

Verein für
Association pour le
Associazione per il



medizinische Qualitätskontrolle
contrôle de qualité médical
controllo di qualità medico

Report

Differential Blood Smear H3

MQ 2017-1

Acknowledgements

The Mythic 18 analyzer was provided by the company Polymed, the ABX Microsemi CRP analyzer by the company Axonlab and the XP-300 analyzer by the Firma Sysmex. MQ employees conducted the measurements.

The findings of the XE-5000 and ADVA 2120 devices and of the microscopic blood counts were generated by the Central Laboratory of Medical Diagnostic HAD of the University Hospital Zurich Hematology Clinic. The lab is ISO/IEC 17025 certified (STS 445). Dr. J-D. Studt is the responsible manager; Prof. MG Manz, M.D., the clinic director.

www.haematologie.usz.ch

For information regarding all analyses offered by the University Hospital of Zurich, see:

www.uzl.usz.ch

(c) 2017 Verein für medizinische Qualitätskontrolle

Index

1	SAMPLE A	4
1.1	ABX Microsemi CRP	4
1.2	Mythic	5
1.3	Sysmex XP300	6
1.4	Sysmex XE-5000	7
1.5	ADVIA 2120	9
1.6	Differential Blood Smear	11
1.7	Summary of participant results	13
1.8	Qualab Codes	14
2	SAMPLE B	15
2.1	ABX Microsemi CRP	15
2.2	Mythic	16
2.3	Sysmex XP300	17
2.4	Sysmex XE-5000	18
2.5	ADVIA 2120	20
2.6	Differential Blood Smear	22
	Summary of participant results	24
2.7	Qualab Codes	25

1 Sample A

1.1 ABX Microsemi CRP



Findings MQ 2017-1 H3A

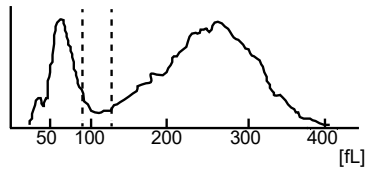
40 year old man

WBC :	9.1	10 ⁹ /L	MCV :	31.2	fL
RBC :	4.88	10 ¹² /L	MCH :	31.2	pg
HGB :	152	g/L	MCHC:	340	g/L
HCT :	448	L/L	RDW :	13.1	%
PLT :	183	10 ⁹ /L	MPV :	8.3	fL
PCT :	152	10 ⁻² L/L	PDW :	17.5	%

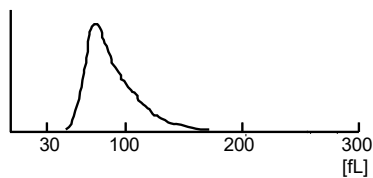
WBC Flags: L1

DIFF:					
%LYM:	19.8	%	#LYM:	1.8	10 ⁹ /L
%MON:	3.7	L %	#MON:	0.3	10 ⁹ /L
%GRA:	76.5	H %	#GRA:	7.0	H 10 ⁹ /L

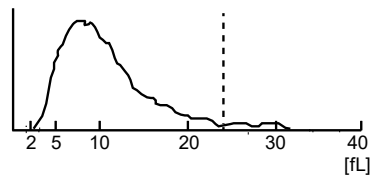
WBC



RBC



PLT

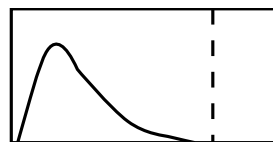
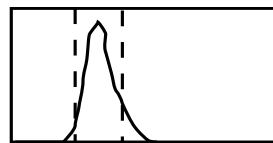
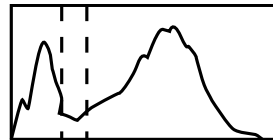


1.2 Mythic



Findings MQ 2017-1 H3A 40 year old man

WBC	8.9	10 ⁹ /l	3.5 /	10.0
LYM	1.7	10 ⁹ /l	1.2 /	3.2
MON	0.4	10 ⁹ /l	0.1 /	1.0
GRA	6.8	10 ⁹ /l	1.2 /	6.8
LYM%	19.0	%	17.0 /	48.0
MON%	4.9	%	2.0 /	10.0
GRA%	76.1	h %	43.0 /	76.0
RBC	4.74	10 ¹² /l	4.00 /	5.70
HGB	152	g/l	140 /	180
HCT	0.427	l/l	0.420 /	0.540
MCV	90.1	fl	80.0 /	100.0
MCH	32.1	pg	26.0 /	34.0
MCHC	356	g/l	310 /	365
RDW	14.9	%	10.0 /	16.0
PLT	177	10 ⁹ /l	150 /	400
MPV	9.0	fl	7.0 /	11.0
PCT	0.159	cl/l	0.100 /	0.500
PDW	16.6	%	10.0 /	18.0



FLAGS: Granulocytosis

1.3 Sysmex XP300



Findings MQ 2017-1 H3A 40 year old man

WBC	9.2	$10^3/\mu\text{L}$	<p>WBC [fL]</p>	
RBC	4.74	$10^6/\mu\text{L}$		
HGB	14.8	g/L		
HCT	42.6	%		
MCV	89.9	fL		
MCH	31.2	pg		
MCHC	34.7	g/L		
PLT	193	$10^3/\mu\text{L}$		
LYM%	-20.0	%		<p>RBC [fL]</p>
MXD%	6.9	%		
NEUT%	+73.1	%		
LYM#	1.8	$10^3/\mu\text{L}$	<p>PLT [fL]</p>	
MXD#	0.6	$10^3/\mu\text{L}$		
NEUT#	6.8	$10^3/\mu\text{L}$		
RDW_SD	+46.1	fL		
RDW_CV	13.3	%		
PDW	+16.3	fL		
MPV	11.0	fL		
P_LCR	32.3	%		
PCT	0.21	%		

