

SUMMARY STATISTICS

Filter: Slovakia

EQA round: DIF3/17 - Peripheral Blood Morphology Evaluation

Dead line (EQA round closed): 28.07.2017

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	0,000 - 0,018	0,000
Neutrophil metamyelocytes	0	0,000 - 0,018	0,002	0	0,000 - 0,018	0,000
Neutrophil bars	0,075	0,010 - 0,130	0,129	0,013	0,000 - 0,043	0,014
Segmented neutrophil granulocytes	0,598	0,529 - 0,668	0,512	0,590	0,518 - 0,659	0,597
Eosinophil granulocytes - immature forms	0	0,000 - 0,018	0,003	0	0,000 - 0,018	0,000
Eosinophil segmented granulocytes	0,027	0,008 - 0,057	0,021	0,014	0,003 - 0,043	0,015
Basophilic granulocytes	0,005	0,000 - 0,028	0,005	0,008	0,001 - 0,036	0,007
Monocytes	0,065	0,035 - 0,109	0,063	0,046	0,021 - 0,084	0,040
Lymphocytes	0,248	0,192 - 0,316	0,256	0,321	0,256 - 0,389	0,325
Plasma cells	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Erythroblasts (number)	0	0,000 - 2,000	0,000	0	0,000 - 2,000	0,000

Sample A

Sample B

WBC - morphology

1	No changes	4,0 %	> 7	No changes	28 %
1	Giant bands and metamyelocytes	4,0 %	3	Hypergranulation/toxic granulation	12 %
> 9	Hypogranulation/agranulation	36 %	3	Hypogranulation/agranulation	12 %
2	Hypersegmented granulocytes	8,0 %	10	Hypersegmented granulocytes	40 %
>>> 21	Hyposegmentation or pseudo Pelger anomaly	84 %	8	Denuded nuclei/cells, nuclear shadows / smudge cells	32 %
4	Denuded nuclei/cells, nuclear shadows / smudge cells	16 %	>>> 3	Vacuolisation	12 %
> 5	Vacuolisation	20 %	2	LGL/big lymphocytes	8,0 %
1	LGL/big lymphocytes	4,0 %	> 11	Lymphocytes - reactive forms	44 %
> 7	Lymphocytes - reactive forms	28 %	3	Lymphocytes - atypical forms	12 %
4	Lymphocytes - atypical forms	16 %	1	Nucleus fragments of neutrophils	4,0 %

WBC - relative changes of count

> 9	Normal count	36 %	>>> 17	Normal count	68 %
1	Neutropenia	4,0 %	4	Neutrophilia	16 %
1	Neutrophilia	4,0 %	1	Lymphocytosis	4,0 %
1	Lymphocytopenia	4,0 %	1	Basophilia	4,0 %
> 18	Left shift	72 %	1	Monocytosis	4,0 %
			2	Monocytopenia	8,0 %
			1	Left shift	4,0 %

RBC - morphology

4	Normocytosis	16 %	>>> 3	No changes	12 %
>>> 20	Microcytosis	80 %	> 13	Normocytosis	52 %
1	Macrocytosis	4,0 %	3	Macrocytosis	12 %
4	Anisocytosis	16 %	5	Anisocytosis	20 %
3	Poikilocytosis	12 %	2	Poikilocytosis	8,0 %
> 7	Eliptocytes, ovalocytes	28 %	1	Eliptocytes, ovalocytes	4,0 %
1	Spherocytes	4,0 %	1	Spherocytes	4,0 %
5	Stomatocytes	20 %	9	Stomatocytes	36 %
> 10	Dacryocytes	40 %	9	Dacryocytes	36 %
> 7	Target cells	28 %	2	Target cells	8,0 %
1	Schistocytes (and other fragmentocytes)	4,0 %	3	Polychromasia	12 %
>>> 16	Hypochromia	64 %	> 3	Basophilic stippling	12 %
> 4	Basophilic stippling	16 %	2	Howell-Jolly bodies	8,0 %
3	Howell-Jolly bodies	12 %	2	Rouleaux formation	8,0 %
2	Rouleaux formation	8,0 %			
2	Pappenheimer bodies	8,0 %			

Sample A			Sample B				
Platelets - morphology							
>	18	No changes	72 %	>	14	No changes	56 %
>	6	Large platelets	24 %	>	9	Large platelets	36 %
	3	Small platelets	12 %		1	Small platelets	4,0 %
	2	Platelet aggregates	8,0 %	>	2	Platelets hypogranulation	8,0 %
					1	Megakaryocytic nucleus fragments	4,0 %
Clinical recommendation - smear							
>>>	21	Blood smear is pathological	84 %		6	Blood smear is pathological	24 %
	4	Blood smear within physiological limits or with reactive changes	16 %	>>>	19	Blood smear within physiological limits or with reactive changes	76 %
Clinical recommendation - examination							
>>>	22	An examination by the specialist/haematologist is recommended	88 %		8	An examination by the specialist/haematologist is recommended	32 %
	3	An examination by the specialist/haematologist is not necessary	12 %	>>>	17	An examination by the specialist/haematologist is not necessary	68 %
Diagnosis - anaemia							
	2	Exact determination impossible	8,0 %				
	4	Microcytosis	16 %				
	2	Hypochromia	8,0 %				
	8	Thalassemia or other haemoglobinopathies	32 %				
Diagnosis - acute leukaemia							
	1	Without closer determination	4,0 %				
Diagnosis - myelodysplastic syndrome							
	2	Myelodysplastic syndrome	8,0 %				
Diagnosis - other							
	1	Viral infection	4,0 %		1	Viral infection	4,0 %
	4	Other reactive changes	16 %	>>>	16	Other reactive changes	64 %
>>>	6	Other findings	24 %		9	Other findings	36 %
Smear quality							
	18	Acceptable	72 %		19	Acceptable	76 %
	7	Not acceptable	28 %		6	Not acceptable	24 %
Staining							
	20	Acceptable	80 %		20	Acceptable	80 %
	4	Not acceptable	16 %		4	Not acceptable	16 %

Evaluation of the results - scoring system**DIF3/17**

Sample A		Sample B	
Maximal achievable score: 69		Maximal achievable score: 69	
Successful participants (success 60 % and more): 23 (it is 92 %)		Successful participants (success 60 % and more): 17 (it is 68 %)	
Minimal success in this round: 46,4 %		Minimal success in this round: 37,7 %	
Maximal success in this round: 100,0 %		Maximal success in this round: 89,9 %	
Number of participants: 25			
in both samples: 15 (it is 60 %)			
in one sample: 10 (it is 40 %)			
in no sample: 0 (it is 0 %)			