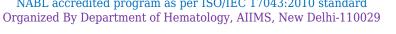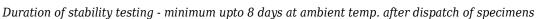# PROFICIENCY TESTING REPORT
ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME
NABL accredited program as per ISO/IEC 17043:2010 standard
Organized By Department of Hematology, AIIMS, New Delhi-110029

PC-1002

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

EQAP CODE No. : 534   **Distribution No.:** 157-B   **Month/Year:** July/2022

Instrument ID: DxH-800 BECKMAN COULTER (RBD45164)

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: 16-10-2022[Final].

CBC and Retic Assessment

Test Parameters	S.No.	Your Result 1	Your Result 2	Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
				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 x10³/µl	1	5.3	5.3	10.6	10.47	0.0280	0.19	0	0.1	0.0070	-0.79
RBC x10⁶/µl	1	4.31	4.29	8.6	8.75	0.0070	-0.75	0.02	0.04	0.0020	-0.54
Hb g/dl	1	12.5	12.4	24.9	25.4	0.0200	-0.75	0.1	0.1	0.0070	0.00
HCT%	1	39.4	39.3	78.7	78.2	0.1260	0.13	0.1	0.4	0.0230	-0.81
MCV-fl	1	91.8	91.3	183.1	178.7	0.2390	0.60	0.5	0.3	0.0200	0.67
MCH-Pg	1	29.1	28.9	58	58	0.0550	0.00	0.2	0.2	0.0110	0.00
MCHC-g/dl	1	31.8	31.6	63.4	64.8	0.1120	-0.42	0.2	0.3	0.0200	-0.34
Plt. x10³/µl	1	107	106	213	214	1.05	-0.03	1	4	0.26	-0.58
Retic %	2	3.5	2.5	6	3.1	0.08	1.00	1	0.2	0.01	5.40

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=01 , Poly=35 L=12, E=02, Mono/Promono=06 , B1=03 P.M.=09, Mye=12, Meta=18, Other=	Poly: 42 – 56, Myelo: 13 - 23, Meta: 8 – 17, Lympho: 4 – 8, Eos: 2 - 5, Promyelo: 1-5, nRBC/Blast/Baso/Mono: 0 – 5
RBC Morphology	3	Hypochromic (++), Microcytic (++)	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis
Diagnosis	3	CLL	Chronic Myeloid Leukemia (Chronic Phase)

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 157--B	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 x10³/µl	1	373	366	83.61	91.53	7.92	3.28	8.47	5.19
RBC x10⁶/µl	1	373	373	85.25	87.4	5.9	4.56	8.85	8.04
Hb g/dl	1	373	373	87.67	85.52	4.83	5.63	7.5	8.85
HCT%	1	373	365	89.59	89.59	7.12	5.21	3.29	5.2
MCV-fl	1	373	364	94.51	84.89	3.57	10.44	1.92	4.67
MCH-Pg	1	373	364	87.09	73.35	6.87	18.41	6.04	8.24
MCHC-g/dl	1	373	364	92.31	87.91	4.4	6.87	3.29	5.22
Plt. x10³/µl	1	373	364	91.21	93.13	5.22	3.3	3.57	3.57
ReticCount%	2	373	273	91.21	95.6	5.49	1.47	3.3	2.93
PS Assessment	3	373	349	Satisfactory :90.89%, Borderline Sat. :6.97%, Unsatisfactory :2.14%					

*Comments:

1). Among Lab (EQA) : PS Diagnosis wrongly reported, remaining results acceptable

2). Within Lab (IQA) : RETIC result is unacceptable, may be due to random/human error.

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 ($\overline{x}$-$\overline{y}$) 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-----------