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. : 1807 **Distribution No.:** 161-E **Month/Year:** September/2023

Instrument ID: EZY2100Z3200803211 **Model Name.:** **Serial No.:**

Zybio Z3

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi, Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue & status of the report: 30-10-2023[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	3.7	3.6	7.3	6.88	0.038	**0.44**	0.1	0.1	0.005	**0.00**
RBC x10^6/µl	1	4.36	4.31	8.67	8.82	0.011	**-0.58**	0.05	0.04	0.002	**0.27**
Hb g/dl	1	12.4	12.3	24.7	25.75	0.029	**-1.42**	0.1	0.1	0.008	**0.00**
HCT%	1	38.5	37.7	76.2	81.6	0.186	**-1.12**	0.8	0.4	0.025	**1.08**
MCV-fl	1	88.9	88.4	177.3	184.6	0.302	**-0.83**	0.5	0.3	0.024	**0.45**
MCH-Pg	1	28.8	28.4	57.2	58.2	0.070	**-0.59**	0.4	0.2	0.016	**0.67**
MCHC-g/dl	1	32.4	32.2	64.6	62.8	0.146	**0.49**	0.2	0.3	0.022	**-0.34**
Plt. x10^3/µl	1	129	128	257	306	1.568	**-1.21**	1	5	0.336	**-0.67**
Retic %	2	4.2	4.1	8.3	4.9	0.112	**1.07**	0.1	0.3	0.021	**-0.67**

P.S . Assesment

	YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=43 L=4, E=01, Mono/Promono=06 , B1=8 P.M.=, Mye=15, Meta=10, Other=Atyipcal cells 12	Poly: 46 – 62, Myelo: 11 - 20, Meta: 7– 15, Promyelo: 2-7, Lympho: 2– 5, Blast: 2-4, Eosino: 1-3, nRBC/Mono, Baso: 0-6
RBC Morphology	3	Mild anisopoikilocytosis. predominantly normocytic normochromic	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Hypochromic, Mild: Poikilocytosis
Diagnosis	3	Likely suggestive of chronic Myeloproliferative disorder.	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 161--E	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	314	314	88.54	92.99	5.41	3.82	6.05	3.19
RBC $x10^6$/µl	1	314	314	85.67	90.45	7.01	2.55	7.32	7
Hb g/dl	1	314	314	86.31	90.45	4.46	5.1	9.23	4.45
HCT%	1	314	313	87.86	92.33	7.67	2.56	4.47	5.11
MCV-fl	1	314	314	92.99	93.63	2.55	3.5	4.46	2.87
MCH-Pg	1	314	314	85.35	92.04	6.69	4.46	7.96	3.5
MCHC-g/dl	1	314	314	88.85	86.31	7.01	2.87	4.14	10.82
Plt. $x10^3$/µl	1	314	314	90.76	91.72	6.37	4.46	2.87	3.82
ReticCount%	2	314	263	92.4	80.99	4.18	0.76	3.42	18.25
PS Assessment	3	314	281	Satisfactory :94.92%, Borderline Sat. :2.54%, Unsatisfactory :2.54%					

*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.

Note 10: Reports are kept confidential.

Report authorized by,

Dr. Manoranjan Mahapatra (Prof. & Head)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

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