



**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. : 2038

Distribution No.: 148-F

Month/Year: September/2019

Instrument ID: NIHON KOHDEN MEK-9100(SERIAL NO.-248)

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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	5.67	5.65	11.32	10.5	0.0290	1.01	0.02	0.1	0.0080	-0.63
RBC x10 <sup>6</sup> /µl	1	4.65	4.56	9.21	9.14	0.0100	0.25	0.09	0.05	0.0020	0.77
Hb g/dl	1	11.97	11.9	23.87	23.8	0.0260	0.10	0.07	0.1	0.0070	-0.20
HCT%	1	39.6	39.2	78.8	74.85	0.1220	1.22	0.4	0.4	0.0240	0.00
MCV-fl	1	86	85.2	171.2	163.15	0.2050	1.47	0.8	0.3	0.0210	0.87
MCH-Pg	1	26.1	25.7	51.8	51.9	0.0500	-0.07	0.4	0.2	0.0130	0.90
MCHC-g/dl	1	30.4	30.2	60.6	63.6	0.1020	-1.01	0.2	0.3	0.0200	-0.34
Plt. x10 <sup>3</sup> /µl	1	288	283	571	549	1.79	0.46	5	7	0.47	-0.27
Retic %	2	2.6	2.2	4.8	10	0.15	-1.27	0.4	0.4	0.03	0.00

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=00 , Poly=02 L=93/05, E=00, Mono/Promono=00 , B1=00 P.M.=00, Mye=00, Meta=00, Other=SMUDGE CELLS NOTED	Lymph: 85-95, nRBC/Poly/Eo/Mono/Blast/Pro/Mye/Meta: 0-5, Smudge cells seen prevalently.
RBC Morphology	3	NORMOCYTIC NORMOCHROMIC	Predominantly: Normocytic Normochromic, Moderate: Microcytic, Mild: Hypochromic.
Diagnosis	3	CHRONIC LYMPHOPROLIFERATIVE DISORDER	Chronic Lymphocytic Leukemia [ CLL ]

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MEK-9100(SERIAL NO.-248)

**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	450	355	90.42	84.51	4.51	7.04	4.79	7.61
RBC x10 <sup>6</sup> /µl	1	450	355	87.04	90.99	4.79	3.1	7.89	5.63
Hb g/dl	1	450	355	86.2	86.76	6.48	4.79	7.04	8.17
HCT%	1	450	355	87.61	90.42	6.48	3.94	5.63	5.35
MCV-fl	1	450	355	89.01	93.52	5.63	2.54	5.07	3.66
MCH-Pg	1	450	355	87.32	88.45	6.48	4.23	5.92	6.76
MCHC-g/dl	1	450	355	91.55	89.3	5.35	5.07	2.54	5.07
Plt. x10 <sup>3</sup> /µl	1	450	355	87.32	91.83	6.48	3.38	5.63	4.23
ReticCount%	2	450	330	91.82	93.33	5.76	3.64	3.03	3.33
PS Assessment	3	450	337	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,



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