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

NABL Certificate No. PC - 1002

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

EQAP CODE No. : 1377 **Distribution No.:** 153-C **Month/Year:** July/2021

Instrument ID: NIHON KOHDEN MEK 6240

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: 08-09-2021[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	13.5	13.5	27	24.1	0.0830	**1.62**	0	0.2	0.0130	**-1.08**
RBC x10^6/µl	1	5.86	5.83	11.69	12.64	0.0130	**-2.80**	0.03	0.05	0.0030	**-0.39**
Hb g/dl	1	16.2	16.2	32.4	32.8	0.0320	**-0.49**	0	0.1	0.0090	**-0.67**
HCT%	1	51	50.8	101.8	100.6	0.1840	**0.26**	0.2	0.4	0.0280	**-0.45**
MCV-fl	1	87.1	87	174.1	159.5	0.2300	**2.50**	0.1	0.3	0.0220	**-0.54**
MCH-Pg	1	27.8	27.6	55.4	51.8	0.0510	**3.04**	0.2	0.2	0.0140	**0.00**
MCHC-g/dl	1	31.9	31.8	63.7	65	0.1150	**-0.45**	0.1	0.2	0.0180	**-0.45**
Plt. x10^3/µl	1	440	416	856	783.5	4.61	**0.59**	24	11	0.70	**1.25**
Retic %	2	3.5	3.2	6.7	3.59	0.09	**1.13**	0.3	0.2	0.02	**0.34**

P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=3/100WBC , Poly=57 L=19, E=02, Mono/Promono=0 , B1=20 P.M.=0, Mye=02, Meta=0, Other=PLATELETS ARE MARKEDLY INCREASED	Poly: 40 – 60, Lympho: 15 - 30, Blast: 10 – 25, Myelo/Meta/nRBC/Promyelo/Eos/Baso/Mono: 0 – 5
RBC Morphology	3	ANISOPOIKILOCYTOSIS WITH MICROCYTES ,TEAR DROP CELLS , SHISTOCYTES, BURR CELLS, PENCIL CELLS	Predominantly: Microcytosis, Anisocytosis; Moderate: Hypochromia, Poikilocytosis; Mild: Normocytic/Normochromic, Macrocytosis, Tear drop cells, Schistocytes
Diagnosis	3	FEATURES SUGGESTIVE OF CML WITH BLAST CRISIS, D/D - AML-M2 .SUGGEST BONE MARROW ASPIRATION AND IMMUNOPHENOTYPING FOR CONFIRMATION	1. Myeloproliferative Neoplasm 2. CML - Accelerated/Blast phase

EQAP Code No.: 1377 *Distribution No.: 153-C* *Month/Year: July/2021* *Instrument ID: NIHON KOHDEN MEK 6240*

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	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	283	280	80.36	91.43	7.14	3.57	12.5	4.64
RBC x10^6/µl	1	283	282	92.2	89.01	4.26	3.9	3.55	7.09
Hb g/dl	1	283	282	87.94	86.88	5.32	0.35	6.74	7.09
HCT%	1	283	282	91.13	90.43	4.61	3.9	4.26	5.67
MCV-fl	1	283	282	92.2	91.49	5.32	2.84	2.48	5.67
MCH-Pg	1	283	282	89.36	95.39	5.32	1.77	5.32	2.84
MCHC-g/dl	1	283	282	91.84	90.43	4.96	2.48	3.19	7.09
Plt. x10^3/µl	1	283	282	95.39	89.36	3.55	4.96	1.06	5.67
ReticCount%	2	283	238	92.02	87.82	3.78	0.84	3.36	11.76
PS Assessment	3	283	247	Acceptable:85.0%,Warning Signal:14.2%,Unacceptable :0.8%					

***Comments:**

1). Among Lab (EQA) : CBC result for *MCH* 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.

Report authorized by,

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

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

Fatima Hospital
GORAKHPUR

Ref. No. 1381/FH/2021

Date:- 20-09-21

Department of Laboratory Medicine
ISHTM – AIMS External Quality Assurance Programme
Discrepancy Report

Month year-July/2021

OBSERVATION:-

1. Among Lab (EQA) – CBC result for MCH unacceptable may be due to random error/human error.

CORRECTIVE ACTION:-

1) Daily Quality Control (QC) was run for all three levels (Low, Normal and high) and the results of three level controls were in acceptable range.
2) Here daily QC report for MCH from 09/09/2021 to 11/09/2021 with their range chart.

