



**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. : 945

Distribution No.: 152-C

Month/Year: January/2021

Instrument ID: MICROS 60c 105PCP10339

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

Date of issue &amp; 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 <sup>3</sup> /µl	1	4.4	4.3	8.7	7.2	0.0350	1.38	0.1	0.1	0.0060	0.00
RBC x10 <sup>6</sup> /µl	1	3.5	3.4	6.9	6.63	0.0070	1.58	0.1	0.03	0.0020	1.89
Hb g/dl	1	10.9	10.8	21.7	22.7	0.0190	-1.93	0.1	0.1	0.0070	0.00
HCT%	1	35	34	69	71.4	0.1540	-0.47	1	0.3	0.0230	1.59
MCV-fl	1	100	99	199	213.95	0.3740	-1.11	1	0.3	0.0270	1.35
MCH-Pg	1	31	30	61	68.5	0.0680	-4.05	1	0.3	0.0200	1.89
MCHC-g/dl	1	31	30	61	63.4	0.1230	-0.55	1	0.3	0.0190	1.89
Plt. x10 <sup>3</sup> /µl	1	150	148	298	288.5	1.12	0.30	2	4	0.25	-0.54
Retic %	2	7.3	6.6	13.9	13	0.20	0.15	0.7	0.5	0.02	0.54

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs= , Poly=09 L=, E=, Mono/Promono= , B1= P.M.=, Mye=, Meta=, Other=Atypical Lymphocytes - 91	Lympho: 75-90, Poly: 5-15, Mono: 1-5, nRBC/Blast/Eo/Myelo/Meta: 0-1		
RBC Morphology	3	Predominanatly Normocytic Normochromic	Predominantly: Normocytic/Normochromic, Moderate: Anisocytosis, Mild: Microcytosis, Hypo.		
Diagnosis	3	Lymphoproliferative disorder favoring CHRONIC LYMPHOCYTIC LEUKEMIA. Advised flow cytometric studies.	Chronic Lymphocytic Leukemia (CLL)		

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**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 <sup>3</sup> /µl	1	333	344	91.57	85.76	4.94	6.4	2.91	6.1
RBC x10 <sup>6</sup> /µl	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 <sup>3</sup> /µl	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 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](http://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-----



EQAS / ILC / CORRECTIVE ACTION REPORT

Name of the department: Hematology

EQAS / ILC Programme: EQAS Allms

Cycle / Sample No.: cycle-1 sample-1

Month and year: Feb-2021

Nature of Non conformance:

EQAS Results out of 250 Range violations

Corrective and Preventive action taken:

Check the System forime check Background, check ILC and  
Enter Equipment comparisons all are founde within the range.  
One Random sample sent to out sourced lab. the values are found within  
the range. this is a Random Error.

Review during the next EQAS / Effectiveness of Corrective Action:

The following analytes are reviewed on next cycle of the  
sample.

Prepared by: *[Signature]*  
Lab Incharge

Approved by: *[Signature]*  
Pathologist  
2/3/2021

**REPORT**

Patient Name	: Mrs. SAMEENA BEGUM UMR36562	Reg. No.	: 00692103010059
Age and Sex	: 34 Yrs / Female	PCC Code	: PCL-TS-516
Referring Doctor	: NA	Sample Drawn Date	: 01-Mar-2021 03:02 PM
Referring Customer	: St. Therasas Hospital	Registration Date	: 01-Mar-2021 07:41 PM
Vial ID	: L0383946	Report Date	: 02-Mar-2021 08:29 AM
Sample Type	: WB-EDTA	Report Status	: Final Report
Client Address	: Sanathnagar, Opp. Rythu Bazar, Hyderabad, Telangana.		

