



**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



## PARTICIPATION CERTIFICATE

[Certificate No. EAQP/2915/2023/30]

Date 30.12.2023

This is to certify that " , , , " has participated in the "ISHTM-AIIMS External Quality Assurance Program" for the period "January 2023 to December 2023".

Report authorized by,

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



**PROFICIENCY TESTING REPORT**  
**ISHBT-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. : 2915

Distribution No.: 162-G

Month/Year: December/2023

Instrument ID: BC-6800 Mindray, 5 part, SH-78002528

Model Name.: Mindray

Serial No.: BC6800/SH-78002528

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

Date of issue & status of the report: 08-03-2024[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	4.53	4.49	9.02	8.94	0.026	0.14	0.04	0.1	0.007	-0.62
RBC x10 <sup>6</sup> /µl	1	4.37	4.37	8.74	8.78	0.011	-0.15	0	0.03	0.003	-0.58
Hb g/dl	1	13.1	13.1	26.2	25.7	0.023	0.96	0	0.1	0.008	-1.35
HCT%	1	43.5	43.5	87	82.84	0.223	0.74	0	0.3	0.027	-0.67
MCV-fl	1	99.6	99.3	198.9	189.6	0.415	0.80	0.3	0.2	0.020	0.34
MCH-Pg	1	29.9	29.9	59.8	58.4	0.074	0.79	0	0.2	0.018	-0.90
MCHC-g/dl	1	30.1	30	60.1	61.45	0.158	-0.31	0.1	0.3	0.019	-0.67
Plt. x10 <sup>3</sup> /µl	1	151	150	301	267	1.491	0.94	1	4	0.325	-0.67
Retic %	2	9.5	9	18.5	23.45	0.429	-0.48	0.5	0.6	0.053	-0.18

**P.S . Assesment**

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbc=0 , Poly=06 L=74, E=2, Mono/Promono=10 , B1=08 P.M.=0, Mye=0, Meta=0, Other=	Lymp: 82-90, Poly: 7-10, nRBC/Blast/Myelo/Meta/Mono/Eosino: 0-5		
RBC Morphology	3	Predominantly Normocytic Normochromic red Cell. Smudge Cells Seen	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Mild: Microcytic, Hypochromic.		
Diagnosis	3	CLPD (Chronic Lymphoproliferative disorder)	Chronic Lymphoproliferative Disorder/CLL		

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 162--G	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	250	250	82	92	2.8	3.2	15.2	4.8
RBC x10 <sup>6</sup> /μl	1	250	250	89.6	89.2	6.8	4	3.6	6.8
Hb g/dl	1	250	250	87.6	90.8	7.2	4	5.2	5.2
HCT%	1	250	250	96.4	87.6	2.8	5.6	0.8	6.8
MCV-fl	1	250	250	98	87.6	2	3.2	0	9.2
MCH-Pg	1	250	250	90.4	93.2	6	3.2	3.6	3.6
MCHC-g/dl	1	250	250	96.8	90.8	3.2	5.2	0	4
Plt. x10 <sup>3</sup> /μl	1	250	250	92	90	5.6	3.6	2.4	6.4
ReticCount%	2	250	230	93.04	79.57	4.35	10.43	2.61	10.00
PS Assessment	3	250	226	Satisfactory :95.2%, Borderline Sat. :0.8%, Unsatisfactory :4%					

**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.ishtmaiimseqap.com](http://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-----





**PROFICIENCY TESTING REPORT**  
 ISHBT AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME  
 National Proficiency Testing 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. : 2915

Distribution No.: 161-G

Month/Year: September/2023

Instrument ID: BC6800/SH78002528

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

Date of issue & status of the report: 27-12-2023[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	5.14	5.05	10.19	10.15	0.042	0.04	0.09	0.1	0.009	-0.09
RBC x10 <sup>6</sup> /µl	1	4.11	4.08	8.19	8.03	0.010	0.67	0.03	0.04	0.003	-0.27
Hb g/dl	1	12.9	12.8	25.7	25.2	0.030	0.84	0.1	0.1	0.009	0.00
HCT%	1	41.2	41.1	82.3	78.4	0.203	0.68	0.1	0.4	0.028	-0.81
MCV-fl	1	100.9	100.2	201.1	194.9	0.388	0.57	0.7	0.2	0.022	1.64
MCH-Pg	1	31.6	31.3	62.9	62.7	0.076	0.11	0.3	0.3	0.019	0.00
MCHC-g/dl	1	31.3	31.2	62.5	64.1	0.159	-0.42	0.1	0.3	0.021	-0.67
Plt. x10 <sup>3</sup> /µl	1	201	200	401	420	1.689	-0.47	1	6	0.359	-0.96
Retic %	2	10	9.5	19.5	14.65	0.279	0.69	0.5	0.5	0.034	0.00

