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. : 5497 **Distribution No.:** 158-N **Month/Year:** February/2023

Instrument ID: INS00078

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: 28-02-2023[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	7.04	6.99	14.03	14.94	0.0360	-1.02	0.05	0.1	0.0080	-0.48
RBC x10^6/µl	1	3.86	3.84	7.7	7.31	0.0090	1.64	0.02	0.04	0.0020	-0.54
Hb g/dl	1	12.4	12.4	24.8	24.9	0.0270	-0.16	0	0.1	0.0080	-0.79
HCT%	1	41.5	41.3	82.8	78.15	0.1710	0.88	0.2	0.4	0.0250	-0.45
MCV-fl	1	107.6	107.4	215	214.85	0.4180	0.01	0.2	0.3	0.0230	-0.27
MCH-Pg	1	32.3	32.2	64.5	68.1	0.0800	-1.72	0.1	0.3	0.0220	-0.54
MCHC-g/dl	1	30	30	60	63.4	0.1470	-0.76	0	0.3	0.0200	-0.81
Plt. x10^3/µl	1	189	187	376	319	1.68	1.11	2	5	0.32	-0.58
Retic %	2	4.5	4.3	8.8	10	0.18	-0.24	0.2	0.5	0.03	-0.51

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=06 L=60, E=01, Mono/Promono=02 , B1=29 P.M.=, Mye=01, Meta=, Other=	Lympho: 49-73, Blast: 5-35, Poly:4-10, nRBC/Eos/Baso/Mono /Myelo/Meta/ Promyelo: 0-5
RBC Morphology	3	normocytic normochromic/ few macrocytes	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic
Diagnosis	3	Acute Leukemia - Probably Acute Lymphocytic Leukemia (ALL)	Acute Leukemia (AL)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 158--N	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	342	340	80	85.59	4.71	3.53	15.29	10.88
RBC $x10^6/\mu l$	1	342	342	88.3	90.35	6.73	3.51	4.97	6.14
Hb g/dl	1	342	342	86.55	85.96	6.73	6.73	6.72	7.31
HCT%	1	342	340	95.88	87.94	3.53	5.29	0.59	6.77
MCV-fl	1	342	340	97.35	92.35	1.76	2.35	0.89	5.3
MCH-Pg	1	342	340	86.47	88.24	8.82	6.47	4.71	5.29
MCHC-g/dl	1	342	340	95.59	90.88	3.24	4.71	1.17	4.41
Plt. $x10^3/\mu l$	1	342	340	95	90	3.24	3.82	1.76	6.18
ReticCount%	2	342	265	94.34	89.81	4.53	5.66	1.13	4.53
PS Assessment	3	342	244	Satisfactory :81.59%, Borderline Sat. :11.40%, Unsatisfactory :7.01%					

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----------

PROFICIENCY TESTING REPORT

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME

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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. : 5497 **Distribution No.:** 158-N **Month/Year:** February/2023

Instrument ID: INS00078

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: 28-02-2023[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	7.04	6.99	14.03	14.94	0.0360	-1.02	0.05	0.1	0.0080	-0.48
RBC x10^6/µl	1	3.86	3.84	7.7	7.31	0.0090	1.64	0.02	0.04	0.0020	-0.54
Hb g/dl	1	12.4	12.4	24.8	24.9	0.0270	-0.16	0	0.1	0.0080	-0.79
HCT%	1	41.5	41.3	82.8	78.15	0.1710	0.88	0.2	0.4	0.0250	-0.45
MCV-fl	1	107.6	107.4	215	214.85	0.4180	0.01	0.2	0.3	0.0230	-0.27
MCH-Pg	1	32.3	32.2	64.5	68.1	0.0800	-1.72	0.1	0.3	0.0220	-0.54
MCHC-g/dl	1	30	30	60	63.4	0.1470	-0.76	0	0.3	0.0200	-0.81
Plt. x10^3/µl	1	189	187	376	319	1.68	1.11	2	5	0.32	-0.58
Retic %	2	4.5	4.3	8.8	10	0.18	-0.24	0.2	0.5	0.03	-0.51

