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

PC-1002

Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens

EQAP CODE No. : 1884 **Distribution No.:** 157-F **Month/Year:** August/2022

Instrument ID: BC6200(TW-02000912)

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: 28-10-2022[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	5.3	5.23	10.53	10.5	0.0360	0.04	0.07	0.1	0.0070	-0.25
RBC x10^6/µl	1	4.19	4.19	8.38	8.43	0.0090	-0.22	0	0.04	0.0030	-1.08
Hb g/dl	1	14.3	14.2	28.5	28.4	0.0300	0.13	0.1	0.1	0.0080	0.00
HCT%	1	49.7	49.6	99.3	85.2	0.1910	2.04	0.1	0.4	0.0260	-0.81
MCV-fl	1	118.5	118.4	236.9	202.6	0.3720	3.56	0.1	0.3	0.0240	-0.54
MCH-Pg	1	34.3	33.8	68.1	67.4	0.0810	0.36	0.5	0.3	0.0200	0.67
MCHC-g/dl	1	28.9	28.6	57.5	66.2	0.1610	-2.06	0.3	0.3	0.0190	0.00
Plt. x10^3/µl	1	131	131	262	273	1.81	-0.24	0	5	0.32	-1.12
Retic %	2	0.3	0.2	0.5	11.4	0.22	-1.93	0.1	0.49	0.03	-0.66

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=5 L=10, E=, Mono/Promono=5 , B1=80 P.M.=, Mye=, Meta=, Other=	Blast: 30-85, Poly: 2-8, Lympho: 4-10, Myelo: 0-7, Mono: 1-10.5, nRBC/Promyelo/Meta/Eos: 0-5
RBC Morphology	3	MICROCYTIC HYPOCHROMIC	Predominantly: Normocytic/Normochromic; Moderate: Microcytosis, Hypochromia; Mild: Anisocytosis, Macrocytosis
Diagnosis	3	ACUTE LEUKEMIA	Acute Myeloid Leukemia (AML)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 157--F	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 $x10^3/\mu l$	1	288	288	82.29	86.11	4.17	7.64	13.54	6.25
RBC $x10^6/\mu l$	1	288	288	86.46	93.06	6.25	3.47	7.29	3.47
Hb g/dl	1	288	288	87.5	87.5	5.9	6.6	6.6	5.9
HCT%	1	288	287	91.99	90.59	3.83	5.92	4.18	3.49
MCV-fl	1	288	287	91.64	94.08	5.57	1.05	2.79	4.87
MCH-Pg	1	288	287	83.97	89.55	7.32	6.62	8.71	3.83
MCHC-g/dl	1	288	287	93.03	86.76	4.18	5.23	2.79	8.01
Plt. $x10^3/\mu l$	1	288	287	89.55	88.85	6.27	5.57	4.18	5.58
ReticCount%	2	288	251	95.62	91.24	3.98	7.17	0.4	1.59
PS Assessment	3	288	255	Satisfactory :94.45%, Borderline Sat. :3.12%, Unsatisfactory :2.43%					

Comments:

1). Among Lab (EQA) : CBC result for MCV unacceptable, may be due to random/human error

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. Seema Tyagi (Prof.)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

Sanjeev

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

EQAS RCA and CAPA Record for outliers

S.No.	Month	Parameter	Z Score	Reason for failure	Corrective action	Status after corrective action	Reviewed by
1.	Aug	MCV	3.56	Random Error	Shall be checked in the next consecutive sample	–	Sanjeev.
		HCT	2.84	Random Error	shall be cheches in the next consecutive Sample		Sanjeev.
	M	MCHc	-2.06	Random Error	Shall be Checked in the next consecutive Sample	–	Sanjeev.