1.4 Sysmex XE-5000

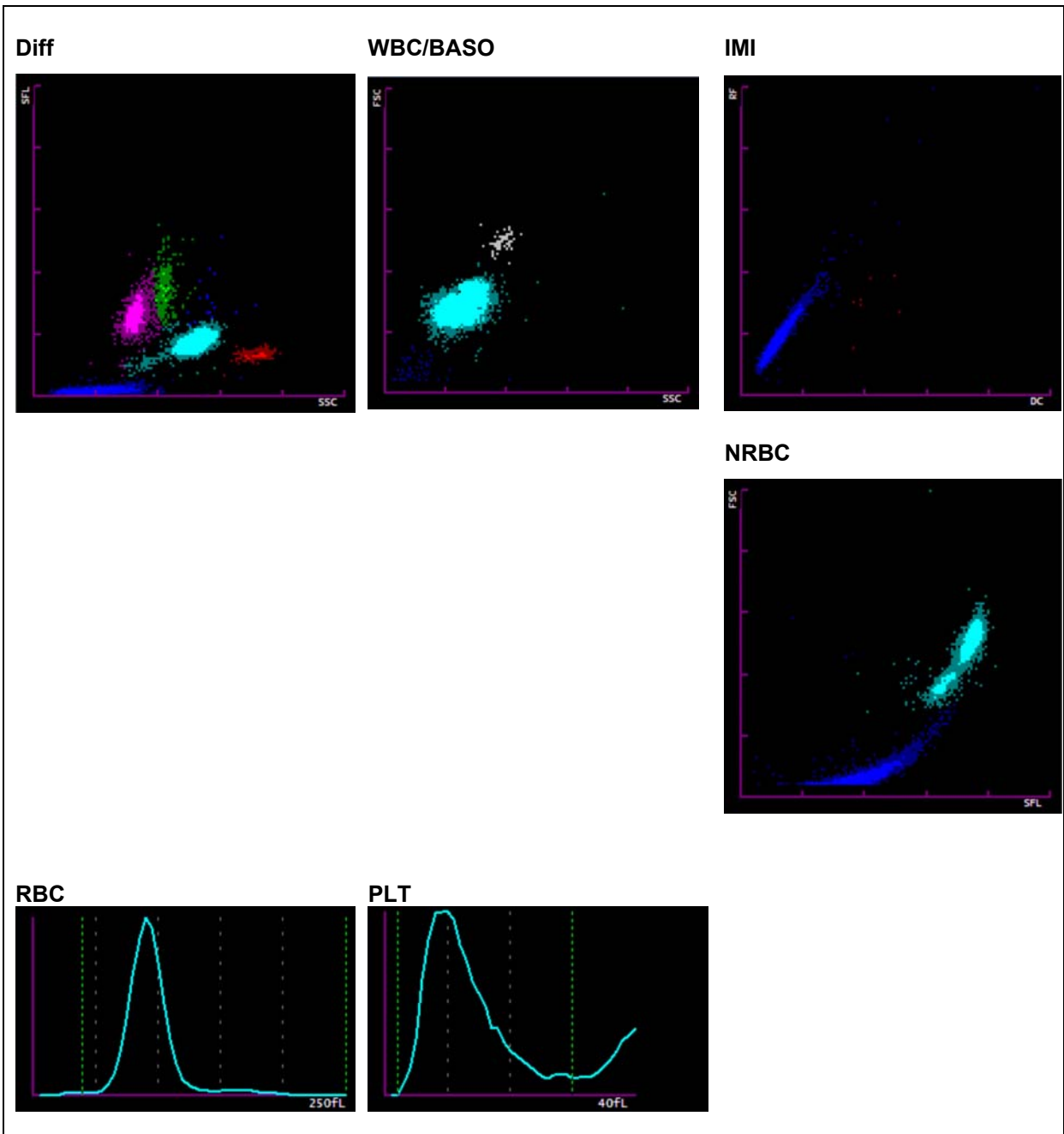


Findings MQ 2017-1 H3A

40 year old man

Analysis	Result	Unit	Reference value
Blood Count			
<u>Hemoglobin</u>	147	g/l	
<u>Hematocrit</u>	0.428	l/l	
Erythrocytes	4.76	T/l	
MCV	89.9	fl	80-100
MCH	30.9	pg	26-34
MCHC	343	g/l	310-360
Mikrocytes	13.7	%	11.0-14.8
<u>Thrombocytes</u>	209	G/l	143-400
<u>Leucocytes</u>	12.6	G/l	3.0-9.6
Leucocyte Differentiation			
Neutrophils	6.53	G/l	1.40 – 8.00
Monocytes	0.53	G/l	0.16 – 0.95
Eosinophils	0.27	G/l	0.00 – 0.70
Basophils	0.06	G/l	0.00-0.15
Lymphocytes	1.85	G/l	1.50 - 4.00
IG abs.	0.01	G/l	0.00 – 0.03
IG %	0.1	%	0.0 – 0.05
NRBC abs.	0.00	G/l	
NRBC	0.0	/100 Lc	

