



**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. : 13

Distribution No.: 155-A

Month/Year: January/2022

Instrument ID: sysmex xp 100 (A9639)

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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	6.1	5.9	12	11.3	0.0260	0.94	0.2	0.1	0.0070	0.79
RBC x10 <sup>6</sup> /µl	1	4.58	4.57	9.15	8.94	0.0110	0.62	0.01	0.04	0.0020	-0.67
Hb g/dl	1	13.5	13.5	27	27.3	0.0190	-0.52	0	0.1	0.0060	-1.35
HCT%	1	40.8	40.4	81.2	82.2	0.1300	-0.25	0.4	0.3	0.0210	0.34
MCV-fl	1	89.1	88.4	177.5	185	0.2670	-0.88	0.7	0.3	0.0210	0.90
MCH-Pg	1	29.5	29.5	59	60.7	0.0820	-0.64	0	0.3	0.0180	-1.01
MCHC-g/dl	1	33.4	33.1	66.5	66.4	0.1090	0.03	0.3	0.3	0.0190	0.00
Plt. x10 <sup>3</sup> /µl	1	237	232	469	434	0.95	1.28	5	5	0.32	0.00
Retic %	2	6.4	4	10.4	4.2	0.09	2.09	2.4	0.2	0.01	14.84

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs=1.00 , Poly=80.00 L=15.00, E=2.00, Mono/Promono=2.00 , B1=0.00 P.M.=0.00, Mye=0.00, Meta=0.00, Other=
RBC Morphology	3	macrocytic
Diagnosis	3	Megaloblastic Anemia

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 155--A	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
<b>WBC x10<sup>3</sup>/µl</b>	1	390	389	86.63	82.78	5.4	9.51	7.97	7.71
<b>RBC x10<sup>6</sup>/µl</b>	1	390	390	92.05	92.05	6.41	4.87	1.54	3.08
<b>Hb g/dl</b>	1	390	390	91.28	93.33	6.15	3.59	2.57	3.08
<b>HCT%</b>	1	390	390	93.85	91.28	4.36	4.1	1.79	4.62
<b>MCV-fl</b>	1	390	390	95.13	92.56	4.87	3.59	0	3.85
<b>MCH-Pg</b>	1	390	389	93.06	91.77	5.91	4.11	1.03	4.12
<b>MCHC-g/dl</b>	1	390	390	97.44	88.46	2.56	4.87	0	6.67
<b>Plt. x10<sup>3</sup>/µl</b>	1	390	390	90.77	88.72	5.64	7.69	3.59	3.59
<b>ReticCount%</b>	2	390	390	87.18	75.9	4.36	11.03	8.46	13.07
<b>PS Assessment</b>	3	390	360	Satisfactory :96.42%, Borderline Sat. :3.07%, Unsatisfactory :0.51%					

**\*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  $\pm 2$ : Acceptable, Z score  $\pm 2$  to  $\pm 3$  :Warning Signal, Z score  $> \pm 3$  : Unacceptable [As per ISO/IEC 13528:2015 standard]

**Note-4:** Z score value between "0 to  $\pm 2$ " are texted in green colour. Z score value between " $\pm 2$  to  $\pm 3$ " are texted in orange colour. Z score value  $> \pm 3$  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. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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