PROFICIENCY TESTING REPORT

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME

NABL accredited program as per ISO/IEC 17043:2023 standard

Organized By Department of Hematology, AIIMS, New Delhi-110029

PC-1098

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

EQAP CODE No. : 1828 **Distribution No.:** 167-F **Month/Year:** April/2025

Instrument ID: Horiba **Model Name.:** Yumizen H500 **Serial No.:** 008YOXH03694

Name & Contact No. of PT Co-ordinator: Dr. Manoranjan Mahapatra (Prof. & Head), Hematology, AIIMS, Delhi, Tel: 9013085730 , E-Mail : info@ishtmaiimseqap.com

Date of issue & status of the report: 21-05-2025 [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	10.4	9.89	20.29	13.65	0.079	2.57	0.51	0.11	0.009	3.00
RBC x10^6/µl	1	6.11	6.01	12.12	12.18	0.014	-0.15	0.1	0.05	0.003	0.84
Hb g/dl	1	14.8	14.8	29.6	30.5	0.027	-1.10	0	0.1	0.007	-0.67
HCT%	1	48.5	47.9	96.4	99.65	0.224	-0.50	0.6	0.4	0.024	0.45
MCV-fl	1	79.8	79.4	159.2	164.6	0.298	-0.58	0.4	0.2	0.016	0.90
MCH-Pg	1	24.7	24.3	49	50.1	0.053	-0.74	0.4	0.2	0.012	1.35
MCHC-g/dl	1	31	30.6	61.6	60.9	0.143	0.16	0.4	0.2	0.015	0.90
Plt. x10^3/µl	1	86	85	171	281	1.724	-2.17	1	5	0.313	-0.67
Retic %	2	7	5	12	12.8	0.190	-0.14	2	0.5	0.032	2.53

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs= , Poly=13 L=9, E=, Mono/Promono=1 , B1=77 P.M.=, Mye=, Meta=, Other=	Blast: 52-73, Poly: 13-22, Lympho: 8-18, Mono: 1-3, nRBC/Myelo/Meta/Eos/Promyelo/Baso : 0-5
RBC Morphology	3	Normocytic normochromic, anisocytosis.	Normocytic normochromic red blood cells with few mild anisopoikilocytosis. Occasional tear drop cells are noted.
Diagnosis	3	Suggestive of Acute Leukemia.	Acute Leukemia (AL)

Sakhina Begum

c/o fever }
cough } ∵ 1 month.
SOB }

- no comorbidities.

- H/O loss of apetite (+)

- H/O loss of weight (+)

HIV +ve

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 167--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/µl	1	365	361	92.8	90.03	5.26	4.16	1.940	5.81
RBC x10^6/µl	1	365	365	90.68	90.68	4.38	4.66	4.94	4.66
Hb g/dl	1	365	365	88.77	84.66	6.58	7.95	4.65	7.39
HCT%	1	365	362	92.82	93.09	5.25	2.76	1.93	4.15
MCV-fl	1	365	362	96.69	86.46	3.31	8.84	0	4.7
MCH-Pg	1	365	362	86.46	93.65	6.91	2.49	6.63	3.86
MCHC-g/dl	1	365	362	92.82	91.16	6.35	4.97	0.83	3.87
Plt. x10^3/µl	1	365	363	90.91	90.63	5.79	4.68	3.3	4.69
ReticCount%	2	365	305	94.1	88.2	3.93	7.21	1.97	4.59
PS Assessment	3	365	296	Satisfactory :94.81%, Borderline Sat. :1.91%, Unsatisfactory :3.28%					

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 13528:2022 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 13528:2022 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 13528:2022 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

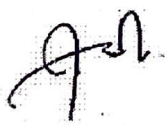
Note-7: Participants are free to use methods/analyzer of their own choice.

