



**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. : 1937

Distribution No.: 155-E

Month/Year: March/2022

Instrument ID: H360-K10012102151

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: 29-04-2022[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	3.1	2.9	6	6.4	0.0320	-0.45	0.2	0.09	0.0050	1.65
RBC x10 <sup>6</sup> /µl	1	2.96	2.94	5.9	6.14	0.0070	-1.30	0.02	0.03	0.0020	-0.34
Hb g/dl	1	10.9	10.8	21.7	22.4	0.0210	-1.28	0.1	0.1	0.0070	0.00
HCT%	1	33.6	33.3	66.9	69.4	0.1290	-0.71	0.3	0.3	0.0230	0.00
MCV-fl	1	113.5	113.3	226.8	225.1	0.3410	0.18	0.2	0.4	0.0310	-0.34
MCH-Pg	1	37.1	36.5	73.6	73.1	0.0970	0.19	0.6	0.3	0.0220	1.01
MCHC-g/dl	1	32.7	32.2	64.9	64.65	0.1280	0.07	0.5	0.3	0.0150	0.67
Plt. x10 <sup>3</sup> /µl	1	185	170	355	351	1.21	0.12	15	5	0.31	1.93
Retic %	2										

**P.S . Assesment**

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs=2 , Poly=69 L=4, E=1, Mono/Promono=05 , B1=00 P.M.=02, Mye=08, Meta=09, Other=-	Poly: 37 - 50, Myelo: 16 - 32, Meta: 8 - 16, Promyelo: 1-10, nRBC/Lympho/Blast/Eos/Baso/Mono: 0 - 5		
RBC Morphology	3	HYPOCHRONIC AND NORMOCYTIC TO MACROCYTIC.FEW MICROCYTES.ANISOCYTOSIS	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, hypochromia, Microcytosis; Mild: Macrocytosis, Poikilocytosis		
Diagnosis	3	Suggestive of chronic myeloproliferative disorder.Immunophenotyping advised for confirmation	Chronic Myeloid Leukemia (Chronic Phase)		

*Result satisfactory*  
*Anju Kacker*

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 155--E	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	320	318	89.94	90.25	5.66	3.77	4.4	5.98
RBC x10 <sup>6</sup> /μl	1	320	320	88.13	87.81	6.56	3.13	5.31	9.06
Hb g/dl	1	320	320	85	91.25	5.63	3.13	9.37	5.62
HCT%	1	320	318	93.4	88.36	5.03	5.97	1.57	5.67
MCV-fl	1	320	317	94.01	95.58	4.42	1.58	1.57	2.84
MCH-Pg	1	320	317	90.22	88.01	4.1	5.36	5.68	6.63
MCHC-g/dl	1	320	318	93.08	90.25	4.09	4.72	2.83	5.03
Plt. x10 <sup>3</sup> /μl	1	320	318	89.94	88.99	6.92	5.66	3.14	5.35
ReticCount%	2	320	320	84.69	82.19	5.63	5.94	9.68	11.87
PS Assessment	3	320	300	Satisfactory :87.16%, Borderline Sat. :6.89%, Unsatisfactory :5.95%					

**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.ishtmaimseqap.com](http://www.ishtmaimseqap.com).

Report authorized by,



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

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



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

EQAP CODE No. : 1937

Distribution No.: 154-E

Month/Year: November/2021

Instrument ID: H360

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: 23-02-2022[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	3.51	3.4	6.91	10.99	0.1670	-0.68	0.11	0.18	0.0140	-0.31
RBC x10 <sup>6</sup> /μl	1	4.24	4.2	8.44	8.53	0.0100	-0.36	0.04	0.06	0.0040	-0.34
Hb g/dl	1	13	12.9	25.9	25.9	0.0300	0.00	0.1	0.1	0.0100	0.00
HCT%	1	41.2	41.2	82.4	79.3	0.1750	0.66	0	0.4	0.0290	-0.77
MCV-f	1	98	97.3	195.3	185.2	0.3170	1.12	0.7	0.3	0.0250	0.90
MCH-Pg	1	30.8	30.8	61.6	60.5	0.0690	0.69	0	0.3	0.0250	-0.70
MCHC-g/dl	1	31.6	31.4	63	64.8	0.1380	-0.48	0.2	0.4	0.0270	-0.39
Plt. x10 <sup>3</sup> /μl	1	122	96	218	278	1.30	-1.76	26	5	0.34	3.54
Retic %	2	0.8	0.7	1.5	8.8	0.20	-1.17	0.1	0.36	0.02	-0.64

