nalyzer Report

1
ole Blood-CBC+DIFF
AS 02

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Para	Result	Unit	Ref. Range	Para	Result	Unit	Ref. Range	Para	Result	Unit	Ref. Range	Flag
WBC	8.24	/nL	4.00-10.00	RBC	3.79	10^12/L	3.50-5.50	P-LCC	93	10^9/L	30-90	
Neu#	3.86	/nL	2.00-7.00	HGB	13.4	g/dL	11.0-16.0	P-LCR	32.6	%	11.0-45.0	
Lym#	3.21	/nL	0.80-4.00	HCT	39.0	%	37.0-54.0					
Mon#	0.35	/nL	0.12-1.20	MCV	102.8	fL	80.0-100.0					
Eos#	0.52	/nL	0.02-0.50	MCH	35.3	pg	27.0-34.0					
Bas#	0.30	/nL	0.00-0.10	MCHC	34.3	g/dL	32.0-36.0					
Neu%	47.0	%	50.0-70.0	RDW-CV	16.0	%	11.0-16.0					
Lym%	38.9	%	20.0-40.0	RDW-SD	59.1	fL	35.0-56.0					
Mon%	4.2	%	3.0-12.0	PLT	285	10^9/L	100-300					
Eos%	6.3	%	0.5-5.0	MPV	10.6	fL	7.0-11.0					
Bas%	3.6	%	0.0-1.0	PDW-CV	0.117		0.150-0.170					
NLR	1.20			PDW-SD	16.9	fL	9.0-17.0					
PLR	88.79			PCT	0.303	%	0.108-0.282					

gy Analyzer Report

163
Whole Blood-CBC+DIFF
EQAS 01

Admin

22/04/2024 12:13
t only accounts for this test sample]

Para	Result	Unit	Ref. Range	Para	Result	Unit	Ref. Range	Para	Result	Unit	Ref. Range
WBC	8.44	/nL	4.00-10.00	RBC	3.76	10^12/L	3.50-5.50	P-LCC	86	10^9/L	30-90
Neu#	4.15	/nL	2.00-7.00	HGB	13.3	g/dL	11.0-16.0	P-LCR	31.4	%	11.0-45.0
Lym#	3.17	/nL	0.80-4.00	HCT	38.7	%	37.0-54.0				
Mon#	0.25	/nL	0.12-1.20	MCV	102.8	fL	80.0-100.0				
Eos#	0.49	/nL	0.02-0.50	MCH	35.4	pg	27.0-34.0				
Bas#	0.38	/nL	0.00-0.10	MCHC	34.4	g/dL	32.0-36.0				
Neu%	49.1	%	50.0-70.0	RDW-CV	16.2	%	11.0-16.0				
Lym%	37.6	%	20.0-40.0	RDW-SD	60.0	fL	35.0-56.0				
Mon%	3.0	%	3.0-12.0	PLT	275	10^9/L	100-300				
Eos%	5.8	%	0.5-5.0	MPV	10.4	fL	7.0-11.0				
Bas%	4.5	%	0.0-1.0	PDW-CV	0.136		0.150-0.170				
NLR	1.31			PDW-SD	14.8	fL	9.0-17.0				
PLR	86.75			PCT	0.286	%	0.108-0.282				

DLC - P-11 L 88 B01

PLS Red Blood Cells seen predominantly are normocytic normochromic in nature with mild anisocytosis and hypochromia. occasional microcytic hypochromic cells are seen.