P.S . Assesment

	YOUR REPORT		CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=06 L=60, E=01, Mono/Promono=02 , B1=29 P.M.=, Mye=01, Meta=, Other=	Lympho: 49-73, Blast: 5-35, Poly:4-10, nRBC/Eos/Baso/Mono /Myelo/Meta/ Promyelo: 0-5
RBC Morphology	3	normocytic normochromic/ few macrocytes	Predominantly: Normocytic/ Normochromic, Moderate: Anisocytosis, Microcytic
Diagnosis	3	Acute Leukemia - Probably Acute Lymphocytic Leukemia (ALL)	Acute Leukemia (AL)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 158--N	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	342	340	80	85.59	4.71	3.53	15.29	10.88
RBC $x10^6/\mu l$	1	342	342	88.3	90.35	6.73	3.51	4.97	6.14
Hb g/dl	1	342	342	86.55	85.96	6.73	6.73	6.72	7.31
HCT%	1	342	340	95.88	87.94	3.53	5.29	0.59	6.77
MCV-fl	1	342	340	97.35	92.35	1.76	2.35	0.89	5.3
MCH-Pg	1	342	340	86.47	88.24	8.82	6.47	4.71	5.29
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Plt. $x10^3/\mu l$	1	342	340	95	90	3.24	3.82	1.76	6.18
ReticCount%	2	342	265	94.34	89.81	4.53	5.66	1.13	4.53
PS Assessment	3	342	244	Satisfactory :81.59%, Borderline Sat. :11.40%, Unsatisfactory :7.01%					

*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.
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IQR = Quartile 3 - Quartile 1 of participant data, Normalised IQR = 0.7413 x IQR

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Report authorized by,

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PT Co-ordinator: ISHTM-AIIMS-EQAP
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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. : 5497 **Distribution No.:** 159-N **Month/Year:** April/2023

Instrument ID: INS00078

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: 14-06-2023[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	3.86	3.85	7.71	8.1	0.039	**-0.32**	0.01	0.1	0.007	**-0.76**
RBC x10^6/µl	1	5.29	5.28	10.57	10.7	0.013	**-0.35**	0.01	0.05	0.003	**-0.67**
Hb g/dl	1	12	11.9	23.9	25.2	0.026	**-1.59**	0.1	0.1	0.007	**0.00**
HCT%	1	40.2	40.1	80.3	79.8	0.155	**0.11**	0.1	0.4	0.025	**-0.67**
MCV-fl	1	76.1	75.9	152	149.4	0.206	**0.41**	0.2	0.2	0.017	**0.00**
MCH-Pg	1	22.8	22.5	45.3	46.8	0.059	**-0.95**	0.3	0.2	0.012	**0.67**
MCHC-g/dl	1	30	29.6	59.6	62.5	0.120	**-0.77**	0.4	0.3	0.018	**0.34**
Plt. x10^3/µl	1	173	170	343	370.5	1.599	**-0.57**	3	7	0.392	**-0.58**
Retic %	2	6.9	6.5	13.4	15.7	0.249	**-0.30**	0.4	0.5	0.034	**-0.17**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=2 , Poly=45 L=05, E=01, Mono/Promono=02 , B1=01 P.M.=02, Mye=25, Meta=06, Other=Band forms 10	Poly: 44 – 60, Myelo: 10 - 22, Meta: 7– 16, Lympho: 2– 6, Promyelo: 2-6, Eosino: 1-4, Blast: 1-4, Mono: 1 – 3, nRBC/Baso: 0-5
RBC Morphology	3	Normocytic normochromic, few microcytes also seen.	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis
Diagnosis	3	Myeloproliferative neoplasm - probably Chronic myeloid leukemia (CML)	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 159--N	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	364	359	88.58	86.07	3.06	6.69	8.36	7.24
RBC $x10^6/\mu l$	1	364	364	87.64	87.09	6.87	4.95	5.49	7.96
Hb g/dl	1	364	364	90.66	84.89	4.95	5.22	4.39	9.89
HCT%	1	364	360	94.72	87.5	4.44	4.72	0.84	7.78
MCV-fl	1	364	360	93.06	88.33	5.28	6.67	1.66	5
MCH-Pg	1	364	360	86.94	93.06	8.06	1.67	5	5.27
MCHC-g/dl	1	364	359	93.87	87.19	5.29	5.85	0.84	6.96
Plt. $x10^3/\mu l$	1	364	360	93.61	91.94	3.89	4.17	2.5	3.89
ReticCount%	2	364	273	93.41	84.62	4.76	8.79	1.83	6.59
PS Assessment	3	364	267	Satisfactory :93.95%, Borderline Sat. :2.20%, Unsatisfactory :3.85%					

*Comments:

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