

SUMMARY STATISTICS

Filter: Slovakia

EQA round: DIF1/18 - Peripheral Blood Morphology Evaluation

Dead line (EQA round closed): 23.03.2018

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	0,736	0,668 - 0,795	0,710	0	0,000 - 0,018	0,000
Promyelocytes	0	0,000 - 0,018	0,001	0	0,000 - 0,018	0,000
Neutrophil myelocytes	0	0,000 - 0,018	0,001	0	0,000 - 0,018	0,000
Neutrophil metamyelocytes	0	0,000 - 0,018	0,001	0	0,000 - 0,018	0,000
Neutrophil bars	0,002	0,000 - 0,018	0,004	0,013	0,000 - 0,043	0,018
Segmented neutrophil granulocytes	0,013	0,003 - 0,043	0,019	0,575	0,500 - 0,660	0,590
Eosinophil granulocytes - immature forms	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Eosinophil segmented granulocytes	0	0,000 - 0,018	0,002	0,021	0,005 - 0,050	0,021
Basophilic granulocytes	0	0,000 - 0,018	0,000	0,006	0,000 - 0,028	0,006
Monocytes	0,070	0,039 - 0,115	0,064	0,063	0,035 - 0,109	0,065
Lymphocytes	0,173	0,125 - 0,235	0,190	0,321	0,245 - 0,390	0,298
Plasma cells	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Erythroblasts (number)	1,000	0,000 - 3,000	0,740	0	0,000 - 2,000	0,000

Sample A				Sample B			
WBC - morphology							
1	Giant bands and metamyelocytes	5,3 %	>>> 6	No changes			32 %
1	Agranulation	5,3 %	3	Hypergranulation/toxic granulation			16 %
1	Hypersegmented granulocytes	5,3 %	1	Agranulation			5,3 %
2	Auer rods	11 %	4	Hypersegmented granulocytes			21 %
>	3	Atypical/reactive monocytes	16 %	2	Atypical/reactive monocytes		11 %
>>>	17	Denuded nuclei/cells, nuclear shadows / smudge cells	89 %	2	Denuded nuclei/cells, nuclear shadows / smudge cells		11 %
>	8	Vacuolisation	42 %	2	Vacuolisation		11 %
1	LGL/big lymphocytes	5,3 %	2	LGL/big lymphocytes			11 %
1	Lymphocytes - atypical forms	5,3 %	4	Lymphocytes - reactive forms			21 %
1	Nucleus fragments of neutrophiles	5,3 %	1	Nucleus fragments of neutrophiles			5,3 %

WBC - relative changes of count							
>>>	14	Neutropenia	74 %	>>>	16	Normal count	84 %
	2	Neutrophilia	11 %		1	Neutrophilia	5,3 %
	2	Lymphocytosis	11 %		1	Basophilia	5,3 %
>	11	Lymphocytopenia	58 %		1	Left shift	5,3 %
	1	Monocytopenia	5,3 %				
	10	Left shift	53 %				

RBC - morphology							
>>>	11	Macrocytosis	58 %	>>>	5	No changes	26 %
>>>	14	Anisocytosis	74 %		12	Normocytosis	63 %
	2	Poikilocytosis	11 %		1	Anisocytosis	5,3 %
>>>	9	Eliptocytes, ovalocytes	47 %		1	Poikilocytosis	5,3 %
>>>	6	Spherocytes	32 %		1	Eliptocytes, ovalocytes	5,3 %
	1	Stomatocytes	5,3 %		1	Spherocytes	5,3 %
	3	Dacryocytes	16 %		6	Stomatocytes	32 %
	7	Acanthocytes	37 %		1	Dacryocytes	5,3 %
>>>	7	Echinocytes	37 %		4	Target cells	21 %
>	2	Target cells	11 %		1	Polychromasia	5,3 %
>	5	Schistocytes (and other fragmentocytes)	26 %		1	Rouleaux formation	5,3 %
	3	Polychromasia	16 %		1	RBC agglutination	5,3 %
	2	Hypochromia	11 %				
	2	Rouleaux formation	11 %				

Platelets - morphology							
>	8	No changes	42 %	>>>	15	No changes	79 %
>	1	Large platelets	5,3 %		2	Large platelets	11 %

Sample A			Sample B		
Platelets - morphology					
8	Small platelets	42 %	> 2	Small platelets	11 %
>>> 2	Platelets hypogranulation	11 %	1	Platelet satellitism	5,3 %
Clinical recommendation - smear					
>>> 19	Blood smear is pathological	100 %	>>> 19	Blood smear within physiological limits or with reactive change	100 %
Clinical recommendation - examination					
>>> 19	An examination by the specialist/haematologist is recommended	100 %	1	An examination by the specialist/haematologist is recommended	5,3 %
			>>> 18	An examination by the specialist/haematologist is not necessary	95 %
Diagnosis - anaemia					
1	Exact determination impossible	5,3 %			
1	Hypochromia	5,3 %			
1	Macrocytosis	5,3 %			
Diagnosis - acute leukaemia					
> 8	Without closer determination	42 %			
2	ALL (acute lymphoblastic leukemia)	11 %			
>>> 11	AML (acute myeloid leukemia)	58 %			
Diagnosis - mature lymphocytic cells neoplasms					
1	CLL (chronic lymphocytic leukaemia)	5,3 %			
Diagnosis - platelets disorders					
2	Thrombocytopenia	11 %			
Diagnosis - other					
			1	Viral infection incl. inf. mononucleosis	5,3 %
			5	Other reactive changes	26 %
			6	Other disease	32 %
Smear quality					
18	Acceptable	95 %	19	Acceptable	100 %
1	Not acceptable (give a reason)	5,3 %			
Staining					
17	Acceptable	89 %	18	Acceptable	95 %
2	Not acceptable (give a reason)	11 %	1	Not acceptable (give a reason)	5,3 %

Evaluation of the results - scoring system**DIF1/18**

Sample A		Sample B	
Maximal achievable score: 99		Maximal achievable score: 75	
Successful participants (success 60 % and more): 12 (it is 63 %)		Successful participants (success 60 % and more): 16 (it is 84 %)	
Minimal success in this round: 32,3 %		Minimal success in this round: 56,0 %	
Maximal success in this round: 100,0 %		Maximal success in this round: 100,0 %	
Number of participants: 19			
Number of participants that succeeded:		in both samples: 11 (it is 58 %)	
		in one sample: 6 (it is 32 %)	
		in no sample: 2 (it is 11 %)	