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. : 64 **Distribution No.:** 165-B **Month/Year:** September/2024

Instrument ID: Shenzhen Mindray Bio-Medical Electronics co.,Ltd. **Model Name.:** Auto Hematology Analyzer BC-6200 **Serial No.:** TW-91000342

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: 18-10-2024 [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 x10^3/µl	1	4.74	4.72	9.46	9.66	0.020	**-0.33**	0.02	0.1	0.005	**-0.98**
RBC x10^6/µl	1	4.39	4.36	8.75	8.4	0.008	**1.63**	0.03	0.03	0.002	**0.00**
Hb g/dl	1	12.9	12.8	25.7	25.2	0.019	**1.12**	0.1	0.1	0.007	**0.00**
HCT%	1	42.3	41.8	84.1	76.2	0.118	**2.22**	0.5	0.3	0.020	**0.54**
MCV-fl	1	96.3	95.9	192.2	182	0.239	**1.35**	0.4	0.3	0.020	**0.27**
MCH-Pg	1	29.3	29.3	58.6	60	0.047	**-1.00**	0	0.2	0.012	**-0.90**
MCHC-g/dl	1	30.5	30.4	60.9	66.3	0.103	**-1.66**	0.1	0.3	0.020	**-0.67**
Plt. x10^3/µl	1	158	153	311	342	1.301	**-0.80**	5	5	0.278	**0.00**
Retic %	2	1.2	0.8	2	7.5	0.188	**-0.73**	0.4	0.25	0.020	**0.52**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=5 , Poly=7 L=78, E=12, Mono/Promono=3 , B1=0 P.M.=0, Mye=0, Meta=0, Other=	Lymp: 70 - 79, Poly: 14 - 21, Eosino: 1 - 2, Mono: 2 - 5, nRBC/blast/Promyelo/Myelo/Meta: 0-5
RBC Morphology	3	Predominantly Normocytic Normochromic, Mild hypochromia	RBCs are normocytic and normochromic. *Smudge cells* are present, indicating a possible chronic lymphoproliferative disorder.
Diagnosis	3	CHRONIC LYMPHOCYTIC LEUKEMIA	Chronic Lymphoproliferative Disorder (CLPD)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 165--B	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 $x10^3$/µl	1	382	379	85.49	93.67	2.11	4.49	12.40	1.84
RBC $x10^6$/µl	1	382	382	89.01	87.17	3.4	6.28	7.59	6.55
Hb g/dl	1	382	382	80.89	90.58	8.9	4.45	10.21	4.97
HCT%	1	382	379	91.56	88.13	5.28	7.12	3.16	4.75
MCV-fl	1	382	377	95.76	85.15	3.45	7.96	0.79	6.89
MCH-Pg	1	382	378	87.83	76.46	6.08	18.52	6.09	5.02
MCHC-g/dl	1	382	378	94.97	89.95	2.38	4.76	2.65	5.29
Plt. $x10^3$/µl	1	382	380	92.63	93.95	5.26	3.95	2.11	2.1
ReticCount%	2	382	347	96.54	81.84	2.59	1.15	0.87	17.01
PS Assessment	3	382	346	Satisfactory :93.99%, Borderline Sat. :3.14%, Unsatisfactory :2.87%					

*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 ($\bar{x}$-$\bar{y}$) 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,

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