



**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. : 1198

Distribution No.: 156-D

Month/Year: May/2022

Instrument ID: MEK 7300 K, Celltac ES, 5 Part Hematology Analyzer, Nihon Kohden , Sr No 994

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,  
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Date of issue &amp; status of the report: 22-07-2022[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	19.2	18.7	37.9	19.21	0.0960	<b>7.10</b>	0.5	0.15	0.0110	<b>2.25</b>
RBC x10 <sup>6</sup> /µl	1	5.24	5.16	10.4	11.28	0.0110	<b>-2.76</b>	0.08	0.04	0.0030	<b>0.90</b>
Hb g/dl	1	14.5	14.4	28.9	28.1	0.0290	<b>1.08</b>	0.1	0.1	0.0070	<b>0.00</b>
HCT%	1	53.2	52.5	105.7	94.6	0.2270	<b>1.68</b>	0.7	0.4	0.0240	<b>0.81</b>
MCV-fl	1	102	102	204	166.9	0.3470	<b>3.71</b>	0	0.2	0.0170	<b>-0.67</b>
MCH-Pg	1	27.9	27.7	55.6	49.5	0.0650	<b>3.43</b>	0.2	0.2	0.0120	<b>0.00</b>
MCHC-g/dl	1	27.4	27.3	54.7	59.1	0.1500	<b>-1.08</b>	0.1	0.2	0.0150	<b>-0.34</b>
Plt. x10 <sup>3</sup> /µl	1	241	209	450	614.5	4.34	<b>-1.21</b>	32	8	0.45	<b>3.24</b>
Retic %	2	17.3	17	34.3	16.65	0.27	<b>2.38</b>	0.3	0.5	0.02	<b>-0.34</b>

### P.S . Assesment

YOUR REPORT		CONSENSUS REPORT
<b>DLC%</b>	3	Nrbcs=2 , Poly=42 L=5, E=1, Mono/Promono=1 , B1=5 P.M.=1, Mye=25, Meta=19, Other=
<b>RBC Morphology</b>	3	Anisocytosis +, Normocytic normochromic +, macrocytosis +, target cells few, occasional polychromatic RBCs noted
<b>Diagnosis</b>	3	Chronic myeloid leukemia(CML)
		Chronic Myeloid Leukemia (Chronic Phase)

**COMBINED DATA VALUES OF TOTAL PARTICIPANTS**

Test parameters	S.No.	Total participants covered in the current dist. 156--D	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
<b>WBC x10<sup>3</sup>/µl</b>	1	352	345	82.03	87.54	6.67	3.48	11.3	8.98
<b>RBC x10<sup>6</sup>/µl</b>	1	352	352	88.92	88.35	5.97	3.69	5.11	7.96
<b>Hb g/dl</b>	1	352	352	84.09	88.92	5.4	5.4	10.51	5.68
<b>HCT%</b>	1	352	346	86.13	89.02	5.78	4.62	8.09	6.36
<b>MCV-fl</b>	1	352	346	83.82	93.64	4.91	3.76	11.27	2.6
<b>MCH-Pg</b>	1	352	346	86.71	92.77	3.76	3.47	9.53	3.76
<b>MCHC-g/dl</b>	1	352	346	87.28	90.17	8.38	3.18	4.34	6.65
<b>Plt. x10<sup>3</sup>/µl</b>	1	352	346	88.44	91.33	4.91	4.91	6.65	3.76
<b>ReticCount%</b>	2	352	328	91.46	88.41	7.01	9.15	1.53	2.44
<b>PS Assessment</b>	3	352	332	Satisfactory :97.73%, Borderline Sat. :0.56%, Unsatisfactory :1.70%					

**\*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  $\pm 2$ : Acceptable, Z score  $\pm 2$  to  $\pm 3$  :Warning Signal, Z score  $> \pm 3$  : Unacceptable [As per ISO/IEC 13528:2015 standard]

**Note-4:** Z score value between " $0$  to  $\pm 2$ " are texted in green colour. Z score value between " $\pm 2$  to  $\pm 3$ " are texted in orange colour. Z score value  $> \pm 3$  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.)

PT Co-ordinator: ISHTM-AIIMS-EQAP

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