INTERFERANCE:- The unacceptable MCH may be due to random error.

Sr. Jolly LST
Lab In-charge

FATIMA HOSPITAL REG. No RMEE1900899 Gorakhpur

Dr. Aditi Kumar
MBBS, MD
Pathologist
Reg. No. 50434
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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. : 1377 **Distribution No.:** 152-C **Month/Year:** January/2021

Instrument ID: NIHON COHDEN

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: 25-02-2021[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	4	4	8	7.2	0.0350	0.74	0	0.1	0.0060	-0.84
RBC x10^6/µl	1	3.22	3.18	6.4	6.63	0.0070	-1.35	0.04	0.03	0.0020	0.27
Hb g/dl	1	10.4	10.1	20.5	22.7	0.0190	-4.24	0.3	0.1	0.0070	2.70
HCT%	1	35.1	35	70.1	71.4	0.1540	-0.25	0.1	0.3	0.0230	-0.45
MCV-fl	1	110	109	219	213.95	0.3740	0.38	1	0.3	0.0270	1.35
MCH-Pg	1	32.7	31.4	64.1	68.5	0.0680	-2.37	1.3	0.3	0.0200	2.70
MCHC-g/dl	1	29.7	28.8	58.5	63.4	0.1230	-1.12	0.9	0.3	0.0190	1.62
Plt. x10^3/µl	1	146	138	284	288.5	1.12	-0.14	8	4	0.25	1.08
Retic %	2	7.5	7	14.5	13	0.20	0.26	0.5	0.5	0.02	0.00

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=11 L=88, E=01, Mono/Promono= , B1= P.M.=, Mye=, Meta=, Other=Few smudge cells seen	Lympho: 75-90, Poly: 5-15, Mono: 1-5, nRBC/Blast/Eo/Myelo/Meta: 0-1
RBC Morphology	3	Predominantly :NC/NC, Mild Anisocytosis	Predominantly: Normocytic/Normochromic, Moderate: Anisocytosis, Mild: Microcytosis, Hypo.
Diagnosis	3	CHRONIC LYMPHOCYTIC LEUKEMIA (CLL)	Chronic Lymphocytic Leukemia (CLL)

EQAP Code No.: 1377 Distribution No.: 152-C Month/Year: January/2021 Instrument ID: NIHON COHDEN

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	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	333	344	91.57	85.76	4.94	6.4	2.91	6.1
RBC $x10^6/\mu l$	1	333	344	87.79	90.7	6.4	4.36	5.23	3.2
Hb g/dl	1	333	344	87.21	88.37	7.56	5.23	4.36	5.52
HCT%	1	333	344	96.51	89.53	2.33	4.07	0.58	4.65
MCV-fl	1	333	344	98.55	93.02	0.58	3.2	0.29	3.2
MCH-Pg	1	333	344	88.66	88.95	7.27	6.4	3.49	3.2
MCHC-g/dl	1	333	344	96.8	91.28	2.33	3.49	0.29	4.07
Plt. $x10^3/\mu l$	1	333	344	91.28	92.73	6.1	4.94	2.03	1.74
ReticCount%	2	333	329	94.22	90.88	3.65	1.22	2.43	8.21
PS Assessment	3	333	339	Acceptable:92.5,Warning Signal:2.7,Unacceptable :4.8					

Comments:

1). Among Lab (EQA) : CBC result for *HB* 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.

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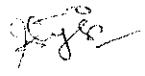
Report authorized by,



Dr. Seema Tyagi (Prof.)
PT Co-ordinator: ISHTM-AIIMS-EQAP
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----------End Of Report----------

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Department of Laboratory Medicine

DATE-15/02/2021

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME (EQAP)

Discrepancy Report

Month/Year-Jan/2021

OBSERVATION –

1. Among Lab (EQA) – CBC result for Haemoglobin unacceptable may be due to random / human error.

CORRECTIVE ACTION –

1. Proper maintenance were performed by the technician.
2. Daily Quality Control was run for all three Levels (Low, Normal and High) and the results of all three level controls were in acceptable range.

INFERENCE- The unacceptable Haemoglobin may be due to random error.

Sr. Ramya LST
Lab In-Charge

Dr. Aditi Kumar
Pathologist