Findings HAD MQ 2017-1 H3A

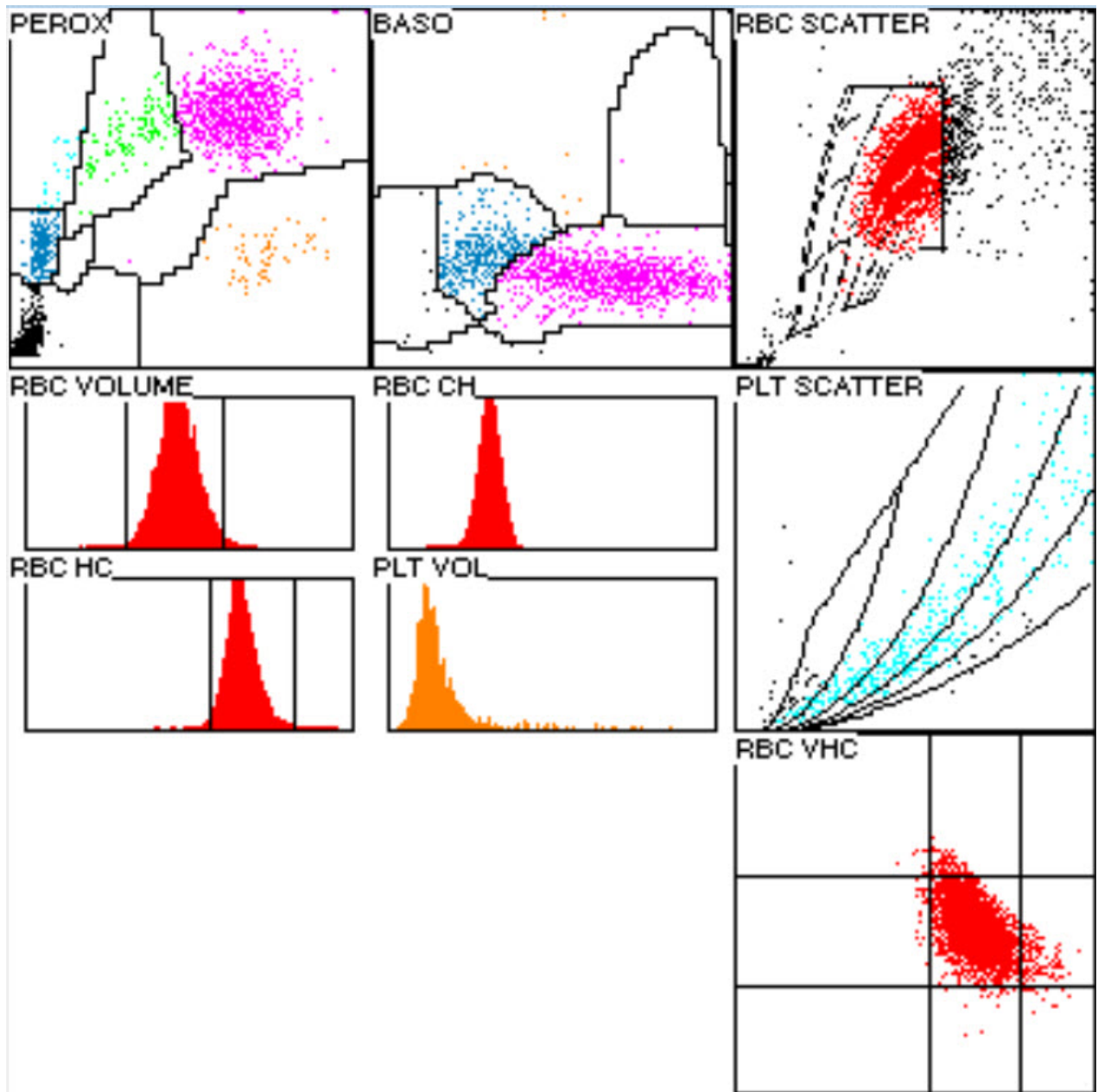


1.5 ADVIA 2120



Findings HAD MQ 2017-1 H3A 40 year old man

Analysis	Result	Unit	Reference value
Blood Count			
<u>Hemoglobin</u>	146	g/l	134-170
<u>Hematocrit</u>	0.441	l/l	0.400-0,500
Erythrocytes	4.74	T/l	4.2-5.7
MCV	93.1	fl	80-100
MCH	30.7	pg	26-34
MCHC	330	g/l	310-360
Mikrocytes	0.3	%	0-2.0
Macrocytes	1.3	%	0-2.0
Hypochromic Ec	1.0	%	0-2.0
Hyperchromic Ec	0.6	%	0-2.0
RDW	13.2	%	11.0-14.8
<u>Thrombocytes</u>	197	G/l	143-400
Vd. L-SHIFT	0	+	None (0)
<u>Leucocytes</u>	9.10	G/l	3.0-9.6
Leucocyte Differentiation			
Neutrophils	6.5	G/l	1.40-8.00
Monocytes	0.47	G/l	0.16-0.95
Eosinophils	0.28	G/l	0.00-0.70
Basophile	0.07	G/l	0.00-0.15
Lymphocytes	1.71	G/l	1.50-4.00
LUC	0.9	%	0.0-4.0



1.6 Differential Blood Smear

Findings HAD MQ 2017-1 H3A

40 year old man

Analysis	Result	Unit	Reference value
Neutrophils total	6.01	G/l	1.40-8.00
Monocytes	0.64	G/l	0.16-0.95
Eosinophils	0.18	G/l	0.00-0.70
Basophils	0.05	G/l	0.00-0.15
Lymphocytes	2.23	G/l	1.50-4.00
Neutrophils total	66.0	%	40.0-74.0
Neutrophils Band	13.0	%	0.0-20.0
Neutrophils Segmented	* 53.0	%	30.0-50.0
Monocytes	7.0	%	3.4-9.0
Eosinophils	2.0	%	0.0-7.0
Basophils	0.5	%	0.0-1.5
Lymphocytes	24.7	%	19.0-48.0
Plasmacells	0.0	%	0-0.5
Blasts	0.0	%	0
Promyelocytes	0.0	%	0
Myelocytes	0.0	%	0
Metamyelocytes	0.0	%	0
Nucleated Red Cells	0.0	/100 Lc	

Commentary

The red blood count is normochromic and normocytic. There are no erythrocytic inclusions detectable. Neutrophil granulocytes with fine cytoplasmic granulation. The lymphocytes are polymorphic in terms of size and nuclei, few with azurophilic granules. Platelets are anisocytic. No giant forms detectable.

K. Schreiber / PD. Dr. St. Balabanov

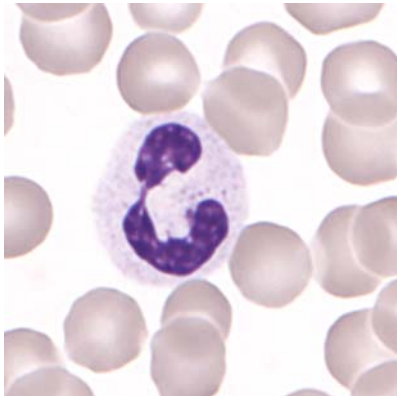


Abb 1. Neutrophil (Seg)

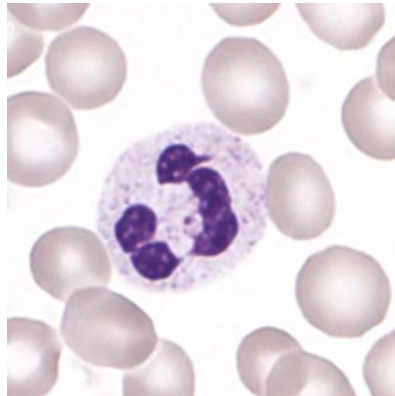


Abb 2. Neutrophil (Seg)

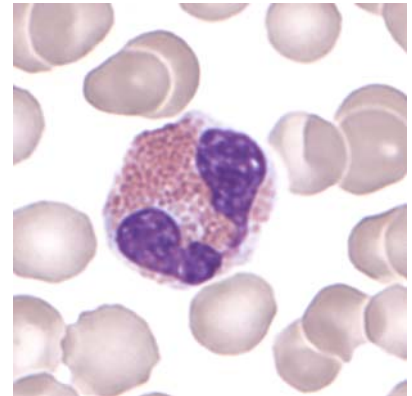


Abb 3. Eosinophil

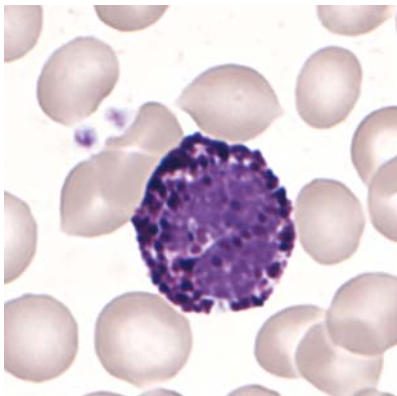


Abb 4. Basophil

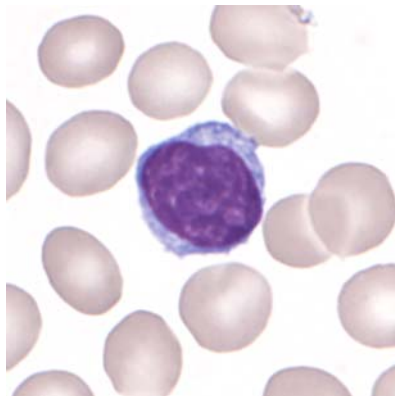


Abb 5. Lymphocyte

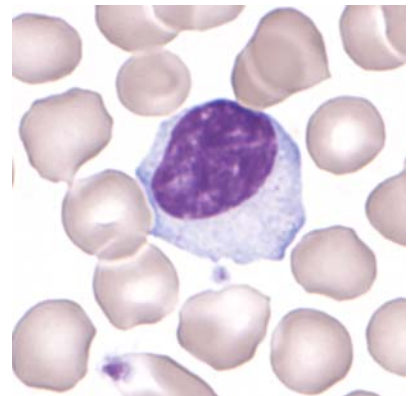


Abb 6. Lymphocyte (LGL)