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. Manoranjan Mahapatra (Prof. & Head)
PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

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

Prepared By: Quality Manager	TRUSTlab DIAGNOSTICS where Trust matters	Document No:	TDPL/BE/REG-001
		Version No:	2.0
Approved By: Lab Head		Version Date:	01/10/2024
		Revision No:	00
DOCUMENT TITLE:	Equipment Breakdown Maintenance Register	Revision Date:	00-00-0000

Month & Year: Log Book required

Date	Equipment Name / ID	Problem Identified	When Attended and other details			Total Down Time	Remarks if any	Signature
			Breakdown Time	Action Taken	Name of Engineer			

(1). No Break Down in the month of

(2) " " " " " "

Section Head Signature:

Department Head Signature:

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME

An NABL accredited programme as per ISO/IEC 17043:2023 standard

Department of Hematology, AIIMS, New Delhi-110029

Website: www.ishtmaiimseqap.com

E-mail: Info@ishtmaiimseqap.com, Contact No.9013085730

EQAP Code No. **Distribution No.** 167 - F

Direction Sheet for sample processing and Report Submission

[Please read it carefully]

1. ISHTM-AIIMS-EQAP sends specimens quarterly to each participating lab for external quality control or proficiency testing as per the following schedule:

EQAP Code No. and Distribution	Month of specimen dispatch
1 - 899 (odd Nos. only) [A] 3901 – 4350 (both odd and even Nos.) [K] 4351 – 4800 (both odd and even Nos.) [L] 4801 - 5250 (both odd and even Nos.) [M] 5251 - 5700 (both odd and even Nos.) [N]	Jan, Apr, Jul, Oct
6151 - 6600 (both odd and even Nos.) [P] 2 - 900 (even Nos. only)[B] 901 - 1799 (odd Nos. only) [C] 902 - 1800 (even Nos. only)[D] 1801 - 2699 (odd Nos. only) [E]	Feb, May, Aug, Nov
1802 – 2700 (even Nos. only) [F] 2701 – 3050 [G] 3051 – 3250 [H] 3251 – 3450 [I] 3451 – 3900 [J] 5701 – 6150 [O] 6601 – 7050 [Q]	Mar, Jun, Sep, Dec

Note: You will also receive an email when we dispatch the specimens. If the EQAP samples do notreach you within 7 days of dispatch, please e-mail us immediately so that repeat samples can be sent. ISHTM-AIIMS-EQAP will not be responsible for sample non-receipt, if not informed timely.
The following 3 samples will be sent:

Sample No.1: **COMPLETE BLOOD COUNTS**

It is stabilized human whole blood sample. Report all the parameters listed in the results submission page on website. Run the sample twice on your registered analyzer and report all the parameters in duplicate by entering higher value in first column and lower value in second column. The parameters must be reported on the scale of WBC:** x10^3/µl, RBC:** x10^6/µl, Hb:**g/dl, HCT:**%,MCV:** fl, MCH:** Pg, MCHC: ** g/dl, Platelet: ** x 10^3/µl. Please only fill the measurement value (**) in report submission column and **do not type any text, scale or superscript strictly**. For E.g. a WBC count of 7800 / µl, you have only to type 7.8 in the WBC column, **nothing else**. Please note, if result is not reported in duplicate or on correct scale, it will not be accepted and no assessment will be done. A copy of your analyzer's report for both measurements should also be attached as a single PDF copy on the link provided. Report must be of the registered analyzer only; any other will be rejected.

Sample No.2: **RETICULOCYTE COUNT**

Please assess the reticulocyte count (%) on the slide provided. Counting the red blood cells correctly can be helped by a card board diaphragm or a piece of paper inserted into the eyepiece, with a small hole in the centre to reduce the optical field, so that not more than 30-35 R.B.C should be viewed in a field.

Sample No.3: **PERIPHERAL BLOOD SMEAR**

The blood films are already stained with Jenner-Giemsa. The clinical summary is placed with the peripheral smear in the specimen box. Please report DLC and briefly comment on R.B.C. morphology (minimum 2 and maximum 4 noticeable/relevant features observed). Reporting of diagnosis is optional.

1. You result must be uploaded on our website by login with your unique user name and password **within 20 days of dispatch of the specimen** and once submitted, **in case of any mistake, you can also edit your results.** In case you missed your login details, you may recover it simply through 'forgot password' link provided on the website. Hard copy of the result by e-mail or post will NOT be accepted for evaluation strictly. Once the deadline of result submission is over, the link for same will be disabled and you will not be able to upload the result. **Once the result submitted, immediately check it there in the link "My Submitted Reports" on your profile,** it must be visible there if result was successfully submitted. You should **save this screenshot as a proof** of your