

SUMMARY STATISTICS

Filter: Slovakia

EQA round: DIF3/18 - Peripheral Blood Morphology Evaluation

Dead line (EQA round closed): 27.07.2018

Key:	ELG ... expert laboratories group	> ... possible result (found by ELG, but consensus not reached)
	AV, >>> ... assigned value type CVE (consensus of ELG)	
	RAR ... range of acceptable results	
	RoM ... robust average of all results	

	Sample A			Sample B		
	AV	RAR	RoM	AV	RAR	RoM
WBC - differential count						
Blasts	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Promyelocytes	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Neutrophil myelocytes	0	0,000 - 0,018	0,000	0,002	0,000 - 0,018	0,003
Neutrophil metamyelocytes	0	0,000 - 0,018	0,000	0,002	0,000 - 0,018	0,002
Neutrophil bars	0,002	0,000 - 0,018	0,005	0,007	0,000 - 0,028	0,012
Segmented neutrophil granulocytes	0,286	0,224 - 0,353	0,277	0,456	0,385 - 0,527	0,460
Eosinophil granulocytes - immature forms	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Eosinophil segmented granulocytes	0,020	0,005 - 0,050	0,020	0,020	0,005 - 0,050	0,025
Basophilic granulocytes	0,002	0,000 - 0,018	0,003	0,011	0,001 - 0,036	0,012
Monocytes	0,033	0,014 - 0,071	0,033	0,061	0,031 - 0,102	0,061
Lymphocytes	0,655	0,585 - 0,721	0,660	0,416	0,346 - 0,487	0,412
Plasma cells	0	0,000 - 0,018	0,000	0,013	0,000 - 0,043	0,002
Erythroblasts (number)	0	0,000 - 2,000	0,000	1,000	0,000 - 4,000	0,821

Sample A				Sample B			
WBC - morphology							
2	No changes	8,7 %	> 6	No changes	26 %		
>>> 20	Denuded nuclei/cells, nuclear shadows / smudge cells	87 %	1	Agranulation	4,3 %		
>>> 7	Vacuolisation	30 %	5	Hypersegmented granulocytes	22 %		
>>> 6	LGL/big lymphocytes	26 %	1	Hyposegmentation or pseudo Pelger anomaly	4,3 %		
> 10	Lymphocytes - reactive forms	43 %	1	Atypical/reactive monocytes	4,3 %		
> 9	Lymphocytes - atypical forms	39 %	2	Denuded nuclei/cells, nuclear shadows / smudge cells	8,7 %		
			1	Cytoplasmatic fragments	4,3 %		
			> 8	Vacuolisation	35 %		
			2	LGL/big lymphocytes	8,7 %		
			> 7	Lymphocytes - reactive forms	30 %		
			3	Lymphocytes - atypical forms	13 %		
			2	Nucleus fragments of neutrophils	8,7 %		

WBC - relative changes of count					
>>> 15	Neutropenia	65 %	> 9	Normal count	39 %
>>> 23	Lymphocytosis	100 %	> 5	Neutropenia	22 %
1	Monocytopenia	4,3 %	2	Lymphocytosis	8,7 %
			1	Eosinophilia	4,3 %
			> 2	Basophilia	8,7 %
			2	Monocytosis	8,7 %
			> 9	Left shift	39 %

RBC - morphology					
>>> 9	No changes	39 %	>>> 15	Microcytosis	65 %
14	Normocytosis	61 %	1	Macrocytosis	4,3 %
2	Anisocytosis	8,7 %	>>> 22	Anisocytosis	96 %
1	Eliptocytes, ovalocytes	4,3 %	>>> 16	Poikilocytosis	70 %
1	Spherocytes	4,3 %	>>> 12	Eliptocytes, ovalocytes	52 %
2	Stomatocytes	8,7 %	>>> 10	Spherocytes	43 %
4	Dacryocytes	17 %	> 9	Stomatocytes	39 %
1	Schistocytes (and other fragmentocytes)	4,3 %	1	Drepanocytes	4,3 %
1	Basophilic stippling	4,3 %	>>> 16	Dacryocytes	70 %
3	Rouleaux formation	13 %	2	Acanthocytes	8,7 %
			1	Echinocytes	4,3 %
			>>> 21	Target cells	91 %
			>>> 13	Schistocytes (and other fragmentocytes)	57 %
			>>> 13	Polychromasia	57 %

Sample A				Sample B			
RBC - morphology				>>>	17	Hypochromia	74 %
				>>>	17	Basophilic stippling	74 %
					3	Howell-Jolly bodies	13 %
					2	Cabot rings	8,7 %
					2	Rouleaux formation	8,7 %
					1	RBC agglutination	4,3 %
Platelets - morphology				>>>	16	No changes	70 %
>	6	Large platelets	26 %	>>>	17	Large platelets	74 %
	2	Small platelets	8,7 %		3	Small platelets	13 %
					3	Platelet aggregates	13 %
					2	Platelets hypogranulation	8,7 %
Clinical recommendation - smear				>>>	22	Blood smear is pathological	96 %
	1	Blood smear within physiological limits or with reactive changes	4,3 %	>>>	21	Blood smear is pathological	91 %
					2	Blood smear within physiological limits or with reactive changes	8,7 %
Clinical recommendation - examination				>>>	21	An examination by the specialist/haematologist is recommended	91 %
	2	An examination by the specialist/haematologist is not necessary	8,7 %	>>>	23	An examination by the specialist/haematologist is recommended	100 %
Diagnosis - anaemia					1	Exact determination impossible	4,3 %
					3	Microcytosis	13 %
					1	Hypochromia	4,3 %
				>	6	Haemolytic	26 %
				>>>	19	Thalassemia or other haemoglobinopathies	83 %
Diagnosis - myelodysplastic syndrome					1	Myelodysplastic syndrome	4,3 %
Diagnosis - mature lymphocytic cells neoplasms				>>>	10	Exact determination impossible	43 %
	13	CLL (chronic lymphocytic leukaemia)	57 %				
Diagnosis - other					2	Viral infection incl. inf. mononucleosis	8,7 %
>	1	Other reactive changes	4,3 %		1	Other disease	4,3 %
	3	Other disease	13 %				
Smear quality					21	Acceptable	91 %
	2	Not acceptable (give a reason)	8,7 %		23	Acceptable	100 %
Staining					22	Acceptable	96 %
	1	Not acceptable (give a reason)	4,3 %		1	Not acceptable (give a reason)	4,3 %

Evaluation of the results - scoring system**DIF3/18**

Sample A		Sample B	
Maximal achievable score: 93		Maximal achievable score: 117	
Successful participants (success 60 % and more): 21 (it is 91 %)		Successful participants (success 60 % and more): 21 (it is 91 %)	
Minimal success in this round: 49,5 %		Minimal success in this round: 47,9 %	
Maximal success in this round: 97,8 %		Maximal success in this round: 94,9 %	
Number of participants: 23			
Number of participants that succeeded:		in both samples: 19 (it is 83 %)	
		in one sample: 4 (it is 17 %)	
		in no sample: 0 (it is 0 %)	