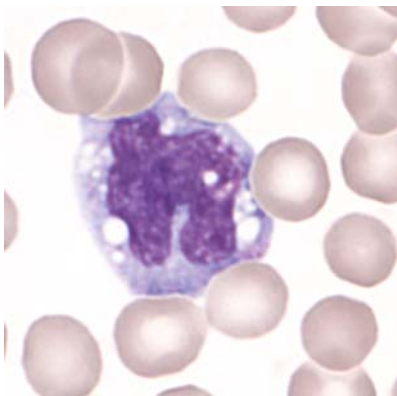


Abb 7. Monocyte

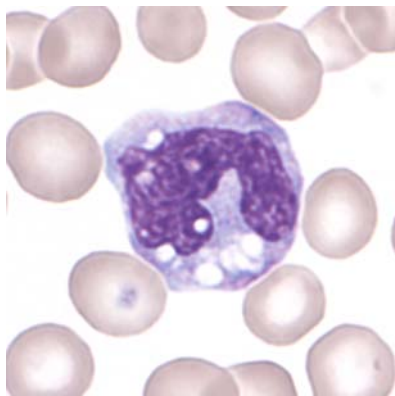


Abb 8. Monocyte

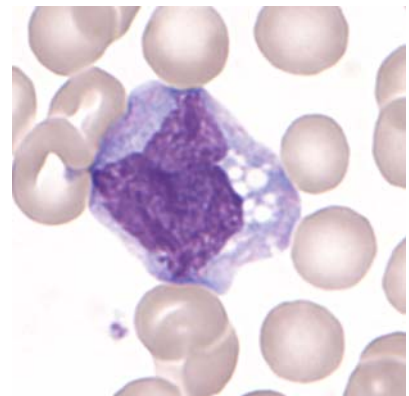


Abb 9. Monocyte

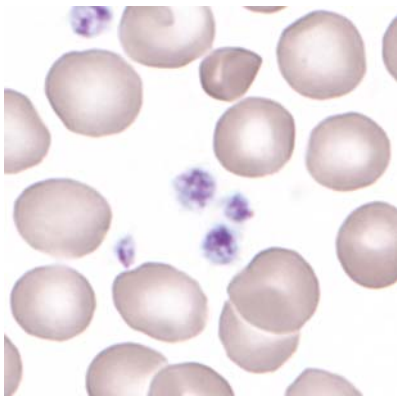


Abb 10. Thrombocytes

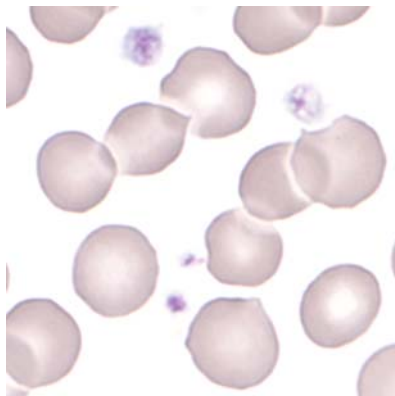


Abb 11. Thrombocytes

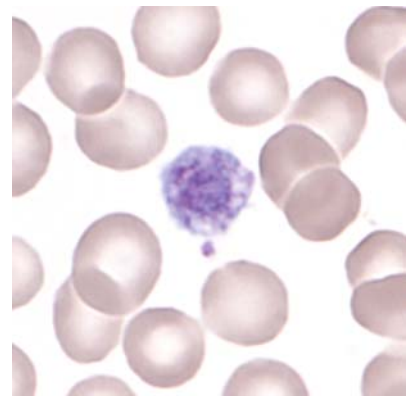


Abb 12. Giant Thrombocyte

1.7 Summary of participant results

Leukocyte Differenzial H3-A

	0	1-4	5-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	>79
<i>Neutrophils Band</i>	3	35	93	128*	36	5					
<i>Neutrophils Segmented.</i>	1				4	7	30	137*	106	14	1
<i>Eosinophils</i>	12	261*	27								
<i>Basophile</i>	148*	149	3								
<i>Monocytes</i>	9	122	154*	14	1						
<i>Lymphocytes</i>	1			82	202*	13	2				
<i>Plasmacells</i>	293*	7									
<i>Blasts</i>	299*	1									
<i>Promyelocytes</i>	299*	1									
<i>Myelocytes</i>	300*										
<i>Metamyelozyten</i>	297*	3									
<i>Erythrocytes Nucleated</i>	295*				1				1		3
<i>Unknown</i>	295*	5									
<i>Smudge cells</i>	282*	14	3	1							

Evaluation H3-A

	light	medium	strong		light	medium	strong
<i>Hypersegmentation</i>	18	6		<i>Hypochromic Ec</i>	20	3	
<i>Pelger-Hüet Anomaly</i>				<i>Polychromatic Ec</i>	16	3	
<i>Coarse Granulation</i>	20	1		<i>Anisocytes</i>	106	16	1
<i>Basophilic Stripling</i>	4			<i>Mikrocytes</i>	37	1	
<i>Vacuoles</i>	15	3		<i>Makrocytes</i>	19	4	1
<i>Reaktive Lymphocytes</i>	54	5	1	<i>Megalocytes</i>	4	0	
<i>Atypical Lymphocytes</i>	5			<i>Poikilocytosis</i>	41	5	
<i>Others</i>	2	1		<i>Ovalocytes</i>	31	1	
				<i>Target Cells</i>	9	4	1
				<i>Akanthocytes</i>	10		
<i>Anisocytosis</i>	100*	37	3	<i>Echinocytes</i>	21	1	
<i>Megakaryocyte Nucleaus</i>	13	3	2	<i>Sickle Cells</i>	1		
<i>Granulation</i>	17	3	0	<i>Fragmentocytes</i>	5		
<i>Others</i>				<i>Spherocytes</i>	4	2	
				<i>Stomatocytes</i>	5	2	
				<i>Basophilic Stripling</i>	3	1	
				<i>Howell-Jolly Bodies</i>	2		2
				<i>Pappenheim Bodies</i>			
				<i>Others</i>	2		

Commentary

Smear H3-A is from a healthy employee.

