



**HEMATOLOGY CONTROL FOR SYSMEX XE-5000 ANALYZERS  
OPEN MODE ASSAY**

Expiration Date: <b>2010-10-11</b>		Quality Control Data Due Date #1: <b>30-Aug-10</b>			Quality Control Data Due Date #2: <b>11-Oct-10</b>		
Lot Number:		<b>02020810</b>		<b>02020811</b>		<b>02020812</b>	
Control:		<b>L1:Level 1</b>		<b>L2:Level 2</b>		<b>L3:Level 3</b>	
PARAMETERS	MEAN	EXPECTED RANGE	MEAN	EXPECTED RANGE	MEAN	EXPECTED RANGE	
OPEN	RBC (10 <sup>12</sup> /L)	2.29	2.20 - 2.38	4.33	4.20 - 4.46	5.21	5.05 - 5.37
	HGB (g/dL)	5.6	5.4 - 5.8	12.0	11.6 - 12.4	15.9	15.4 - 16.4
	HCT (%)	17.1	16.2 - 18.0	35.1	33.5 - 36.7	45.5	43.5 - 47.5
	MCV (fL)	74.7	68.2 - 81.7	81.0	75.2 - 87.3	87.3	81.0 - 94.1
	MCH (pg)	24.6	22.6 - 26.5	27.8	26.1 - 29.4	30.5	28.7 - 32.4
	MCHC (g/dL)	33.2	29.9 - 35.9	34.7	31.7 - 36.9	35.3	32.4 - 37.7
	PLT (10 <sup>9</sup> /L)	53	32 - 74	215	191 - 239	523	476 - 570
	RDW-SD (fL)	46.3	41.7 - 50.9	43.9	39.5 - 48.3	46.9	42.2 - 51.6
	RDW-CV (%)	17.0	15.3 - 18.7	15.1	13.6 - 16.6	15.0	13.5 - 16.5
	MPV (fL)	9.3	8.6 - 10.0	9.6	9.0 - 10.2	9.8	9.2 - 10.4
	WBC (10 <sup>9</sup> /L)	3.06	2.75 - 3.37	7.15	6.72 - 7.58	18.09	17.00 - 19.18
	WBC-D (10 <sup>9</sup> /L)	2.97	2.67 - 3.27	6.68	6.28 - 7.08	17.28	16.24 - 18.32
	NEUT%	44.1	35.3 - 52.9	49.6	42.2 - 57.0	51.7	43.9 - 59.5
	LYMPH%	34.2	20.5 - 47.9	29.4	23.5 - 35.3	25.0	20.0 - 30.0
	MONO%	12.0	2.4 - 21.6	10.9	6.5 - 15.3	11.7	8.2 - 15.2
	EO%	9.8	6.9 - 12.7	10.1	7.1 - 13.1	11.6	8.7 - 14.5
	BASO%	62.5	43.8 - 81.3	68.0	47.6 - 88.4	71.4	53.6 - 89.3
	NEUT# (10 <sup>9</sup> /L)	1.35	1.08 - 1.62	3.55	3.02 - 4.08	9.35	7.95 - 10.75
	LYMPH# (10 <sup>9</sup> /L)	1.05	0.63 - 1.47	2.10	1.68 - 2.52	4.52	3.62 - 5.42
	MONO# (10 <sup>9</sup> /L)	0.37	0.07 - 0.67	0.78	0.31 - 1.25	2.13	1.28 - 2.98
	EO# (10 <sup>9</sup> /L)	0.30	0.21 - 0.39	0.73	0.51 - 0.95	2.09	1.57 - 2.61
	BASO# (10 <sup>9</sup> /L)	1.91	1.34 - 2.48	4.86	3.40 - 6.32	12.91	9.68 - 16.14
	NRBC# (10 <sup>9</sup> /L)	0.15	0.08 - 0.23	0.46	0.32 - 0.60	1.11	0.78 - 1.44
	NRBC% (/100 WBC)	5.0	2.5 - 7.5	6.8	4.8 - 8.8	6.6	4.6 - 8.6
	PLT-O (10 <sup>9</sup> /L)	55	30 - 80	211	179 - 243	518	440 - 596
	RET# (10 <sup>12</sup> /L)	0.1383	0.0968 - 0.1798	0.1102	0.0771 - 0.1433	0.0562	0.0393 - 0.0731
	RET%	6.04	4.23 - 7.85	2.55	1.79 - 3.32	1.08	0.76 - 1.40
	IRF (%)	23.8	3.8 - 43.8	20.6	0.6 - 40.6	17.2	0.0 - 37.2
	IG #	0.32	0.29 - 0.35	0.84	0.63 - 1.05	2.16	1.51 - 2.81
	IG %	10.5	7.4 - 13.7	11.7	8.8 - 14.6	12.0	7.2 - 16.8
HPC #	0.014	0.012 - 0.016	0.033	0.030 - 0.036	0.101	0.091 - 0.111	
RET-HE (pg)	24.6	17.2 - 32.0	25.1	18.8 - 31.4	26.2	15.7 - 36.7	
IPF %	21.5	18.3 - 24.7	22.0	18.7 - 25.3	21.1	17.9 - 24.3	

Sysmex recommends that laboratories establish their own Q.C. Target Values for each new lot number by collecting at least 10 data points per control level over 5 days. The mean Q.C. Target Values from this data collection should be inside the Expected Ranges. These Expected Ranges represent estimates of interlaboratory variation and are not included for use as the laboratory's internal Q.C. file limits. Sysmex recommends that each laboratory establish its own Q.C. file limits based on the laboratory's historical coefficient of variation. See your Sysmex Training Manual for more information on establishing Q.C. file limits.