**P.S . Assesment**

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs=1 , Poly=2 L=90, E=0, Mono/Promono=0 , B1=6 P.M.=0, Mye=1, Meta=1, Other=SMUDGE CELLS SEEN	Lymp: 85-93, Poly: 3-7, Mono: 1-3, nRBC/Blast/Eosino/Promyelo/Myelo/Meta: 0-5		
RBC Morphology	3	Normocytic normochromic with mild to moderate anisopoikilocytosis seen	Normocytic, Normochromic; Mild: Microcytic , Hypochromic, Anisopoikilocytosis ,Tear Drop Cells.		
Diagnosis	3	Chronic lymphoproliferative disorder	Chronic Lymphoproliferative Disorder		

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**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 161--G	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	258	257	82.88	81.71	2.33	7.78	14.79	10.51
RBC x10 <sup>6</sup> /μl	1	258	258	86.05	92.25	8.53	3.1	5.42	4.65
Hb g/dl	1	258	258	84.88	87.6	7.75	4.26	7.37	8.14
HCT%	1	258	257	95.72	93	3.11	2.33	1.17	4.67
MCV-fl	1	258	257	96.89	89.11	2.72	6.23	0.39	4.66
MCH-Pg	1	258	257	87.16	88.33	7	5.45	5.84	6.22
MCHC-g/dl	1	258	257	92.22	89.11	5.84	7	1.94	3.89
Plt. x10 <sup>3</sup> /μl	1	258	257	91.83	92.61	4.67	3.11	3.5	4.28
ReticCount%	2	258	232	92.24	90.95	6.47	6.03	1.29	3.02
PS Assessment	3	258	233	Satisfactory :93.8%, Borderline Sat. :1.55%, Unsatisfactory :4.65%					

**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

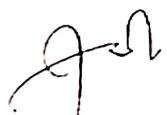
**Note-7:** Participants are free to use methods/analyzer of their own choice.

**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.ishtmaiimseqap.com](http://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-----



**PROFICIENCY TESTING REPORT**  
**ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME**  
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 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. : 2915

Distribution No.: 160-G

Month/Year: June/2023

Instrument ID: BC6800/SH78002528

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: 01-08-2023[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>9</sup> /µl	1	5.39	5.38	10.77	10.77	0.042	0.00	0.01	0.1	0.007	-0.81
RBC x10 <sup>9</sup> /µl	1	4.5	4.45	8.95	8.86	0.009	-0.36	0.05	0.04	0.003	0.27
Hb g/dl	1	12.9	12.9	25.8	25.5	0.030	0.40	0	0.1	0.008	-0.67
HCT%	1	43.4	42.8	86.2	81.9	0.173	0.96	0.6	0.4	0.027	0.54
MCV-fL	1	96.3	96.2	192.5	185.1	0.307	0.94	0.1	0.3	0.022	-0.54
MCH-Pg	1	29	28.6	57.6	57.8	0.073	-0.12	0.4	0.2	0.019	0.67
MCHC-g/dl	1	30.1	29.7	59.8	62.4	0.135	-0.75	0.4	0.3	0.021	0.34
PLT. x10 <sup>9</sup> /µl	1	115	111	226	166.5	1.767	1.24	4	5	0.308	-0.22
Retic %	2	12.5	12	24.5	16.4	0.376	0.81	0.5	0.5	0.037	0.00

**P.S . Assesment**

YOUR REPORT			CONSENSUS REPORT
DLC%	3	Nrbcs=0 , Poly=7 L=85, E=6, Mono/Promono=2 , B1=0 P.M.=0, Mye=0, Meta=0, Other=There is marked leukocytosis, showing atypical lymphocytes in predominance. These atypical cells have high N:C ratio, clumped chromatin, inconspicuous nucleoli.	Lymp: 78-86, Poly: 8-15, Eosino: 1-3, mono: 1-2, nRBC/blast/Myelo/Meta: 0-5
RBC Morphology	3	mild anisocytosis, predominantly normocytic normochromic red cells with few microcytes.	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Macrocytosis, Poikilocytosis.



