

SUMMARY STATISTICS

EQA round: NF2/22 - Peripheral Blood Smears - Photos

Deadline (EQA round closed): 16.09.2022

Professional supervision: Czech Haematological Society

Key:	>>>	... marks correct (expected) result
	>	... marks conditionally correct (acceptable) result

Photo 1

Object no.1 WBC and other nucleous elements - types of cells	>>>	44	Lymphocyte	100 %
WBC - morphology	>>>	12	No changes	27 %
	>	7	Lymphocytes - reactive forms	16 %
		1	"Hairy" lymphocytes	2,3 %
		23	Lymphocytes - atypical forms	52 %
Object no.2 WBC and other nucleous elements - types of cells		7	Neutrophil bar	16 %
WBC - morphology	>>>	37	Neutrophil segment	84 %
	>>>	39	No changes	89 %
		2	Hypergranulation/toxic granulation	4,5 %
		3	Hyposegmentation or pseudo Pelger anomaly	6,8 %
RBC - morphology		5	Normocytosis	11 %
	>	15	Anisocytosis	34 %
		1	Poikilocytosis	2,3 %
		5	Spherocytes	11 %
	>>>	42	Stomatocytes	95 %
		2	Dacryocytes	4,5 %
		1	Acanthocytes	2,3 %
	>>>	41	Schistocytes (and other fragmentocytes)	93 %
		8	Basophilic stippling	18 %
		1	Howell-Jolly bodies	2,3 %
		1	Knizocytes	2,3 %
		5	Ovalocytes	11 %

Photo 2

Object no.1 WBC and other nucleous elements - types of cells		1	Promyelocyte	2,3 %
		2	Neutrophil metamyelocyte	4,5 %
WBC - morphology	>>>	37	Monocyte	84 %
		4	Lymphocyte	9,1 %
	>	20	No changes	45 %
		1	Giant bands and metamyelocytes	2,3 %
		1	Hypogranulation/agranulation	2,3 %
	>>>	18	Atypical/reactive monocytes	41 %
		4	Vacuolisation	9,1 %
		1	LGL/big lymphocytes	2,3 %
		3	Lymphocytes - reactive forms	6,8 %
		1	Lymphocytes - atypical forms	2,3 %
		1	Leukemic promyelocyte	2,3 %
Object no.2 WBC and other nucleous elements - types of cells	>>>	44	Neutrophil segment	100 %
WBC - morphology	>>>	33	No changes	75 %
		4	Hypergranulation/toxic granulation	9,1 %
	>	4	Hypogranulation/agranulation	9,1 %
		2	Hypersegmented granulocytes	4,5 %
		2	Vacuolisation	4,5 %
RBC - morphology	>>>	24	Macrocytosis	55 %
	>	8	Anisocytosis	18 %
	>	17	Spherocytes	39 %
	>	21	Stomatocytes	48 %
		8	Acanthocytes	18 %
	>	28	Echinocytes	64 %
	>	16	Target cells	36 %
	>>>	39	Polychromasia	89 %

Photo 2

RBC - morphology		2	Hypochromia	4,5 %
		1	Basophilic stippling	2,3 %
	>>>	13	Howell-Jolly bodies	30 %
	>>>	40	Pappenheimer bodies	91 %
		1	Anisochromia	2,3 %
		1	Knizocytes	2,3 %
		6	Ovalocytes	14 %
Platelets - morphology	>>>	31	No changes	70 %
		2	Small platelets	4,5 %
		10	Anisocytosis	23 %
		1	Platelets hypo-/agranulation	2,3 %
		1	Megakaryocytic nucleus fragments	2,3 %

Photo 3

Object no.1 WBC and other nucleous elements - types of cells		1	Lymphocyte	2,3 %	
	>>>	41	Bare nuclei, smudge cell	93 %	
		2	Erythroblast	4,5 %	
	WBC - morphology	>	12	No changes	27 %
			1	LGL/big lymphocytes	2,3 %
			1	Erythroblast: bi-multinuclearity	2,3 %
			1	Erythroblast: karyorrhexis/lobulisation/fragmentation of	2,3 %
		1	Erythroblast: disturbance of cytoplasmatic haemoglobinisation	2,3 %	
RBC - morphology	>>>	29	Anisocytosis	66 %	
		2	Poikilocytosis	4,5 %	
		1	Eliptocytes	2,3 %	
	>	24	Spherocytes	55 %	
	>>>	42	Stomatocytes	95 %	
		3	Dacryocytes	6,8 %	
	>	4	Acanthocytes	9,1 %	
		7	Echinocytes	16 %	
	>>>	38	Schistocytes (and other fragmentocytes)	86 %	
		1	Polychromasia	2,3 %	
		4	Hypochromia	9,1 %	
	>>>	43	Basophilic stippling	98 %	
		1	Malaric plasmodia	2,3 %	
	>	32	Rouleaux formation	73 %	
		2	RBC agglutination	4,5 %	
	>	5	Anisochromia	11 %	
	>>>	39	Knizocytes	89 %	
>>>	37	Ovalocytes	84 %		
Platelets - morphology		1	No changes	2,3 %	
	>	28	Large platelets	64 %	
		1	Small platelets	2,3 %	
	>>>	41	Anisocytosis	93 %	
	>	21	Platelets hypo-/agranulation	48 %	
	>	16	Megakaryocytic nucleus fragments	36 %	

Photo 4

RBC - morphology		3	Microcytosis	6,8 %
	>	10	Anisocytosis	23 %
		10	Poikilocytosis	23 %
		14	Eliptocytes	32 %
		14	Spherocytes	32 %
	>>>	36	Stomatocytes	82 %
	>>>	30	Drepanocytes	68 %
	>	31	Dacryocytes	70 %
	>>>	26	Acanthocytes	59 %
		12	Echinocytes	27 %
	>>>	23	Target cells	52 %
	>	6	Schistocytes (and other fragmentocytes)	14 %
	>>>	24	Polychromasia	55 %
		1	Hypochromia	2,3 %
	>	22	Howell-Jolly bodies	50 %
	8	Pappenheimer bodies	18 %	
	3	Anisochromia	6,8 %	

Photo 4

RBC - morphology	>>>	33	Knizocytes	75 %
	>	18	Ovalocytes	41 %
Platelets - morphology	>>>	42	Large platelets	95 %
		1	Small platelets	2,3 %
	>>>	42	Anisocytosis	95 %
		2	Platelets hypo-/agranulation	4,5 %
		2	Megakaryocytic nucleus fragments	4,5 %

Evaluation of the results - scoring system

NF2/22

	Photo 1	Photo 2	Photo 3	Photo 4
Maximal achievable score:	30	45	40	40
Successful participants (success 60 % and more):	36 (it is 82 %)	34 (it is 77 %)	40 (it is 91 %)	30 (it is 68 %)
Minimal success in this round:	43,3 %	2,2 %	17,5 %	27,5 %
Maximal success in this round:	100,0 %	100,0 %	100,0 %	97,5 %
Number of the participants that succeeded:	Number of participants: 44 in all 4 photos: 23 (it is 52 %) in 3 photos: 12 (it is 27 %) in 2 photos: 4 (it is 9 %) in 1 photo: 4 (it is 9 %) in no photo: 1 (it is 2 %)			