

SUMMARY STATISTICS

Filter: Slovakia

EQA round: DIF4/21 - Peripheral Blood Morphology Evaluation

Deadline (EQA round closed): 29.10.2021

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	0,010	0,001 - 0,036	0,008	0	0,000 - 0,018	0,000
Promyelocytes	0,001	0,000 - 0,018	0,001	0	0,000 - 0,018	0,000
Neutrophil myelocytes	0,028	0,000 - 0,064	0,027	0	0,000 - 0,018	0,000
Neutrophil metamyelocytes	0,035	0,014 - 0,071	0,033	0	0,000 - 0,018	0,000
Neutrophil bars	0,068	0,039 - 0,115	0,065	0,005	0,000 - 0,028	0,007
Segmented neutrophil granulocytes	0,602	0,529 - 0,668	0,581	0,389	0,322 - 0,461	0,380
Eosinophils - immature forms	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,002
Eosinophil segmented granulocytes	0,002	0,000 - 0,018	0,003	0,160	0,112 - 0,218	0,166
Basophilic granulocytes	0,007	0,000 - 0,028	0,006	0,014	0,003 - 0,043	0,013
Monocytes	0,047	0,021 - 0,084	0,057	0,065	0,035 - 0,109	0,062
Lymphocytes	0,202	0,147 - 0,262	0,215	0,369	0,303 - 0,441	0,368
Plasma cells	0	0,000 - 0,018	0,000	0	0,000 - 0,018	0,000
Erythroblasts (number)	1,000	0,000 - 4,000	1,001	0	0,000 - 2,000	0,000

Sample A

Sample B

WBC - morphology

> 3	No changes	20 %	> 4	No changes	27 %
2	Agranulation	13 %	1	Agranulation	6,7 %
> 4	Hypersegmented granulocytes	27 %	3	Hypersegmented granulocytes	20 %
1	Hyposegmentation / asegmentation / pelgeroid	6,7 %	1	Döhle bodies	6,7 %
1	Döhle bodies	6,7 %	> 4	Denuded nuclei/cells, nuclear shadows / smudge cells	27 %
3	Denuded nuclei/cells, nuclear shadows / smudge cells	20 %	> 3	Vacuolisation	20 %
> 8	Vacuolisation	53 %	2	LGL/big lymphocytes	13 %
3	Lymphocytes - reactive forms	20 %	2	Lymphocytes - reactive forms	13 %
1	Nucleus fragments of neutrophiles	6,7 %	>	Lymphocytes - atypical forms (except "hairy")	

WBC - relative changes of count

> 2	Neutrophilia	13 %	>>> 8	Neutropenia	53 %
> 3	Lymphocytopenia	20 %	>>> 15	Eosinophilia	100 %
1	Monocytosis	6,7 %	> 7	Basophilia	47 %
>>> 15	Left shift	100 %	1	Left shift	6,7 %

RBC - morphology

2	Normocytosis	13 %	> 8	No changes	53 %
1	Microcytosis	6,7 %	> 3	Normocytosis	20 %
>>> 13	Anisocytosis	87 %	1	Anisocytosis	6,7 %
6	Poikilocytosis	40 %	1	Poikilocytosis	6,7 %
>>> 15	Eliptocytes, ovalocytes	100 %	> 2	Eliptocytes, ovalocytes	13 %
3	Spherocytes	20 %	2	Echinocytes	13 %
>>> 9	Stomatocytes	60 %	1	Schistocytes (and other fragmentocytes)	6,7 %
>>> 15	Dacryocytes	100 %	> 4	Rouleaux formation	27 %
> 5	Schistocytes (and other fragmentocytes)	33 %			
> 2	Polychromasia	13 %			

Platelets - morphology

2	No changes	13 %	>>> 8	No changes	53 %
>>> 13	Large platelets	87 %	6	Large platelets	40 %
1	Small platelets	6,7 %	2	Small platelets	13 %
> 7	Platelets hypogranulation	47 %	1	Platelets hypogranulation	6,7 %
>	Megakaryocytic nucleus fragments				

Clinical recommendation - smear

>>> 15	Blood smear is pathological	100 %	>>> 12	Blood smear is pathological	80 %
			2	Blood smear within physiological limits or with reactive changes	13 %

Sample A

Sample B

Clinical recommendation - examination

>>> 15	An examination by the specialist/haematologist is recommended	100 %	>>> 11	An examination by the specialist/haematologist is recommended	73 %
			3	An examination by the specialist/haematologist is not necessary	20 %

Diagnosis - anaemia

1	Normocytosis	6,7 %	>>> 9	Normocytosis	60 %
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Diagnosis - myelodysplastic syndrome

1	Myelodysplastic syndrome	6,7 %			
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Diagnosis - chronic myeloproliferative disease

>>> 8	Exact determination impossible	53 %	2	Exact determination impossible	13 %
>>> 8	Myelofibrosis	53 %			

Diagnosis - platelets disorders

			1	Thrombocytopenia	6,7 %
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Diagnosis - other

1	Other reactive changes	6,7 %	2	Parasitic infection	13 %
1	Other disease	6,7 %	2	Other reactive changes	13 %
			> 5	Allergy	33 %
			> 4	Other disease	27 %

Smear quality

15	Acceptable	100 %	15	Acceptable	100 %
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Staining

14	Acceptable	93 %	15	Acceptable	100 %
1	Not acceptable (give a reason)	6,7 %			

Evaluation of the results - scoring system

DIF4/21

Sample A

Maximal achievable score: 87

Successful participants (success 60 % and more): 15 (it is 100 %)

Minimal success in this round: 70,1 %

Maximal success in this round: 100,0 %

Sample B

Maximal achievable score: 69

Successful participants (success 60 % and more): 13 (it is 87 %)

Minimal success in this round: 53,6 %

Maximal success in this round: 100,0 %

Number of participants: 15

in both samples: 13 (it is 87 %)

Number of the participants that succeeded: in one sample: 2 (it is 13 %)

in no sample: 0 (it is 0 %)