



**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. : 3046

Distribution No.: 148-G

Month/Year: September/2019

Instrument ID: HORIBA MICROSEMI CRP(45901004)

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### 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 <sup>3</sup> /µl	1	5.8	5.6	11.4	9.65	0.0570	1.26	0.2	0.1	0.0070	0.96
RBC x10 <sup>6</sup> /µl	1	4.85	4.76	9.61	9.72	0.0110	-0.40	0.09	0.04	0.0030	0.96
Hb g/dl	1	11.6	11.5	23.1	22.6	0.0290	0.75	0.1	0.1	0.0070	0.00
HCT%	1	37.7	36.4	74.1	76.6	0.2280	-0.45	1.3	0.3	0.0260	2.70
MCV-fl	1	77.6	76.6	154.2	157.9	0.4100	-0.38	1	0.2	0.0190	2.70
MCH-Pg	1	24.1	23.9	48	46.5	0.0570	1.12	0.2	0.2	0.0140	0.00
MCHC-g/dl	1	31.5	30.7	62.2	59.1	0.1830	0.72	0.8	0.2	0.0170	2.02
Plt. x10 <sup>3</sup> /µl	1	214	209	423	435	2.65	-0.18	5	6	0.41	-0.17
Retic %	2	2	2	4	10	0.18	-1.26	0	0.4	0.03	-0.76

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=03 , Poly=05 L=88, E=01, Mono/Promono=02 , B1=04 P.M.=, Mye=, Meta=, Other=PLATELETS REDUCED ON SMEAR. MANY SMUDGE CELLS ARE SEEN ON SMEAR.
RBC Morphology	3	HYPOCHROMIA +, MICROCYTOSIS +, ANISOCYTOSIS +.
		Lymph: 85-95, nRBC/Poly/Eo/Mono/Blast/Pro/Mye/Meta: 0-5, Lymphocytes morphology resembling a lot with blasts morphology.
		Predominantly: Normocytic Normochromic, Moderate: Microcytic, Mild: Hypochromic.

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
Diagnosis	3	ABOVE HAEMATOLOGICAL FINDINGS ARE SUGGESTIVE OF LYMPHOID DISORDER (CHRONIC LYMPHOCYTIC LEUKEMIA).ADVICE TO DO MARKER STUDIES AND CYTOCHEMISTRY ALONG WITH FLOWCYTOMETRY.				Chronic Lymphocytic Leukemia [ CLL ] / Acute Leukemia. Adv: Immunophenotyping by flow cytometry.				

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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 <sup>3</sup> /µl	1	350	262	86.64	84.35	5.73	5.73	6.87	8.02
RBC x10 <sup>6</sup> /µl	1	350	262	85.88	91.98	6.11	2.29	7.63	4.96
Hb g/dl	1	350	262	86.64	89.69	3.44	5.34	9.54	4.58
HCT%	1	350	262	91.6	88.93	3.44	4.2	4.58	6.49
MCV-fl	1	350	262	91.22	91.22	5.34	1.91	3.05	6.49
MCH-Pg	1	350	262	86.64	82.82	6.11	9.16	6.87	6.87
MCHC-g/dl	1	350	262	92.37	92.37	4.2	1.91	3.05	5.34
Plt. x10 <sup>3</sup> /µl	1	350	262	93.13	88.17	4.2	5.73	1.91	5.34
ReticCount%	2	350	239	92.89	94.98	5.02	3.77	2.51	1.67
PS Assessment	3	350	238	Acceptable:84.3%,Warning Signal:6.1%,Unacceptable :9.6%					

#### \*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](http://www.ishtmaiimseqap.com).

Report authorized by,



Dr. R. Saxena

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PT Co-ordinator: ISHTM-AIIMS-EQAP

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