**HEMATOLOGY CONTROL FOR SYSMEX XE-5000 ANALYZERS  
CLOSED MODE ASSAY**

Expiration Date		<b>2010-10-11</b>		Quality Control Data Due Date #1:		30-Aug-10		Quality Control Data Due Date #2:		11-Oct-10	
Lot Number:		02020810			02020811			02020812			
Control:		L1:Level 1			L2:Level 2			L3:Level 3			
PARAMETERS		MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE		MEAN	EXPECTED RANGE		
CLOSED	RBC (10 <sup>12</sup> /L)	2.29	2.15	- 2.43	4.33	4.11	- 4.55	5.21	4.95	- 5.47	
	HGB (g/dL)	5.6	5.3	- 5.9	12.0	11.4	- 12.6	15.9	15.1	- 16.7	
	HCT (%)	17.1	15.9	- 18.3	35.1	33.0	- 37.2	45.5	42.8	- 48.2	
	MCV (fL)	74.7	65.5	- 85.0	81.0	72.6	- 90.4	87.3	78.2	- 97.4	
	MCH (pg)	24.6	21.7	- 27.6	27.8	25.1	- 30.6	30.5	27.6	- 33.7	
	MCHC (g/dL)	33.2	28.8	- 37.3	34.7	30.6	- 38.2	35.3	31.3	- 39.0	
	PLT (10 <sup>9</sup> /L)	52	26	- 78	206	175	- 237	486	413	- 559	
	RDW-SD (fL)	46.3	41.7	- 50.9	43.9	39.5	- 48.3	46.9	42.2	- 51.6	
	RDW-CV (%)	17.0	15.3	- 18.7	15.1	13.6	- 16.6	15.0	13.5	- 16.5	
	MPV (fL)	9.3	8.6	- 10.0	9.6	9.0	- 10.2	9.8	9.2	- 10.4	
	WBC (10 <sup>9</sup> /L)	2.97	2.52	- 3.41	6.79	6.18	- 7.40	17.73	16.31	- 19.15	
	WBC-D (10 <sup>9</sup> /L)	2.88	2.45	- 3.31	6.35	5.77	- 6.92	16.93	15.58	- 18.29	
	NEUT%	43.6	34.9	- 52.3	49.8	42.4	- 57.3	51.1	43.4	- 58.7	
	LYMPH%	34.3	20.6	- 48.0	29.1	23.2	- 34.9	25.5	20.4	- 30.6	
	MONO%	12.5	2.5	- 22.4	10.8	6.5	- 15.1	11.7	8.2	- 15.2	
	EO%	9.6	6.7	- 12.5	10.3	7.2	- 13.4	11.8	8.8	- 14.7	
	BASO%	63.1	44.1	- 82.0	66.5	46.6	- 86.5	69.9	52.4	- 87.4	
	NEUT# (10 <sup>9</sup> /L)	1.29	1.04	- 1.55	3.38	2.88	- 3.89	9.05	7.69	- 10.41	
	LYMPH# (10 <sup>9</sup> /L)	1.02	0.61	- 1.43	1.97	1.58	- 2.37	4.52	3.62	- 5.42	
	MONO# (10 <sup>9</sup> /L)	0.37	0.07	- 0.67	0.73	0.29	- 1.17	2.07	1.24	- 2.89	
	EO# (10 <sup>9</sup> /L)	0.29	0.20	- 0.37	0.70	0.49	- 0.91	2.09	1.57	- 2.61	
	BASO# (10 <sup>9</sup> /L)	1.87	1.31	- 2.43	4.52	3.16	- 5.88	12.39	9.30	- 15.49	
	NRBC# (10 <sup>9</sup> /L)	0.15	0.07	- 0.22	0.45	0.32	- 0.59	1.10	0.77	- 1.43	
	NRBC% (/100 WBC)	5.0	2.5	- 7.4	6.7	4.7	- 8.7	6.5	4.6	- 8.5	
	PLT-O (10 <sup>9</sup> /L)	52	26	- 78	207	176	- 238	508	431	- 584	
	RET# (10 <sup>12</sup> /L)	0.1383	0.0968	- 0.1798	0.1102	0.0771	- 0.1433	0.0562	0.0393	- 0.0731	
	RET%	6.04	4.23	- 7.85	2.55	1.79	- 3.32	1.08	0.76	- 1.40	
	IRF (%)	23.8	3.8	- 43.8	20.6	0.6	- 40.6	17.2	0.0	- 37.2	
IG #	0.32	0.29	- 0.35	0.84	0.63	- 1.05	2.16	1.51	- 2.81		
IG %	10.5	7.4	- 13.7	11.7	8.8	- 14.6	12.0	7.2	- 16.8		
HPC #	0.014	0.012	- 0.016	0.033	0.030	- 0.036	0.101	0.091	- 0.111		
RET-HE (pg)	24.6	17.2	- 32.0	25.1	18.8	- 31.4	26.2	15.7	- 36.7		
IPF %	21.5	18.3	- 24.7	22.0	18.7	- 25.3	21.1	17.9	- 24.3		

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