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=1.00 , Poly=4.00 L=5.00, E=0.00, Mono/Promono=1.00 , B1=80.00 P.M.=9.00, Mye=, Meta=, Other=	Blast: 60-88, Poly: 2-6, Lympho: 4-12, Mono: 0-4, Myelo/Promyelo/Meta: 1-5, nRBC/Eos: 0-1
RBC Morphology	3	HYPOCHROMIC AND MICROCYTIC .ANISONUCLEOSIS .FEW MACROCYTES.TEAR DROP CELLS	Predominantly: Normocytic/Normochromic; Moderate: Microcytosis, Hypochromia; Mild: Anisocytosis, Macrocytosis
Diagnosis	3	AML.IMMUNOPHENOTYPING ADVISED FOR CONFIRMATION	Acute Myeloid Leukemia (AML)

*Ayiketh  
Randomemr*

*Result Satisfactory  
ILC done  
Satisfactory*

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Parameters	S.No.	Total participants covered in the current dist. 154--E	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
BC x10 <sup>3</sup> /µl	1	298	290	96.55	88.62	3.79	4.14	-0.34	7.24
ABC x10 <sup>6</sup> /µl	1	298	298	83.89	86.91	6.38	5.37	9.73	7.72
Hb g/dl	1	298	298	81.88	83.22	10.4	4.36	7.72	12.42
HCT%	1	298	291	93.81	86.6	3.44	7.9	2.75	5.5
MCV-fl	1	298	291	92.78	94.85	5.15	2.75	2.07	2.4
MCH-Pg	1	298	291	83.51	91.75	8.59	6.19	7.9	2.06
MCHC-g/dl	1	298	291	91.75	94.16	6.19	3.44	2.06	2.4
Plt. x10 <sup>3</sup> /µl	1	298	291	93.13	94.85	3.78	3.78	3.09	1.37
ReticCount%	2	298	298	95.3	88.59	3.02	1.68	1.68	9.73
PS Assessment	3	298	275	Satisfactory :78.18%, Borderline Sat. :21.14%, Unsatisfactory :0.67%					

**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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Report authorized by,



Dr. Seema Tyagi (Prof.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

Department of Hematology, AIIMS, New Delhi

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



Date 13/07/2022  
Name Ms. MEGHA  
Ref. By Dr. SELF

Srl No. 1  
Age 23 Yrs. Sex F

## COMPLETE HAEMOGRAM

HAEMOGLOBIN (Hb)	13.7	gm/dl	11.0 - 16.0
TOTAL LEUCOCYTE COUNT (TLC)	5,800	/cumm	4000 - 11000
DIFFERENTIAL LEUCOCYTE COUNT (DLC)			
NEUTROPHIL	51	%	40 - 75
LYMPHOCYTE	40	%	20 - 45
EOSINOPHIL	04	%	01 - 06
MONOCYTE	05	%	02 - 10
BASOPHIL	00	%	0 - 0
ESR (WESTEGREN's METHOD) Westegren's	16	mm/1st hr.	0 - 20
R B C COUNT	4.13	Millions/cmm	3.8 - 4.8
P.C.V / HAEMATOCRIT	42.0	%	35 - 45
M C V	101.7	fl.	80 - 100
M C H	33.1	Picogram	27.0 - 31.0
M C H C	32.6	gm/dl	33 - 37
PLATELET COUNT	174	Lakh/cmm	1.50 - 4.50
RDW	54.4	FL	39.0 - 46.0

**DR. ANJU KACKAR**  
**MBBS,MD**  
**SENIOR PATHOLOGIST**

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In case of any discrepancies in the report, please contact the laboratory immediately.  
(This is professional opinion and not the final diagnosis. It should be clinically correlated)

Timings 8 am to 8 pm  
Sundays 8 am to 1.30 pm

• Free Home Collection

• Not For Medico Legal Cases



Pocket C2/34, Sector 11, Rohini, Delhi-110085

IDOCG INFOSYSTEMS PVT. LTD.

