	2,1	7,8	13	0	CVPG	26,8	0,97	10%	24,1	29,5	13		
Other					1	0							0		
							1x 176								
<b>(127) Mean reticulocyte volume</b>	[fL]				13							13	10	77	
<b>Sample A</b>		103	8,4	8,2	13		CVP	102	3,7	10%	91,8	113	13	10	77
(12) Beckman Coulter		104	2,6	2,5	5	0							5		
(177) Mindray		105	16	15	8	0							8		
<b>Sample B</b>		94,5	7,3	7,7	13		CVP	93,8	3,1	10%	84,4	104	13	11	85
(12) Beckman Coulter		91,8	4,5	4,9	5	0							5		
(177) Mindray		96,9	12	12	8	0							8		