1.8 Qualab Codes

Summary of the participant codes
(Bold printed: expected codes)

Code	Text	Number
29	Normal findings	262
9	Macrothrombocytes	37
5	Atypical lymphocytes, probably reactive	31
31	Pathologic findings	24
16	Poikilocytosis	17
30	Pathologic findings, refer to expert	17
2	Neutrophils, left shift	16
12	Microcytes	13
22	Rouleaux	12
13	Macrocytes	11
27	Erythrocytes, other	9
14	Hypochromic Erythrocytes	8
17	Elliptocytes/Ovalocytes	8
19	Targetcells	7
11	Thrombocytes, others	6
15	Polychromatophilic Red Cells	6
1	Neutrophils, hypersegmentation of nucleus	5
26	Teardrops	4
8	Leucocytes other:	3
18	Stomatocytes	3
20	Fragmentocytes	3
24	Howell-Jolly bodies	3
10	Thrombocyte aggregates	2
21	Spherocytes	2
25	Basophilic strippling	2
4	Neutrophils, Toxic Changes	1
6	Atypical lymphocytes, probably neoplastic	1
7	Auer rods	1
99	Total	310

2 Sample B

2.1 ABX Microsemi CRP



Findings MQ 2017-1 H3B

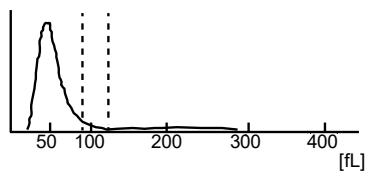
32 year old man

WBC :	47.6	H	10 ⁹ /L	MCV :	72.7	L	fL
RBC :	3.41	L	10 ¹² /L	MCH :	24.4	L	pg
HGB :	83	L	g/L	MCHC:	336		g/L
HCT :	0.248	L	L/L	RDW :	16.7	H	%
PLT :	832	§	10 ⁹ /L	MPV :	8.5	§	fL
PCT :	.710	§	10 ⁻² L/L	PDW :	14.4	§	%

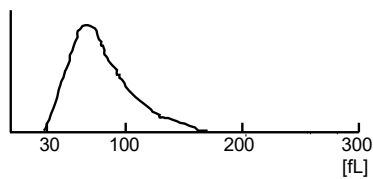
WBC Flags: G1

DIFF:							
%LYM:	72.3	H	%	#LYM:	34.4	H	10 ⁹ /L
%MON:	6.0		%	#MON:	2.8	H	10 ⁹ /L
%GRA:	21.7	L	%	#GRA:	10.4	H	10 ⁹ /L

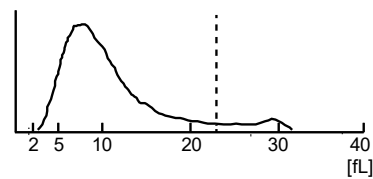
WBC



RBC



PLT



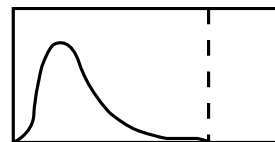
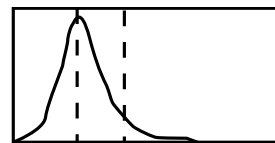
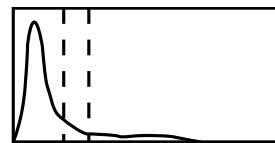
2.2 Mythic



Findings MQ 2017-1 H3B

32 year old man

WBC	57.2	H	10 ⁹ /l	3.5	/	10.0
LYM	41.5	H	10 ⁹ /l	1.2	/	3.2
MON	4.9	H	10 ⁹ /l	0.1	/	1.0
GRA	10.8	H	10 ⁹ /l	1.2	/	6.8
LYM%	72.5	H	%	17.0	/	48.0
MON%	8.6		%	2.0	/	10.0
GRA%	18.9	L	%	43.0	/	76.0
RBC	3.36	l	10 ¹² /l	4.00	/	5.70
HGB	83	L	g/l	140	/	180
HCT	0.254	l	l/l	0.420	/	0.540
MCV	75.6	l	fl	80.0	/	100.0
MCH	24.7	L	pg	26.0	/	34.0
MCHC	327		g/l	310	/	365
RDW	24.6	h	%	10.0	/	16.0
PLT	763	H	10 ⁹ /l	150	/	400
MPV	8.8		fl	7.0	/	11.0
PCT	0.671	H	cl/l	0.100	/	0.500
PDW	16.0		%	10.0	/	18.0



2.3 Sysmex XP300



Findings MQ 2017-1 H3B 32 year old man

WBC	51.2	$10^3/\mu\text{L}$	<p>WBC</p> <p>RBC</p> <p>PLT</p>
RBC	3.35	$10^6/\mu\text{L}$	
HGB	-8.0	g/dL	
HCT	26.3	%	
MCV	78.5	fL	
MCH	23.9	pg	
MCHC	32.7	g/dL	
PLT	832	$10^3/\mu\text{L}$	
LYM%	75.3	%	
MXD%	-	%	
NEUT%	-	%	
LYM#	38.6	$10^3/\mu\text{L}$	
MXD#T2	-	$10^3/\mu\text{L}$	
NEUT#T2	-	$10^3/\mu\text{L}$	
RDW_SD	75.1	fL	
RDW_CV	29.5	%	
PDW	13.2	fL	
MPV	9.9	fL	
P_LCR	25.2	%	
PCT	0.82	%	