Diag Chronic lymphocytic Leukemia

tology Analyzer Report

ID: 1641
Whole Blood-CBC+DIFF
EQAS 02

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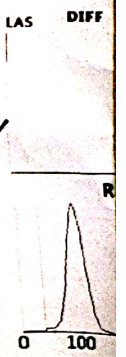
Para	Result	Unit	Ref. Range	Para	Result	Unit	Ref. Range	Para	Result	Unit	Ref. Range
WBC	8.24	/nL	4.00-10.00	RBC	3.79	10^12/L	3.50-5.50	P-LCC	93	10^9/L	30-90
Neu#	3.86	/nL	2.00-7.00	HGB	13.4	g/dL	11.0-16.0	P-LCR	32.6	%	11.0-45.0
Lym#	3.21	/nL	0.80-4.00	HCT	39.0	%	37.0-54.0				
Mon#	0.35	/nL	0.12-1.20	MCV	102.8	fL	80.0-100.0				
Eos#	0.52	/nL	0.02-0.50	MCH	35.3	pg	27.0-34.0				
Bas#	0.30	/nL	0.00-0.10	MCHC	34.3	g/dL	32.0-36.0				
Neu%	47.0	%	50.0-70.0	RDW-CV	16.0	%	11.0-16.0				
Lym%	38.9	%	20.0-40.0	RDW-SD	59.1	fL	35.0-56.0				
Mon%	4.2	%	3.0-12.0	PLT	285	10^9/L	100-300				
Eos%	6.3	%	0.5-5.0	MPV	10.6	fL	7.0-11.0				
Bas%	3.6	%	0.0-1.0	PDW-CV	0.147		0.150-0.170				
NLR	1.20			PDW-SD	16.9	fL	9.0-17.0				
PLR	88.79			PCT	0.303	%	0.108-0.282				



Hematology Analyzer Report

mple ID: 163
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ame: EQAS 01
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epartment:
perator: Admin
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Para	Result	Unit	Ref. Range	Para	Result	Unit	Ref. Range	Para	Result	Unit	Ref. Range
WBC	8.44	/nL	4.00-10.00	RBC	3.76	10^12/L	3.50-5.50	P-LCC	86	10^9/L	30-90
Neu#	4.15	/nL	2.00-7.00	HGB	13.3	g/dL	11.0-16.0	P-LCR	31.4	%	11.0-45.0
Lym#	3.17	/nL	0.80-4.00	HCT	38.7	%	37.0-54.0				
Mon#	0.25	/nL	0.12-1.20	MCV	102.8	fL	80.0-100.0				
Eos#	0.49	/nL	0.02-0.50	MCH	35.4	pg	27.0-34.0				
Bas#	0.38	/nL	0.00-0.10	MCHC	34.4	g/dL	32.0-36.0				
Neu%	49.1	%	50.0-70.0	RDW-CV	16.2	%	11.0-16.0				
Lym%	37.6	%	20.0-40.0	RDW-SD	60.0	fL	35.0-56.0				
Mon%	3.0	%	3.0-12.0	PLT	275	10^9/L	100-300				
Eos%	5.8	%	0.5-5.0	MPV	10.4	fL	7.0-11.0				
Bas%	4.5	%	0.0-1.0	PDW-CV	0.136		0.150-0.170				
NLR	1.31			PDW-SD	14.8	fL	9.0-17.0				
PLR	86.75			PCT	0.286	%	0.108-0.282				

PROFICIENCY TESTING REPORT

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME

NABL accredited program as per ISO/IEC 17043:2010 standard

Organized By Department of Hematology, AIIMS, New Delhi-110029

Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens

EQAP CODE No. : 4484 | Distribution No.: 163-L | Month/Year: April/2024

Instrument ID: Countcell | Model Name.: Penta 2.0 Auto hematology analyzer | Serial No.: 0840519220422

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi, Tel: 9013085730 , E-Mail : info@ishtmaiimseqap.com

Date of issue & status of the report: 19-06-2024[Final].

CBC and Retic Assessment

Test Parameters	S.No.			Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
		Your Result 1	Your Result 2	Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
WBC x10³/µl	1	8.44	8.24	16.68	16.14	0.046	0.48	0.2	0.1	0.008	0.84
RBC x10⁶/µl	1	3.79	3.76	7.55	7.96	0.009	-1.78	0.03	0.03	0.002	0.00
Hb g/dl	1	13.4	13.3	26.7	26.4	0.028	0.40	0.1	0.1	0.008	0.00
HCT%	1	39	38.7	77.7	83.05	0.206	-0.95	0.3	0.4	0.024	-0.27
MCV-fl	1	102.93	102.9	205.83	207.15	0.423	-0.12	0.03	0.3	0.020	-0.91
MCH-Pg	1	35.37	35.36	70.73	66.25	0.060	0.99	0.01	0.3	0.021	-0.98
MCHC-g/dl	1	34.37	34.36	68.73	63.2	0.152	1.39	0.01	0.3	0.022	-0.98
Plt. x10³/µl	1	285	275	560	509	1.829	1.04	10	6	0.352	0.77
Retic %	2	4.9	4.5	9.4	5.45	0.111	1.30	0.4	0.3	0.022	0.22

