## EQA round: DIF4/23 - Peripheral Blood Morphology Evaluation

Setup: Slovakia

AV = assigned value  $N_{tot}$  = total number of the results  $N_{eva}$  = number of the results assessed CVE = consensus of the experts  $N_{rel}$  = relative number of the results  $N_{suc}$  = number of successful results  $N_{suc}$  = number of successful results  $N_{rel}$  = relative success  $N_{rel}$  = relative success  $N_{rel}$  = relative success  $N_{rel}$  = result not assessed

> acceptable result ± result not assessed								
Sample					Frequency of the results		ccess	
<b>lest</b> Group		AV	$N_{tot}$	N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	$N_{\text{suc}}$	S <sub>r</sub> [%
Sample A	1							_
921) WBC - morphology								
All results			1		Giant bands and metamyelocytes			
			3		Agranulation			
	CVE	>>>	19		Neutrophil hypersegmentation			
			1 1		Döhle bodies Atypical/reactive/pathological manacytes/premana			
			5		Atypical/reactive/pathological monocytes/promono.  Denuded nuclei/cells, nuclear shadows / smudge cells			
			1		Cytoplasmatic fragments			
	CVE	>>>	10		Vacuolisation			
			1	5	LGL/big lymphocytes			
			5	25	Lymphocytes - reactive forms			
922) WBC - count changes (relat			10		N. 1. 19			
All results		>>> >>>	19 16		Neutrophilia Lymphocytopenia			
		>>>	13		Basophilia			
	CVL	>	1		Monocytopenia			
	CVE	>>>	18		Left shift			
923) <b>RBC - morphology</b>								
All results		>>>	15		Macrocytosis			
	CVE	>>>	18		Anisocytosis			
			2		Poikilocytosis			
		>	4 4		Eliptocytes, ovalocytes Spherocytes			
	CVF	>>>	18		Stomatocytes			
	CVL	>	11		Dacryocytes			
			1		Schistocytes (and other fragmentocytes)			
	CVE	>>>	9		Polychromasia			
		>	5		Basophilic stippling			
024) BL. L.			2	10	Howell-Jolly bodies			
924) <b>Platelets - morphology</b> All results			2	10	No changes			
All results	CVF	>>>	18		Large platelets			
	CVL	>	7		Platelets hypogranulation			
			1		Megakaryocytic nucleus fragments			
925) Clinical recommendation - s	smear							
All results	CVE	>>>	20	100	Blood smear is pathological			
926) Clinical recommendation - e								_
All results	CVE	>>>	20	100	An examination by the specialist/haematologist is			
927) Estimation of diagnosis					recommended			_
All results			3	15	Anemia: Macrocytosis			
			1		Myelodysplastic syndrome: Myelodysplastic syndrome			
	CVE	>>>	10	50	Chronic myeloproliferative disease: Exact determination			
			_		impossible			
			2	10	Chronic myeloproliferative disease: CML (chronic			
			3	15	myelogenous leukaemia) Chronic myeloproliferative disease: Polycythemia vera			
		>	8		Chronic myeloproliferative disease: Myelofibrosis			
			1		Platelets disorders: Other			
928) How do you rate the techni	cal quality of		20			0		
he smear?								
All results	on of the	±	20	100	Acceptable	^		_
929) How do you rate the staining mear?	ig of the		20			0		
All results		±	20	100	Acceptable			
939) Overall assessment			20	100		20	19	_
Maximum score achievable: 1	117 points Crite	erion (6		ıt of t	he maximum): 71 points	~		•
Minimum score achieved: 7	70 points (59,8 %)	,						
Maximum score achieved: 1	116 points (99,1 %)							
All results			1		Unacceptable result			
		>>>	19	95	Correct result			

Deadline: 27.10.2023

**Summary statistics - qualitative results SEKK** 

EQA round: DIF4/23 - Peripheral Blood Morphology Evaluation Deadline: 27.10.2023 Setup: Slovakia Frequency of the results Sample Success  $N_{\text{eva}}$ Test ΑV  $N_{tot}$  $N_{rel}$ Result  $N_{suc}$ Group [%] [%] Sample B (921) WBC - morphology All results 8 40 No changes 1 5 Agranulation 10 Neutrophil hypersegmentation 2 6 30 Denuded nuclei/cells, nuclear shadows / smudge cells 7 35 Vacuolisation 1 5 LGL/big lymphocytes 9 45 Lymphocytes - reactive forms 5 "Hairy" lymphocytes 1 10 Lymphocytes - atypical forms (except "hairy") 2 (922) WBC - count changes (relative) All results 1 5 Not specified CVE >>> 18 90 Normal count 5 Lymphocytosis 1 (923) RBC - morphology CVE >>> All results 14 No changes Normocytosis 12 60 Eliptocytes, ovalocytes 2 10 1 5 Stomatocytes 1 5 Dacryocytes 1 5 Target cells Schistocytes (and other fragmentocytes) 1 1 Howell-Jolly bodies 1 Rouleaux formation (924) Platelets - morphology All results 1 5 Not specified CVE >>> 12 60 No changes 8 40 Large platelets 1 Platelets hypogranulation (925) Clinical recommendation - smear assessment All results 1 5 Not specified 2 Blood smear is pathological 85 Blood smear within physiological limits or with reactive CVE >>> 17 changes (926) Clinical recommendation - examination All results 2 10 An examination by the specialist/haematologist is recommended CVE >>> 18 90 An examination by the specialist/haematologist is not necessary (927) Estimation of diagnosis All results CVE >>> 3 Not specified 2 Mature lymphocytic cells neoplasms: Exact determination impossible Mature lymphocytic cells neoplasms: PLL 1 (prolymphocytic leukaemia) 9 Other: Other reactive changes 6 30 Other: Other disease (928) How do you rate the technical quality of 20 0 the smear? All results 19 95 Acceptable 5 Not acceptable (give a reason) 1 (929) How do you rate the staining of the 0 20 smear? All results 20 100 Acceptable (939) Overall assessment 20 20 18 90

Summary for all samples				
(939) Overall assessment	20	20	17	85

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Criterion (60 % out of the maximum): 42 points

10 Unacceptable result 90 Correct result

Maximum score achievable: 69 points

All results

Minimum score achieved: 36 points (52,2 %) Maximum score achieved: 69 points (100 %)