2.4 Sysmex XE-5000

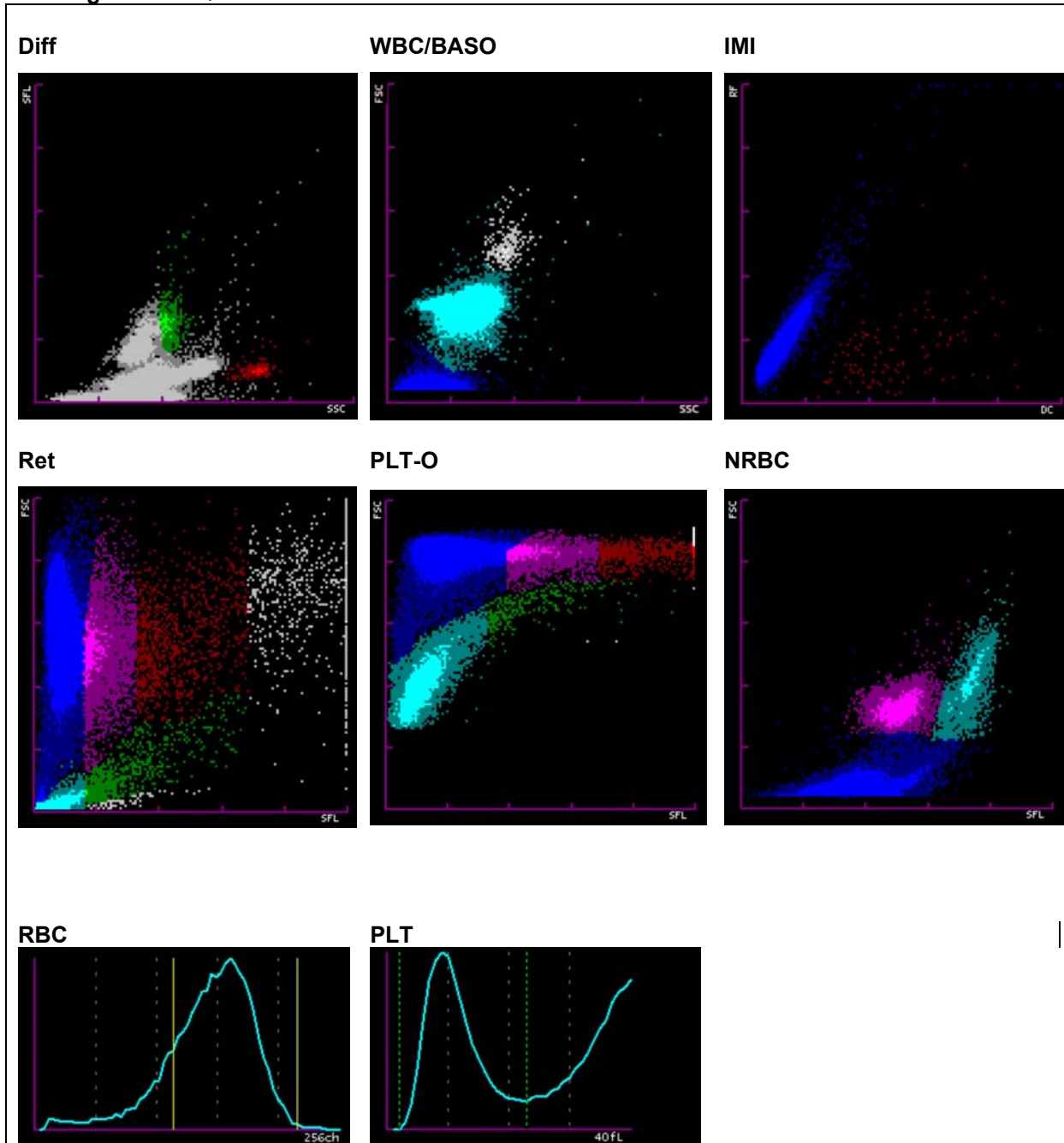


Findings MQ 2017-1 H3B

32 year old man

Analysis	Result	Unit	Reference value
Blood Count			
Hemoglobin	* 79	g/l	117-153
Hematocrit	* 0.251	l/l	0.350-0.460
Erythrocytes	* 3.48	T/l	3.9-5.2
MCV	72.1	fl	80-100
MCH	22.7	pg	26-34
MCHC	315	g/l	310-360
Mikrocytes	* 26.6	%	11.0-14.8
Thrombocytes	* 811	G/l	143-400
Leucocytes	* 18.53	G/l	3.0-9.6
Leucocyte Differentiation			
Neutrophils	Not measurable	G/l	1.40-8.00
Monocytes	Not measurable	G/l	0.16-0.95
Eosinophils	Not measurable	G/l	0.00-0.70
Basophils	* 0.40	G/l	0.00-0.15
Lymphocytes	Not measurable	G/l	1.50-4.00
IG abs.	Not measurable	G/l	0.00-0.03
IG %	Not measurable	%	0.0-0.5
NRBC abs.	36.42	G/l	
NRBC	196.6	/100 Lc	

