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

NABL Certificate No. PC - 1002

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

EQAP CODE No. : 1714 **Distribution No.:** 149-D **Month/Year:** November/2019

Instrument ID: RA-53001281

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,
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Date of issue & status of the report: 27-12-2019[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	4.5	4.4	8.9	7.51	0.0150	**3.35**	0.1	0.1	0.0050	**0.00**
RBC x10^6/µl	1	4.52	4.41	8.93	8.25	0.0070	**3.19**	0.11	0.03	0.0010	**2.16**
Hb g/dl	1	12.6	12.6	25.2	24.4	0.0180	**1.54**	0	0.1	0.0060	**-1.35**
HCT%	1	43	41.8	84.8	74.4	0.1400	**2.26**	1.2	0.3	0.0170	**3.04**
MCV-fl	1	95.2	95	190.2	180.4	0.3040	**0.99**	0.2	0.2	0.0180	**0.00**
MCH-Pg	1	28.5	27.8	56.3	59	0.0530	**-1.82**	0.7	0.2	0.0110	**2.25**
MCHC-g/dl	1	30.1	29.3	59.4	65.65	0.1270	**-1.44**	0.8	0.3	0.0110	**1.69**
Plt. x10^3/µl	1	265	252	517	409	1.05	**3.47**	13	6	0.30	**1.35**
Retic %	2	2.5	1	3.5	7.15	0.16	**-0.75**	1.5	0.3	0.02	**3.37**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=1- 2 NRBCs/100 WBC , Poly=56 L=05, E=04, Mono/Promono=03 , B1=06 P.M.=04, Mye=06, Meta=16, Other=	Poly: 65-75, nRBC/Lymph/Eo/Mono/blast/pro: 0-5, Myelo: 10-15, Meta: 5-12, Baso: 0-2
RBC Morphology	3	Mild hypochromia, mild anisocytosis	Predominantly: Normocytic Normochromic, Moderate: Anisocytosis, Mild: Microcytic
Diagnosis	3	Suggestive of chronic myeloid leukemia	Chronic Myeloid Leukemia (Chronic Phase) [CML-CP]

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COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	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	450	372	88.17	90.59	4.3	3.49	6.99	4.57
RBC x10^6/µl	1	450	372	92.74	87.37	5.11	6.99	1.88	4.84
Hb g/dl	1	450	372	90.05	91.67	5.38	5.65	4.3	2.42
HCT%	1	450	372	95.7	88.98	2.96	4.84	1.08	5.38
MCV-fl	1	450	372	95.7	84.41	3.23	9.41	0.54	5.65
MCH-Pg	1	450	372	91.13	73.39	5.38	19.09	2.96	6.18
MCHC-g/dl	1	450	372	97.85	88.17	1.61	4.3	0	6.45
Plt. x10^3/µl	1	450	372	91.94	91.67	6.45	2.96	1.08	5.11
ReticCount%	2	450	324	94.14	80.86	4.32	12.96	2.16	8.02
PS Assessment	3	450	345	Acceptable:97%,Warning Signal:2.2%,Unacceptable :0.8%					

***Comments:**

1). Among Lab (EQA) : CBC result for *WBC, RBC & PLT* unacceptable, please check calibration/human error.Remaining results acceptable.

2). Within Lab (IQA) : *HCT & RETIC* unacceptable, please check precision/human error.Remaining 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.

Report authorized by,

Dr. R. Saxena
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PT Co-ordinator: ISHTM-AIIMS-EQAP

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