**HEMATOLOGY**

Test Name	Obtained Value	Units	Bio. Ref. Intervals (Age/Gender specific)	Method
<b>Complete Blood Count (CBC)</b>				
Haemoglobin	11.3	g/dL	12-15	Colorimetric Method
RBC Count	4.4	10 <sup>12</sup> /L	3.8-4.8	Cell Impedance
Haematocrit (HCT)	35.7	%	40-50	Calculated
MCV	80.8	fL	81-101	Calculated
MCH	25.5	pg	27-32	Calculated
MCHC	31.6	g/dl	32.5-34.5	Calculated
RDW-CV	16.1	%	11.6-14.0	Calculated
Platelet Count	270	10 <sup>9</sup> /L	150-410	Cell Impedance
WBC count, Total	13.6	10 <sup>9</sup> /L	4.0-11.0	Cell Impedance
Neutrophils	55.0	%	40-70	Microscopy
Neutrophil-Absolute Count	7.48	10 <sup>9</sup> /L	2.0-7.0	Calculated
Lymphocytes	35.0	%	20-40	Microscopy
Lymphocytes-Absolute Count	4.76	10 <sup>9</sup> /L	1.0-3.0	Calculated
Monocytes	7.0	%	2-10	Microscopy
Monocytes-Absolute Count	0.95	10 <sup>9</sup> /L	0.2-1.0	Calculated
Eosinophils	3.0	%	1-6	Microscopy
Eosinophils-Absolute Count	0.41	10 <sup>9</sup> /L	0.02-0.5	Calculated
Basophils	0.0	%	0-2	Microscopy
Basophils-Absolute Count	0.00	10 <sup>9</sup> /L	0.0-0.3	Calculated
Others	0.0	%	00	Microscopy
Remarks	Normocytic Hypochromic with Leucocytosis			

Sample is Processed on Automated CBC Analyzer

Note: Haematocrit (HCT) is derived from calculated MCV based on RBC Histogram as per Manufacturer's Manual

Correlate Clinically.

Laboratory is NABL Accredited.

Result rechecked and verified for abnormal cases.

**\*\*\* End Of Report \*\*\***

 MC-2197  
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**DR. PRATAP PATIL**  
**MD PATHOLOGY**

Note: If the test results are alarming or unexpected, Client is advised to contact the laboratory immediately for possible remedial action.



# St. Theresa's Hospital

Unit of St. Theresa's Convent Society

PAN No. AAATS7437D

DEPARTMENT OF HEAMATOLOGY



<b>Patient Name</b> : Miss. SAMEENA BEGUM	<b>Age /Sex</b> : 34 Y(s)/Female
<b>Bill Date</b> : 01-Mar-2021 12:32 PM	<b>UMR No</b> : UMR36562
<b>Received Date</b> : 01-Mar-2021 12:32 PM	<b>Bill No</b> : BIL200023614
<b>Report Date</b> : 01-Mar-2021 16:30 PM	<b>Result No</b> : RES261968
<b>Ref By</b> : DR.C.S ANJANEYULU MD.	
	<b>Specimen</b> : EDTA whole blood

<u>Parameter Values</u>	<u>Result</u>	<u>Biological Reference</u>	<u>Method</u>
Haemoglobin.	* 11.8 gm%	12.0 - 15.0 gm%	Sis
RBC Count.	4.5 Millions/cumm	3.8 - 4.8 Millions/cumm	Impedance
WBC	* 12,900 cells/cumm	4,000 - 11,000 cells/cumm	Impedance
Platelet Count	2,55,000	1,50,000 - 4,00,000 lakhs/cumm	Impedance
Haematocrit (PCV)	36.0 Vol%	36.0 - 46.0 Vol%	Impedance
Mean Cell Volume (MCV)	80.1 fl	80 - 97 fl	Calculation
Mean Cell Haemoglobin (MCH)	* 26.0	26.5 - 33.5 pg	Calculation
Mean Cell Haemoglobin Concentration (MCHC)	32.0	31.5 - 35.0 gm%	Calculation
Polymorphs	59	40.0 - 70.0 %	Microscopy
Lymphocyte	34	20.0 - 40.0 %	Microscopy
Monocyte	05	2.0 - 10.0 %	Microscopy
Eosinophil	02	1.0 - 6.0 %	Microscopy

NOTE

Rbc: Normocytic Hypochromic few microcytes present

Wbc: Mild leucocytosis with left to shift no abnormal cells seen

Platelets : Adequate

\*\*\* End Of Report \*\*\*



Approved By

DR. ANIL

CONSULTANT PATHOLOGIST

Suggested Clinical Correlation \* If necessary, Please discuss

Test results related only to the item tested.

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Done By: T

Verify By : SALOMIDAS

Dispatched By : JAYA

MAY GOD BLESS YOU

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