Findings HAD MQ 2017-1 H3B

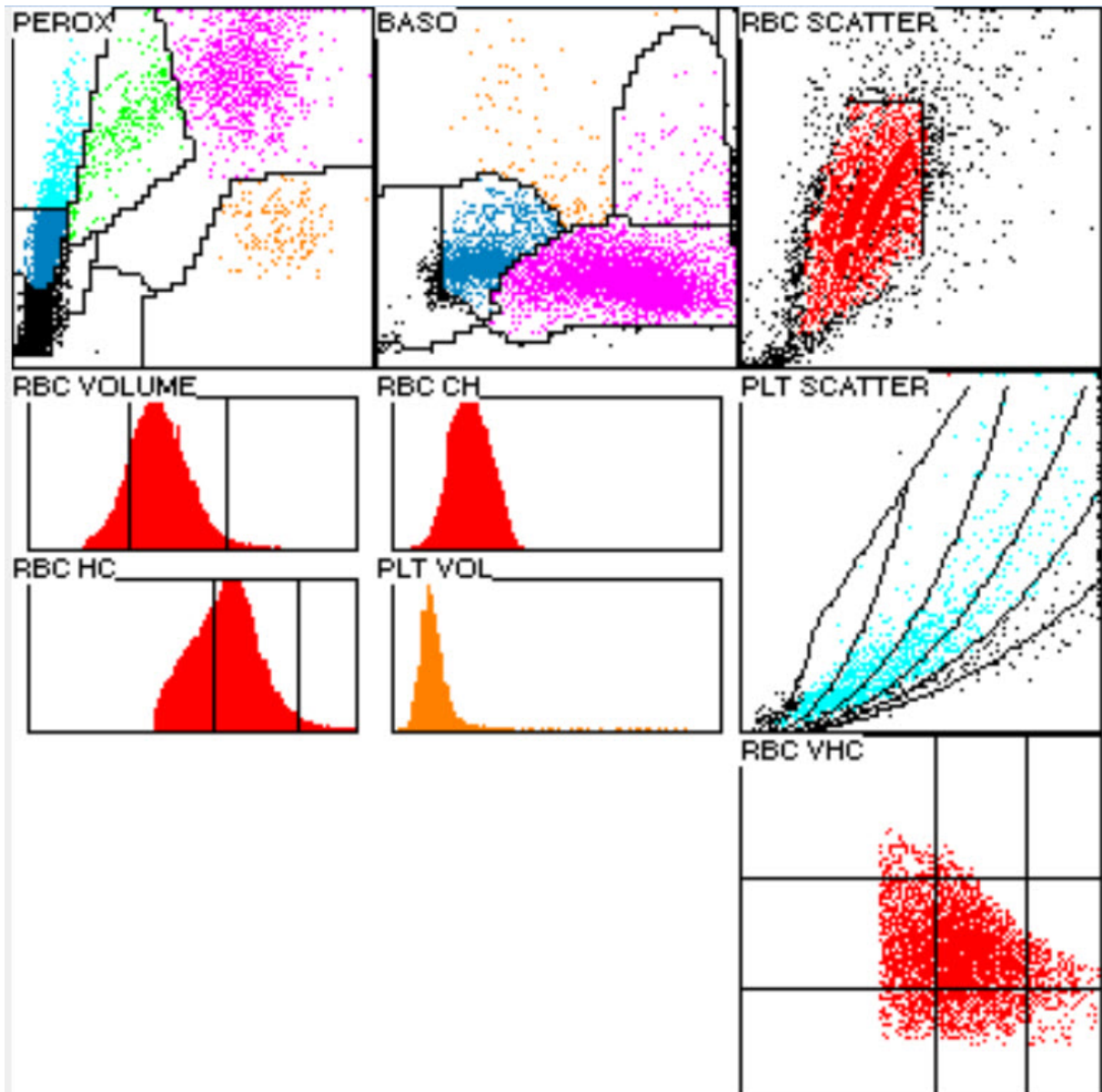


2.5 ADVIA 2120



Findings HAD MQ 2017-1 H3B 32 year old man

Analysis		Result	Unit	Reference value
Blood Count				
Hemoglobin	*	80	g/l	134-170
Hematocrit	*	0.272	l/l	0.400-0.500
Erythrocytes	*	3.45	T/l	4.2-5.7
MCV	*	78.8	fl	80-100
MCH	*	23.1	pg	26-34
MCHC	*	293	g/l	310-360
Mikrocytes	*	13.6	%	0-2.0
Makrocytes		1.4	%	0-2.0
Hypochromic Ec	*	34.9	%	0-2.0
Hyerchromic Ec		1.8	%	0-2.0
RDW	*	22.4	%	11.0-0-14.8
Thrombocytes	*	752	G/l	143-400
Vd. L-SHIFT		0	+	Keine (0)
Leukocytes	*	53.52	G/l	3.0-9.6
Leucocytes Differentiation				
Neutrophils		7.82	G/l	1.40-8.00
Monocytes	*	2.24	G/l	0.16-0.95
Eosinophils	*	0.95	G/l	0.00-0.70
Basophils	*	0.74	G/l	0.00-0.15
Lymphocytes	*	35.52	G/l	1.50-4.00
LUC	*	6.52	%	0.0-4.0



2.6 Differential Blood Smear

Findings MQ 2017-1 H3B

32 year old man

Analysis	Result	Unit	Reference value
Leucocytes Differentiation			
Neutrophils total		G/l	1.40-8.00
Monocytes	7.00	G/l	0.16-0.95
Eosinophils	* 2.24	G/l	0.00-0.70
Basophils	0.58	G/l	0.00-0.15
Lymphocytes	* 0.58	G/l	1.50-4.00
Neutrophils total	* 8.95	%	40.0-74.0
Neutrophils Band	* 36.0	%	0.0-20.0
Neutrophils Segmented	1.0	%	30.0-50.0
Monocytes	35.0	%	3.4-9.0
Eosinophils	* 11.5	%	0.0-7.0
Basophils	3.0	%	0.0-1.5
Lymphocytes	* 3.0	%	19.0-48.0
Plasmacells	46.0	%	0-0.5
Blasts	0.0	%	0
Promyelocytes	0.0	%	0
Myelocytes	0.0	%	0
Metamyelocytes	* 0.5	%	0
Nucleated Red Cells	0.0	/100 Lc	

Commentary

Washout of 172.5 erythroblasts per 100 leukocytes, some of the erythroblasts show basophilic stippling, rare karorrhexis forms. In the red blood picture there it is marked hypochromic anemia, marked anisocytosis with many microcytes and few macrocytes, poikilocytosis with many target cells, acanthocytes with few ovalocytes. Many Howell-Jolly bodies and erythrocytic inclusions (most consistent with Pappenheim bodies) and few with basophilic stippling. Rare neutrophil granulocytes with somewhat coarse cytoplasmic granulation. Absolute lymphocytosis; the lymphocytes are mostly small, with a round dense nucleus and narrow cytoplasmic border. In addition few larger forms with a broad cytoplasmic border – over all this corresponds to the description atypical, most likely reactive. Severe thrombocytosis with clear anisocytosis, giant forms rare in microscopy.

K. Schreiber / PD. Dr. St. Balabanov

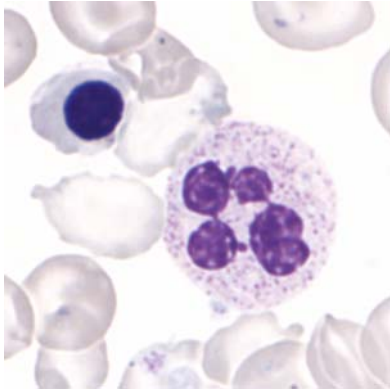


Abb 1. Neutrophil (Seg)

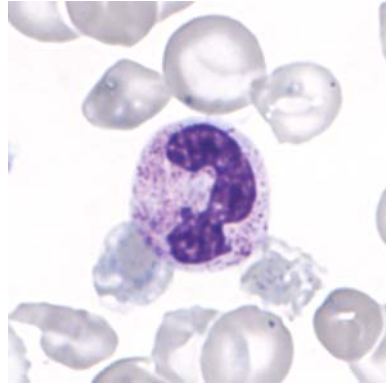


Abb 2. Neutrophil (Band)