Patient MRN: 296160  
 Name: **Ms. MEGHA**  
 Age/Gender: 23 Y/Female  
 Order ID: 296160130722130921  
 Booked By: Healthplus Wellness Diagnostics  
 Sample Type:



Patient ID: 2712207130001  
 Sample Drawn Date: 13/Jul/2022 04:22PM  
 Lab Accession Date: 13/Jul/2022 04:22PM  
 Report Date & Time: 13/Jul/2022 05:18PM  
 Ref By: Self  
 BarcodeID/Slide No: 2665685/

Test Name	Results	Units	Bio. Ref. Interval	Test Method
<b>Complete Blood Count (CBC)</b>				
Hemoglobin <sup>^</sup>	13.5	g/dL	12.0-15.0	Non Cyanide - SLS
Total Leucocyte Count (TLC / WBC) <sup>^</sup>	5.75	10 <sup>^</sup> 3/uL	4.0-10.0	Floctometry
Packed Cell Volume (PCV / HCT) <sup>^</sup>	42.1	%	36.0-46.0	Cumulative Pulse Height Detection
Mean Corpuscular Volume (MCV) <sup>^</sup>	98.1	fl	83.0-101.0	Calculated
Mean Corpuscular Hemoglobin (MCH) <sup>^</sup>	31.5	pg	27.0-32.0	Calculated
Mean Copuscular Hb Conc (MCHC) <sup>^</sup>	32.1	g/dL	31.5-34.5	Calculated
Platelet count <sup>^</sup>	161	10 <sup>^</sup> 3/uL	150-410	DC Detection
RDW-SD <sup>^</sup>	<b>47.3</b>	fL	36.4-46.3	Calculated
RDW-CV <sup>^</sup>	13.6	%	11.7-14.4	Calculated
Neutrophils <sup>^</sup>	68.00	%	40-80	Semiconductor Laser Floctometry/ Light Microscopy
Lymphocytes <sup>^</sup>	25.00	%	20-40	Semiconductor Laser Floctometry/ Light Microscopy
Monocytes <sup>^</sup>	5.00	%	2-10	Semiconductor Laser Floctometry/ Light Microscopy
Eosinophils <sup>^</sup>	2.00	%	1-6	Semiconductor Laser Floctometry/ Light Microscopy
Basophils <sup>^</sup>	0.00	%	0-2	Semiconductor Laser Floctometry/ Light Microscopy
Absolute Neutrophils <sup>^</sup>	3.91	10 <sup>^</sup> 3/uL	2.00-8.00	Calculated
Absolute Lymphocytes <sup>^</sup>	1.44	10 <sup>^</sup> 3/uL	1.00-3.00	Calculated
Absolute Monocytes <sup>^</sup>	0.29	10 <sup>^</sup> 3/uL	0.20-1.00	Calculated
Absolute Eosinophils <sup>^</sup>	0.12	10 <sup>^</sup> 3/uL	0.02-0.50	Calculated
Absolute Basophils <sup>^</sup>	<b>0.00</b>	10 <sup>^</sup> 3/uL	0.02-0.10	Calculated

Above Results are of the Tests performed at NirAmaya Pathlabs with Commitment to provide Accurate Pathology Services

  
**Dr. Indu Sardana**  
 MD Pathology  
 Lab director & Senior Pathologist



**Dr. Ashok Malhotra**  
 MBBS, MD.  
 Sr. Consultant Biochemist



**Dr. Surbhi**  
 MBBS, MD. Microbiologist

Approved By: Dr. Ashok Malhotra



Test result marked 'BOLD/RED' indicates abnormal results i.e higher or lower than normal.  
 All Lab results are subject to clinical interpretation by a qualified medical professional & This report is not subject to use for any medico-legal purpose