



**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. : 162

Distribution No.: 153-B

Month/Year: July/2021

Instrument ID: swelab alpha 15008

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: 17-08-2021[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 <sup>3</sup> /pl	1	3.8	3.7	7.5	7.6	0.0220	-0.17	0.1	0.1	0.0060	0.00
RBC x10 <sup>6</sup> /pl	1	2.66	2.5	5.16	5.3	0.0040	-1.26	0.16	0.02	0.0010	6.07
Hb g/dl	1	9	8.5	17.5	17.4	0.0120	0.27	0.5	0.1	0.0060	5.40
HCT%	1	27.4	25.8	53.2	52.5	0.0720	0.32	1.6	0.3	0.0120	4.56
MCV-fl	1	102.9	102.7	205.6	199	0.2440	0.91	0.2	0.4	0.0280	-0.45
MCH-Pg	1	34.1	34	68.1	65.8	0.0580	1.41	0.1	0.3	0.0160	-0.72
MCHC-g/dl	1	33.2	33.1	66.3	66.3	0.1000	0.00	0.1	0.3	0.0200	-0.60
Plt. x10 <sup>3</sup> /pl	1	116	110	226	240	0.77	-0.65	6	4	0.22	0.54
Retic %	2	4.4	4	8.4	7.8	0.13	0.16	0.4	0.2	0.08	0.67

**P.S . Assesment**

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs=04 , Poly=48/7/0 L=32/0, E=09, Mono/Promono=04/00 , B1=00 P.M.=00, Mye=00, Meta=00, Other=00	Poly: 55 - 75, Lympho: 15 - 30, Eosin/hRBC: 1 - 10, Blast/Myelo/Promyelo/Baso/Mono: 0 - 5		
RBC Morphology	3	Macrocytic hypochromic to microcytic hypochromic	Predominantly: Macrocytosis, Anisocytosis, Teardrop cells ; Moderate: Poikilocytosis, Microcytosis ; Mild: Normocytic/Normochromic , Hypochromia		
Diagnosis	3	Diamorphic anaemia with eosinophilia with thrombocytopenia	Leukoerythroblastic Blood picture with macrocytic Anemia/Myelofibrosis		

*(Handwritten Signature)*

**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>9</sup> /µl	1	349	347	81.27	89.34	5.76	4.32	12.68	5.76
RBC x10 <sup>6</sup> /µl	1	349	348	90.8	92.53	5.46	4.02	3.74	3.45
Hb g/dl	1	349	348	90.52	99.14	5.75	3.16	3.74	0.57
HCT%	1	349	348	92.82	89.94	4.02	3.74	3.16	6.32
MCV-fl	1	349	347	93.08	91.64	5.48	2.59	1.44	5.76
MCH-Pg	1	349	347	88.18	93.37	6.92	3.75	4.9	2.88
MCHC-g/dl	1	349	347	91.93	92.22	5.76	3.75	2.31	4.03
Plt. x10 <sup>9</sup> /µl	1	349	347	89.34	94.52	6.63	3.17	4.03	2.31
ReticCount%	2	349	315	95.24	88.25	3.49	1.9	2.22	11.11
PS Assessment	3	349	307	Acceptable:98.37%,Warning Signal:0.65%,Unacceptable:0.98%					

**Comments:**

- 1). Among Lab (EQA) : Results acceptable.
- 2). Within Lab (IQA) : Difference in the CBC measurement values for RBC, HB & HCT 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](http://www.ishtmaiimseqap.com).

Report authorized by,



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