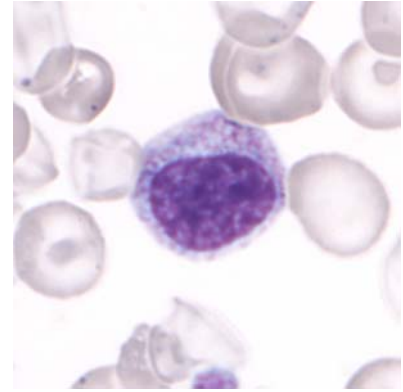


Abb 3. Myelocyte

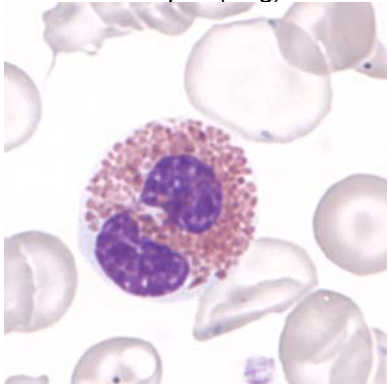


Abb 4. Eosinophil

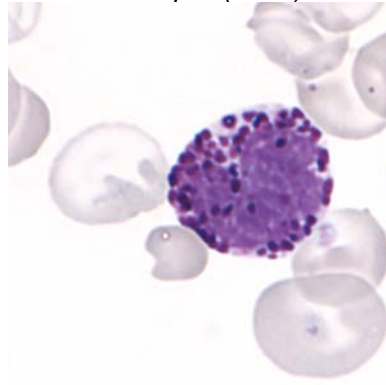


Abb 5. Basophil

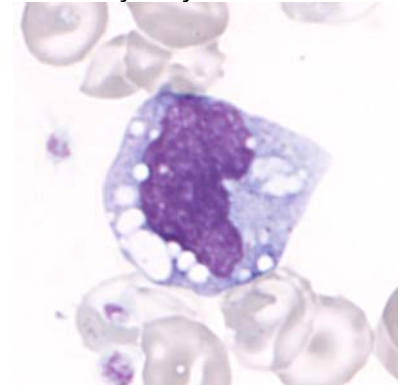


Abb 6. Monocyte

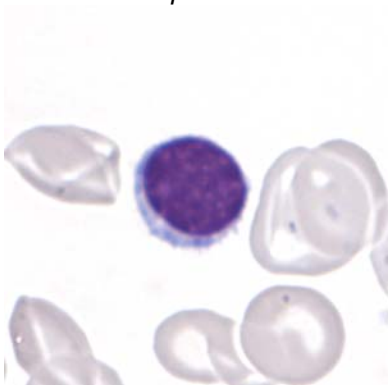


Abb 7. Lymphocyte

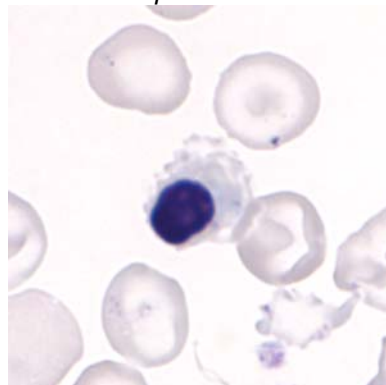


Abb 8. Erythroblast

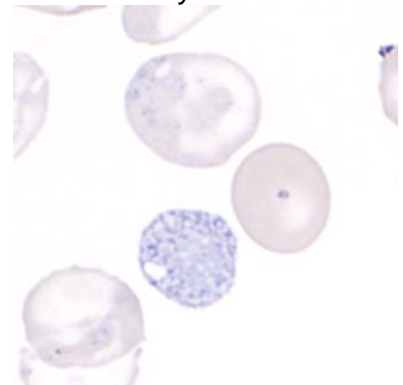


Abb 9. basophilic stippling

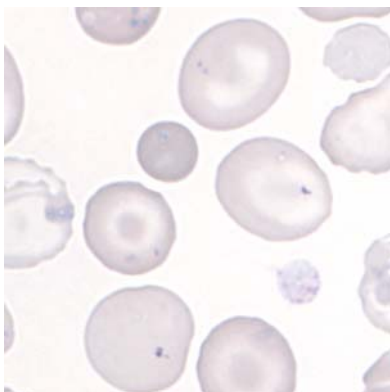


Abb 10. Anisocytosis, Target cells

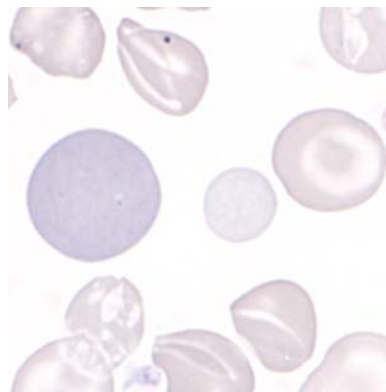


Abb 11. Polychromasia

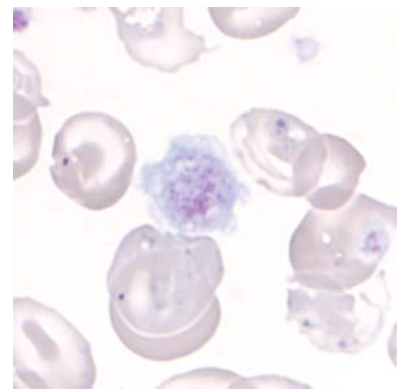


Abb 12. Giant Thrombocyte

Summary of participant results

Leukocyte Differential H3-B

	<1	1-4	5-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	>79
<i>Neutrophils Band</i>	17	160*	87	33			1				
<i>Neutrophils Segmented.</i>		6	33	63	113	79*	3	1			
<i>Eosinophils</i>	15	153*	120	10							
<i>Basophile</i>	58	228*	11		1						
<i>Monocytes</i>	18	86	98	93*	1	1				1	
<i>Lymphocytes</i>	4	1	8	16	10	38	117*	38	11	27	28
<i>Plasmacells</i>	277*	19		1							1
<i>Blasts</i>	241*	20	9	11	1	1	1	2	6	4	2
<i>Promyelocytes</i>	271*	20	3	2	1		1				
<i>Myelocytes</i>	246*	34	13	5							
<i>Metamyelozyten</i>	271*	23	2	2							
<i>Erythrocytes Nucleated</i>	96	4	2	7	61	4	1	1	4	2	116*
<i>Unknown</i>	276*	9	3	4	2	1				3	
<i>Smudge cells</i>	223*	23	14	26	8	2				2	

Beurteilung H3-B

	light	medium	strong		light	medium	strong
<i>Hypersegmentation</i>	13	4		<i>Hypochromic Ec</i>	16	85*	153
<i>Pelger-Huet Anomaly</i>	1			<i>Polychromatic Ec</i>	69	82	19
<i>Coarse Granulation</i>	72	41	7	<i>Anisocytes</i>	28	117*	100
<i>Basophilic Stripling</i>	10	2	2	<i>Mikrocytes</i>	75	63*	8
<i>Vacuoles</i>	50	15		<i>Makrocytes</i>	56*	79	25
<i>Atypical Lymph, reactive</i>	51	28	4	<i>Megalocytes</i>	30	17	5
<i>Atypical Lymph, neoplastic</i>	2	3	2	<i>Poikilocytosis</i>	66	79*	42
<i>Others</i>	19	12	12	<i>Ovalocytes</i>	52*	14	3
				<i>Target Cells</i>	42	100	75
				<i>Akanthocytes</i>	65	16*	1
<i>Anisocytosis</i>	63	100*	56	<i>Echinocytes</i>	32	7	
<i>Megakaryocyte Nucleaus</i>	34	14	10	<i>Sickle Cells</i>	5	1	
<i>Granulation</i>	33	22	7	<i>Fragmentocytes</i>	67	23	9
<i>Others</i>				<i>Spherocytes</i>	38	1	
				<i>Stomatocytes</i>	37	17	1
				<i>Basophilic Stripling</i>	78	36	15
				<i>Howell-Jolly Bodies</i>	42	80*	39
				<i>Pappenheim Bodies</i>	15	25	13
				<i>Others</i>	3	2	3

Commentary

Smear H3-B is from a patient with thalassemia.

2.7 Qualab Codes

Summary of the participant codes
(Bold printed: expected codes)

Code	Text	Number
30	Pathologic findings, refer to expert	261
14	Hypochromic Erythrocytes	175
19	Targetcells	129
24	Howell-Jolly bodies	107
15	Polychromatophilic Red Cells	63
27	Erythrocytes, other	60
9	Macrothrombocytes	58
13	Macrocytes	58
16	Poikilocytosis	54
31	Pathologic findings	33
12	Microcytes	32
6	Atypical lymphocytes, probably neoplastic	30
25	Basophilic strippling	26
4	Neutrophils, Toxic Changes	22
5	Atypical lymphocytes, probably reactive	22
20	Fragmentocytes	20
8	Leucocytes other:	10
10	Thrombocyte aggregates	6
11	Thrombocytes, others	6
18	Stomatocytes	6
17	Elliptocytes/Ovalocytes	5
21	Spherocytes	5
22	Rouleaux	4
1	Neutrophils, hypersegmentation of nucleus	3
2	Neutrophils, left shift	3
26	Teardrops	2
7	Auer rods	1
23	Erythrocytes agglutination	1
28	Parasites	1
29	Normal findings	1
	Total	310