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)
Diagnosis	3	Chronic Lymphoproliferative disorder (CLPD) with mild Eosinophilia. most probably CLL with Eosinophilia				Chronic Lymphoproliferative Disorder/CLL			

### COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist. 160--G	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	270	270	79.26	89.63	5.19	4.44	15.55	5.93
RBC x10 <sup>6</sup> /µl	1	270	270	88.15	86.3	6.3	7.41	5.55	6.29
Hb g/dl	1	270	270	91.85	88.52	4.81	5.19	3.34	6.29
HCT%	1	270	270	95.19	87.41	2.22	8.15	2.59	4.44
MCV-fl	1	270	270	94.81	86.67	3.33	8.15	1.86	5.18
MCH-Pg	1	270	270	88.89	88.52	6.3	5.56	4.81	5.92
MCHC-g/dl	1	270	270	92.59	87.78	5.93	4.81	1.48	7.41
Plt. x10 <sup>3</sup> /µl	1	270	270	96.3	88.52	1.85	5.19	1.85	6.29
ReticCount%	2	270	239	94.98	88.28	4.6	8.37	0.42	3.35
PS Assessment	3	270	239	Satisfactory :95.19%, Borderline Sat. :2.96%, Unsatisfactory :1.85%					

#### 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.

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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).

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**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).

**Note 10:** Reports are kept confidential.

Report authorized by,



**PROFICIENCY TESTING REPORT**  
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 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. : 2915

Distribution No.: 159-G

Month/Year: March/2023

Instrument ID: BC-6800/SH78002528

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: 01-05-2023[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	3.78	3.72	7.5	8.21	0.0460	-0.64	0.06	0.1	0.0070	-0.36
RBC x10 <sup>6</sup> /μl	1	4.45	4.41	8.86	8.8	0.0100	0.31	0.04	0.04	0.0030	0.00
Hb g/dl	1	13.3	13.3	26.6	25.9	0.0240	1.11	0	0.1	0.0080	-1.35
HCT%	1	42	41.7	83.7	80.5	0.1800	0.72	0.3	0.3	0.0270	0.00
MCV-fl	1	94.6	94.4	189	183.65	0.2900	0.69	0.2	0.3	0.0250	-0.27
MCH-Pg	1	30.1	29.8	59.9	59	0.0730	0.53	0.3	0.2	0.0170	0.45
MCHC-g/dl	1	31.9	31.6	63.5	64.05	0.1360	-0.16	0.3	0.3	0.0200	0.00
Plt. x10 <sup>3</sup> /μl	1	153	151	304	293	1.46	0.30	2	4.5	0.34	-0.48
Retic %	2	6.5	6	12.5	8.15	0.19	0.93	0.5	0.4	0.03	0.39

### P.S . Assesment

YOUR REPORT			CONSENSUS REPORT		
DLC%	3	Nrbcs=32 , Poly=73 L=20, E=1, Mono/Promono=2 , B1=0 P.M.=0, Mye=0, Meta=4, Other=	Poly: 55-66, Lympho: 24-34, Mono: 1-4, Eosino: 1-3, blast/Promyelo/Myelo/Meta: 0-5		
RBC Morphology	3	PREDOMINANTLY microcytic hypochromic red cells with severe anisopoikilocytosis showing majority of spherocytes along with scattered target cells , elliptocytes, schistocytes, pencil cells & few macrocytic hypochromic red cells.	Predominantly: Normocytic/Normochromic; Moderate: Anisocytosis, Microcytosis, Hypochromia; Mild: Poikilocytosis , Target cells , Sickle shaped cells ,tear drop cells		
Diagnosis	3	smear suggestive of hemolytic anemia.	Thalassemia/Haemoglobinopathy		



**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 159--G	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	248	248	87.5	88.31	4.44	3.63	8.06	8.06
RBC x10 <sup>6</sup> /µl	1	248	248	79.84	87.9	10.48	6.05	9.68	6.05
Hb g/dl	1	248	248	88.71	92.34	4.84	3.63	6.45	4.03
HCT%	1	248	248	94.35	89.92	4.44	4.84	1.21	5.24
MCV-fl	1	248	248	96.77	91.53	2.42	3.23	0.81	5.24
MCH-Pg	1	248	247	91.9	94.74	6.07	0.4	2.03	4.86
MCHC-g/dl	1	248	248	94.76	90.73	4.84	2.82	0.4	6.45
Plt. x10 <sup>3</sup> /µl	1	248	248	92.74	93.95	5.24	4.03	2.02	2.02
ReticCount%	2	248	216	91.2	84.26	5.56	9.26	3.24	6.48
PS Assessment	3	248	218	Satisfactory :90.74%, Borderline Sat. :8.06%, Unsatisfactory :1.20%					

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

**Note 10:** Reports are kept confidential.

Report authorized by,



Dr. Seema Tyagi (Prof.)  
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-----End Of Report-----