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. : 4427 **Distribution No.:** 156-L **Month/Year:** July/2022

Instrument ID: XN 550 18115

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

Date of issue & status of the report: 27-09-2022[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	7.86	7.74	15.6	12.18	0.0990	**1.15**	0.12	0.15	0.0120	**-0.18**
RBC x10^6/µl	1	4.53	4.44	8.97	8.69	0.0140	**0.71**	0.09	0.05	0.0040	**0.60**
Hb g/dl	1	12.8	12.7	25.5	24.8	0.0290	**0.86**	0.1	0.1	0.0100	**0.00**
HCT%	1	41.9	41.4	83.3	79.6	0.2150	**0.64**	0.5	0.4	0.0290	**0.17**
MCV-fl	1	93.2	92.5	185.7	183.3	0.3570	**0.24**	0.7	0.4	0.0270	**0.58**
MCH-Pg	1	28.8	28	56.8	57.3	0.0800	**-0.25**	0.8	0.3	0.0200	**1.69**
MCHC-g/dl	1	30.9	30.3	61.2	62.4	0.1610	**-0.28**	0.6	0.3	0.0230	**0.81**
Plt. x10^3/µl	1	172	158	330	348	1.70	**-0.40**	14	7	0.47	**0.79**
Retic %	2	1.9	1.8	3.7	3.63	0.09	**0.03**	0.1	0.2	0.02	**-0.34**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=46 L=4, E=4, Mono/Promono=1 , B1=3 P.M.=4, Mye=28, Meta=9, Other=	Poly: 32 – 50, Myelo: 14 - 28, Meta: 10 – 18, Promyelo: 2-8, Lympho: 2-7, nRBC/ /Blast/Eos/Baso/Mono: 0 – 5
RBC Morphology	3	PREDOMINANTLY MICROCYTIC HYPOCHROMIC MODERATE ANISOCYTOSIS WITH PENCIL CELLS AND TEAR DROP CELLS 2NRBC/100WBC SEEN	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis
Diagnosis	3	CHRONIC MYELOID LEUKEMIA	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 156--L	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	318	306	92.16	82.35	5.56	5.88	2.28	11.77
RBC $x10^6$/µl	1	318	318	87.11	83.65	5.35	4.4	7.54	11.95
Hb g/dl	1	318	318	87.74	84.91	3.14	5.35	9.12	9.74
HCT%	1	318	307	92.18	89.25	4.56	5.21	3.26	5.54
MCV-fl	1	318	307	91.21	91.86	5.54	3.58	3.25	4.56
MCH-Pg	1	318	307	89.25	85.67	4.89	3.58	5.86	10.75
MCHC-g/dl	1	318	307	90.88	86.97	5.86	5.21	3.26	7.82
Plt. $x10^3$/µl	1	318	307	91.86	92.18	5.86	2.61	2.28	5.21
ReticCount%	2	318	218	91.28	83.94	3.67	13.3	5.05	2.76
PS Assessment	3	318	216	Satisfactory :93.4%, Borderline Sat. :2.83%, Unsatisfactory :3.77%					

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

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

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PC-1002

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

EQAP CODE No. : 4427 **Distribution No.:** 157-L **Month/Year:** October/2022

Instrument ID: 10120520 XN 550 18115

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

Date of issue & status of the report: 17-11-2022[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	6.45	6.38	12.83	12.5	0.0700	**0.21**	0.07	0.11	0.0090	**-0.30**
RBC x10^6/µl	1	4.52	4.43	8.95	8.41	0.0130	**1.51**	0.09	0.04	0.0030	**0.84**
Hb g/dl	1	12.6	12.4	25	23.6	0.0280	**2.10**	0.2	0.1	0.0090	**0.67**
HCT%	1	40.1	39.3	79.4	74	0.1930	**1.06**	0.8	0.4	0.0280	**0.90**
MCV-fl	1	88.7	88.7	177.4	177.4	0.3730	**0.00**	0	0.3	0.0230	**-0.81**
MCH-Pg	1	28	27.9	55.9	56.4	0.0820	**-0.25**	0.1	0.2	0.0220	**-0.34**
MCHC-g/dl	1	31.6	31.4	63	63.7	0.1580	**-0.17**	0.2	0.3	0.0220	**-0.34**
Plt. x10^3/µl	1	292	258	550	593	3.16	**-0.46**	34	11	0.73	**1.94**
Retic %	2	3.7	3.6	7.3	7.18	0.17	**0.02**	0.1	0.4	0.03	**-0.45**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=2 L=9, E=1, Mono/Promono= , B1=88 P.M.=, Mye=, Meta=, Other=	Blast: 44-90, Lympho: 4-21, Poly: 1-6, nRBC/Eos/Baso/Mono /Myelo/Meta/ Promyelo: 0-5
RBC Morphology	3	ANISOCYTOSIS HYPOCHROMASIA++	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic
Diagnosis	3	ACUTE LEUKEMIA	Acute Leukemia (AL)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 157--L	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	312	300	77.33	90	6.33	2.33	16.34	7.67
RBC $x10^6$/µl	1	312	312	88.14	83.65	3.85	5.45	8.01	10.9
Hb g/dl	1	312	312	84.29	82.69	5.45	5.77	10.26	11.54
HCT%	1	312	301	90.03	87.04	6.31	5.65	3.66	7.31
MCV-fl	1	312	301	93.02	89.37	4.65	6.64	2.33	3.99
MCH-Pg	1	312	301	87.71	90.03	7.97	2.66	4.32	7.31
MCHC-g/dl	1	312	301	92.36	91.03	5.98	2.99	1.66	5.98
Plt. $x10^3$/µl	1	312	297	93.27	92.26	4.38	3.7	2.35	4.04
ReticCount%	2	312	206	88.83	89.81	5.83	7.28	5.34	2.91
PS Assessment	3	312	199	Satisfactory :90.04%, Borderline Sat. :3.21%, Unsatisfactory :6.75%					

*Comments:

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