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=11 L=88, E=00, Mono/Promono=00 , B1=01 P.M.=00, Mye=00, Meta=00, Other=Pp	Lymp: 77-88, Poly: 9-15, mono: 1-3, nRBC/Blast/Myelo/Meta/Eosino: 0-5
RBC Morphology	3	Red blood cells seen predominantly are normocytic normochromic in nature with mild anisocytosis and hypochromia. Occasional microcytic hypochromic cells are seen	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Mild: Microcytic
Diagnosis	3	Chronic Lymphocytic Leukemia	Chronic Lymphoproliferative Disorder/CLL

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

st parameters	S.No.	Total participants covered in the current dist. 163--L	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC $x10^3/\mu l$	1	319	319	83.7	87.46	3.13	5.02	13.17	7.52
RBC $x10^6/\mu l$	1	319	319	86.83	86.52	7.21	5.02	5.96	8.46
Hb g/dl	1	319	319	87.15	85.58	7.84	7.21	5.01	7.21
HCT%	1	319	319	91.22	87.77	4.7	5.64	4.08	6.59
MCV-fl	1	319	319	88.71	85.89	6.9	7.84	4.39	6.27
MCH-Pg	1	319	319	89.66	90.91	4.7	3.76	5.64	5.33
MCHC-g/dl	1	319	319	89.97	90.28	5.64	5.02	4.39	4.7
Plt. $x10^3/\mu l$	1	319	319	88.4	91.22	6.27	4.7	5.33	4.08
ReticCount%	2	319	210	91.9	95.71	4.76	3.81	3.34	0.48
PS Assessment	3	319	201	Satisfactory :91.55%, Borderline Sat. :4.07%, Unsatisfactory :4.38%					

*Comments:

1). Among Lab (EQA) : **Results acceptable.**

2). Within Lab (IQA) : **Precision acceptable.**

Note-1: EQA (External Quality Assurance) : Your Performance among various of participating labs in PT, to determine the accuracy of your results.
IQA (Internal Quality Assurance) : Your Performance of comparison of two consecutive measurement values within your lab to test the precision of your autoanalyzer.

Note-2: Z score among & within lab were calculated, as per to ISO/IEC 13528:2015 standard. Z score among lab (EQA)= (Your Result Sum of two values – Consensus Result sum of two values)/(Normalised IQR)
Z score within lab (IQA)= (Your Result Difference of two values – Consensus Result difference of two values)/(Normalised IQR)
IQR = Quartile 3 - Quartile 1 of participant data, Normalised IQR = 0.7413 x IQR

Note-3: Z score 0 to ±2: Acceptable, Z score ±2 to ±3 :Warning Signal, Z score > ±3 : Unacceptable [As per ISO/IEC 13528:2015 standard]

Note-4: Z score value between"0 to ±2" are texted in green colour. Z score value between"±2 to ±3" are texted in orange colour. Z score value > ±3 are texted in red colour.

Note-5: Homogeneity and stability testing of PT sample were done as per ISO 13528:2015 standard. To pass homogeneity test, between sample SD (Ss) should be smaller than the check value (0.3*SDPA). To pass the stability test, average difference in measurement values of first and last day sample $(x-\bar{y})$ should be smaller than the check value (0.3*SDPA).

Note-6: ISHTM-AIIMS-EQAP does not subcontract any task of its scheme

Note-7: Participants are free to use methods/analyzer of their own choice.

Note-8: Proficiency testing (PT) samples are sent quarterly to each participant.

Note-9: All the necessary details regarding design and implementation of PT, are provided in the instruction sheet as well as on programme's website www.ishtmaiimseqap.com.

Note 10: Reports are kept confidential.

Report authorized by,

Dr. Manoranjan Mahapatra (Prof. & Head)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

----------End Of Report----------